MESSINESS AND COMPLEXITY: A CASE STUDY EXPLORING STUDENT PARAMEDICS' VOYAGES IN NAVIGATING UNCERTAINTY

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DEDICATION

My father, Peter, whose love of education, boundless enthusiasm and curiosity planted strong foundations for my intellectual endeavour.

Des who would have been so proud that I have undertaken and got to the end of this academic peregrination- having for so long supported my journeying though the lows and highs of my university career.

ABSTRACT

This thesis explores the real-world practice experiences of student paramedics during their developmental journey when facing ambiguous and complex psychosocial patient scenarios. In paramedic practice, the risk assessment and management terrain is changing from clear-cut decision-making to uncertain and person-centered, rather than procedure-centered approaches. Although the concept and preparation of students for uncertainty around decision-making has been explored, particularly in medicine, the perspective and peregrinations of paramedic students through their own narratives has not featured in the literature. The thesis explores this relatively uncharted aspect of practice with one cohort of paramedic students on the first, degree level programme at university.

A longitudinal case study approach was combined with narrative enquiry methodology drawing on social constructivism and phenomenology. The case explored multiple realities of student learning/development and how individual students learn and make sense of their experiences. The case study approach offered the structure for the study, and narrative enquiry enabled the exploration of patterns of meaning, and the cherishing of individual stories. Data was collected from twelve students: eight in-depth one to one semi-structured interviews were undertaken with students at two different points in their programme, and a focus group comprising four other learners was convened. The data was analysed using in vivo and dramaturgical coding.

What surfaced was the recurrence of powerful plotlines and scenarios around uncertainty with four entwined crossbeams supporting the students in managing uncertainty and developing as confident practitioners and decision-makers. These were experiential learning, collaborative conversations, role of the mentor as coach in supporting reflection, and in developing emotion management. The thesis recommends ways to better prepare students for uncertainty whilst enhancing their development of adaptive expertise.

Contents

LIST OF TABLES

LIST OF FIGURES

APPENDICES

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INTRODUCTION AND BACKGROUND TO THE RESEARCH

The study took place at the School of Nursing Sciences, University of East Anglia with the first cohort of paramedic students on the BSc (Hons) Paramedic Science programme starting in September 2014. These students heralded a new profession joining the school's portfolio.

Ahead of paramedic lecturers joining the staffing team, I co-constructed the curriculum with experienced paramedic associate tutors, previously staff members, employed for a fixed period to support this development, together with the local ambulance Trust's Head of Education, Trust educators and service users. I was conscious that the direction of travel for paramedic education into higher education and with changing caseloads required the curriculum to address holistic, psychosocial scenarios including mental health and end of life situations. My contextual awareness was informed though close working (since 2002) with out-of-hospital services in planning post-qualifying training and programmes for current workforce and emerging roles.

Careful planning of the pedagogical approach and teaching methods had taken place with stakeholder workshops being a key part of the process. The programme had been approved by the Health and Care Professions Council and endorsed by the College of Paramedics. The programme curriculum was integrated rather than systems-based / topic-based didactic delivery (see programme information in Appendix 1). In each year of the programme person-centred care, and psychosocial aspects were addressed using enquiry-based learning, workshops and with service user-led sessions. Additionally, modules in the final year addressed more primary care focused practice and decision-making and developing insight into yourself as a lifelong learner – in total over one third of the curriculum was devoted to these issues and their ambiguity/uncertainty.

Placements were scheduled in each year of the programme, spanning ambulance services, acute hospital, General Practitioner/primary care and maternity experience, giving a range of different perspectives and supporting the integration of theory and practice.

My background and experience and its relevance to this study

I am registered as both an adult and mental health nurse. Starting as a 'general' nurse in the 1970s, task-orientated care was frequently the norm; most of the training was hospital-based. I moved into mental health having often seeing that psychological needs

in patients were not being understood or met – body rather than mind being treated. Over time I became more involved in developing services that spanned physical and mental health dimensions of care as well as education. At the time of undertaking the research I had been in education for just over twenty years, much of it spent working with professions other than nurses, developing projects and working with paramedics and ambulance services.

My first interactions with ambulance service and paramedic staff undertaking courses in primary care development, mental health and care of older people had led to some challenging feedback. An example of this from a group struggling mid-module to adjust from medical technocratic procedures to ambiguous and messy subject areas:

> *This is Rosie's pink fluffy stuff! Why can't you give us yes/no definitive answers…! I would like it if you taught us by separate body systems, like a medical curriculum…one term on each!*

By the end of the module the responses were peppered with 'ah-has' and 'now it makes sense!' and 'I will never look at someone who is mentally ill and think pull your socks up so I can get on with the **real** paramedic work'!

This triggered reflection on my journey, helping me to surface my position in relation to the germinating research idea. This 'identity memo' (Maxwell, 2013) helps to explain this:

> *I hadn't fully tracked my interest in all things psychosocial until I focused on my methodology and positionality. I then remembered that I had, as far back as 1973, been concerned that nursing seemed only interested in physical disease and symptom; tasks and treatments. It was really when I went to medical wards that I asked 'what is going on in people's lives that means that they are wishing to hurt and harm themselves? Or that their diagnosis lays them lower than the next person?' I saw how distraught patients and families could be, and wrestled with the attitudes of other staff who said 'another overdose taking up a valuable bed' or 'here we go again she's back, she doesn't try to cope!'*
>
> *Later at a Women's hospital I saw how support, in this case by women patients towards other women (supported by me)- in effect I was running a support group without knowing it-could ease preoperative fear or give women hope for the future.*

In the neuro unit I became interested in palliative and end of life care and mental health and psychological aspects. I could no longer see a future where I would only look after people's physical selves. I decamped to a psychiatric hospital and, whilst it felt like coming home, I then felt frustrated that physical health needs of patients were not understood, often being neglected. There and then, in 1979, I vowed to try and enhance colleagues' education and understanding of the ***whole*** *person.*

Leading on elements related to psychosocial, emotional, spiritual needs in the BSc curriculum…there's connectedness between my values and beliefs about patient care, my practise and how I would hope future practitioners will be prepared for the complex and messy context of current practise.

In doing this, I became more aware of the key values I hold, have nurtured and how this influences my research.

Overview of the historical context of the development of paramedic education

This section summarises the historical roots of out of hospital practice and the paramedic role, making the case that the past remains an influence on the culture, role, education, care and decision-making of practitioners, having derived from transportation services for the injured from battlefields.

Provision for the sick and injured has existed since at least Roman times (Liverpool Medical Institution, undated), focused on methods of conveying patients by wagons and later carriages and sedan chairs. Organised mobile transport arrangements were in action during the Napoleonic Wars. Later, in the French Revolution (Skandalakis et al., 2006), Dominique Jean Larrey, recognised by many as the 'father' of battlefield surgery, developed horse-drawn carts as a system of ambulances volantes ('flying ambulances') (ibid). Additionally, he developed triage – rules for prioritising and identifying which of the wounded to treat first. Triage via Ambulance Response Programme targets (NHS, 2015) categories remains a key principle of allocating resources today.

Moving to motorised ambulances did not lead to a greater level of skill by the ambulance operators, who often only needed a driving licence (Caroline, 2014). Only with the advent of the 'Millar Report' in 1966 was there a recommended, orchestrated national approach for training ambulance staff (Ministry of Health Scottish Home and Health Department, 1966). This comprised eight weeks of basic training, with practical skills for advanced First

Aid Training - laying out a detailed syllabus for achievement of The Ambulance Services Proficiency Certificate, very much like the Emergency Medical Technician role (a trained but unregistered role) rather than the developing role of the registered paramedic.

The 'Miller Period' (Brooks et al., 2016) focused on pre-hospital coronary care. Other publications focussing on care practice for trauma cases influenced how the early paramedic/ Emergency Medical Technician was trained, and the role was shaped. The early roots of the paramedic were medical, with the focus on time-critical diagnoses. The aim being to stabilise the patient prior to conveying them to hospital as soon as possible.

The next phase in the development of the emergency medical technician–paramedic role and training programme came about in the United States of America (USA) in the early 1970s, from the ground-breaking initiatives of Dr Nancy Caroline and others in Pittsburgh. Some training included more complex procedures and medicines administration. The emphasis remained on transporting physically ill and injured patients.

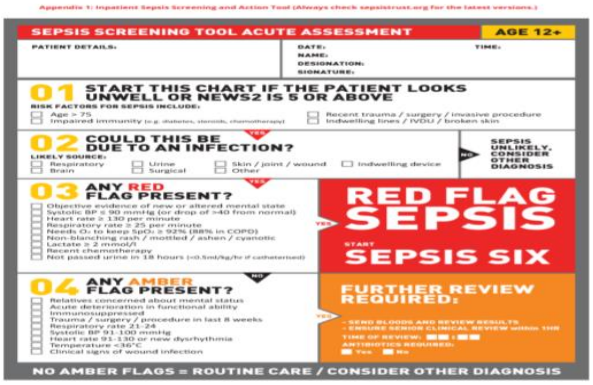
With costs and demand rising, and emergency department queues growing, the Blair government, with evidence from the Audit Commission, set about enhancing 'efficiencies' and integrating services. 'A life in the fast lane' (Audit Commission, 1998) and the NHS White Paper 'New NHS: modern, dependable' (Department of Health, 1997) leading to an appreciation of the need to provide education enabling paramedics to make effective clinical decisions and to rely less on protocol-based practice and training. Following this, the first paramedic degree programmes developed, alongside work-based training, and to paramedic regulation (2000) and the genesis of the Joint Royal Colleges Ambulance Liaison Committee's first set of guidelines.

The Quality Assurance Agency Paramedic Science Benchmark (2004, 2016) specified minimum level of entry to the register as Diploma of Higher Education/Foundation Degree (2004) and BSc level (2016) but it has taken until the Health and Care Professions Council's decision of 21 March 2018 for national agreement on change to the minimum threshold level for registration as a paramedic, only being implemented in September 2021. A training model rather than a higher education approach therefore has been dominant until recently.

Many 'traditional curricula' remained focused on the training of technicians and paramedics relying on the Joint Royal Colleges Ambulance Liaison Committee Guidelines (Ambulance Services Association, 2013; 2016), which despite amendments still largely

reflect clinical procedures and which are illustrated with decision-trees and flowcharts. This suggests a continuing high-reliance on a protocol-based approach. The sepsis tool below is an example of a commonly used decision-support tool enabling a rapid checklist for decision-making.

Figure 1 Sepsis Screening Tool



(Sepsis Trust, 2020)

Even the updated edition of ambulance guidelines (Joint Royal Colleges Ambulance Liaison Committee, 2019) advertises that it contains:

> *numerous updated and essential algorithms, as well as an extensive UK drugs formulary and Page for Age drugs tables…*

Paramedicine is a relatively young role, facing great change moving from a 'scoop and run' service, deriving its scope of practice from a medical 'tick box' model to a more first contact approach, with pressure to reduce 'avoidable admissions', supporting leaving patients at home safely.

The number of patient care episodes resolved over the phone or by the ambulance team not involving taking the patient to an acute hospital has been rising, with the National Audit Office (2017) reporting this as 48% with 11% of calls being related to mental health. Anecdotally mental health-based calls are said to be a least 20% of the 'workload', it is however hard to find more recent national data attesting to this and whether this is pre- or post-pandemic. The dissonance between Ambulance Response Programme (NHS, 2015) targets required for response times and the time and complex skills and decisions frequently required by complex distressed patients is an important space into which the paramedic student is entering.

Research focus

The research therefore aimed to address the following questions:

How does learning on this graduate programme allow for complex psychosocial issues to be understood, assessed and managed by the paramedic?

With the following the sub-questions:

- How do students develop decision making skills of sufficient complexity in uncertain conditions?
- How can the curriculum be improved/amended?

Chapter Summary

The paramedic role has been predicated on a training model, emphasising technical clinical abilities geared towards emergency and time critical patients drawing on protocols and guidance following a biomedical/medicalised model (Williams, 2012, 2013a, 2013b; Ambulance Services Association, 2016; Caroline, 2014). Traditional curricula focused on physical/medical interventions Williams (2012, 2013a), now changing (College of Paramedics, 2015; 2019) as senior paramedics are now in leadership positions which previously would have been undertaken by doctors.

Despite these initiatives and more, including the Paramedic Evidence-based Education Project Report (2013) and the QAA benchmark (2016) both focusing on degree level preparation for the paramedic, the legacy of the past continues to influence current practice and culture. The influence of the medical model and 'hard science', remains, and can be in tension with current role requirements related to decision-making in messier and less time critical patient interactions.

Few would have thought in 2000 when the paramedic profession was first regulated that the role scope would now emphasise public health approaches (College of Paramedics, 2017a). Paramedics can now be independent prescribers, lead multi-professional teams and occupy a myriad of roles as publicised in their campaign #NotAllParamedicsWearGreen.

Therefore, the risk assessment and management terrain is changing from clear-cut decision-making to ambiguity and person-centred, rather than procedure-centred approaches. This changing landscape is that for which the UEA student paramedics are being prepared.

The language espoused in policy is that of 'out-of-hospital' care rather than 'pre-hospital' practice. However, amongst the students, colleagues at UEA and in the field, the term pre-hospital remains somewhat stuck. Consequently, recognising the potential tension between historical training and medicalised 'pre-hospital' care with the evolution of 'out-of-hospital' practice led me to wish to explore student experiences with complexity and uncertainty.

LITERATURE REVIEW

This chapter aims to present a review of current literature germane to the research problem and question. In following chapters, when exploring themes and concepts uncovered during the research process, related literature will be integrated. In this chapter literature is reviewed and explored under the following strands:

- A brief summary of relevant educational/learning theories
- Influence of the biomedical model, and medical/paramedic gaze
- Overview of emerging trends in methodology and discourses of decision-making and/in paramedicine
- Emotional labour/emotions and/in decision-making

Brief summary of some key elements of cognitive, experiential and reflective learning theories

There is a myriad of educational theories; some focusing on cognition, exploring how material is taken in, processed, and recollected during learning (cognitivist approaches). Others focus on behavioural approaches to learning, that is how behaviours are learnt through interactions with the environment. Neither behaviourism nor cognitive educational theories tend to focus adequately, on emotion and the response of the **whole** learner in the process of learning. These omissions mean that these give only a partial lens through which to make sense of the complexities of the learning process. Social constructivist theories of learning (from which I have drawn) attempt to pay attention to the whole learner. These approaches pay more attention to language and social interaction, and how knowledge is acquired through social processes and is not just an individual accomplishment.

Some insights from the cognitive approach to educational theories are helpful, for example from the work of Vygotsky (1978) who rejected cognitivism. His notion of the 'Zone of Proximal Development' (ibid), adds a helpful perspective from which to understand the social and collaborative context of the learning experience- agreeing with Piaget (1953) and Ausubel (1968) that the learner is not passive during the educative process. This 'zone' Vygotsky explained as being:

> *"the distance between the actual developmental level as determined by independent problem solving and the level of potential development as*

determined through problem-solving under adult guidance, or in collaboration with more capable peers".

(Vygotsky, 1978, p. 86).

The notion of the "more capable peer" supporting the learner to attain their promise and succeed in the learning being undertaken, makes explicit that learning, for Vygotsky (1978), is a socially constructed and shared experience, not merely an internal cognitive pocess. This approach supports the social constructivist stance I have employed, as articulated in the methodology chapter (page 35) and the findings related to the styles and qualities shown by the 'good enough' mentor as explored in the chapter, 'Steadying the Tightrope', being applicable to the way learning is undertaken by these paramedic students during challenging practice experiences.

Ausubel (1968), a cognitive theorist, articulated the view of the learner as active, recognizing the role of motivation and the meaningfulness of the material to be learnt, as being key. He theorized that cognitive schema, frequently allied to the metaphor of 'coat-pegs' or the 'scaffolding' of Bruner (1978), to add new learning to that which is pre-existing, to avoid rote learning of unfamiliar material, are pre-requisites to effective and meaningful learning. This approach resonates with the Novice level of Benner's model of developing clinical development and competence (1984; 2001) and with my own observations of the tendency of students to struggle with new/ambiguous material (Rosie's 'fluffy pink stuff') and to long for certainty and clear/fixed rules- i.e., when the 'coat-pegs' may not all be in place.

For this research, relevant theories drawn from the body of literature relating to experiential learning theories and models, which consider the significance of learning from and through experience, and the role that critical reflection and feedback can play in this, are not only relevant but essential. The students retold/reconstructed their practice **experiences**, enabling me to see how these were affecting and shaping their development as articulated in the extracts and vignettes given in the three findings chapters. The stories are powerful and emotional and charted the students' development of knowledge, emotion management, professional identity, and enhanced comfort and capability with risk and the ambiguity of real-world practice.

Kolb (1984) developed his theory from the foundations of, for example, Dewey and Lewin, positing an experiential learning theory with four-stages comprising exposure to

the experience, reflection, reframing and reforming/transforming the experience. Dewey (1897, p. 79) specifically remarked that:

> *"education must be conceived as a continuing reconstruction of experience".*

So, learning for Dewey (1897) is about deriving meaning from experience which then shapes the engagement of the learner with future learning experiences.

For Kolb (1984; Kolb, Boyatzis and Mainemelis, 1999) learning is conceptualized as a cycle, being frequently used, alongside other models and elaborations, for reflection following learning experiences. Kolb, Boyatzis and Mainemelis (1999) focus on the significance of experience being holistic, recognizing that theories focusing only on cognition or behaviour omit emotion/feeling and its role in learning as a process not a product per se:

> *"…knowledge is created through the transformation of experience. Knowledge results from the combination of grasping and transforming experience.*
>
> (Kolb 1984, p. 41)

Difference, dissension, and conflict drive learning through which the learner is required to steer despite their anxiety and trepidation (Kolb, 1984), with productive stress supporting their development. Taking further the centrality of experience and learner discomfort (with its potential to trigger withdrawal) in and to the research participants' learning, a specific approach, Taylor's (1979, 1987) four-phase model of experiential learning and the role of the mentor/capable other in this, is utilized in the chapter 'Steadying the Tightrope' as this recognizes the role of learner disorientation and dis-ease and its effect on learning, providing ways of envisaging support/scaffolding and processes to help students explore and reorientate themselves to facilitate productive learning and development. The full exploration and justification of the application of this model is discussed from page 118.

Educational theories focusing on the role of reflection in learning are also germane to this research, as the students in their narratives were not passively recalling their experiences, rather actively and purposefully recalling and reconstructing key experiences- which were frequently emotive and emotionally charged- to convey their perceptions and meanings (Dewey, 1933). Schön (1983) built on Dewey's work and posited the notions of Reflection on Action (looking back to influence learnings for future practice), and Reflection in Action ('thinking on one's feet' at the time and changing practice outcomes in the 'here

and now') and how these enhance practice and the capability of the practitioner. Neither (Dewey, 1933), Schön (1983) or Kolb (1984) specifically focus on how feelings and emotions impact on the experience, its recall and interpretation. Boud, Keogh and Walker (1985) contest this omission and explain that for learning to be complete the feelings and emotions connected with the experience and their influence should be a focus. The relevance of reflection, debriefing and supportive feedback in the students' learning is further explored in the findings' chapters of this thesis.

Knowledge and the 'Medical Gaze'- Foucault and Goffman

Antecedents to paramedic and out-of-hospital practice, including care practice and decision-making, stem from a medical model approach as indicated earlier. This legacy influences contemporary practice as a persisting, though gradually reducing, biomedical reductionist culture (Boyle, 2005; Williams 2012, 2013a, 2013b). The medicalized 'training roots' from which paramedicine is emerging still influence the lens through which practice and the patient-paramedic relationship may be viewed, as well as early literature focused on clinical decision-making. This is explored later in this chapter.

The medicalised approach, defined as the '(bio)medical model' focuses on physiological aspects of ill-health and disease, rather than a more holistic viewing of the person within their lived psychosocial world. Foucault (1973) took the notion of the medical model further, theorising the term 'medical gaze' to explain how patients could be stripped of their identity as a subjective person. The patient therefore being considered as a passive physical object, diagnosed by taking a medicalised history and tests informing a biophysiological assessment. The gaze of doctors (paramedics) therefore, Foucault (1973) and Greenhalgh (2001) contend, may give health practitioners more power in practitioner-patient relationships; less likely to promote shared decision-making with patients.

Foucault's work on genealogy and archaeology is helpful in tracing the way that the 'medical model' has historically been dominant in shaping the role and clinical decision-making of paramedics. Past lack of power and unequal relationships between paramedics and doctors can be recognised where paramedics experience difficulties in accessing some referral pathways or believe/find that a doctor **must** initiate referrals. The construction of doctors as gatekeepers to primary care/acute services (Burns, 2018)

means that whether paramedics can initiate such referrals may be determined by past relationships (Sheffield, O'Meara and Verrinder, 2016), and paramedic confidence in asserting/advocating for patients. This can affect outcomes of care decisions, encouraging risk aversion with conveyance to hospital as a default position.

In the case of para**medicine** (the term positioning paramedics and other members of the team in relation to medicine), transitioning from training with tight protocols, to fully fledged independent practice exercising autonomous decision-making in relation to complex psychosocial situations has been slowly continuing for over 20 years. Greenhalgh (2001) when considering the 'medical gaze' focuses attention on the tendency of practitioners and patients/the public to 'marvel' at high tech interventions and, perhaps more overtly in the 1970s and 1980s, there was less tendency for doctors to situate themselves outside the meta-narrative of bioscience discourse and its' power over patients i.e. offering 'the cure'. The 'gaze', being the dominant discourse, shaped how assessment, decision-making and treatments were construed and delivered- in paramedicine as well as medicine.

According to Yuginovich (2000 p73):

> *Discourses assist in the creation of various practices and yet simultaneously are essential to the continuation and reinforcement of patterns and practices.*

Control of procedures and policies within a medicalized narrative can be seen in early clinical guidelines and when comparing initial clinical training manuals for paramedics (Institute of Health and Care Development, 2003) with more recent curriculum guidance from the College of Paramedics (2014; 2015). In the former, there is an emphasis on health and safety and psychomotor skills focusing on hyper-acute presentations with assessment via OSCEs and examinations. In the College of Paramedics curriculum guidance (2019) human sciences, person-centred care, professional values and public health and health promotion aspects are made explicit.

Contrasting with high acuity and critical care, emotional aspects and less straightforward decision-making involved in contemporary paramedic work due to the complexity of 'messy' psychosocial aspects, including frailty, long-term health, and mental health needs of patients, is only more recently being recognised- changing the structuring and positioning of knowledge and thinking.

Foucault (1972) theorised the way one episteme could replace a previous one, sometimes tumultuously otherwise gradually. The way of thinking and social/clinical practices and power base within paramedic science, has until recently focused on clinical interventions, considering as 'Gucci' (i.e. highly prized/valued, anecdotally used by paramedics and students) critical care techniques which position the power with doctors/paramedics within clear intervention rules. In Foucault's terms, a scientific and empirical episteme.

In relation to pre-hospital and out-of- hospital care and decision-making, paramedics may view their role as skills and 'science'-based, rather than recognise and value the 'art' of the individualised person-focused approach and political context in paramedicine. Consequently, there may be tensions in the transition (Foucault, 1972), and in clinical decision-making when dealing with and making complex psychosocial and end of life decisions where no situation is exactly the same, and patients' wishes, and preferred choices differ. Both epistemes (science and art) currently co-exist, as they need to, for safe holistic care. What is key is practitioner awareness of which genre they are operating from, and being comfortable with working between rules of formation, power structures and modes of intervention (Foucault, 1972) of each, thereby employing both artful and scientific approaches in practice.

Clearly it is not as simple as this, but insights from both Foucault (1972) and Goffman (1959, 1961, 1974) provide perspectives for analysing the emerging role, decision-making and practice of paramedics, the discourses and culture of Ambulance Services and the tensions for educationalists within the curriculum in addressing uncertainty and ambiguity inherent in the changing role. The medical gaze may be in tension with the changing practice terrain and a person-centred care, and this may be lived out in contrasting ways by practitioners and experienced by learners. Changing paramedic caseloads call for switching lenses between medical and holistic gazes, between and within patient episodes, when considering the patient's values and wishes and the clinical decisions required.

Additionally, exposing and raising awareness of dissonances between classroom simulation and real-world practice, and between new learners' desire for an algorithm (science/certainty) to follow against the messiness of reality (art/contextualized) against a backdrop of increasingly complex patient-centred care and clinical decision-making, enables exploration and preparation.

Moving from the medical gaze, from 'doing to' patients as passive objects in high acuity situations, to sharing power and 'working with' speaking and feeling subjects in messy and ambiguous scenarios involves working in partnership together. Perhaps being perceived as a less 'heroic' scenario, but one requiring more emotion work and sharing of decision-making.

The continuing impact of the medical gaze and desire to feel safe and fully scaffolded is shown in the anxiety I have observed in the classroom with some students when approaching more ambiguous psychosocial scenarios rather than medical aspects of the curriculum. This led me to consider how to better understand this and examine ways to enhance the holistic gaze and approach to clinical decision-making in theory and practice.

Summary of key current dominant decision-making discourses: From the thinking machine to post intuition/analytic dichotomy

Classical Theories

Until relatively recently literature around clinical decision-making in healthcare and paramedic practice has tended to explore cognitive models of decision-making and to focus on 'competence' in a more psychomotor sense– for example: Normative, Descriptive and Prescriptive Models (Chapman and Sonnenberg, 2000), relying on algorithms, statistics or decision-trees. Earlier cognitive approaches focused on modelling how decisions are made (the 'theory'), describing linear phases, contrasting with embedded and more intuitive approaches of 'traditionally trained' paramedics with more hypotheco-deductive models and theories. Intuition being in some cases viewed negatively and as a polar opposite of 'scientific' cognitive rules i.e. hypothetico-deductive approaches (Shaban, 2005) and how 'rational' decisions ought to be taken (Croskerry, 2017).

Classical approaches to clinical decision-making tended to position alternative theories as binary opposites – between decision-making under lab-based, controlled situations and the messiness and multi-layered juggling required when undertaking clinical decision-making in the 'real world' (Shaban, 2005; Nibbelink and Brewer, 2018; Ryan and Halliwell, 2012; Sheffield, O'Meara and Verrinder 2016). Such models of reasoning and decision-making ('System Two') were seen as polar-opposites to unconscious 'intuitive', in-vivo,

decision-making arising from refection-in-action ('System One'). Paramedic clinical decision-making can be viewed as still being in transition away from classical approaches to clinical decision-making with critical care and trauma often perceived as being very appealing in practice – only requiring 'System Two' decision-making (rational choice and relying on rubrics and mnemonics/ heuristics) (Shaban, 2005; Nibbelink and Brewer, 2018; Ryan and Halliwell, 2012; Sheffield, O'Meara and Verrinder 2016; Croskerry, 2002; 2017).

Many classical cognitive models emphasise patient safety and risk with full exploration of **all** options, frequently focused on emergency situations or classroom settings. In reality, paramedics often have partial information of available options and the patient's presenting complaint may in fact not be their actual key need (Murdoch, 2019; Shaban, Smith and Cumming, 2004).

Kahneman's work on decision-making challenges classical and normative models of clinical decision-making, observing that actual decision-making behaviour deviates significantly and frequently from conventions laid down, decision-making being complex and affected in many ways (Kahneman and Tversky, 2008; Kahneman, 2011). Kahneman (2011) argues that intuition is unsafe unless backed by capability; experience alone not being enough. He argues for the uniformity that a set of rules can provide whilst conversely reasoning that decision-makers often do not follow the rules, thereby recognising dichotomy between System One and System Two thinking. System Two thinking chimes with more protocol drive-approaches to decision-making operationalised by the trained pre-hospital workforce, whose decisions were rooted in stabilising patients before conveying them to hospital (Kahneman and Tversky, 2008). Kahneman (2011) argues for Dual Process thinking, where fast, intuitive clinical decision-making in safe(r) and more usual situations is combined with a slower, more analytical approach where novel or more complex facets are present. Murdoch (2019), notes that amongst other things, the time pressure paramedics face means that clinical decision-making involves the dual process thinking blend.

A push/pull between expecting clear rules to follow and some student feedback asking for definite yes/no answers as to what to do when faced with more ambiguous enquiry-based learning scenarios and their experience of the reality of clinical decision-making, is what originally triggered my interest in this research subject. Early models viewed from

the lens of a single theoretical and ideological paradigm were not encompassing the intricacy and multiplicity of factors involved in, and impacting on, clinical decision-making and which students were encountering.

Low Acuity Decision-Making – Unpacking Complexity

More recently clinical decision-making methodologies either critique earlier approaches which focus only on specific aspects, recognizing evolving complexity in clinical decision-making since the 1950s, for example the changed approach advocated in moving from practitioner-led to shared decision-making with patients (Stiggelbout, Pieterse and De Haes, 2015). clinical decision-making, especially for paramedics and students, may be fundamentally uncertain and risky (Han et al., 2019; Moffett et al., 2021) with incomplete information available, time constraints and great diversity of patient presentations – paramedics and students working as part of a crewed ambulance will be likely to encounter any type of presentation across the lifespan, and at any time. They also have to face a myriad of presentations and often unfamiliar cases (Shaban, Smith and Cumming, 2004).

As paramedics become more professionalised and professionally regulated from 2000, they are required to make increasingly complex decisions more autonomously, and across more disparate scenarios. Diversity of caseload impacts on the scope of practice as patients presenting with high severity/acuity reduces, and the level of complexity and individual tailoring of care and shared decision-making increases (O'Hara et al., 2015; Bingham et al., 2013; Bomhof-Roordink, et al., 2019). Kahneman's (2011) work on decision-making challenges the hegemony of System Two proponents that reason dominates and recognises how cognitive bias, 'noise' i.e. variability, mood and chance play part in decision-making, problematising and illustrating growing facets of decision-making.

Whilst there is a flourishing body of literature, with differing perspectives, concepts and definitions, clinical judgement and clinical decision-making remains contested and complex, and lacking an universal encompassing theoretical model and paradigm (Shaban, 2005, Croskerry, 2017; Kahneman and Tversky, 2008; Kahneman, 2011).

Sheffield, O'Meara and Verrinder's (2016) scoping review of paramedic decision-making noted (as I have done) emerging research and literature focused on paramedics and low

acuity patient decision-making and referrals in the 10 years between 2005-2015. However only four studies out of 534 focused on clinical decision-making; two being quantitative studies and the other two qualitative. The synthesis of this review teased out many questions worthy of further enquiry including ways health policy and holistic patient-centred care, paramedic education and clinical experience/tacit knowledge affect how practitioners make decisions and access and steer low acuity referrals. As Sheffield, O'Meara and Verrinder (2016) indicate, researching paramedic clinical decision-making is in its early days; the paramedic role being a relatively young profession (Paramedic Evidence Based Education Project (PEEP), 2013; College of Paramedics 2014, 2015; Parsons and O'Brien, 2011). The corpus of work is now moving from quantitative studies measuring patient outcomes following specific interventions (e.g. airway management) to asking research questions considering graduate paramedics' 'readiness for the road', comparing how FD and BSc students make decisions (Ryan and Halliwell, 2012; Murdoch, 2019). This triggered my desire to explore the lived stories of students and their readiness and confidence to embark on their journey as registrants.

Exploration of the role of experience and intuition (tacit knowledge) and decision-making in clinical practice has been undertaken, often focusing on registered practitioners including Shaban (2005; 2006). Wyatt (2003), using phenomenological and ethnographic methodology captured subtle social and environmental meanings, on which he suggests registered paramedics rely when facing unfamiliar presentations outside 'the rule book'. This has opened the arena of qualitative research by focusing on decision-making in mental health emergencies in paramedic practice. For some, including Lasater (2007), research into clinical judgement and decision-making involves measuring and using decision algorithms (during simulation). Lasater (2007), drawing on Tanner's (2006) model details four stages- Noticing, Interpreting (analytic, intuitive and narrative patterns), Responding and Reflecting, with an emphasis on reflection and feedback. Lasater (2007) recognises the importance of context and experience on reasoning and teamwork in her quest to develop an Assessment Rubric for nurses- however, the context for learning related to reasoning and decision-making is during high-fidelity simulation (simulation is very commonly used in paramedic education) and does not consider transferability to the 'real world' of practice nor the effects of emotion/emotional labour and messiness involved in practice contexts whilst recognising the value of supported experiential learning and feedback. This disconnect between simulation/constructed

clinical decision-making and 'real world' lived practice and how to better understand and support learners through the lenses of their experience seemed uncharted and open for my research enquiry.

Exploration of learner journeys in 'real world' clinical decision-making is evolving, moving away from clinical decision-making and uni-professional methodologies, originally predominantly concentrated on medical students and then nursing learners and specific to one care setting (e.g. Emergency Department) or a specific client group (e.g. end-of-life). Scoping reviews (Moffett et al., 2021), and more systematic approaches (Han et al., 2019), promote a more integrative and concentrated narrative around categories of uncertainty in practice, strategies to accept and manage uncertainty, and the student journey towards acceptance of messiness and independence in clinical decision-making as a practitioner. As indicated earlier, the body of knowledge for paramedicine is growing from the early quantitative focus on decision-making and uncertainty in hyperacute situations to exploring attitudes and coping strategies where uncertainty focuses on aspects of practice such as end-of-life care (Pentaris and Mehmet, 2019) and mental health (Shaban 2015). This evidence reveals that paramedics feel lacking in knowledge and preparation, and with challenging legal and ethical aspects encountered in relation to these scenarios.

Other studies examine key decision-making processes needed by qualified paramedics-especially when under stressful situations (Shaban, 2005; Shaban, 2006) and factors that influence clinical decision-making behaviours among paramedics such as previous experience, underpinning clinical knowledge and tacit/intuitive factors (Wyatt, 2003). The 'direction of travel' within the literature, as shown for example in Parsons and O'Brien's (2011) work, is towards more qualitative methodologies including case study and ethnographic methods for example Eaton (2019). Ryan and Halliwell (2012) focused on unpacking how decision-making is taught and comparing intuitive decision-making and hypothetico-deductive reasoning in students- touching on concepts of confidence and models of competence (Benner, 2001). To me a gap appeared i.e., more 'affect' and transactional/relationship focused models of decision-making, which try to understand and make sense of ambiguity and 'messiness' of patient: paramedic interactions and relationships and 'theory' versus lived practice experience. This gap relates to meanings, perceptions, reflections and learning of students as evidenced by their practice reminiscences. Although the direction of travel is qualitative and increasingly focused on

student reasoning/confidence and competence development, there is still a gap that does not intimately address their perceptions, reflections, experiences, and post-hoc stories as learners. So better understanding of this 'messiness' and complexity, and students' developing sense of self as a decision-maker, assumed a central role in my enquiry.

Uncertainty and risk

Han et al's., (2019) examination of the diverse corpus of evidence indicates a lack of a systematic grasp of complexity and uncertainty, whilst Harenčárová (2017) and Perona, Ramon and O'Meara (2019) suggest there are gaps in the understanding of qualified paramedics' coping strategies and the impact of uncertainty on decision-making and patient safety- albeit focused on acute situations. The notion of uncertainty also felt important to focus on, as students, like registrants face doubt and risk in practice and did not seem to have been linked into paramedic clinical decision-making studies. Shaban, Smith and Cumming (2004) noted that uncertainty was not well understood and that theorising about judgement and clinical decision-making in paramedic practice still tended to focus on more mechanistic analytical models.

Others, for example Ferraz (2015) concentrate on differing perceptions of risk and uncertainty in relation to non-paternalistic shared decision-making, collaboratively made with patients/families. Many models of shared decision-making, emphasise the process of reaching a reciprocal agreement and understanding (where possible) between healthcare professionals as experts on the medical evidence, and informed patients as experts on their needs and preferences (Bomhof-Roordink et al., 2019; Stiggelbout, Pieterse and De Haes, 2015; Spatz et al., 2017). Key to moving away from a medical gaze and model approach is enabling patients to be speaking actors, with paramedics seeking the patient's view as to what is significant to them. Probst et al., (2015) advocate that shared decision-making, even in the Emergency Department, should be the default position unless patient capacity and willingness, the level of uncertainty and time and acuity of the situation require **immediate** practitioner-led clinical decision-making. Shared decision-making is clearly more easily facilitated in lower acuity scenarios where patients /families can be active participants. Shared decision-making therefore requires paramedics to accept and appreciate differing and conflicting values presented by patients and their families to facilitate shared decision-making (Eaton, 2019).

Emotional labour/emotion work and emotion management in clinical decision-making

Since publication of Hochschild's work on emotional labour (1983, 2003, 2012), much research and exploration of emotional aspects of working with people in public and consumer sectors has been undertaken including nursing (Smith, 1992, 2012). Theodosius (2008), considered empathy, acting and emotional labour in doctor- patient relationships (Larson and Yeo, 2005). Boyle (2005) and Williams (2012; 2013a, 2013b) have explored emotional labour in out-of-hospital settings in relation to paramedic and student paramedic experiences, practice and education. Emotional labour and the feelings' domain of practice has relevance to clinical decision-making and emotional 'noise' (Kahnehan, 2011; Croskerry, 2017) that can and does affect clinical decision-making.

Hochschild (2012, p7) defined emotional labour as:

> *management of feeling to create a publicly observable facial and bodily display; emotional labour is sold for a wage and therefore has an exchange value …(and) emotion work…refer(s) to these same acts done in a private context…*

Hochschild's (1983, 2003, 2012) focus was on emotions that are the 'private face of an emotional system' and those emotional elements that are expressed in a public arena, either by surface or deep acting related to social context. She theorises that emotion management requires work, learning how to control emotions and how and what to express in given social situations (display rules). Hochshild's view of emotional labour demonstrated in a public environment is informed by Goffman's (1959, 1961, 1974) work on presentation of self/dramaturgy and 'regions', as well as that of Stanislavski in relation to method acting. Hochschild (2012) defines surface acting as 'disguising what we feel, of pretending to feel what we do not' (p33)- thus changing how they show emotion but without altering their felt emotions. Though Smith (2012), in contrast, in her research into emotional labour in nursing, perceives surface acting as:

> *consciously chang(ing) our outer expression in order to make our inner feelings correspond to how we appear (p12).*

Boyle (2005) suggests that paramedics admitted to her that they frequently use surface acting particularly with patients whose needs are not life threatening and time critical. This includes use of humour with worried patients, a deliberately 'neutral expression'

when encountering a patient who is drunk, being nice to a patient who they perceived to be merely 'whingeing' (when judged alongside 'seriously acutely ill' patients).

From my experience, feedback and responses from some students in the classroom and in tutorials spanned frustration that there are no rules and recipes to nuanced insights, about the individuality of every patient and each situation and each decision. For some students personal emotional dis-ease was clear, for others emotional self-awareness seemed more developed and the focus was changing from self to emotional needs of others (the patient and family). I felt originally that I had recognised that facts/knowledge alone was not enough to support the development of effective clinical decision-making, hence the curriculum had a strong focus on psychosocial aspects of care and enquiry-based learning. However, the span in students' development and the key role of feelings and emotion labour and management, as a powerful dynamic in clinical decision-making, influenced and solidified how I wanted to explore clinical decision-making in this research focusing on students' practice experiences when attending mental health, end of life and patients with psychosocial needs.

Hochschild (1983) theorises deep acting as working to change our feelings from the inside with institutions' (in this case NHS/Ambulance Trusts/professional and regulatory bodies) infrastructure such as rules, procedures and policy guiding how their workers (practitioners) see and feel. Hochschild's (1983, 2012), view considered how institutions arrange their 'front stages and sets' (ambulances/response cars) – the locations for care provision. Smith's (1991, 1992, 2012) work focused on student nurses, finding that (in a hospital-based institutional context) the ward sister shaped the infrastructure for the emotional milieu for managing emotions of self and others. Context, staging and individual role-modelling therefore being powerful influencers of emotion work.

Smith (1992, 2012), Theodosius (2008) and Williams (2011, 2012) have subsequently taken Hochschild's work further, with Smith and Theodosius focusing on emotional labour in relation to 'caring'; whilst Williams (2011, 2012) focuses on paramedics. Deep acting involves the actor consciously working to learn and accept feelings- I had been observing and hearing the span of emotion work and management across this first student group and wanted to know more and understand better, to consider whether and how the curriculum could support learners with this key aspect of clinical decision-making.

There are numerous definitions of 'emotion': Thoits (1989) construes that emotions include an element of appraisal of the context, changes in physiological status, demonstration of expression and constructions and labels applied by a given culture/organisation- in other words emotion as influenced by social influences, the cultural beliefs about emotion and emotional language of a given society/organisation. Hochschild (1983) has considered 'feeling rules' i.e., opinions about how private feelings should be expressed in specific situations- in healthcare roles, whether nursing or paramedicine. These are clearly influenced by culture and norms of the service provider organisation as well as societal expectations (Williams, 2012). Ambulance services in the UK still tend to have a masculine ideology though less hegemonically masculine and militaristic than in earlier days of the development of the role of the paramedic. In contrast, all paramedics, regardless of gender, are required to, as with nurses, demonstrate a caring, compassionate and empathic approach (Boyle, 2005; Williams, 2012) and move towards shared decision-making and patient-centred care where possible.

Goffman (1959), from whom Hochschild drew, theorised that people, when interacting in social milieu, are constantly working on conscious 'impression management', suppressing or controlling emotions motivated, according to Goffman, by desire to conform. The person's concern being focused on what others think about them and being enabled in the community to share the same expectations of how to behave, how to be 'socially acceptable' and to 'fit' within the institution's cultural norms and 'feeling rules.'

When an actor (paramedic) takes on an established professional role, s/he will, according to Goffman (1959), find that the setting and their 'front' will be established by, for example, clinical practice guidance, patient, employer and professional expectations. The actor/paramedic, according to Goffman (1959), may select from a range of fronts and may discover the gap between the specific performance and a "not quite fitting front" (p38). Goffman's (ibid) notion of dramatic realization theorises the way actors expresses themselves during an interaction to portray what s/he wishes about their role, whether attributes, qualities or actions. Goffman himself critiques *"obvious inadequacies"* (1959: ix), of his theory, admitting the stage is not real life; critics pointing out that Goffman's dramaturgical world is shallow (Raffel, 2013). However, some of his observations are helpful in making sense of the drama of paramedic practice.

Whilst medicine has, as Barker (2002) proposes, legal powers to diagnose and prescribe, paramedicine has been situated in relation to medicine and is striving to develop enhanced independence (BSc level education for registration, advanced and specialist roles and finally the case for prescribing rights). The relationship between emotional labour and decision-making has only been recently investigated, and, as this research is seeking to tease out how students develop in decision-making in tricky, challenging and ambiguous situations, which may be anxiety provoking and a certainty is a key feature, exploring how students manage emotions and relevance or their affective state in relation to decision-making seemed important.

Theodosius (2008) contends that if the cognitive standpoint dominates, then the experience of emotion becomes subordinate. More recent integrated theories of clinical decision-making accept that there is complex inter-dependency between cognition and emotion, which can helpfully be explored and applied in relation to how paramedics/paramedic students develop their decision-making, clinical judgment and management of emotions in interactions with patients.

Kozlowski et al. (2017) synthesised 23 papers comprising a range of qualitative, quantitative, and mixed methods papers which had a clear focus on elements related to emotional intelligence and experienced emotion in clinical decision-making. Whilst studies included did not incorporate data from paramedics, other professions including nurses, doctors, occupational therapists and physiotherapists were included. What does not emerge in literature is a clear conceptual framework nor matrix for emotional competence to enhance patient safety when making clinical decisions. Lerner, Li and Valesolo (2014) go further, suggesting that emotions **drive** clinical decision-making, proposing an integrated model of clinical decision-making, whilst recognising that there are limited conclusions amongst this rich and growing field.

> *Collectively, they elucidate one overarching conclusion: emotions powerfully, predictably, and pervasively influence decision making (p5).*

Lerner, Li and Valesolo (2014) differentiate between 'integral emotions' which are triggered by decisions and their consequences -for example anxiety about risk would lead to guarded/risk averse/'safe' decisions- from 'incidental emotions' which, in this case, the paramedic/student brings to decision-making scenarios. Integral emotions can powerfully attach to judgement and reasoning, even when other options are available, thereby

dominating rationality. Incidental emotions can generalise from one experience to another (this can be seen in patients with anxiety who transfer anxiety from one situation to another despite what they may recognise rationally as not making sense). Furthermore, studies (Keltner and Lerner, 2010; Lerner, Li and Valesolo, 2014) have demonstrated a correlation between emotional states and their effect on judgement and decision-making, with current emotions influencing evaluation of potential choices, risk and outcomes.

Chapter Summary

The approach to developing decision-making in paramedic education draws heavily on research and insights from nursing literature (following in the footsteps of the journey to graduate nursing that the paramedic workforce is now treading), with much work focusing on transitions (from out of hospital to in hospital care, or other services; emergency decision-making or small -scale qualitative studies focusing on end of life or mental health interactions). What is less visible is analysis and incorporation of the growing body of studies focusing on cognition and emotion and their impact and influence on decision-making.

The literature and diverse paradigms within clinical decision-making literature have led to fragmentation in construction and evolution of an holistic inter-professional understanding and representation of clinical decision-making and an approach which truly reflects the reality of clinical decision-making for paramedic students and registrants. In exploring clinical decision-making from cognitive and emotional standpoints, I recognised that there was a need to explore students' experiences of and learning from clinical decision-making in the real world to identify more completely ways that clinical decision-making is affected by experience, reality, emotion, risk encapsulated in a patient-centred care/ shared decision-making approach. This would, I felt, identify whether and how the curriculum (theory and practice) could support learners in navigating sophisticated, complex, risky and emotionally laden decision-making terrain.

METHODOLOGY

This chapter explores my positionality as a researcher, then discusses the methodology informing research methods employed for this research, providing its' justification, and exploring my conceptual and epistemological position – that of phenomenology and social constructivism. I then discuss the two research methodologies which are integrated within this research, Case Study and Narrative Inquiry, providing theoretical rationales, as well as personal perspectives, followed by details of the research design.

Reflections on research experiences are woven through this chapter, incorporating contemplations arising from data analysis embedded in the next chapter and final reflections in the chapter 'Endings', to convey the ongoing reflections during this most complex and often demanding research process.

Introduction and research aim

The main research aim is to explore the experience of the first cohort of BSc (Hons) student paramedics undertaking the programme running in HSC at UEA to see where they may need better support, in the particular area of uncertainty inherent in complex psychosocial issues in non-emergency situations. The 'Research Problem' is to identify whether the curriculum and practice-based learning support students in their assessment, decision-making and management of patients who do not require emergency and time-critical care. The focus was on student experience and reflections on working with patients whose needs are complex, ambiguous, span psychosocial aspects, where traditional practice may not yet have 'caught up' with the 'vision' for the profession, and where key patient pathways may not always be in place. These situations include mental health and end of life episodes of care. In doing this, I also sought to identify gaps in the current (UEA) educational provision, to enhance the curriculum and to better prepare students for the reality of the paramedic role in a rural setting.

Having reviewed the literature, reflected upon my experience and the assumptions and 'lenses'/perspectives I brought to the research process, the ethical elements (explored in more depth later in this chapter) were also considered. Working through Creswell's Philosophical Assumptions (2013: 21) was a further very helpful exercise as the questions focused my thinking about 'why' and 'how' my assumptions, beliefs and viewpoint were relevant to and informing this research. The analysis of these, and questioning how my attitudes and biases might and could influence the research and analytic process,

enhanced awareness of my standpoint, and the positioning of this research within theoretical and epistemological paradigms.

Table 1 Philosophical assumptions

Assumption	Question	Characteristic	Implication for Research
Ontological	What is the nature and meaning of students' reality?	Multiple realities and meanings	I explored the themes raised and the range of perspectives focusing on their narratives/stories as a way of accessing these realities meanings
Epistemological	What is 'knowledge'? What is the relationship between myself and the students?	Subjective stories from participants and narrative artefacts (e.g. reflections) Balance between 'insider' and 'outsiderness'	The stories are the evidence Collaboration with participants – co-production Awareness of conflict – me as researcher/lecturer/assessor
Axiological	Role and relevance of values?	Acknowledgement of values and biases	Open exploration of values: - Myself as a mental health nurse and lecturer - My beliefs about 'care' - In shaping narratives - In interpretation and analysis - In storying and interpreting of participants' articulations - In the role modelling by mentors/lecturers in learning environments
Methodological	What research process 'fits'? What are the research aims and questions?	Inductive approach Situated and contextualised Emerging design	Context considered in detail (case study) Revise and revisit the research questions Is holistic, reflective and interpretative Reliant on student narrative (narrative inquiry)

(adapted from Creswell, 2013: 21)

Positionality and its importance to case study and narrative inquiry approaches and this research

As a mental health nurse, I have a natural inclination towards exploring interpersonal/relational aspects and find that qualitative research methods and studies are more likely to resonate with me, my philosophical approach to mental health nursing having been hugely influenced by Hildegard Peplau's work (1952, 1991). Peplau conceptualised mental health nursing as a significant interpersonal relationship, with patient and practitioner bringing their individual values, past experiences and expectations into interpersonal relationships that hopefully will be formed as part of the therapeutic process. Helping relationships are, she says, a developmental process (for both patient and nurse) and a therapeutic tool in which the nurse may intentionally play a number of helping roles in order to engage and orientate the patient and help them to exploit helping resources leading towards the meeting of the patient's needs. Whilst this might be criticised as a somewhat simplistic approach, in that interpersonal relationships do not flourish, grow and progress in a facilitative and orderly way, Peplau's model was developed against the background of growing medicalisation of psychiatry. This model and others which resonate with me, tend towards identification and responding to individual patients within the context of a helping relationship, thus disavowing the 'medical gaze'.

When undertaking an MA (in Women's studies) I explored experiences of women mental health nurses when working with women patients who self-harm by cutting, using grounded theory, and I continue to have an interest in mental health, relational and cultural aspects of care. I observed in practice and in the classroom, not just in paramedic education, a dichotomy between task orientated approaches to care/practice, where patients are not recognised as individual 'subjects' (something explored earlier), drawing on Goffman's theorising of the 'medical gaze' and holistic, personalised care. Patients/survivors of self-harm report negative attitudes from a range of emergency staff towards 'cutters' (Doy, 2003) as do people with mental health difficulties. I was interested in better understanding what constructions and attitudes students were developing and whether these affected care decisions.

Reflecting on my role as researcher, as an actor within the research process, I was therefore aware of tensions within the roles and relationships integral to the research process. What, I asked myself, was my role here? Would I be an interpreter or conductor, an insider or an outsider? I started to be critically self-reflective and to consider the ' I-thou' relationship between myself as researcher/lecturer/adviser/assessor/mental health nurse and the students. This helped me to consider the process of the dialogue (the stories students will tell) and the encounters (interviews, observations) (Buber 2002 cited by McNiff, 2007). As described by Clandinin and Connelly (2000), I moved between stories and narrative as my inquiry, and narrative as/of professional (and educational practice) from the student's standpoint. This appears to equate to 'narrative beginnings' and situating myself within the research journey (Clandinin, 2007).

Social constructivism and phenomenology

This research was informed by a social constructivist perspective (Creswell, 2013) and belief that people (in this case, student paramedics) are active in striving to make sense of their learning and practice worlds, interacting and collaborating in their learning, developing subjective, complex and multiple meanings. The research perspective and analytic position taken was to enquire using an inductive/interpretive approach/lens to make sense of emerging meanings within cultural, social and organisational contexts situating and surrounding students.

As Vygotsky (1978) argues, learning cannot be separated from the social context in which it is taking place, this includes how to become integrated into a given social group (the paramedic profession/the Ambulance Trust) and its culture; language filtering experience. Vygotsky understood learning to be a collaborative, relational process involving not merely absorbing and applying new learning, but also affected by the culture of the learning environment. Learners develop together with their peers and mentors whilst being integrated into their learning community.

> *Every function in the …(learner's) cultural development appears twice: first, on the social level and, later on, on the individual level; first, between people (interpsychological) and then inside the … (learner) (intrapsychological). This applies equally to voluntary attention, to logical memory, and to the formation of*

concepts. All the higher functions originate as actual relationships between individuals.

Vygotsky (1978, p57)

For this research, insights from qualitative approaches and a social constructivist stance supported the better understanding of student experiences, feelings and personal and social constructions of care, decisions and outcomes for self and others.

The phenomenological approach was also relevant to my standpoint. This study sought to develop a comprehensive, detailed and coherent understanding of paramedic students' experiences of messy, complex, ambiguous decision-making and patient management (Cresswell, 2013). Phenomenology enables *"grasp of the very nature of the thing"* (Van Manen, 1990: 177) from the learner's standpoint and lens, with participants (the students) who have experienced uncertainty during complicated patient encounters so that lived experiences/texts can be described and interpreted/re-interpreted to value students' experiences.

In Van Manen's (1990) theorising, hermeneutic phenomenology collapses investigation of lived experiences and their interpretation. Following this approach, the researcher does not bracket (seek to exclude their own perceptions and experiences) as with for example Husserl's approach (Hermberg, 2006). The difficulty of the latter approach is that, being an insider with many years of experience, I would find the totally 'removed'/bracketed stance of researcher to be faux, as it is not possible to be aware of and to exclude all experiences. Tainting of the research process and data analysis is lessened by reflection and reflexivity. This does not mean striving to become objective, rather using reflection and reflexivity seeking to diminish beliefs, values, or knowledge about the phenomenon to be open to emerging stories and insights.

It is acknowledged that bracketing is difficult and seldom possible (Cresswell, 2013). Dahlberg, Dahlberg and Nystom (2008) provide a rationale for the relevance of reflection/reflexivity but explore 'bridling' to rein in the researcher's assumptions and probe their understanding so that the experiences are problematized, so interpretation is not undertaken *"too quickly, too carelessly or slovenly"* (p130). Whilst it is not possible to totally bracket/exclude my assumptions, I carefully considered my position and

perceptions, being reflexive to enhance my awareness and be alert to drawing hasty or biased conclusions.

Constructivism argues that knowledge is socially situated and constructed, uniting other actors and prevailing socio-cultural aspects of learners' development, this being influential in educational research. Wilkinson and Hanna (2016) assert that intersection of the phenomenological standpoint with constructivism provides the basis for a more extensive pedagogical basis for exploring student development than either perspective alone achieves. Whilst both conceptual frameworks recognize centrality of experience (Wilkinson and Hanna, 2016), social constructivism contends that all knowledge is socially and collaboratively constructed, as is the case for students whether in the classroom or practice.

The central focus of phenomenological approaches is on lived experiences, with rich data about how attitudes inter-relate, and how experiences interconnect with reflections, consciousness of/in the 'objective' world and shared conscious connection with others, Husserl's 'intersubjectivity'. Duranti (2010) in re-examining 'intersubjectivity' takes this notion further. Positing a range of six spheres from a hazy consciousness of the 'Other' (the patient or carer for example) through to working to match the 'Other' perceptually, conceptually almost being able to 'trade places', is a deeper, more extensive level of being with the 'Other'/patient. Duranti's (2010) conceptualizing of matching with the 'Other' chimes with the concept of empathy, the capacity to appreciate or sense what another person is experiencing from their frame of reference (Egan, 2014) whether experiencer (student): patient or student: researcher, and their interconnectedness.

Using phenomenology to explore and gather rich data about stories and descriptions of individual subjective experiences, married with a social constructivist approach to the cultural and contextual relationships and learning processes within which students are situated would, I anticipated, strengthen the interpretative possibilities and framework for data analysis.

Case study, its diverse definitions and orientations

The Case Study as a research method, though some authors for example, Stake (2005) do not see it as a method, is challenging to define clearly. Nevertheless, the literature makes clear that this research approach explores real people in their lived world, to gain a rich and powerful description of events from the perspectives of the 'actors' (i.e., students). Stake (2005) sees case study as *"a choice of what is to be studied"* (p443) and the means used is not material.

These students all experienced practice in the East of England, a rural locale. Most practice experience took place in three Ambulance hubs, with some placements in acute hospital and community/primary care. The objective therefore was to better understand the learning on this graduate programme allows for complex psychosocial issues to be understood, assessed and managed by paramedics and how decision-making changes in a degree student population, drawn from stories of their lived practice experience and the contextual factors that affect this, using the lens of the case study. As well as the 'typical' encounter/decision, I was looking for the unexpected, challenging, and unexpected (Webster and Mertova, 2007), revealing 'gold-dust' experiences from students (Clandinin and Connelly, 2000).

To explore how this method was used to address the aims of my study it is necessary to consider case study as a research approach, its advantages and weaknesses and applicability to my study. Case study as a research method has altered over time, varying between disciplines and individual researchers (Stake 2005, Yin 2009, Yin 2011, Creswell 2006). Case study has been much used but, as Merriam (1998) has suggested, it can be problematic to clarify what a case study is and how to approach undertaking a case study, especially as a novice educational researcher.

Yin argues that doing case study research is indicated when:

> *you want to understand a real-world case and assume that such an understanding is likely to involve important contextual conditions pertinent to your case.*
>
> (Yin, 2014: 16)

Both Stake (1995; 2005; 2006) and Merriam (1998) draw on a constructivist approach in employing a case study, where the researcher is the medium through which insights and views of participants are interpreted and constructed, as was the case for my research.

Yin (2014) and Merriam (1998) signal the relevance of the context of the case, and the researcher's role in re-presentation and reconstruction of the storying during research analysis:

> *The researcher brings a construction of reality to the research situation, which interacts with other people's constructions or interpretations of the phenomenon being studied. The final product of this type of study is yet another interpretation by the researcher of others' views filtered through his or her own.*
>
> (Merriam, 1998 p22)

Many definitions and explanations of case study research are complex and opaque as Sandelowski (2010) has observed. Sandelowski herself indicates that case study research can include a range of research processes as did my research:

> *ethnographic studies are typically case studies, and case studies may entail grounded theorizing, phenomenological reflection, and narrative analysis.*
>
> (Sandelowski, 2010: 154)

The design of this research was partly that of an 'unfolding' study (Punch, 2006), in that some research concepts and ideas were not yet clear, unfolding during data analysis and exploration of theoretical standpoints. Whilst there was some structure at the commencement of the research, further 'unfolding' took place as part of the qualitative research process. This case study then involved emerging (grounded) conjecture and continuing reflection (Sandelowski, 2010). This enabled insights and themes emerging from the first round of interviews, the focus group and exploration of literature to sharpen the focus of the research and for student experiences to truly inform the empirical stage of the research (Punch, 2006).

A key strength of using case study as a research method enables an intense spotlight to be shone on the cases for rigorous analysis. This involves and is an appropriate method to undertake first-hand enquiry of the case viz. current contextualised decision-making experiences in participant students from this first paramedic science intake. The case study method enables exploration of contextualised student experiences; marrying phenomenological/subjective and individualised post-hoc reflections with social, relational and background aspects to the situated experiences giving richness and more comprehensive information.

In respect of epistemological standpoints, Yin (2014) notes that often case study research takes an orientation that there is a *"single reality"* (ibid: 17). Case study approaches can also explore multiple perceptions, as I have within this research, seeking multiple meanings from research participants trying to gain an in-depth understanding from the frames of reference of research participants (Cohen, Manion and Morrison, 2011). Patient encounters are dynamic, unique and unpredictable, involving relationships between student practitioners and patients/families. The case study therefore is congruent, being a method that captures more of the holism using a 'Gestalt' prism to view the case (Sturman, 1999; Cohen, Manion and Morrison, 2011).

The case and its' boundaries

In exploring literature related to decision-making in health care (medicine, nursing and occupational therapy) and emerging evidence from paramedic research, it became clear to me that a longitudinal case study approach following the first cohort of BSc students would enable a more in-depth and exploratory approach. My 'case' therefore was an exploration of the student experience, their learnings, meanings and values, not that of registered practitioners, and not explicitly focused on describing the models of decision-making being used. The spotlight being on how their cross- programme experiences, as shared at the end of each of years two and three of their studies, were shaping the ways they approached uncertainty and complex/messy decisions, and how the research findings could inform and enhance the curriculum.

If educators are to help student practitioners to develop capabilities in listening to individual patient stories, making effective assessments in partnership with patients

and/or carers, then it was important to understand the stories of learner paramedics as they construct and reconstruct their encounters with patients, and make sense of how their decision-making changes and develops during their pre-registration programme. This would help in shaping educators' understanding of the complexity and meaning around difficult decisions. As I read and considered how to explore this 'case', narrative inquiry began to emerge as a meaningful framework for my research journey.

A specific interaction with a student ('Jenny') strengthened my feeling that the case study method – to explore the phenomenon (Dawson and Hancock, 2006) of tricky, uncertain decisions- would help to gain a more in-depth understanding, because I would be able, using the case study framework with narrative inquiry (as a research design and philosophy), to gain a *"richly descriptive"* (ibid: 16) understanding of experiences and world views of these students.

> *Why didn't you tell me people live like that (whilst sharing a distressing story of a totally isolated elderly patient with multiple mental and physical health problems living in abject poverty, without any human contact and refusing to go to hospital)! What can we do…it's not like attending a cardiac arrest…then we switch into gear and follow what we have been taught!*
>
> (Jenny, 2015 during tutorial)

This extract predates research data collection. The emotionality, anguish and helplessness I heard in Jenny's observation, after her first placement in year one, both startled me and reminded me of how shocked I had been when undertaking my first community nursing placement. This served to ground me in terms of recognising how far away I had been from those feelings, evoked in the 1970s, and powerfully confirmed my growing motivation and interest in exploring students' practice experiences from **their** frame of reference.

My 'case' comprised a longitudinal study focusing on the first intake of the Paramedic BSc cohort, following self-selected students over years two and three of the programme, exploring their understanding, confidence and capability in making difficult decisions, in non- life-threatening but uncertain situations. Using the case study method to undertake

a ‘deep dive’ into the stories of a small number of student paramedics during year two and again towards the end of year three to better understand their peregrination.

The focus for Stake (2006) and Merriam (1998) is on exploring multiple realities and views of the case being presented. For me this case incorporated two elements:

- Exploring multiple realities of the case of student learning/development
- How individual students learn, and make sense of their experiences in a multi-dimensional way.

For Merriam (1998), the defining aspects of a case study approach is the *“unit around which there are boundaries”* (p27) whether the case is an entity, a person, an educational programme, or a group as in my research.

This case:

- contains all of the inter-related complexities of/from/between the data collected –bounded by the stories/experiences and artefacts from the research process (Thomas, 2011)
- comprises individual stories and the context of each experience remembered and shared- and how far each story is unique and a single unit of analysis, or, as in this case, when exploring several students’ peregrinations, analysing multiple experiences.

This case study is not ‘clinical’ (Connelly, 2014) - by this I mean it did not explore patient presentations and compare the literature on their condition and does not explore mentors’ experiences in practice. Whilst Yin (2009, 2014) proposes three types of case study that can form the conceptual framework, Stake (2005) offers a more flexible categorisation, with three further types, two of which are relevant to my study:

• Intrinsic – where the researcher holds an interest in the case which holds ‘unusual interest’ (Creswell, 2013).

• Instrumental – when the case is used to explain deeper issues.

• Collective – studying a group of cases.

Analysing these categories, it seemed to me that my case study was both intrinsic, as there were exceptional and unique stories, and instrumental, providing insight into the different stories students told around their practice and decision making and how we as educators may learn from this (Stake, 2005). The study is a case of student learning and development, the smaller (intrinsic) cases being samples/examples which contribute to theorizing of student learning on this paramedic science programme. Together these individual cases combine to be instrumental – to illuminate issues that affect their learning and development, together offering insights to help programme improvement.

Sandelowski (2010) challenges Stake (2005) and Yin (2009) amongst others, disputing Stake's categorisation of an intrinsic/instrumental boundary and Yin for his contention that behavioural events are not engineered. She contends that "the cases selected for study are made as opposed to found through an iterative and theory-laden process called 'casing.'" (ibid, 2010: 155). There are many different ways of viewing what a case study is from being a specific example used to illuminate the wider context, to the case study being 'holistic' (Yin, 2009).

In reading and reflecting, 'casing' and 're-casing' the case study (Sandelowski, 2010), I reviewed student responses to NHS pre-registration and National Student Surveys (NSS). Many students studying health sciences programmes (not paramedic students who at that time had not experienced a practice placement) provided qualitative comments which indicating they did not always feel confident entering practice (though in fact they may have had preparation and have been determined as competent – perhaps through simulation for example). I began to consider the role of perception and meaning and the inter-relationship between experience, reflection and meaning, as well as the integration of values and patient-centred approaches (Del Mar, Doust and Glasziou, 2006) in developing confidence as a decision-maker in 'real world' practice. This cemented my bringing together both case study and narrative inquiry approaches in this study.

Suitability of the case study method for my research

In theorising research methodology and exploring the case study approach, I was mindful of Yin's (2014) suggested criteria to consider the type of case study most appropriate for addressing the research question. Yin argues that three foci inform this process: the research question itself (the how and why); whether the researcher needs control over the behaviour being studied (in this case no) and whether the research focus is on current experiences (yes) (Yin, 2014: 9–15). I aimed to illuminate understanding of patient management processes/confidence/outcomes, so the purposes of case studies as articulated by Yin (2009) were incorporated. Holism not reductionism (Verschuren, 2003, cited by Yin, 2009) being my goal.

To summarise, the case study method enabled in-depth exploration, analysis and enhanced understanding of development of student paramedics in decision-making in complexity. More than one decision-making experience was studied, drawing on a small number of students (twelve in total out of twenty seven), as well as documents and reflective artefacts. In order to maintain awareness of my biases and assumptions, situate the case appropriately and *"get it right"* (Stake, 1995)- or rather 'more right'- as there may well be no one right, I kept field notes, developed reflective memos and undertook a number of strategies- detailed in later in this chapter as well as in the next, to make the research process transparent and enhance trustworthiness.

Whilst the case study method has many strengths, as previously discussed, the results may not be transferrable, and I was alert to my assumptions and biases, taking steps to be reflexive and self-monitor. There are challenges around the confidence with which the data, its analysis and reporting will be understood and viewed (Cohen, Manion and Morrison, 2011; Yin, 2014). I will return to these in the section on trustworthiness in relation to vignettes in the next chapter.

Narrative inquiry (NI)

> *People shape their daily lives by stories of who they and others are and as they interpret their past in terms of these stories. Story, in the current idiom, is a portal through which a person enters the world and by which their experience of the*

world is interpreted and made personally meaningful. Viewed this way, narrative is the phenomenon studied in inquiry. Narrative inquiry, the study of experience as story, then, is first and foremost a way of thinking about experience. Narrative inquiry as a methodology entails a view of the phenomenon. To use narrative inquiry methodology is to adopt a particular narrative view of experience as phenomena under study.

(Connelly and Clandinin, 2006: 477)

NI emerged as a meaningful framework within which to undertake the research, enabling a focus on affective and relationship aspects of decision-making as joint enterprise between paramedic and patient. The NI method seemed similar to the case study method, in that both draw on a broad range of disciplinary foundations. However it is the storying and meanings rather than observations 'in the field' from which insights would be drawn to 're-story' and to develop 'plot lines' and then construct (being consistently aware of needing to be reflexive) the narrative of decision-making. The case study method provided the framework for the research -exploring understanding of decision-making in real-world practice- and narrative inquiry to draw out the patterns of meaning, valuing individual stories; both methods complementing each other. NI is intertwined in the building of the case of student journeys in decision-making.

NI draws from the interpretative paradigm, using experiences from texts, stories and interviews with the researcher connecting with narratives to explore complex layers of experience as a collaborative enterprise- researcher and narrator together add pieces to the puzzle constructing new insights from social, cultural and systemic contexts (Clandinin, 2013). NI is now seen as comprising the intertwining connectedness of the narrative views of experiences as both the phenomenon and the methodology (Clandinin, 2013, Clandinin, 2007, Clandinin and Connelly, 2000). Understanding experiences enables researchers an 'insider view', elicits a profounder grasp of the narrator's perspective, revealing personal subjective perspectives of students within the social practice milieu, informing analysis of the findings.

In their voyages of experience and storytelling, the students were sharing multifaceted stories and lived experience in practice around challenging and unsettling decisions,

comprising multiple layers. What interested me and sparked curiosity was how can I as an educator understand the stories, meanings and metaphors from the perspective of the student? The idea of a partnership between myself (as educator, tutor and researcher) and the students (research participants) over time, with students able to tell and retell their stories from practice (Clandinin and Connelly, 2000), appealed. The possibility of taking the case study approach further by gaining insight into how students' identities as developing practitioners and decision-makers, whose emerging stories provided a window into students' view of themselves and their practice (Creswell, 2013), added richness to in-depth study afforded by a case study. Additionally, narrative inquiry also draws on the interaction and collaboration/co-construction of stories (Creswell, 2013), following both the way that the researcher draws out themes across stories and the researcher as shapes stories. This Creswell calls building on the 'plotline(s)' and 'restorying' which emerges from analysis of the stories (ibid: 72; 74). This entails drawing on narrative inquiry both as a research method and the phenomenon being studied.

There is a difference between the 'analysis of narratives' i.e. modelling to create descriptions of themes that emerge across student narratives, and 'narrative analysis', assembling accounts and incorporating them into a story using a 'plotline' (Creswell, 2006, 2013). From the plotlines, rich metaphors emerged. I decided to develop and synthesise these into vignettes to re-story and portray the rich scenes in which students were players. Composite vignettes were developed from the analysis of first round of interviews to share with a focus group of students. These brought together initial plot lines into reconstructed stories, to elicit further experiences and hear how these resonated with the focus group. Development of the multiple vignettes incorporated both aspects of analysis of the stories and constructing stories with plotlines such as 'No Little Boxes of Certainty'.

Barter and Renold (1999) identify three reasons for using vignettes in qualitative research, these include exploring (in this case decision-making journeys), participants' thoughts, feelings and behaviours and to distance upsetting/problematic issues allowing participants to interpret and explore the scenario (Hughes, 1998). Further exploration of vignette construction in relation to analysis of the findings is in the next chapter, with an in-depth exposition and justification of modes of vignette development.

There are many practices in NI, with Clandinin and Connelly's (1990, 2000) work being particularly influential and more specifically addressing NI and how researchers exploring narrative can proceed. For me, it is the stories derived from students about their real-world experiences of decision-making and the meanings they weave as their identity as practitioners 'in waiting' develops that were key. The stories (from a small number of students) were gained via interviews and focus group interactions. They were analysed to illuminate the moments of insight, tensions, meanings being framed and reframed and to determine the 'plotlines' (Polkinghorne, cited by Cresswell, 2012). Therefore, the integration of NI within the case study framework, seemed to be both congruent and to 'fit'. As Chase (2005) argues, NI is a specific form of qualitative inquiry drawing on interdisciplinary and multiple ways of viewing – typified by an interest in participant's lived story- this involves shaping (reshaping) meaning by looking back at experiences (reflection on action as explored by Schön, 1983 and Argyris and Schön, 1974).

The following Four Criteria (Lieblich et al., 1998, cited by Giovannoli, undated) for evaluating narrative studies, was hugely helpful, acting as critical triggers in conceptualising the methodology, in the emerging process of analysis, my positionality, feelings and reflexivity as well as in analysing and synthesising the findings themselves. As the research process unfolded, I returned to these and augmented these particularly when critically reflecting on the methodology for analysing research findings:

1. Width: Is the evidence complete enabling the audience to 'trust' the research and its interpretation?

2. Coherence: Do the various parts come together in a meaningful way and do they 'fit' with existing research and emerging theory? Is there a resonance?

3. Insightfulness: Does the research offer creative or novel insights on the stories and their analysis? Do the perceptions support the audience in gaining additional understanding of practice?

4. Parsimony: How well is the narrative inquiry presented? How sophisticated and careful is the identification of key themes and concepts and their analysis?

(Adapted from Giovannoli, undated)

Using NI makes explicit that diverse ways of thinking and tensions in boundaries around interaction and continuity (Clandinin and Connelly, 2000) are important places to explore in research. I aimed, in considering the limits, in this case of peregrinations in decision-making in practice, to illuminate how these both affect and shape the individual's experience, over time and within their social world. These tensions resonated with me as did the idea of exploring the *"storied landscapes"* inhabited by students (ibid: 25). Using NI with its recognition of multiple lenses and voices telling stories of experience to reflect the complexity of being in the middle of an *"amalgam of interdisciplinary analytic lenses…and approaches…"* (Chase, 2005: 651) and patient encounters, became increasingly relevant as a research method and a way of thinking about approaching fieldwork for this research. I recognised how narrative inquiry, both as a method, and informing the analytic process would fit well with the framework of a case study research method.

As previously discussed, reflection, insight and self-awareness are important areas to explore, so the work of Schön (1983, 1990) related to experience, reflection-on- and –in-action as well as knowing-in-action resonated as this layered the criticality of my reflection and reflexivity, supplementing ways of focusing my reflective lens, which I hoped would enhance the trustworthiness and integrity of this research.

> *The practitioner allows himself to experience surprise, puzzlement, or confusion in a situation which he finds uncertain or unique. He reflects on the phenomenon before him, and on the prior understandings which have been implicit in his behaviour. He carries out an experiment which serves to generate both a new understanding of the phenomenon and a change in the situation*.
>
> (Schön 1983: 68)

As can be seen above, some of the theories around developing professional practice illuminate further the notion of storying and narratives involved in the development of decision-making.

Whilst NI may be seen as appealing and congruent with an educator's role, critics have suggested it is easy and merely related to storytelling. Clandinin, Pushor and Murray Orr

(2007) point out how complex the research inquiry into narrative is, requiring 'wakefulness' on the part of the researcher. As NI is fluid process, Clandinin and Connelly (2000) urge continuing reflection, this they deem as 'wakefulness'. Being wakeful and reflective encompasses awareness of the ways the research is developing and being alert to decisions being made by the researcher. This wakefulness enables alertness to stories not told as well as what is narrated, to the boundaries and contexts and any likelihood of risk or manipulation, researcher biases and awareness of:

> *Crossing guards, gates, trap doors, and stop signs...allow(ing) us to proceed forward with a constant, alert awareness…where diversity is cherished, where wondering about other possibilities is encouraged.*
>
> (Clandinin and Connelly, 2000: 182).

NI has sometimes been viewed as merely a way of collecting research data with consideration of the narrative rather than the total immersion in the stor(ies). The literature provides arguments to support the value of narratives in research. Webster and Mertova (2007) informed by Eisner's (1998) review of educational research exploring the nature of experience, identify how a new researcher can go beyond disciplinary boundaries and use narrative as a research method to address *"complexity and human-centeredness"* (Webster and Mertova, 2007): x). Narrative Inquiry is the making of meaning; more than telling stories. Narrative is how we create, recreate and reconceptualise ourselves (recording and retelling of, as in this case, significant events) (Webster and Mertova, 2007). In the case of my study, this is exploring how students make sense of their experiences and how these shape their development during their journey from novice to competent paramedic (Benner, 1984; 2001; Dreyfus and Dreyfus, 1980). As with a case study method, exploration of student experience and perceptions using NI is an appropriate focus for the educational researcher:

> *Experience happens narratively…Therefore, educational experience should be studied narratively.*
>
> (Clandinin and Connelly, 2000: 19)

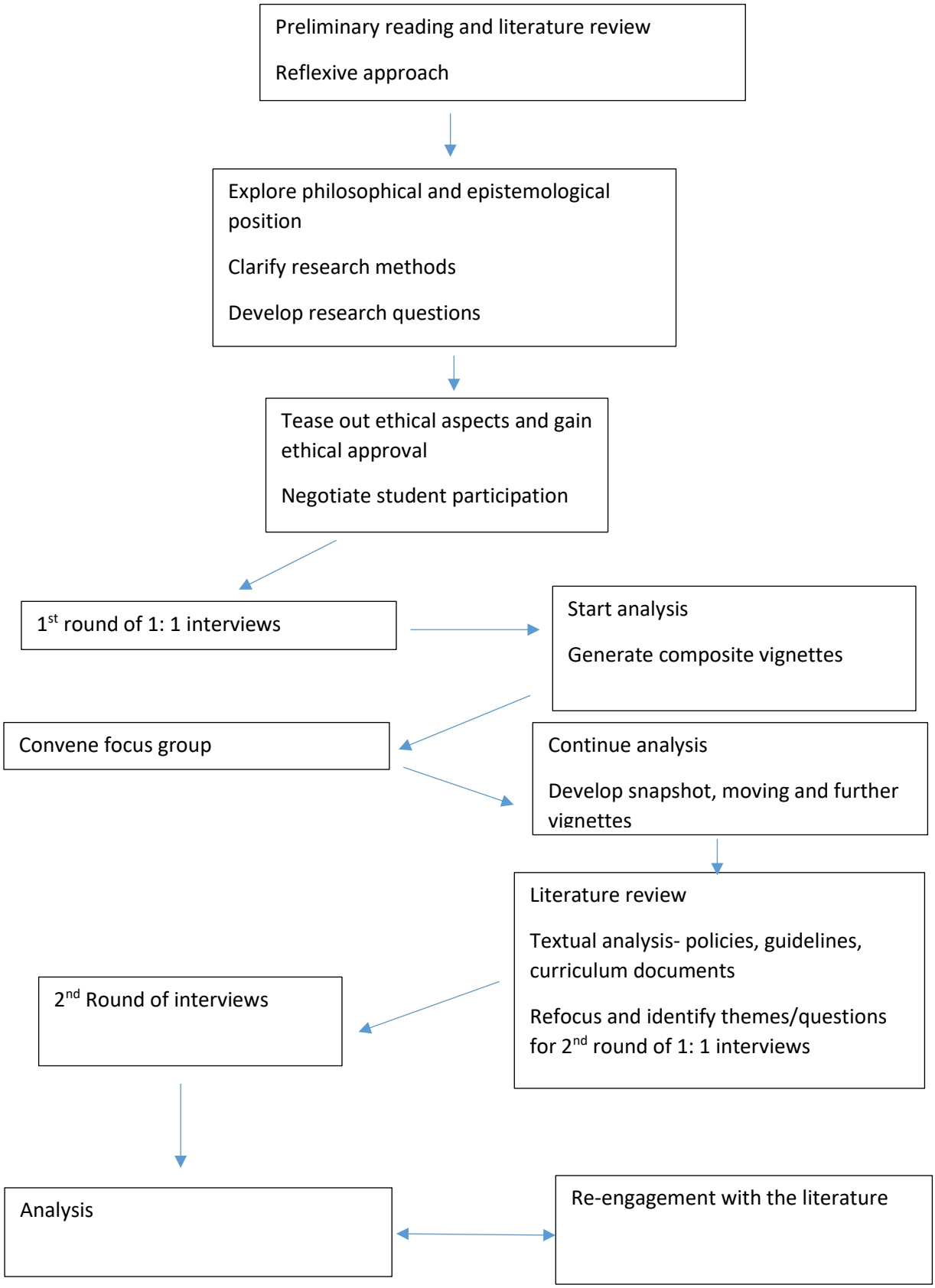
I recognised that it was likely that the stories student would tell would be in some way significant or memorable (critical) for them (Webster and Mertova, 2007).

Concerns, criticisms and strengths of narrative inquiry

Debates abound related to issues of credibility, trustworthiness and transferability and ways of justifying NI as a research method. This is true in differing degrees within the range of qualitative methods. One criticism is that there may be a gulf between the participant's and researcher's 'narratives of experience' which can lead to lack of connectedness. The extract from 'Jenny' and the reflective/reflexive processes and contemplation of my standpoint were purposeful tools to appropriately enhance my connectedness without being enmeshed/overinvolved- connecting with the story but listening for the student's voice. Another critique is that the relationship should be constantly 'tilled' and renegotiated (many explanations of the research process are needed) so that the researcher *"join(s) the narrative, to become 'part of the landscape'"* (Clandinin and Connelly, 2000: 78) if they are to follow the twists and turns of the "narrative thread" (ibid), so a challenge therefore is that texts and conversations may misrepresent partly, selectively, or imperfectly the story shared. Reflexivity ('wakefulness'), as indicated earlier, supports delving deeply into underlying insights and multifaceted layers of stories with deliberate efforts to draw out student voices and separate researcher biases and perceptual limitations.

To clarify my thinking and how methods and methodology fitted I developed the Design Map (Table; 2 overleaf) (adapted from Maxwell, 2013: 5).

Table 2 Map of the Research Process



Data collection

In case study research, as with other qualitative methods, it is important that data is extensive, and draws on a range of sources to provide, as Yin (2009) indicates 'multiple lines of sight'. This has the advantage of strengthening the insights gained, helping to avoid questions related to how trustworthy the analysis and findings might be. Data was collected by:

- In-depth semi-structured interviews with a sample of year two paramedic students (eight); followed through and re-interviewed in year three of the programme (for the semi-structured interview schedule which was the framework for first round of interviews- see Appendix 2)
- A focus group comprising four other students from this cohort
- My reflexivity, field notes and reflexive memos
- Collaboration and co-production of interpretation and meanings through the use of vignettes (this is discussed in the next chapter)
- Documentary analysis

Interviews

In keeping with the narrative inquiry method, using semi-structured interviews was a key strand of data collection. This facilitated careful exploration and listening to experiences and 'life world view'- the 'InterView' (Brinkmann and Kvale, 2015a) - shared by student paramedics with me as researcher.

Information and an overview of the research was provided in a presentation to the group and information leaflet (approved as part of the Ethical Approval process) was given in hard copy as well as emailed to all students in this cohort (see Appendix 2). Interested participants were given a brief outline of the research, enabling them to provide informed consent as to whether they wished to be involved in two rounds of semi-structured interviews or the focus group to be convened between the first and second rounds of the interviews. Blackboard© announcements also reminded students of the opportunity and offered additional copies of the Opt-in sheet, participants' information and presentation. Students had at least 14 days to decide whether they wished to participate, it being made

clear that they were free to choose whether to participate and could withdraw at any time. I advised students that I would randomly allocate them to the interviews or focus group unless they explicitly expressed a preference for individual interview or focus group participation.

Consent was also sought for the audio-recording of interviews and focus group for accuracy. Consent was checked with each participant before the interview and focus group commenced and again at the end of the interview/focus group, with explanation of how anonymity would be assured, and ways participants would be asked to check and comment on transcripts and vignettes.

I explained to students in the presentation, emails and at the start of each interview and the focus group meeting that I would contact them for more information/checking of the transcripts with the interviewees as well as sharing emerging findings/outcomes. All participants were assigned an alias (for anonymity) which was used when using direct quotations in the thesis, and also for individual vignettes generated. Any composite vignettes developed were carefully crafted to preserve anonymity in collation of emerging key ideas and themes.

Participants were informed of the processes to assure confidentiality at all stages of the research, I checked that each student was still consenting to be part of /remain within the process. Each interview lasted between 30 and 60 minutes, with the focus group running for one hour.

The first interviews took place at the end of year two and the second in the final teaching week at the end of year three as the students prepared to graduate and apply for registration. Examples of themes emerging from the interviews were gathered together and developed into vignettes. Several types of vignettes were generated and used both for gathering data and during the rounds of data analysis. The theoretical basis and justification of the use of vignettes is discussed in depth in the next chapter.

Focus group

Following the first round of individual interviews, a focus group was held, helping to ensure connectedness, confirm emerging ‘plotlines’ and add individual stories and insights. Four students who had not been involved in the individual interviews attended. I had initially hoped to recruit eight-ten students. Prior to the focus group, I had started

preliminary analysis of the interviews, engaging deeply with their narratives and experiences. From this I developed five composite vignette(s) to share with the focus group, in part as a 'reality check' of the emerging plotlines and scenarios, and to see whether there was resonance with emerging plotlines and metaphors.

From key themes/plotlines and metaphors a range of anonymised vignettes was developed with five composite vignettes being used within the focus group, to explore the emerging ideas/themes/categories with four students from the peer group of those students being interviewed. These composite vignettes acted as a 'reality check' of the trustworthiness of the emerging ideas and concepts (Ely et al., 1997) whilst ensuring anonymity of individual participants. These were used within the focus group and elicited further stories and rich examples, adding layers rather than collapsing new insights into the overall melange.

The focus group participants validated the analysed work and vignettes, also adding additional and potential different narratives, authenticating plotlines but individual stories added new perspectives and examples, so that whilst multiple realities are garnered, individual student sense-making of their experiences is also preserved, blending layers and avoiding their total fusion.

As Kamberelis and Dimitriados (in Denzin and Lincoln, 2005) note, focus groups have been used in numerous ways from propaganda and market research, military to feminist enquiry and consciousness-raising. They suggest that focus groups are

> *unique and important formations of collective inquiry where theory, research and pedagogy, and politics converge (p888).*

They examine three approaches of which the third, that of research, is clearly informed by the collective political 'struggles' and insights from feminist practice which over time have influenced the use of focus group methods of qualitative exploration in research in the social and health sciences. Focus groups may be merely used as an efficient way to gain access to a number of research participants and therefore much data, they can also function to enable the voices of participants who would not wish to be interviewed on a one-to-one basis to be heard, benefiting from the dynamics between participants, which may dilute the perceived power of the researcher (Kamberelis and Dimitriados, in Denzin and Lincoln, 2005). For the purposes of this research the shared experiences and multiple stories and the opportunity to explore how the composite vignettes with key themes

chimed with the group members' experiences is a key part of the process of validating the emerging ideas and concepts from the first cycle of individual interviews; noting that this is a *"staged conversation"* (ibid, p904), the focus group nevertheless enabled additional standpoints and memories to surface, adding to the richness of the research data.

Credibility, consistency, transferability and dependability

Enhancing the trustworthiness involves four elements: credibility, consistency, transferability and dependability. Lincoln and Guba (1985) assert that research credibility is established when readers encounter the experience, and it resonates. Credibility therefore focuses on the 'fit' between participants' stories and the researcher's re-presentation of them. Triangulation using several methods of data collection and of sources – two rounds of interviews, a focus group and textual/documentary sources- and some member checking sought to enhance the credibility of the findings. During the coding and analysing I sought peer review by involving my supervisors in verifying, confirming and validating the data, themes and ideas and in repeating the process to identify further themes, concepts and categories. A second method of verification involved the focus group participants using the composite vignettes to authenticate the emerging themes and categories as detailed above. The focus group resoundingly confirmed that the composite vignettes had the 'ring of truth', confirming the storylines as credible and congruent with their experiences.

I have worked to facilitate consistency, credibility and dependability by explaining the research decisions taken, and by having prolonged exposure to the data and by providing 'thick descriptions' with verbatim extracts and an array of detailed vignettes directly drawn from participants' accounts.

Member checking by asking each participant to review the transcript of each interview and/ in order to check for accuracy (Houghton et al, 2013) was a further strategy to assure transparency and dependability as part of the *"audit trail"* (Sandelowski 1986).

Within this chapter a comprehensive account of the research methodology and methods, overall research approach, justification for case study and NI and an account of the design for fieldwork has been provided, to enable readers to scrutinise the research process, and ascertain the dependability of the research (Lincoln & Guba, 1985).

DATA ANALYSIS

This chapter explains the experience of analysing and interpretating the rich and vast array of data gathered, detailing two cycles of coding and development and use of vignettes. Further reflection/reflexivity and a detailed consideration of credibility, trustworthiness and truthfulness in the construction of vignettes is also discussed.

Myself as researcher and reflexivity- 'Wakefulness in analysis'

Extract from my field notes 02/02/2018:

> *I am an insider, a lecturer who led the construction of the curriculum for these students. I'm involved in organising and delivering psychosocial content and modules and am Personal Tutor to three of the twelve students who participated in the research. I'm very aware of the potential for potential power imbalance between myself and the students. Are those who've stepped forward to participate in the interviews or focus group reflecting the perceptions and experiences of those who didn't chose to contribute? Their stories will be filtered and shaped by their individual practice encounters and also by their experiences in the classroom. I've influenced the content and values within the modules I teach around psychosocial perspectives, developing insight and empathy and holistic individualized care. The students call this 'Rosie's fluffy pink stuff'! As I'm reviewing, coding and analysing I'm consciously checking my responses to the stories I'm hearing and also asking 'does this feel authentic…is s/he just saying what they think I want to hear', am I teasing out what* ***I want or need to hear****?*

As Finlay (2002a; 2002b) indicates, reflexivity is slippery and full of ambiguity. My professional journey influenced the learning experiences to which students were exposed in the classroom; there had been interpersonal interactions and formative and summative assessments focusing on mental health issues, end of life care and psychological and sociological concepts and their relevance to patient care. The curriculum requires this approach in order to meet the Health and Care Professions Council Standards of Proficiency for Paramedics (2014). However, as indicated in the literature review, these have traditionally been gaps in paramedic education, and different values, attitudes and understandings would be experienced from other members of the team during the student's practice experience, so the data analysis sought to explore the student's perceptions of different and/or competing approaches to patients.

Many approaches to reflexivity have been suggested (Finlay, 2002a; 2002b) proposes five typologies to illuminate the reflexive 'swamp', each having strengths and limitations, insights and tensions for the researcher.

> *Reflexivity can be defined as thoughtful, conscious self-awareness. Reflexive analysis in research encompasses continual evaluation of subjective responses, intersubjective dynamics, and the research process itself.*
>
> (Finlay, 2002b: 532)

"Reflexivity as inter-subjective reflection" (Finlay, 2002b; Finlay, 2003) at first appealed with its emphasis on the *"situated and negotiated nature of the research encounter"* (Finlay, 2002b) and the relevance of my being older than the students, my position as a nurse not a paramedic and my role as a lecturer. However, this particular genre of reflexivity generally is cautious about the emotional investment of the researcher, something I was very much aware of in myself. This research was important to me, and I was emotionally invested. This research was not a confessional, but I did need to examine and bring to awareness my own attitudes, assumptions and biases, and reflect on the nature of the collaborative relationship and meanings being co-constructed, trying to enable more open examination of the integrity of the research and the interpretation of the research findings.

Finlay (2002a; 2002b) gave me permission to draw on several ways of seeing reflexivity. I recognised the value of introspection balanced against the danger Finlay (2002a) notes, that of self-indulgence and drowning in the swamp, perhaps being the ending, rather than a process to enhance the transparency of the emotional and relational resonances on the analysis and re-construction of participants' stories. Charmaz's (2006) criteria for assessing the quality of research- credibility, originality, resonance and usefulness- informed my approach and reflection on the mutual meanings, power relationships and my shifting positions as a researcher as the methodology and analysis developed. A number of measures, including two coding cycles described in this chapter, were put in place to enhance transparency and credibility, to check for resonance and to improve my *"explicit self-aware meta-analysis"* (Finlay, 2002a: 211).

As Ely et al. (1997), Finlay (2002a, 2002b) and Spalding (2004) suggest, reflection is important at every stage of the process. The use of a research diary, close attention to each research interaction, participant checking of transcripts, the iterations of the

vignettes developed from the first cycle of interviews and then shared with the focus group, and independent review of sample transcripts by my supervisors were used to facilitate multiple reflective views and reflexivity as part of the evaluative/audit and accountability process and to enhance transparency.

Data analysis cycles

There were two cycles of analysis, each comprising many steps to generate ideas, codes and themes and incorporate reflection and reflexivity throughout. The first cycle reviewed and examined patterns in the transcripts, my observations and reflections, and from these data to generate codes and Charmaz's (2006) crucial connection between the research findings, whilst exploring their meanings. The aim of the second cycle was to reanalyse and reorganise the data from the first cycle of coding to link what may have seemed unrelated or disparate elements to develop a *"coherent meta-synthesis"* (Saldaña, 2016:234). Codes being:

> *word(s) or short phrase(s) that symbolically assign... a summative, salient, essence-capturing and/or evocative attribute for a portion of language - based...data.*
>
> (Saldaña,2016: 4)

Each element detailed in the overleaf above contributed to a detailed repertoire of tools and filters for deconstructing both the research relationships and interactions and for establishing that these were 'realistic tales' (Finlay, 2002b). Remaining close to the data, being alert to how far the data, theming and grouping of the findings reflected the students' real-world experiences (Sandelowski, 1986) with awareness of my coding lens (Saldaña, 2016) and developing composite vignettes to check emerging findings, acted to continually assess their trustworthiness.

Table 3 Analytic tools used during the cycles of coding

First Cycle
Field notes Preliminary jottings Transcription Analytic memos In vivo Coding- emerging themes and metaphors Composite vignettes Further field notes Second round interviews In vivo coding – grouping of themes and metaphors
Second Cycle- not a linear process, progressed through many iterations
Notes and reflections Portrait, snapshot and moving vignettes Dramaturgical coding Grouping of themes and metaphors
Interim
Identification of three key categories synthesizing several themes/metaphors

First cycle of analysis

This cycle used in vivo codes (Charmaz, 2006, 2014; Saldaña, 2016) for data analysis, with dramaturgical coding for the second cycle. Two different methods of coding were used to better capture the complexity and richness of the data, whilst taking care not to 'muddy the waters' (Saldaña, 2016: 69). The use of In vivo coding for the first cycle of analysis was informed by the importance of capturing the participants' voices and perspectives as

accurately as possible by drawing out verbatim extracts including the myriad of powerful metaphors, tensions and emotions articulated.

This cycle of data analysis involved review and reflection in my jottings and field notes of impressions, observations of non-verbal communication of the students interviewed, followed by verbatim transcription of each interview. With transcription, data analysis started. As Riessman (2008) indicates, it was a selective interpretive process during which the narratives are co-constructed (Brinkmann and Kvale, 2015b). Hence my impressions as noted at the time, and whilst listening to the interviews, included noticing the tone and pacing of utterances, laughs and hesitancies and my response to these. Elements which seemed to be meaningful or important to the student and powerful emerging metaphors were highlighted on the verbatim transcripts (using colour coding) and notes were added to the transcripts.

After transcription, these were shared with the students, so they could comment, amend and add clarity adding reassurance that the transcript was an authentic record of our research conversation.

The ongoing process of comparison articulated by Charmaz (2006) and the process of distilling the 'big story' (Saldaña, 2016) were key analytical steps. To add further rigour to the data analysis, triangulation, that of sharing the initial coding and emerging themes and metaphors from the transcripts of three student interviews with my supervisors, enabled analytic conversations and comparisons of perspectives to see the data through diverse lenses. This supported the drawing out of the 'bones' of the findings (Charmaz, 2006) and tested their credibility and resonance.

Concept grids, maps and a consolidated map of themes (see Appendix 4) were then developed to trace relationships and interconnections and then to merge 'micro' concepts into those which there were similarities and 'fittingness' (Sandelowski, 1986). The 'fittingness' related to the 'fit'/transferability to other BSc paramedic science students and to out-of-hospital practice more generally.

A two-column table was developed incorporating data from the transcripts in one column and initial coding in the other (see Appendix 4); incorporating in vivo codes (Charmaz, 2006). Comparisons were made between emerging highlighted segments and my notes, which enabled the gradual assimilation and synthesis of the data.

I grappled with the richness of the data, feeling overwhelmed, whilst continuously evaluating (feeling buried in the detail and my responsibility to make sense of my voice amongst those of the students) and wondered how I could crawl out of the swamp to make sense of what was actually emerging from the narratives.

I needed to reorganize and identify connections to start to gain a more coherent sense of the themes and metaphors, to develop more organized categories within which to draw out what Saldaña (2016) deems to be the 'collective meaning', and to consider carefully the many codes/themes which three stood out as key to the research. This sound advice seemed simple. However, really this process took months of thinking and re-reading the transcripts and reflection before I had 'inventoried all the parts' (Saldaña, 2016).

From the 'maze of data analysis and interpretation' (Kim, 2016: 186), evocative stories started to emerge from this tangle of data. Using the metaphor of patchwork quilting (Deleuze and Guattari, 1987) these rich and complex individual stories were gradually stitched together into meaningful narratives.

Vignettes

According to Ely et al., (1997) vignettes are *"narrative investigations"* (p70) which reconstruct, emphasise and capture meanings emerging from the research findings. Vignettes capture the multiple facets of experience, of a person's development and compress time, place, person or scenarios to uncover their significance (Ely et al., 1997).

Vignettes have been used in both quantitative and qualitative research, with a history of being used to explore a range of aspects of social and health care, including decision-making in social work, nursing and medical practice (Evans et al., 2015; Gould, 1996; Wilks, 2004). Fictionalised or hypothetical vignettes have been used to simulate real situations (Barter and Renold, 1999) as part of survey research (West, 1982).

How vignettes are constructed, used, their purposes and trustworthiness within qualitative research are being probed (see for example Hughes and Huby, 2004; Barter and Renold, 1999; Barter and Renold, 2000; Spalding and Phillips, 2007; Gould, 1996). A key strength of the use of vignettes articulated in the literature is that the scenario can be distilled and adapted for the audience (Wallander, 2009; Evans et al., 2015) as were the composite vignettes shared with the focus group.

Quantitative approaches might suggest the need for a vignette to be designed together with pre-agreed classifications offered as part of a survey approach such as that of Wallander (2009; 2012). Vignettes developed as part of qualitative research methodologies should capture the 'essence' of the experience or phenomenon to mirror the 'real world', as a truthful portrayal of an experience to gain a fuller sense of the phenomenon under investigation (Hughes and Huby, 2004; 2002) from research participants.

There are differing viewpoints for example Hughes and Huby (2004) as to whether the vignettes should be of normal, everyday scenarios or focus on unusual and controversial events. There is consensus that a vignette needs to provide background and some detail of the circumstances, which is more likely to engage if participants have similar personal experience, whilst leaving some opacity and 'fuzziness' for participants to add to and explore in relation to their own experiences.

Vignettes have often been used to exemplify or mirror the experiences/worlds of research participants, as reconstructed by the researcher, presented as

> *..valid, authentic, plausible or trustworthy reflections of these worlds.*
>
> (Jenkins, Ritchie and Quinn, 2021: 985)

Evans et al. (2015) note the gap between *"vignette world and real world"* (p163), suggesting that vignettes need to have a ring of truth rather than be abstract and hypothetical. Concerns have been raised about the potential lack of authenticity of vignettes which may not really encapsulate the real experience (Wallander, 2009; Wilks, 2004), however:

> *No research method can truly reflect the reality of people's lives. Each application of a research method is only one way of understanding the complexity of the social world.*
>
> (Hughes and Huby, 2004: 47).

Types of vignettes

Vignettes may be short snapshots (Ely et al., 1997) of text, images, cartoons or videos (Hughes and Huby, 2002; Mercer in McIntosh-Scott et al., 2013). Snapshot vignettes use 'a part of something to represent the whole' (Ely et al., 1997: 74), whilst developmental (or moving moving) vignettes can be used to track attitudinal changes over time. Vignettes should be developed reflecting research data as I have done. The format (snapshot, portrait,

developmental or composite), employed to mirror reality and the experiences of the research participants (Bradbury- Jones et al., 2012).

Composites (Ely et al., 1997; Spalding and Phillips, 2007; Bradbury-Jones et al., 2012) integrate different experiences together (which I constructed to condense rich themes to trigger focus group discussion), using narratives from the first wave of data collection (following some initial analysis) to collect a further range of experiences (adding data) and also affording an opportunity for peer review by students in the same cohort to check the authenticity of emerging themes.

Vignettes can incorporate 'characters' (Ely et al 1997) whose actions, ethical values and reactions can be commented on and against whom participants can compare their own feelings and potential behaviours (Barter and Renold, 1999). Following Spalding and Phillips (2007) suggestion, vignettes compressing emerging issues as in Ely et al's (1997) *"compact sketches"* (p70), are used in this research. These are reconstructed real scenarios from peers' experiences, compressing 'the normal' with unusual and problematic scenes in an accessible way for the focus group.

Four snapshot, three moving/developmental and six composite vignettes were developed during this research, as discussed later.

Uses of vignettes

Vignette-based methods may be used in many ways to explore attitudes, perceptions, clinical judgements and decision-making (Hughes and Huby, 2004) as part of diverse research methodologies and are:

> *used in structured and depth interviews as well as focus groups, providing sketches of fictional (or fictionalized) scenarios. The respondent is then invited to imagine, drawing on his or her own experience, how the central character in the scenario will behave. Vignettes thus collect situated data on group values, group beliefs, and group norms of behaviour. (When) used in… focus groups, vignettes act as stimulus to extend… discussion of the scenario in question.*
>
> (Bloor and Wood, 2006: 183)

Whilst vignettes may be used to simulate scenarios (Barter and Reynold, 1999), Ely et al. (1997) suggest that vignettes can also be used to *"summarise a particular theme or issue in*

analysis and interpretation" (p 70). I used composite vignettes to bring forward concepts and ideas from the first preliminary stage of analysis. These were used as part of the process of validating emerging research data with the focus group. Vignettes therefore both act as a way of checking and confirming preliminary themes and emerging ideas (Hughes, 1998), as well as offering an opportunity to gain more data from insider views, positions and perceptions.

Developing vignettes

Vignettes were employed in three ways, as:

- Method of data collection (composite vignettes shared with focus group)
- Analytic tools (composite, snapshot and portrait vignettes)
- Synthesising findings (composite, snapshot and moving vignettes)

The development of composite vignettes therefore was a useful way to gather more data- as discussed in the previous chapter.

The processes of transcription and of teasing out themes, selecting those to incorporate into individual portrait vignettes as well as the issues to condense into the composite vignettes, involved active processing of the data. I was mindful, nervous even, of inappropriately sieving and misrepresenting the essence of the stories I was hearing and replaying during the cycles of data analysis.

Emerging themes were coded and curated as a series of five composite vignettes to share with the focus group. As Brown (1999) argues, a focus group not only enables "*dynamic and interactive exchange among participants"* but also the production of *"multiple stories and diverse experiences"* (p.115).

The vignettes woven into the findings chapters arising as they did from the texts constructed during transcription and vignette development, were reconstructed by me from my central role as 'researcher'. It was very important to ensure that I did not mute the students' voices. Therefore, I sought to make sense and shared meanings from narratives, whilst avoiding being stuck in the mire of personal introspection alone (Finlay 2002a, Finlay, 2003) or conflating individual experiences and insights into a single melting pot.

Using vignettes is congruent with NI, as they emerged from the students' lived practice experiences (Creswell, 2013) as shared in round one interviews, then used within the focus

group (FG). FG members then added their views and perceptions, both co-constructing and elaborating as well as confirming key themes emerging during preliminary analysis.

Care should therefore be taken that each vignette represents as far as possible a realistic, convincing, trustworthy and detailed enough snapshot which is accessible to research participants and with which they are able to identify (Evans et al., 2015; Spalding and Phillips, 2007). A further issue raised by Bradbury-Jones et al. (2012) is that of protecting research participants, which may involve them in revisiting difficult or traumatic experiences. This is important for health care research; protection of patients and practitioners alike is very important, as is assuring confidentiality. Whilst Bradbury-Jones et al. (2012) frequently refer to vignettes as 'paper people', emphasising the distancing and hypothetical aspects of the way they have used vignettes; others including Spalding and Phillips (2007) and Ely et al. (1997) focus on the truthfulness of the re-presentation of the scenario.

In this case, I used vignettes to provide tangible examples, disguising individual narrators to explore sensitive experiences; checking out (in the focus group) how 'real', familiar and true to the experiences of others these composite vignette(s) felt, so that participants could add to, comment on and problematize. Each vignette needed to incorporate enough detail to capture the essence whether of a 'character' (Barter and Renold, 2000) or 'substance' of the scenario. There was a tension between the amount of detail and clarity to contextualise each scenario and the ambiguity providing space for participants to elaborate and enhance the richness of the information provided. Vignettes were written in the present tense, to convey immediacy, as were the portrait, moving and snapshot vignettes subsequently developed. The caution here is not to taint articulated meaning(s). Use of 'I' and extracts of original words of interviewees, as I did, helps to guard against this (Bradbury-Jones et al., 2012).

Composite vignettes

As Ely et al (1997) indicate, a composite vignette restructures and pulls together learning, themes and understanding over a period of time or experiences. Composite vignettes were distilled, sometimes from several student stories, compressing several themes, being therefore partly fictionalized. In one case this was a vignette drawn from the narrative of one participant (whose identity was disguised and who was asked to check and consent to its use). The other four were each a composite from my observations and interviews - used as an analytic tool to pull together key themes. Taking care to view data from the participant's

standpoint, rather than my own (Charmaz, 2006, 2014; Saldaña, 2016), emerging codes and meanings and more focused patterns and relationships appeared, seemingly falling into five meaningful practice scenarios captured for the focus group, three related to mental health, two to end of life and encompassing complex legal and ethical issues.

There is debate about how the researcher should ask participants to respond to the vignette, as a character, as themselves or generally. Some, as for example Hughes and Huby (2004) and Finch (1987) contend that focus group participants should be asked to respond to vignettes from their own perspective as they will not be commentating on how they might have behaved and may thus be able to comment on cultural aspects whilst being freed from concern that they will be judged on their responses. In contrast, in more quantitative research, the issue of how far responses to vignettes mirror what the respondent will do in the 'real world' is viewed as important (Evans et al., 2015; Wallander, 2009, 2012). I asked students to respond as themselves as they were exploring how the composite vignettes were/were not similar to their own personal experiences and reflections, to value their experiences and insights and to enable their stories to add detail, clarity or different perspectives to the scenarios developed.

The Composite vignette themes are detailed in the table overleaf:

Table 4 Composite Vignette Themes

Vignette 1	Vignette 2	Vignette 3	Vignette 4	Vignette 5
Has been drinking MH history Patient decision-making and capacity-threatening behaviour Risk Crisis team won't come out/ no services	Suicide and self-harm, overdose/ cutting when is it serious/not 'serious'? How do you assess/how do the specialists assess? Suicidal ideation versus vague thoughts Risk	Establishing rapport Sex of crew attending "getting to the root cause" Refusal to access MH services Privacy/time/dignity/the wait in A&E What happens next?	Planned 'good death' for their "final chapters" but no paperwork Do not attempt cardiopulmonary resuscitation Conflict family/ care home and patient Own feelings/beliefs/ Societal attitude	Managing symptoms at home versus following the rubric/ checklist Defensive practice versus contextualised practice- what helps/hinders Leave at home or take to hospital What difference does the General Practitioner and other support for shared decision-making lead to? Feeling professionally uncomfortable

Have to take to hospital- "A&E a safe place but not the right place"	Refusal to go to hospital Role of police- help/escalate Who to involve			

Composite vignettes provided the stimuli for discussion by the focus group, as Bloor and Wood (2006) suggest, and established how credible and resonant the emerging themes and stories were with experiences of other students at a comparable phase in their development. The focus group students provided other situated experiences, enabling me to better understand the case under consideration and to identify how typical or not feelings, attitudes and behaviours were amongst the student body and between different practitioners/characters in the practice situation. Students in the focus group were not asked to approach each composite vignette as fiction, to be imagined, but as a trigger to explore whether their experience would support, add to, or challenge the issues and perspectives raised.

Barter and Renold (1999) discuss the relationship, when using vignettes 'without context' (ibid), between what research participants articulate about their attitudes and responses and their actual beliefs and behaviours. Conversely, Goldsteijn and Wright (undated) suggest that participants' responses will correlate with how they would respond in reality, provided that the portraiture stays 'true to the real users' and that the researcher is reflexive with 'an ever-present eye' to their voice in the re-construction of the narrative. Evans et al. (2015) contend it is not as clear-cut as this and suggest the researcher focuses on the perceptions and sense that participants make.

In a comprehensive summary of how to implement vignettes (Barter and Renold, 1999) remind that the credibility and resonance of the vignettes for participants is very important. By constructing the vignettes from real recollections of actual patient experiences by research participants in the first-round interviews and drawing on these in the focus group I was able to record participants' responses to them and record their reflections on similar episodes and experiences. Thus checking the internal validity (Hughes and Huby, 2004) of the composite vignettes.

The focus group participants gave a strong endorsement of the 'ring of truth' for each composite vignette. My sense at the time and during transcription and analysis was that their responses were genuine; their reactions and examples being candid and honest. No probing was needed, and further examples from their own experiences flowed freely, adding to and resonating with the vignettes shared. To show this here is an extract from the focus group snapshot vignette I developed very soon after the group session:

…all students are elaborating, with multiple examples being shared, about what is or is not available especially out-of-hours, the frustration expressed by mental health patients with services including how they have reported as being 'hated' by staff in A&E. Sometimes participants are so eager to contribute that they are talking over each other and the energy is so vibrant!

I hear complex and troublesome examples of capacity and risk assessment being explored and talk about the shortcomings of the suicide risk assessment tool in (Joint Royal Colleges Ambulance Liaison Committee) guidelines when used to score, just as described in the composite vignette.

As I listen, I really get the sense that their examples and shared personal reflections appear authentic and truthful to their experiences, thoughts, feelings and attitudes in practice.

Table 5 Composite Vignettes- Summary of decisions made

Vignette Development:	**Points to Consider:**	**Decision Made:**
Composite Vignettes from first round of interviews • Testing the 'ring of truth' with the focus group • Generating more data from the response of the focus group	Authenticity of individual voices and meanings Protecting interviewee's Identities Engagement and capturing interest Selection of themes to integrate (not an 'eclectic mix' (Spalding and Phillips, 2007) Experience of focus group participants (peers) Diversity of experiences in practice	Three mental health vignettes; one end of life composite; one drawing together legal issues and dilemmas Use of 'I' and verbatim extracts Professional (but not academic language) Keep some fuzziness and equivocality (but understandable) Change all names- to facilitate anonymity and confidentiality Between 150-280 words to engage and allow coverage of a range of situations and to maintain interest Read by me to the group as well as shown using visualiser- to hear the story

	Length?	and then reinforce remind as the discussion progresses Group members respond as themselves

The composite vignettes were realistic and Hughes and Huby (2004) warn that even though there is 'distancing', if the vignette is realistic, it may be distressing. I took care to observe focus group participants for any signs of distress, no students appeared or articulated any distress, though I heard them express frustration, excitement and support for each other and patients.

Moving vignettes

Ely et al. (1997) recognise that the story may develop over time; this, a moving vignette can condense the story which can been told as a series of short vignettes/'scenes', illustrating how participants' lives have moved on. As students were interviewed twice, with a gap of one year between rounds, I was able to explore their growth in confidence, understanding and clinical decision-making over time compressed into moving vignettes. By using these I encapsulated 'scenes' to portray different aspects of a student's experience and development.

Table 6 Moving Vignettes- Key Points

Moving Vignettes	Extended scenarios	Representative of the interviewee's journey
• To reveal different aspects/scenes of student journeys • 'Rebekah', 'Rob', 'Jenny' unfold in a sequence of linked stages • Others comprise scenes portraying student insight and changing perspectives	May have more contextual Detail May be 'segmented' i.e. divided with discussion in between Shows progression by unfolding through stages	between years 2 and 3 of the programme Continuum: Rebekah- 'not yet ready' Rob- confident and insightful Jenny- emotion management

Portrait vignettes and snapshots

The development of portrait vignettes for each interviewee, enabled the distillation of the essence of each actor, and their representations enabled the analysis of their feelings,

attitudes and perceptions. This revealed commonalities and differences as well as the essence of tricky scenes and decisions (Barter and Renold, 2000), acting as condensed sketches (Spalding and Phillips, 2007; Ely et al., 1997) of participants' experiences and starting to reveal a continuum of student development.

From these portraits, characters started to emerge as data analysis continued, concentrating the actor's experiences, and capturing themes enabling detailed exploration both of related situations and of singular and individual perceptions and stories.

As a written re-presentation of an event, an anecdote can help to tease out a 'nugget of meaning' (Ely et al, 1997) - which tells the story and positions myself as the researcher, reflected on the experience and helped me to be sharper in my focus and appreciation of the emerging meanings. Snapshot and moving vignettes, which in some cases I have entitled 'scenes' developed from *"outstanding events"* (Ely et al., 1997: 65)- sometimes focused on resonating insightfulness, or the core of a story *"hounding at us to be told"* (Ely et al., 1997: 67). During the cycles of analysis, writing these anecdotes led me to reflect on the meaning and implications of a powerful experience, one which both touched and enabled me to perceive complexities of meaning and 'move from one scene to a larger drama' (ibid: 69) and change gears, analysing and developing my thinking and understanding. Each anecdote was the original essence, then, for snapshot vignettes/scenes and moving vignettes which reconstructed the multiple facets of experience summarising and synthesizing the research findings (Ely et al., 1997).

Table 7 Snapshots

Snapshot Vignette	Are 'figurative devices' (Ely	In the thesis
• A thumbnail sketch of a powerful lived experience • Focuses on a single scene which represents and condenses connected scenes to reveal the scenario more comprehensively	Et al., 1997) using part of something to represent the whole Omits details as is representative/symbolic	For teaching later

Credibility, trustworthiness and truthfulness in vignette construction

For researchers such as Wallander (2009; 2012) internal validity needs to be established, which for Gould (1996) involves developing vignettes from existing case studies and texts; these may be fictionalised. For Ely et al. (1997) and Spalding and Phillips (2007), vignettes draw instead on narratives from the researcher's own data as I have done. Ely et al. (1997) and Spalding and Phillips (2007) recognise that some researchers feel concerned about how far the vignette may be 'fictionalised' and writing on behalf of others- raising questions and doubts about representation of others truthfully. For Spalding and Phillips (2007) the researcher's ethical values and integrity will enable the researcher to be truthful, especially if vignettes are tested out with others as I did with the focus group. There were two sets of experts in my research, firstly each student as the expert of their experience, as the author of their story, who was offered the opportunity to review their transcripts and so offer further comments, changes and clarity. The focus group students were experts of their experiences too and able to add, amend, elaborate, challenge the composite vignettes and add further situated experience and insights. Vignettes can be a useful learning tool, and this will be considered in the final chapter.

I consciously trod the line between preserving anonymity and confidentiality, and the need to balance giving voice (Bradbury-Jones et al., 2012) to assure truthfulness to the essence of the narrative. All practice areas as well as participants were anonymised, and contextual information was generalised to this end.

Second cycle of data analysis

The decision to use the dramaturgical approach evolved from my recognition of the biopsychosocial drama in the narratives and powerful relationships and interactions between cast members (students, clinicians, patients and their families) (Goffman, 1959; Saldaña, 2016) revealing dramatic dialogues and scripts. As Saldaña (2016) indicates, dramaturgical coding helps the researcher to develop a deeper understanding of power relationships and interactions, in this case between patients/families and practitioners and between practitioners and different service providers. Saldaña (2016) suggests that this method is appropriate for case study research when it is *"meaning-driven"* (p102) to explore the journeying over time of the participants.

Dramaturgical coding can be appropriately applied to vignettes as well as 'episodes' and 'scenes' (Saldaña, 2016: 146). In this case, the student can be seen as 'social actor' as there is social interaction between patients, carers and professionals, and intrapersonal elements too as well as the management of conflict and dissonance around patient management and differences between the patient's and family's wishes. This accords with the notion of the performance and acting elements of emotional labour (Hochschild, 1983; Smith, 1992; 2012) – managing emotion in the practice performance and the metaphor of the 'curtain' sometimes drawn between the personal emotional self and professional performing self. This metaphor was in fact used by one of the students in their narrative. The described performances, plotlines, scripts, scenes narrated by students were captured and reconstructed into the vignettes developed.

Table 8 Example of Recoding of a Composite Vignette

Assessing Risk Keeping Safe	OBJ (Participant objectives/motives)
Crisis team won't assess (patient is drunk) Long wait in A&E Patient capacity "no medical reason to take to hospital" "he picked up a knife"	CON (Conflicts and obstacles)
Deliberation Wait and see	TAC (strategies/tactics to deal with conflicts)
Thoughtful "deliberation" Realistic	ATT (Attitudes)
Frustration Worry (about leaving patient at home) Fear	EMO (Emotions)
No services when you need them Nowhere else to take him except A&E We are on our own	SUB (Subtexts)

From in vivo to dramaturgical coding

Each composite vignette was coded using the in vivo approach, then shared with the focus group, whose responses added a layer of rigour as each vignette chimed with their experiences. The focus group responses were coded and then reviewed and analysed using the dramaturgical coding approach to further distil the myriad of rich data. The example above is that of Composite Vignette 1 (Mental Health).

Interim analysis- emerging from the swamp

The two coding cycles were followed by a review of the coding in the interim, Saldaña's (2016) 'transitional' step in data analysis to consolidate the emerging theory as a precursor to writing up the findings. This continued the process of focusing, analysing, teasing out theory and ordering emerging themes with continuous reflection and was the hardest part of all. The *"codeweaving"* Saldaña (ibid, page 276) advocates was challenging as many powerful stories and metaphors had been articulated. Drawing on Charmaz (2006; 2014) I focused on teasing out students' and patients/carers (the characters) interactions, emotional and clinical reactions and reflections to reconstruct the most vivid themes and arranging and identifying the key concepts unearthed and key scenes in the emerging story as vignettes to represent both parts of practice experiences or to give voice and portray of a student's evolving development.

To visualize the connections, I sketched out diagrams and visual representations, teasing out powerful metaphors emerging from the texts. By doing this as Saldaña (2016) counsels, the connections between what now appeared as the three main thematic categories emerged:

1. The Swaying Tightrope
2. Steadying the Tightrope
3. The Skilled Performance

Each forms a framework for one of the three Findings Chapters which follow.

THE SWAYING TIGHTROPE

This chapter and following two chapters –Steadying the Tightrope and The Skilled Performance- focus on peregrination, development/journeying of students towards being skilled professionals. These three chapters explore the research findings incorporating extracts and vignettes developed during analysis, as described previously. The chapters do not include all themes and vignettes generated, as data was extensive, rich and sometimes overwhelming. These synthesize the most powerful narratives and themes articulated by students in one-to-one interviews and the focus group, introducing some of the cast of students, patients, educators, and staging of pre-hospital and other services in providing complex care.

This chapter draws on examples of messiness, uncertainty and 'real lived world' complexities of practice, in decision-making for safe and effective care, as experienced by students during two years of their journey. Students articulated powerful examples of ambiguity and challenges encountered related to gaps: between theory and practice; 'model' services and actual availability of support; guidance and lived reality. The uniqueness of patients and the difficulties in decision-making frequently related to mental health/illness, resuscitation and end of life scenarios, and legal tensions.

The cast

Pseudonyms allocated to students are given in Appendix 3, and employed when narrative extracts are included. Excerpts are drawn from interviews (Int), the focus group (FG) and from vignettes generated. As explained previously these comprise composite, moving, portrait (developmental) and snapshot vignettes.

> *Reflecting back on the eight interviews, I perceive a continuum, a range of development/understanding/ability to conceptualise...I wonder what each student's journey over year three will be like and how they will have changed and developed when I come to interview them again?*
>
> (Field notes 05/07/2016)

To illustrate this, extracts and vignettes follow distinct examples of challenging decisions and issues for learners. Extracts also focus specifically on what helps students' growth in confidence and expertise when facing psychosocial, mental health and end of life scenarios, by following how students evolve between the first interviews and the end of the programme.

To illustrate different student learning trajectories (Eraut, undated; 1994) three moving (developmental) portrait vignettes are presented 'Rob' (confident, insightful and critically reflective) contrasting with 'Rebekah' (uncertain and less confident); each uses verbatim excerpts authenticating the portrayals. The third, introduced in the next chapter, is 'Eliza', who powerfully and dramatically explores emotion management/ labour.

Rebekah's moving vignette is in three scenes – one scene portraying her journey from great uncertainty, through what she recalls as helping her 'get her bearings', and then to greater comfort waiting in the wings for her performance as a paramedic.

In the moving vignette 'Rob' I am presenting a key character to highlight a student whose level of insight and reflection immediately struck me when the first interview commenced. He was the only student, who when sent his transcripts, replied with great care with detailed corrections and elaborations. Developing this vignette struck me as a perceptive narrative and was influential in my developing understanding of the research story and findings.

Rob's stories were rich with metaphor, critical reflection and detailed scenarios moving insightfully though his experiences. His vignette compresses and comprises three scenes to demonstrate his evolution.

There are separate extracts from both Rob and Rebekah in addition to the moving vignettes.

The script

Research findings and vignettes have been drawn from the long story (Riessman, 2008) and exploration of each story; the interpretive process. The language of paramedic practice describing working with patients and complex and unpredictable activity during the care interaction, can be described, as has Goffman (1959, 1981) as a social drama. There is frontstage action 'being on scene' – the visible public enactment of the care episode in front of the patient, their family, the police and carers. In this, paramedic equipment, often comprising a number of bags of 'kit', is arranged; members of the ambulance crew are led and directed as to their role in proceedings.

Some abbreviations have been left in the extracts and vignettes as this is the language and shorthand scripting used by the students in their storying. To write out these in full in

their accounts would, I believe perceptibly alter the nuancing of their narratives. The abbreviations which remain include:

- A&E- Accident and Emergency Department
- CPR- Cardiopulmonary resuscitation
- DNAR- Do not attempt resuscitation
- DNACPR- Do not attempt cardiopulmonary resuscitation
- GP- General Practitioner
- SADPERSONS - Suicide risk assessment tool -Mnemonic Sex, Age, Depression, Previous attempt, Ethanol abuse, Rational thinking loss, Social supports lacking, Organized plan, No spouse, Sickness

Every scene and patient is different

Following the first interviews, my reflections and field notes at the time, when starting transcription and commencing coding, I reflected (15/07/2016):

> *So many dilemmas and it's so confusing and uncertain for them. Powerful metaphors which really paint a picture of the messiness in the real world of practice and the uniqueness of every patient encounter. I can hear that it is so complicated for students to make sense of what to do and why, to try to provide the best care for patients, in tune with their wishes and needs. So many uncertainties…in identifying what is going on for each patient and the often diverse issues and perspectives raised by the relationship and people in each scenario, with so many complications raised. It feels as if they are being asked to walk across a wobbling tightrope, in danger of falling off into the swamp below.*

A dramaturgical approach is applied across some 'scenes', including the three student 'actors' portrayed in moving vignettes, drawing attention to some emerging plotlines.

The following composite vignette, entitled 'Uncertainty', written very quickly early during transcription and coding was a way to capture the immediacy, power and examples of difficulties and uncertainties faced in the shared stories. This integrates several students' narratives, illustrating the way many students at the end of their second year longed for more certainty, for a recipe for knowing not just what, but how to more easily make good and safe decisions when faced with complexity, potential conflict and an individually situated patient.

How will I ever be able to make safe person-centred decisions? There's so many combinations of psychosocial needs, every patient is different. It's not just a case of the patient who has problems with alcohol, or has dementia, or has fallen or is at the end of their life- it's so often a jumble. Gosh it's hard! I've got a way to assess and treat medical issues but I often find it hard to pick up on what is going on, what's really underneath what I see.

I often don't know what to say, what to ask but also what does the patient want. Are their wishes documented and available to us? What does the family want- what if their views are different? There's conflict if they don't agree with leaving the patient at home or taking them to hospital. It's hard sometimes to feel clear and confident about the evidence, clinical reasons and best ways to manage the situation.

We've learnt about many services that could be available- how I wish we had a specific session on if this patient has this issue then this is exactly how to manage things. Even if we have a clear idea of what the care plan should be, services are not always well integrated, or may not exist.

I've learnt most from watching what other paramedics have done and from our debrief afterwards. Things colleagues say like 'did you notice the state of the room…the house was quite dirty and a potential risk for the patient.' 'Do you think we should make this kind of referral? Will they accept a referral from a paramedic?' I wouldn't have picked this all up myself.

University has given us a good knowledge base and helped us to develop skills in how to communicate with patients, but not how to make the specific and final decision for each individual patient.

(Composite vignette)

Constructing this vignette involved not merely lifting descriptions from students, but analysis and comparison and integration of different narratives to create a meaningful synthesis of key concepts explored relating to the messiness and ambiguity of real-world decision making in general terms, rather than a specific decision focused on a particular diagnosis or patient. The vignette served also to expose my developing analysis and interpretation and emerging theorizing of social and experiential processes involved in

practice-based learning. This distils examples of the quandary of the 'right decision', with no situation and patient being exactly the same. To make sense of what is a/the 'right' decision, whose perspective and wishes are being met, and even what to say and how to respond, does not fit an easy formula.

The composite vignette identifies that making sense and moving towards right decisions is complex and intertwined: differences between apparently more straightforward 'medical' issues and messy psychosocial situations; learners' lack of experience and associated difficulties in making sense of the source of the patient's difficulty; tensions due to differences of opinion about what to do; knowledge 'in theory' and the difference in practice; understanding the patient's wishes; situational awareness; and lack of certainty. The complexity and dynamic nature of decision-making and the importance of the learning drawn from observing others echoes Wyatt's (2003) case study findings and of Shaban (2015). Craving a recipe for 'the specific and final decision', illustrates the novice/advanced beginner levels occupied by some of the students (Benner, 1984); wanting and needing more certainty and rules to follow. This is discussed further later.

The multitude of patients and situations experienced in practice was almost overwhelming. Not only was each situation unique with challenges as to how to communicate, but the students' bank of experience was limited; they were attending countless situations, each requiring an individual decision. Eraut and Hirsch (undated) in examining workplace learning consider four entwined elements impacting on workplace (practice) learning of the individual learner. The first of these relates to the knowledge, experience, awareness, understanding and overall capability of the learner.

Marie articulated that the reality is a myriad of scenes with exposure being immediate:

> *…not that you work your way gradually to the deep end…you're straight in at the deep end. You see everything and anything.*
>
> (Marie Int 1)

Georgie echoes the distinctiveness of each scenario:

> *Everyone is completely different and every situation is completely unique…Often a lot of combinations of different psychosocial factors so it's not just …that this patient has an alcohol or a substance problem or this person has dementia. A lot of times it's a combination, a mish-mash and mix…*

(Georgie Int 1)

Taryn indicates that the situation itself may be different from what the caller has provided:

> *He'd called for something completely different back pain or something like that, but once we were there discovered he had actually taken quite a big overdose…*

(Taryn Int 1)

These extracts show the barrage of information students have to sift through to decide what to focus on, to prioritize, signally some wavering around difference/uniqueness.

Rebekah notes that there are variations in how different clinicians approach the situation:

> *I've noticed different styles cos I've worked with a range of professionals…*

She provides an example of an approach to a suicidal patient where the approach is different from other ways of interacting with patients that she has observed:

> *(He said) 'Well if you stay here, your partner's going to come back and find you dead, would you want that for him?' He was … trying to scare her to come in, we were about to leave her at home because she had capacity… I don't know if I'd have approached it like that… (there are) more gentle ways…*

(Rebekah Int 1)

Rebekah and Jenny observed more experienced professionals using new and varied scripts, different questioning or highly scripted software-led communication all the time.

> *(The) issue being with 111 is their ideas of scene safety and our idea of scene safety are rather different, as control may ask more appropriate questions as to how they can define the scene as safe, and obviously 111 don't- they go off a crib sheet.*

(Jenny Int 1)

Student responses in practice will also vary and indicated by Holly:

> *…different situations are upsetting for different people so it's completely up to the practitioner whether they feel that it's something they need support with.*

(Holly Int 1)

Georgie illustrated the dilemma of lacking scripting for how to respond to suicidal patients which has left her unable to frame a tailored reply:

> *One of the biggest things I… struggle with…if you ask most people they'd say the same, is (that) we've talked about mental health but we've not talked a lot about suicide and that is a vast (area)…We go to patients who are in crisis and wish to end their lives…I feel that we've not actually had the knowledge to… know how to have the conversation with someone, who, when you say to them 'well what do you want to do', and they say 'I want to end my life'.*
>
> *What do you say to that, and how do you try and talk them down because quite often that's what I feel that we are doing? We're having to talk them down from it and quite often I've just had those conversations and I've just sat there and not said anything but I've been a bit speechless really because what do you say to that?*

Georgie elaborates further…

> *…I suppose there's no hard and fast set rules about these kinds of conversations…*
>
> (Georgie Int 1)

These are often tricky conversations for healthcare practitioners, even those who know a patient well, with whom there is a rapport. Paramedics/students are often establishing a relationship, identifying the person's ideas, concerns and expectations and needs and identifying how to respond and appropriate options all together in compressed time (Matthys et al., 2009), an even more challenging conversation.

Decision-making relies on having contextualised information. To gain this, communication is key. Despite no specific script for such discussions, Georgie indicates learning drawn from experiences of observing dialogues, and how questioning is used, by mentors and practice colleagues in assessing to try to get to the heart of the issue:

> *If you (were) looking at the conversation from an outside perspective you might not understand the subtlety of the questioning, but I've had (some)… training and a bit of knowledge about these things. It's really interesting to see that they'll ask certain questions and you'd probably think 'why did you ask them that question'*

but actually it's to get at this issue and …find the real reason as to why …they feel the way they feel.

(Georgie Int 1)

Georgie was reflecting on learning from observing others and subsequent reflection which enhanced her understanding of how questioning may reveal the root cause of the presenting problem or need (Wyatt, 2003), supporting her situational awareness and pattern recognition (Eraut, undated). This allies with aspects of the hypothetico-deductive approach in that recognizing cues and patterns are considered key to decision-making. For Georgie the Intuitive/Humanist model of decision-making illustrates how her experience of observing others enhanced learning gained from this (Benner and Tanner, 1987).

For Eliza the strong feelings involved are interrelated, affecting decision-making (Lerner et al., 2014) when dealing with evolving situations and decisions, which are not considered in a more protocol-based approach, especially if closely applied by novice practitioners where experience alone is not always allied to flexibility and holism of approach.

…not in the guidelines. you don't deal with peoples' emotions when you think of guidelines, (they) don't deal with dynamic situations, they are all very predetermined…

(Eliza Int 1)

For Georgie the difference between similar presentations and what is optimal for an individual patient is tough, as there is no recipe on which to rely:

One of the …things I find difficult about decision-making even if you go to two patients who have exactly the same symptoms, what is best for one is not best for the other.

(Georgie Int 1)

Decision-making in practice for Georgie is further problematized by striving for a best decision for the specific patient. Johansen and O'Brien (2015) investigating elements important to nurse decision-making identified the role of experience and intuition, situational awareness, understanding of the patient, analysis, and reflection in situ in

effective decision-making. This is echoed in the paramedic specific findings of Wyatt (2003), Shaban (2015) and Perona et al., (2019).

Eliza recognizes the inadequacy of current guidelines and the dissonance between different kinds of guideline. Whilst there is room for guideline development, that, in and of itself, is still challenged by individuality of patients and dynamism in given scenarios, and Georgie recognises there are often no hard and fast rules to follow.

The students' experiences mirror Simon's (1983) theory of 'bounded rationality' in decision-making. Limited information, difficulties in communication, ability and confidence in responding to the patient and student inexperience affects their ability to weigh up and make sense of the situation whilst longing for an easy formula for individual decision-making.

These students were not yet armed with all the knowledge, experience, awareness and understanding that Eraut and Hirsch (undated) recognize to be integral to effective performance.

Being (un)prepared

Notwithstanding problems with guidelines and traditional 'training', a practitioner cannot rely on experience alone, education, in this case about mental health, plays a vital role in helping to understand the context and person as Taryn explains:

> *…some of the people I've worked with, even if they're very experienced, do not always feel comfortable or skilled in dealing with difficult mental health cases. I feel that some paramedics that have already been trained for many years do not have as much understanding of mental health as we do… I don't think my mentor could cope with the mental health side. My mentor's had more experience of dealing with mental health patients than I have yet, but I think I have had a lot more training. Anyway, my mentor struggled with it all…*
>
> (Taryn Int 1)

Taryn has observed that colleagues with more experience in practice do not necessarily have the knowledge, understanding or skills to engage confidently. Experience alone may not be enough for clinicians to both cope with, and understand mental health related needs. Formal education, in this case focused on mental health and illness, combined

with experiential learning (Ryan and Halliwell (2012) bring both type One and type Two thinking (intuitive/tacit and analytical) together in understanding the individual patient.

Taryn has seen that mental health programme content during the first two years of the programme has, for her, provided a foundation in theory – more than many very experienced paramedics, less than mental health practitioners.

Jayne (FG) agrees that:

> *It's obvious we've had more training than some of our colleagues.*

For Taryn knowledge alone is not enough. She identifies that the training undertaken did not provide 'real world' skills for complex individual patients with mental health difficulties. She suggests more practical scenarios to bridge the gap between knowing about 'the what' and practising 'the how' to do it:

> *It is quite hard to make those decisions when you haven't had the same amount of mental health training as specialist mental health workers do…and decide for ourselves what to do. I feel it's prepared me quite well. I feel privileged and lucky to have had the amount of training we've had. Some have had no training whatsoever but everyone's different. We were lucky enough to have service users coming to share their stories but we didn't really have any practical side of it.*
>
> (Taryn Int 1)

Holly indicates that the difficulties for her are not in understanding the patient's needs but that, for her, the theory: practice gap is exemplified by lack of services and options; that services explored in theory, may not be available in reality:

> *So here we are, we have done modules on mental health but no matter how much teaching we get on a subject, if the services aren't there, there's only so much you can do. You know the way to assess them and approach them to try to make them feel more comfortable, but I think when you put that into practice it's sort of automatically limited by the fact you can't take it any further*.
>
> (Holly Int 1)

Training and experience are significant in preparing students, but service gaps can and do affect what options and care is available for patients.

The moving vignette 'Rebekah' developed whilst transcribing her two interviews it brings together many issues she shared. I tried to capture her feelings of uncertainty and her frustrated efforts to make sense of scenarios and enact 'doing the best' for patients where there is no strict protocol to follow. A dramaturgical approach was used as Rebekah paints a powerful scene of her front-stage struggle with her 'paramedic identity' and performance:

Scene 1- I am not ready yet to be a 'performer' …it's chaotic and really not easy at all

> *……I really want to do the best for patients but I find it hard to understand the psychosocial aspects of patients' needs. I get so frustrated when there are gaps in services. I'd find it easier if we always had direct access to somebody who can take over, for example you're the first person on scene and speak to the patient's GP and if they take the patient on there and then, there is something in place then.*
>
> *Mental health teams may not accept the patient, I don't know why -maybe they don't believe what we say? It's worrying- I don't know what I can or should do. I don't know what to say to the patient when it's all so complicated with no easy answer!*
>
> *I'm most anxious when there is conflict between the patient's wishes, and their family and …we cannot do what they want or safety net effectively when the patient wants to remain at home. I don't know how I'll ever be able to make safe and patient-centred plans!*
>
> *We've had quite a lot of teaching around end-of-life care, but it doesn't work like that in practice. We were told about the Gold Standards Framework and whenever we go to an end-of-life patient I have asked, but not everybody has it, so although we've been taught about it and what's in it, not a lot have that. I find it so hard if there is not a clear way to put a safe plan in place – in theory it sounded so easy- I haven't found it like that at all in practice!*
>
> *…I'm not very confident in thinking that I'm making the right decision for the patient. I'm not sure why, but I've not had a lot of exposure to some of these patient presentations. I find it difficult when legal documentation isn't in place so we might get the blame if we don't do it right. Gosh, in a year that will be me!*

I have been to a couple of cardiac arrests where I felt it would be more suitable for the patient to have had a Do not attempt resuscitation decision. Maybe there needs to be a conversation with everybody over a certain age about that, then everything will be clear- that would be so helpful? It's not like that when we go to medical cases when you can follow the guidelines easily step by step…

I feel like I'll never get there and have enough self-confidence to be able to deal well with so many complex and worrying situations, even when I am registered. How will I know what is best to say and do? I don't feel they have prepared me enough, I thought we would be taught and practice everything and then put it into practice on placement… and that it would be easier...

(Rebekah Moving vignette)

Reflecting on her interview, I recorded in my field notes on 22/08/2016:

How quiet Rebekah is during the interview and, after talking about the first patient experience, how much prompting and coaxing I need to do to help her share her story. She almost panics when I ask about what she thought (understood) about psychosocial needs and person-centered care…she is clearly finding it difficult to make sense of what I am asking and how to respond. Much of her story is focused on problematic feelings such as anxiety, being scared about decisions and worrying about being blamed and perhaps facing professional misconduct, as well as powerful feelings she experiences when there is conflict and no clear plan. I can hear how she is longing for certainty and for a recipe when the situation is messy…

Whilst Rebekah does not feel ready, she seems correspondingly to accept that some uncertainty and chaos is fundamental to psychosocial and ethical situations in practice. Whilst a more medical model of education and training may be about learning through simplifying life situations in practice, the full complexity means it is not that simple.

For Rebekah, as with Holly, gaps exist between what she has learnt about in 'theory' and real-world practice. The gap here is in the patchy rollout of the Gold Standards Framework (Thomas, undated) for the earlier recognition of patients with life-limiting conditions, and better co-ordination of their care. Despite this framework being in place across some General Practitioner surgeries, it is not universal. Although there has been theoretical input, Rebekah finds it a challenge to understand the concept of 'psychosocial'

in terms of what it means for patient needs in practice. For her, the complexity of the patient's holistic needs and the gaps in services and lack of 'recipe' for care is obscure and it is tough for her to conceive meaning from/about it all.

She further explains that she wants there always to be someone to take responsibility for the patient and their support, thereby offering certainty that the patient will have a clear and safe decision and plan. Rebekah's plea for someone to 'take over' illustrates the reliance inexperienced (novice) practitioners may have on protocols and certainty until experience builds to provide 'intuition' and situational awareness (Rycroft-Malone et al., 2009; Ryan and Halliwell, 2012; Benner, 1984).

She raises complex interrelationships between medical/physical needs, psychosocial needs and risks and the paramedic team occupying the 'default space' to try to catch and hold risky situations. The decisions made are, at times, complicated without adequate and appropriate referral routes and service availability.

Georgie recognizes that there are so many permutations that considering scenarios in theory alone is not enough preparation for every scene and script:

> *I think they never could have prepared us fully 'cos…everyone is completely different…every situation is … unique. University (has) prepared us in terms of a good knowledge base, of what different psychosocial issues can be and how… to communicate with people with these issues but not … specifically on how to actually to come to a final decision at the end about them.*
>
> (Georgie Int 1)

Georgie seems to have grasped that as good as training can be, it cannot cover all the complexity/messiness of real life. This may have helped her to approach learning/training differently, being explicitly comfortable with the lack of a recipe from guidance- and the uncertainty caused by realizing that there may be no easy right or wrong answer.

Decision-making -Mental health and crisis

Students' examples of scenarios commonly focused on patients with mental health difficulties or in crisis, with inherent risk and uncertainty. Dilemmas and issues raised were so powerful that I developed three mental health composite vignettes from the first round of interviews to share with the focus group to check their resonance.

One composite vignette focuses on the intricacies involved in trying to make a safe decision when risk is involved. The complexity of 'self-harm' in the absence of a clear script and protocol to follow is condensed:

> *Sometimes it's hard to assess risk and clearly the patient isn't coping and may have taken an overdose, and we know what's been taken and it's ok from Toxbase. The patient is having a bad day or has self-harmed...quite superficial cuts but there's nothing medically wrong. That's tricky, trying to get to the root cause and decide whether they're safe to be left at home. It's hard as you have to pull different tools out of the toolbox.*
>
> *In time critical cases you follow the check list, with mental health situations it feels uncomfortable as these patients may lack support and maybe the patient has a lack of trust in mental health and acute hospital services. You need to spend a lot of time with them to get a better sense about what to do, and you can't assess by numbers. These decisions are hard when you haven't had as much training as mental health workers have, although we have had more than many of our colleagues, I've seen some colleagues who would take the patient to A&E anyway just to cover their backs.*

(Composite vignette MH 3)

When this composite vignette was tested with the focus group, there was much nodding and confirmation, with unanimous agreement that this reflected the experiences of all attendees. This reassured me, as I was aware that as well as sharing interviewees' experiences I was interpreting, reconstructing and compressing several voices within the composite vignettes shared with the focus group.

Jayne identified a tension between following a strict checklist 'Assessing by numbers', expanding that whilst she agrees that *"we've had more training than some of our colleagues"*, identifying that mental health issues are *"part of the work"* and *"tool-bag"* of the practitioner, that is not always the case. Some practitioners observed demonstrate the perpetuation of older prevailing negative attitudes regarding mental health/illness, which conflict with contemporary training and expected values/behaviours.

> *I just feel…some people in the ambulance service will walk into a situation (and say) 'I'll treat what I can see that's… my remit' and obviously you can't see mental*

health and I don't think that they have the consideration of the psychosocial elements of the job…they'll say 'it's not our job…it's someone else's job'. You can tell that some…attitudes actually in people towards mental health, especially if they've been in the service a long time some of those, not all, will say 'it never used to be like this' and they reject the idea of going to mental health patient… unfortunately I can see that those attitudes rub off onto some students… it means that, for many clinicians, even those who haven't graduated yet, they reject mental health to a degree.

(Jayne FG)

Mary identifies negative attitudes and trivialization of some clinicians:

…there seems to be... stigma attached to self-harmers…people that we go to, that have suicidal intentions …I think a lot of people think that they are just being silly just taking a few paracetamol, and actually…inconvenience everybody as opposed to the ones we go to who really have the intention and you go to them almost too late… I think the way we should approach those who self-harm is that they need something, there's a reason why they've done what they've done, so I think just not being dismissive of that just because it was just a few paracetamol …

(Mary FG)

Mary recognizes that the root cause may not be apparent, but the patient has a reason, an unmet need, which she is not belittling.

Jayne notes the variation in response of clinicians to self-harm and suicidal attempts.

Some…are better at being tactful than others. Some…are fantastic at dealing with mental health, others don't have…understanding and I remember a clinician saying 'you don't want to do a silly thing like that'. To trivialize someone (when) he didn't take enough to do any damage. The intention was to worry and make him (the patient) feel small… it's very difficult when you're a student to correct the behaviours of your mentor... it might undermine the clinician in charge but you also want to say 'not everybody thinks what you're doing is silly or trivial'.

(Jayne FG)

Mary identifies that such situations can lead to over-caution and uncertainty in some qualified team-mates, who only perceive two apparent polar opposites (staying at home or conveyance to A&E) leading to choosing to 'protect their registration', a theme which recurred in other student examples:

> *I think that last sentence (in the composite vignette) about covering your backs, you get a huge amount of that, that people only see stay at home or A&E that's kind of the two options at times and they're not going to put their registration on the line for that sort of decision. I think that happens a lot … it's 'just take them in'.*
>
> (Mary FG)

Deciding between a rock and a hard place-There's no room at an appropriate inn

There was a repeated theme that the lived reality of practice differed, often very uncomfortably, from 'theory' and 'ideal', and students' hopes and expectations about how services operate, with real options for patient support according to their needs and how this affects decision-making in practice. Gaps and frustrations caused by constrained options for patients were expressed– dissonances where the student/practitioner knows what is the correct action to take but is unable (due to lack of access/resources) to initiate this. This is commonly identified as 'moral distress' (Jameton, 1993) to describe situations in which the practitioner knows the ethical and best option for the patient but does not control resources, shouldering the burden of the lack of resources/access.

Students' narratives illustrated their frustration about lack of access to potentially more appropriate services and the dilemma faced when trying to make safe and appropriate decisions. This was shown in their concern about the impact of reduced options when the patient might not need in-patient care, but it was not thought safe to leave the patient at home. However it did not seem that students' feelings of frustration and distress when unable to enact according to their ideals and perceived duties hid feelings that threatened their moral integrity—i.e. not feeling belittled, unimportant, or unintelligent (Epstein and Delgardo, 2010), so not exhibiting overt signs of moral distress or injury. This is something to which educators need to be sensitive, to avoid moral injury where the practitioner feels a failure with adverse effects on health and wellbeing.

During a night shift we went to a patient…in crisis, had drunk a lot of alcohol, hadn't done anything at that time towards ending their life but was threatening that if we left, he would try to end his life. The mental health service… knew him but as he was drunk wouldn't be able to assess him that night. It was difficult for us to assess his capacity and how risky it would be to leave him at home as A&E was a safe place but not the right place. We spent a lot of time deliberating, as we knew he would have a long wait in A&E and take hours to sober up, and that there was no medical reason to take him to hospital.

(Composite vignette MH 1)

This compresses complex competing factors relating to crisis, with competing tensions between risk/caution, impact of alcohol on the patient's capacity and organizational practices (A&E/mental health services).

The following extracts from the FG discussion around the composite vignette illustrates the richness of the debate and indicates the potential value of composite vignette s in teaching and learning for students to explore the peregrinations and messiness of real world practice.

Katie indicates that there is a 'revolving door' in that such patients may not be fully assessed, are discharged and nothing has changed.

Well I think the thing is (when) you do take them into A&E they'll sober up. They then tend to discharge them without any further proper assessment so he's just going to go back into the same…crisis he had before… back to square one.

Katie (FG)

Jayne agrees:

…You just know that they're (A&E) not…going to explore mental health when they're under the influence of alcohol… I don't feel it's safe to leave him at home when he's threatening self-harm or worse… so you would feel forced to take him to A&E knowing he might get a mental health assessment there, but it wouldn't be for a while…

(Jayne FG)

The Accident and Emergency (A&E) department was seen by all four of the FG participants as an unsuitable service for such patients, though needed as a stopgap in the absence of other, more appropriate services.

Mark agrees, seeing there are two binary choices- equally problematic:

> *Following on from what my colleagues have said about attendance at A&E, they may well abscond. If they abscond…it's between a rock and a hard place …you've got leave at home or take to hospital …(as) the options…*
>
> (Mark FG)

Mary expresses the FG's frustration that the decision may have no positive outcome for the patient:

> *… they want some help…A&E is the only option when the Crisis Team are not available or cannot access the patient. When they get to A& E they're given a fairly low priority as they haven't got a medical issue. They realize well 'I'm just going to sit here for hours and not…be seen, they're not going to give me any… attention'. A lot of time they just discharge themselves.*
>
> (Mary FG)

Katie recognizes that patients may have had a difficult history with services and this is magnified out of hours, with the ambulance service being the 'default'.

> *Her relationships between hospitals, police and some ambulance personnel often aren't good ones and we are her only option in those hours.*
>
> (Katie FG)

Central were the tensions involved in managing difficult decisions when balancing possible risk and safety netting without an easy safe and acceptable decision and plan for the patient.

> *…I find it really hard because you arrive and sometimes they don't want to go to hospital. They don't want to seek help…we can't just leave these people at home, even though they have the capacity to refuse to go to hospital. We have to think of other ways to safety net them because often things we could suggest, like speaking to mental health services either they're not available at night, or the*

patient has had bad experiences and doesn't want to be put in contact with them…A&E…really that most likely isn't an appropriate place for a patient in a mental health crisis.

(Georgie Int 1)

For Jenny having limited choices and 'tools' is also complicated when specialist services hold differing perspectives about what is actually a crisis, leaving the paramedic team 'holding' the patient and risk.

He stated categorically that if he did not receive mental health attention he would harm himself…Speaking to him I had to try to pull out of my box all…options that were available to me which unfortunately were not many. Our ability to engage with mental health services is sketchy at best. (There have been) crisis team referrals but from past experience these aren't always prompt (and) maybe sometimes mental health teams do not deem what we deem as a crisis. Unfortunately since they are not there on scene they can't see what we've seen and they can't fathom about how the initial presentation may move on and present down the line.

(Jenny Int 1)

Georgie was concerned about safety netting options for patients when the optimum decision for the person's care is not to go to hospital.

It makes me ...feel quite worried really because (of) lack of support these people (mental health patients) have and our...lack of options... We'll try and safety net them as much as possible...

(Georgie Int 1)

Marie explains that there is variability in what General Practitioner attitudes and what they will do– so it is not just that patient need and risk that varies, but that what is offered can markedly differ:

There's…a big variation in what surgeries and doctors will do…some doctors you phone will say 'yes we'll do this'…others are like 'so well can you take them to hospital'…either they're very busy or they don't really want to deal with it.

(Marie Int 1)

For Taryn, even if mental health services agree and a bed is deemed the appropriate plan…there may none available and the patient may be transported like a parcel.

> *We rang three or four mental health hospitals… there was just no room anywhere…We spent a whole twelve hour shift …just (going) back and forth…we got told there was nowhere so we… eventually had to take him to (A&E) because that was the safest option…basically he sat in a room with a porter/security guard until we could get the mental health team involved…it was almost like he was going to get lost in the system and the system wasn't even working in the first place.*
>
> Taryn (Int 1)

The legal minefield

Many complex and challenging examples were raised to illustrate how difficult juggling the legal and ethical aspects are when weighing up complex decisions practice.

Risky decisions- Capacity and consent

Many exemplars shared happened at night or 'out of office hours', posing challenges in making safe(r), ethical and lawful decisions when faced with the risk to the patient and in turn spreading the contagion of risk to the professional. Georgie explains her understanding of complexity in such risky decisions, recognizing that patients may have capacity to refuse to go to hospital, but there could be resulting professional consequences.

> *It's worrying when patients don't have support. If they have capacity to refuse options we suggest then… that means for the ambulance team …making a decision to leave the person at home. It's worrying identifying what the risks are of leaving the patient at home and thinking about the possible professional repercussions if something happens to that patient…people then question your decision to leave them at home.*
>
> (Georgie Int 1)

The discourse of risk and protection (self, patient, and practitioner registration) in mental health crisis emerged from a number of narratives, particularly linked to the metaphor of

the ‘Legal Minefield’ (composite vignette 5) and of ‘Walking a Tightrope’ (Rob moving vignette Scene 2). Both are detailed later in this chapter. Implicit was the notion that the tightrope sways and the clinician could fall.

Students navigating the complexity and diversity of the world of mental health crisis, encountered many situations which presented complicated, novel elements. When they considered with mentors and crewmates the dynamics of the patient situation, they discovered dissonances between the letter of the law/ambulance-focused guidance and the contextual aspects and those of the individual patient, i.e. the ‘spirit’ of tailored, safe and appropriate decisions.

> *Where do we stand on her right to make her own decisions about treatment, but she also had parental consent (a patient over 16 but under 18)…for her to stay at her friend’s house…what if something had gone wrong and she had taken her life that night, where would we have stood?*
>
> (Eliza Int 1)

In this case, knowledge about the way the clinician should approach making decisions with children and young people is needed. Eliza’s patient was over 16 and under 18 and there was clearly some concern about who can consent to what-the patient or her parents.

Exploring this tricky decision, Eliza seemed to be considering not only the patient’s perspective and rights, but, as a teenager, the relevance of parental consent (and the law) and enactment of its’ spirit against implications for the patient and clinicians walking the tightrope of risk, competence, rights and outcomes.

What seemed important to students at this point in their development was trying to quantify the risk, and gain comfort from guidelines or professional discussions. There was nervousness that a decision might lead to loss of registration or attendance at court, and there seemed, for many, to be a small appetite for risk.

There is a plethora of guidance about Mental Capacity, including the Mental Capacity Act Code of Practice (Department of Constitutional Affairs, 2007). Despite 301 pages covering many worked scenarios and complex questions, not every situation that students and paramedics may encounter is covered- there is no master menu of answers!

Lawful consent must be valid, as must refusal of treatment. Assessing patient competence is undertaken so practitioners do not commit assault and battery (by acting in the face of a competent refusal of treatment) or conversely fail to act in the patient's best interests of people lacking capacity. In print this may appear simple; in urgent, unscheduled and emergency practice this can be far from the case. Making a safe plan where the patient is threatening self-harm or suicide is far from easy.

Sometimes, the assessment of capacity and the seriousness and risk of the patient's crisis was clear:

> *We were called by the police to a patient who had tried to hang herself, but had been stopped. Medically she was ok (we'd done our normal checks) but we needed to find somewhere safe for her as A&E was not the right place and she said she would try again if left alone. She hadn't had any previous contact with mental health services and she had capacity.*
>
> (Composite vignette MH 2)

This extract from the composite vignette evoked much response from the focus group. Katie readily presented a number of such experiences when assessing the patient's competence was not easy and straightforward, nor so clear.

> *Capacity…sometimes …it's hard to assess whether or not they have the intention or not to commit suicide as opposed to self-harm. I don't think you can ever really, well I certainly wouldn't put my registration on the line to say well actually they said they weren't going to do it so I left them at home.*
>
> (Katie FG)

She seems to recognise and accept uncertainty and risk as being inherent in practice. For Katie assessing suicidal ideation and risk is difficult and the border between self-harming behaviour/serious intention to kill is not clear. This is not surprising, as mental health specialists undertake a full psychosocial assessment trying to establish more detail about the level of risk and degree of planning by the patient. This approach is almost the polar opposite of the tick box score approach, traditionally the approach indicated in ambulance guidance extant at the time of the data collection (ASA 2013). A full psychosocial assessment is a somewhat slippery process involving in-depth (rather than time limited) engagement with the patient.

Georgie's worries focus on the competent patient's refusal of treatment and how much persuasion to use:

> *In other situations I'm gonna be honest there has been the threat of the police, saying 'if you don't come with us we going to get someone to force you to come with us'. Even though I don't think we are technically allowed to do that… (Often) saying that to people …(the) fear of getting the police involved will make people… go to hospital.*
>
> (Georgie Int 1)

For Marie whilst the out-of-hospital team cannot coerce the patient into going to hospital, there seems some comfort in thinking the police can take legal steps.

> *…obviously we can't necessarily force them to go…unfortunately we can't … The police they've got that power to either …section them or force them to go…*
>
> (Marie Int 1)

Conversely, Holly's example was of a patient who desperately pleaded to be sectioned by the police.

> *(this patient with a) psychosis …she was begging the police to section her because she so wanted the help and she'd been to her GP and they hadn't really set up any help for her…*
>
> (Holly Int 1)

This professional legal/ethical dilemma opens a challenging debate about professional boundaries and dissonance/potential moral distress around regrets students may have when not able to better protect patients. Some potential educational remedies will be considered in the final chapter.

In the following extract, advice was accessible from the crisis team, but as the patient had drunk alcohol, the team could not help until the patient was sober. In talking to the team concerned, the rationale for their decision (effect of alcohol on patient assessment at that time) becomes clearer to Eliza.

> *(following phone discussion) our impression was because alcohol impairs a person's ability to make decisions and their capacity and how they interpret the*

world at that… time, (that) they (the Crisis Team) couldn't make an accurate mental health assessment so they couldn't offer any services to us, they couldn't do anything for him until the man had sobered up… he wasn't going to be sober in the next hour or so and have an assessment done so it was a case of it's going to be a long wait in A&E and possibly he'd been seen tomorrow by the mental health team.

(Eliza Int 1)

Documenting assessment of capacity and risk can be complicated as Holly explains, as there is a lack of space on the form for assessing capacity, restricting being able to document the rationale for the decision fully. The form used was A4 sized, but even so, when used as a hard copy offers restricted space within which to record such important decisions. Verbal input from the patient is assumed so the capacity assessment takes place within a conversation.

We couldn't assess whether he had capacity as he wouldn't answer our questions and the capacity form we fill in isn't really designed for someone who won't or can't answer questions. If someone isn't answering questions it is very hard to ascertain if they have capacity or not and that's the issue we faced in this scenario. So, we rang clinical advice and asked them and they said if you can't assess it with the form then there isn't much else you can do apart from safeguard him…

(Holly Int 1)

I was really struck when listening to Holly and then reflecting in my field notes, of yet more issues related to the law. In this case consideration of the practical difficulties of being able to accurately and fully document the patient's capacity in the face of patient refusal and risk of self-harm. Despite decision-making tools, algorithms and easy to remember mnemonics being very popular with students and paramedics, the individuality of patient presentations means that it is infinitely more complex in practice.

If assessment of capacity is problematic, overlay mental health risk and its assessment adds further complexity. The JRCLAC (ASA, 2016) provided a suicide assessment scoring tool known as IPAP. This tool cannot be sourced in any other place and in fact countered contemporary guidance including NICE Guidance (2004) for the management of self-harm in the over 8s which specifically states that the practitioner should:

> *…not use risk assessment tools and scales to predict future suicide or repetition of self-harm… Everyone who has self-harmed should have a comprehensive assessment of needs and risk; engaging the service user is a prerequisite*
>
> (NICE, 2004: Section 1.7.2)

Mark critiques the use of a scoring tool, indicating a more broad-based approach (as recommended in current non-ambulance guidance):

> *I've personally used the suicidality risk assessment in the (Joint Royal Colleges Ambulance Liaison Committee) guidelines, obviously that is just an assessment tool and it's been overruled at times when they've scored quite low but I feel there's really intent to tend to self-harm there but it sort of helps you to get into the history as well so you can sort of say 'you have a partner? You have a plan?' and all that. So, you start to delve into it and when you have a systematic approach you can think about it in one go, not 'you haven't got a plan…'. There's I think some other tools you can sort of use… it's more about the overall approach… there other (tools) not just in (Joint Royal Colleges Ambulance Liaison Committee) guidelines …*
>
> (Mark FG)

Other risk assessment tools are available. Rob identifies the SADPERSONS tool (Suicide risk assessment tool -Mnemonic Sex, Age, Depression, Previous attempt, Ethanol abuse, Rational thinking loss, Social supports lacking, Organized plan, No spouse, Sickness) (Hockberger and Rothstein, 1988) as an alternative however, notwithstanding the tool used, uncertainty and risk are lurking in the background.

Trying to gain some certainty is understandable, despite critiques of tools such as the SADPERSONS tool. In this situation Rob identifies the need to quantify how much suicide risk, to be *"clinically grounded"* on the one hand, with other colleagues who were responding more *"intuitively"* to approach middle ground. Rob's perspective connected what can been seen as the distinctly opposing poles of 'rational' analysis (Type 2) and intuition (Type 1) in decision-making. He reflects on a scenario with a suicidal patient, describing differences of opinion and views about the safest plan for them and the dissonance and discomfort evoked. Rob draws together his critical reflections and

understandings of different approaches, attitudes and professional disagreements which distils the complexity raised in the scenarios shared by other students.

Rob Scene 1- Conflicting role expectations- The suicidal patient scene

A situation that is often fraught with difficulty is capacity and risk when the patient is experiencing a mental health crisis and is suicidal. I've a good example...it was a long and uncomfortable process trying to decide what to do.

We arrived first and another crew backed us up. I don't think anybody felt very comfortable, so we tried to hide behind assessing the patient using the SADPERSONS tool which we realized really isn't very good. We hope it anchors and makes us feel we have some certainty… so it gives us some kind of number out of it to hold onto. Anyway the thought process of the crew that backed us up was of more intuition and well common- sense. Just like their principle argument ...they said 'she's not suicidal and as we walked in she's holding a noose, but actually it's taken us half an hour to get here and she hasn't done anything with it so far'.

Between us we were using something between intuition and medicine by numbers to try and make a plan… I remember that there were five of us there sitting in the living room …me, my educator, another crew and an ECA (Emergency Care Assistant). There was this deep professional conflict between trying to persuade her to go to the local hospital where she didn't want to go; to be fair quite sensibly, as she had a terrible experience last time, in essence they'd mistreated her, and leaving her at home. She wanted contact that night and not wait for hours to perhaps be seen…

There was nothing we could do and so it took us a good two hours, I was very uncomfortable, but at the end of the day we had a patient with capacity who doesn't want to go to A & E, who mental health services say it's not appropriate to see. I wonder if we should have withdrawn and left her? Naturally, no-one felt quite confident enough to say well 'we can't really help you for the moment you are going to have to wait 2 or 3 days for a follow up plan.' We discussed can we do this, can we just take her anyway under the Mental Capacity

Act? Does feeling a bit suicidal indicate in itself a lack of capacity?...I think a lot of it was that we weren't comfortable with risk.

(Rob Moving vignette)

Rob indicated that it may not be clear what the clinician is covered to do under the Mental Capacity Act nor whether having suicidal ideas means that the patient lacks capacity. He also indicated that the concept of risk may not sit comfortably and the clinician may have a low appetite for risk. Not only is there risk for the patient, there also may be risk for the clinician in the absence of a patient safety plan.

To resuscitate or not

Legal tripwires and ethical tensions inherent in practice were not limited to mental health situations, but also powerfully and emotively evoked when students were discussing trying to make the 'right decision' whether or not to resuscitate a patient. Rebekah earlier wished for Do Not Attempt Cardiopulmonary Resuscitation documentation to be in place and advance care plans and wishes to be discussed and evidenced.

Jenny recognizes that even if there has been a conversation with the family, unlike her, they may not really understand what the Do Not Attempt Cardiopulmonary Resuscitation form covers and it is vital for the ambulance team to explain this although:

Sometimes this has led to tensions between the legal interpretation of best interests for the patient when the patient doesn't have capacity to consent and what you may believe might be in the best interests for the patient medically and physically…what we may medically feel is needed is (to go to hospital) and what the family feel they know the patient wants (to stay at home).

(Jenny Int 1)

She raises the tensions inherent balancing 'best interests' in patients lacking capacity and the assumed wishes of the patient. In the UK the Do Not Attempt Cardiopulmonary Resuscitation decision is undertaken by the clinician within a legal framework, to discuss the decision with the patient if feasible as well as their family. But, as with many paramedics, education and confidence for many clinicians in undertaking these difficult discussions may be lacking.

Such decisions should be taken in the best interests of patients (Perkins et al., 2016) when the patient lacks capacity and in the context of an overarching treatment plan. This is appropriate and in keeping with person-centred care and professional values, it is far from straightforward (as Jenny indicates) when the paramedic is making these decisions in situ.

> *Sometimes I feel that myself and my colleagues are wading into a legal midfield. A few times I've come across situations where the family are saying 'they must go to hospital' or 'don't move them' and they are very strong willed and maybe the patient just seems to go along with it. There may be no plans in place for example to keep a patient at home and no paperwork re a DNACPR and then the team (has) to commence resuscitation. Acting in the best interests of the patient, especially where the patient doesn't have the capacity to consent and the family don't seem to grasp how unwell the patient is, is also frustrating and difficult.*
>
> (Composite vignette 5)

This scenario was immediately recognised by all focus group attendees and Katie, Mary and Mark (all FG) shared their dismay in practice when they were told that there was a Do Not Attempt Cardiopulmonary Resuscitation or advance care plan in place but this could not be located, or had been discussed but not properly documented. Katie describes an awful death which was not what the patient, her husband or the crew wanted at all.

> *(We had to do) a really uncomfortable transfer…she was really struggling to breathe and in a lot of distress. We needed to fix it…they said she had a DNAR decision in place but couldn't produce it, (so) we… took her in. I think it's the only time I've watched someone dying on the way. She died on handover and it was just horrible…and the husband was arguing with the paramedic saying 'she didn't want this'. The last two hours of her life were just awful.*
>
> (Katie FG)

Katie then explains how the paramedic she was working with felt that he just had to guard himself and his registration. The decision made in this complex interaction follows the script of professional protection, rather than a person-centred storyline, with the sad consequence that the patient did not die in her preferred place of death, according to her wishes.

He just thought 'I need to protect myself'…I think she just died as they were setting up stuff to help her ….it was that much of a foregone conclusion…she just died in resus…

(Katie FG)

Mary agrees:

We had the…same thing with a patient. She was end stage cancer … and it was with a junior newly qualified paramedic who called for backup and was listening to breath sounds and wasn't sure whether it was oedema or pneumonia... Her husband said 'she doesn't want to go to hospital'. The extrication was difficult …as they had converted their living room into her bedroom towards the end of (her) life and there was furniture everywhere.

…it was…not at all nice but the paramedic I was working with had taken the view that she is really struggling to breathe and is in a lot of distress, 'I need… to fix it' and because they didn't have… a Do not attempt resuscitation decision in place, we… took her in…it was just horrible…

(Mary FG)

In optimal circumstances the mentor/educator can act as a 'zip' (College of Paramedics, 2017b) to help the student integrate theory and practice and support individualised patient-focused care decisions. However, at times, as Katie and Mary's experiences clarify, this is not always the case, as the mentor's role and performance may not, as here, have the confidence or expertise to make holistic situated decisions in ethically complex and ambiguous situations, with sad and distressing results.

Sometimes there is a lawful Do Not Attempt Cardiopulmonary Resuscitation form accessible by the ambulance team; this scenario focuses on the unexpected deterioration of the patient and gaining confirmation that all is as reported.

…in this scenario, the daughter turned up and said that they'd had a meeting with the GP a few days beforehand, 'cos this lady was 90 years old so they'd had a meeting…to say that she didn't want to be taken into hospital should she deteriorate and to put DNACPR in place. So that sort of changed our initial

approach, so we needed to contact the GP and check that that was the case 'cos the patient couldn't communicate with us, she was so short of breath.

(Holly Int 1)

The information supplied by the patient's daughter and General Practitioner was revealed with the plans in place. Contrasting with Katie's story, in this scenario the patient's wishes could be respected.

Whilst in theory, if the appropriate documentation is available, this seems straightforward in terms of decisions about treatment and care, even having the conversation with the patient and significant others in order to put 'the paperwork' in place is known to be problematic. This can lead not only to the absence of a Do Not Attempt Cardiopulmonary Resuscitation form, but also that no advanced directions or advance care plans being in place. Often talking about these has not been initiated proactively. Anecdotal and research evidence including the research synthesis of Perkins et al. (2016) showed that during emergency situations a number of problems present themselves. These include inappropriate decisions to commence Cardiopulmonary Resuscitation as the relevant documentation has not been completed, or is not available, even if the patient's wishes have been discussed, which even now is frequently not the case (Parliamentary and Health Ombudsman, 2015). The implications of these dilemmas for education will be returned to in the final chapter.

There's no rule book and no little boxes of certainty- Reflection on the uncertain world of practice

Rob Scene 2- No little boxes of certainty

I think I am quite thoughtful. I spent a lot of time reflecting and thinking about my thinking. My viewpoint is different from that of some student colleagues and many practitioners that I work with on ambulance placements. I've spent a lot of time sharing and reflecting on my experiences with a GP mentor. I think that's given me a very different viewpoint as I've realized I have a tendency to stop and think, to watch and wait and not rush in all guns blazing.

Many paramedics that I have worked with or observed have seemed more comfortable with emergency and time critical situations, which are a bit more by

the rule book, you can bish, bash, bosh for these patients. Often there are no little boxes of certainty, we can't follow a tick box.

I guess my risk appetite is greater than some people's. Archimedes would have said 'medicine is the art of entertaining the patient while the rest of the body heals itself'. And there's actually quite a lot to be said to seeing what happens.

I've spent a lot of time with colleagues deliberating the legalities: can we do this, can we not, does it fall under the mental capacity act, can we have a section? ***This is the tightrope you walk all the time in practice as a paramedic****.*

(Rob Moving vignette Scene 2)

Rob explicitly used the tightrope metaphor, not just with tricky decisions where the practitioner is *"out of their comfort zone"* but also the illness trajectory for the patient *"this is your illness, this is (the uncertainty) you live with" (Int 2).* Rob articulates the formation of a new identity contrary to stereotype and he is comfortable with uncertainty, risk and watching and waiting, not being rule bound.

Chapter summary

Students explained the complexity, uncertainty and individuality of patient care decisions encountered in practice, experiencing the reality of gaps in service and support available for mental health patients and those towards the end of life. Decisions were made in the presence of risk and different and competing viewpoints added complexity and dilemma when teams were trying to make safe and tailored decisions. The extracts/vignettes illustrate differences in responses, with uncertainty caused by realizing that there may be no easy right or wrong answer; nor the certainty of one right answer.

Stories shared illustrate the often-lengthy process involved in assessing the situation and differences in how students were developing insight into how to gather cues and understand the situation and their role script with the use of mnemonics and abbreviations (SADPERSONS and Do Not Attempt Cardiopulmonary Resuscitation (DNACPR) for example) and guidelines. The students showed appreciation that rules, legislation and guidelines alone were not enough. Discussion and reflection with the team and other professionals was valued and useful in supporting understanding of decisions made and application to future practice.

Issues around mental health and end of life situations were articulated commonly as complex and uncertain made more challenging because of the risk and safety dilemmas for patients and practitioners alike.

Student decision-making development appears to span a continuum discomfort when rules and certainties are not applicable, to greater situational perception and a more intuitive approach, drawing implicitly on past experience and knowledge. Many implications raised within the student stories will be considered in the final chapter.

STEADYING THE TIGHTROPE

This chapter explores students' continuing peregrination, developing judgement and decision-making expertise. Stories articulated what bolstered their development, and their adjustment to the reality of uncertainty and complexity in practice. Students shared strategies that steadied the dissonances between theory and practice and how uncomfortable ideas and feelings were eased as they prepared for registration.

Contrasting with messiness, uncertainty and cluttered storying teased out in the previous chapter, the foci emerging from the second round of interviews fit more neatly into four areas, indicating that students were accepting diversity, uncertainty and turmoil as being their practice reality. Four integrated 'crossbeams' symbolise how students were braced for leading their performances in practice with greater certainty and equanimity:

- Experiential learning
- Collaborative conversations
- Role of the mentor and colleagues in building confidence and providing alternative lenses
- Managing emotions

Experiential learning

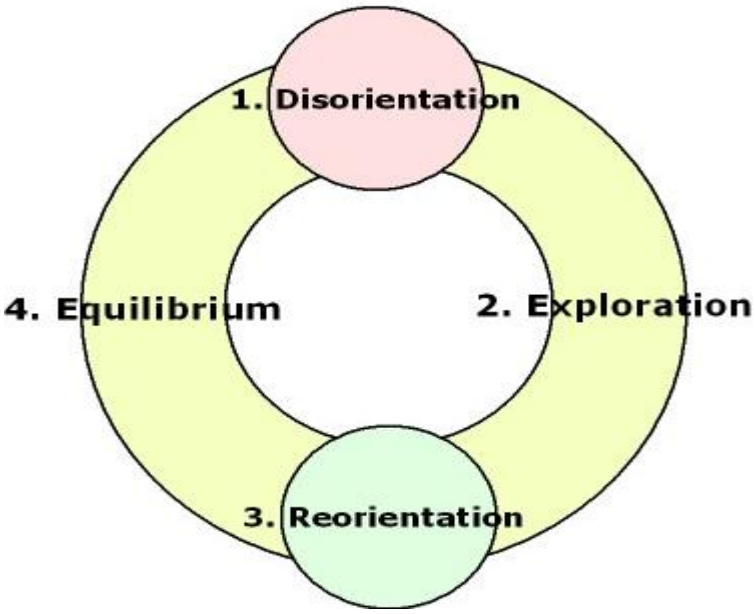
A growing bank of experience in practice and the role, values, behaviours and support of the student's mentors and other supervising practitioners is key to student learning, and how learning is contextualized. In the previous chapter, gaps in, and further scope for, additional experience were shared, for example by Rebekah, alongside disorientation, and dissonance felt when grasping the enormity and reality of practice. In this chapter, students' journeys demonstrate evolving equilibrium from additional experiences, support, emotion management, with insight into real world messy and unpredictable practice.

Taylor's (1979, 1987) four-phase model of experiential learning, researched in a classroom setting, identifies that learners experience disorientation, confusion and loss of confidence, may be anxious and experience tension (as did some of our students), when facing a situation that does not match their expectations and model of what they believe reality to be. This reflects what was articulated in the previous chapter. Taylor (1979, 1987) focuses on experiential learning. Whilst not focused on practice, the phases she identifies, chimed strongly with the emerging data and narratives of the students as they

faced new experiences in practice. Unlike some other experiential models, Taylor teases out how disorientation affects learners, suggesting ways to support them through this. Her model cannot totally represent the full complexity of practice, nor the finer calibration required as individual students navigate their way through bewilderment and uncertainty, but the specific recognition of these stages and role of the educator (mentor) in supporting learners to explore and then develop stability is evoked in student narratives as they articulated their growing confidence and poise in practice.

Taylor (1979, 1987) suggests that disorientated learners may withdraw from supportive relationships which might help in making sense of uncomfortable events experienced, This did not seem to be the case in practice for these students. They frequently talked about the role of debriefing, talking through the situation with the educator or other colleagues close to the event and their learning from this. Students did feel uncomfortable when experiencing unfamiliar situations or those when 'the rules' could not easily be applied which challenged them, causing them think about their expectations, beliefs and values. Taylor (1979, 1987) suggests that learners react by becoming confused and anxious as Rebekah's moving vignette showed. Others expressed their curiosity, engagement and willingness to better understand the untidiness and trickiness of 'real world' practice.

Figure 2 Taylor's Model of Experiential Learning



(From https://jarche.com/2007/06/disorientation-in-learning/)

Support from the mentor at this point is crucial for learner motivation, participation and self-esteem- as shown in Rebekah's moving vignette Scene 2 below.

In fact, rather than withdrawing, the students, even in the first round of interviews, were well accustomed to talking over uncomfortable situations -even where there was discrepancy between 'theory' and 'practice'. Examples illustrated how establishing a dialogue with others experiencing the same event, not just the more immediate members of the care team, was appreciated. The value and ways professional discussions (akin to in-vivo clinical supervision) take place is explored later in this chapter. This seems to follow what Taylor (1979, 1987) defines as the Exploration Phase, where the learner gathers information, explores alternative perspectives and undertakes supported reflection to review and reframe their learning (the Reorientation Phase).

Why might these students not be demonstrating withdrawal as Taylor (1979) noted in her research with students? Her work was with classroom-based learners and, in the practice placements these students are sharing, they are supernumerary throughout their programme. They may not always work with their mentor/educator, but always work with a paramedic and one other team member unless they are working on a Rapid Response Vehicle where they are one-to-one with a paramedic. They do not undertake emergency driving so are able either to attend the patient or to observe the clinician and their work with the patient.

Key attributes of the effective mentor/educator are that they are enabling and possess the requisite:

> *knowledge, competence, skills and attitudes…(encompassing) unique…values and behaviours… (and are) professional, respectful and accountable…trusting…inspirational…*
>
> (College of Paramedics, 2017b: 19).

What was striking to me reflecting back on the dynamics within the group during the year 1 and year 2 modules (both timed to run in semester 1 at the beginning of the year before main placement blocks) was that some students demonstrated Taylor's stages in varying degrees in relation to their 'theoretical learning'. Each of these modules included some Enquiry Based Learning as part of the curriculum approach, incorporated to deliberately provoke exploration of unfamiliar and ambiguous territory. The intentions of the

pedagogical approach included providing titrated scaffolding to enable learners, within the safety of a small group to interact with peers, facilitators and resources to seek to resolve their discomfort, to find information (and understanding and capabilities) to help to resolve the tension/ problem and to find options and alternatives (Taylor's Exploration Phase). Taylor (1979; 1987), unlike other theorists, indicates that confusion and disorientation are not only normal, but expected in the early stages of experiential learning, contrasting with some lecturers' and students' potential expectations that perhaps learning 'should' be comfortable and that it is not ok to experience discomfort.

Rebekah's growing insight into the complexities of decisions around a good and appropriate place of death is shown in Scene 2 of the moving vignette. For her, this illustrates the impact on care co-ordination for this patient when the Gold Standards Framework (Thomas, undated) is in place. A contrasting experience of a more positive person-focused decision than her earlier encounter.

Rebekah scene 2- Rehearsing the paramedic role with a strong supporting cast

This scene exemplifies the key themes identified and articulated by other students when sharing what had helped them in developing their practice in end of life situations, and how a good or better death process can be enabled. Repackaged and reconstructed from Rebekah's narrative, it presented a way of documenting and compressing her rich experience and also signifying, analysing and recreating issues in current practice (Spalding and Phillips, 2007). Rebekah's learning from this richly layered experience is shown, supported by discussion and feedback from her mentor and other cast members, enabling her to undertake deep learning. She moves through Taylor's Exploration and Reorientation stages (Taylor, 1979) and emerges with a more confident sense of what she has learnt, and now understands – moving towards balance/poise and from novice to advanced beginner (Benner, 2001). With the supporting cast she integrates theory and practice, gains confidence and considers how her learning could be applied in future.

The stepwise way she recounts this experience is very vivid and evocative in its illustration of how so many strands of 'messiness' raised in the previous chapter can be assimilated by this mentor-led performance. Her mentor encourages her to assume a 'speaking role', enabling her collaboration in the development and implementation of a person-focused plan for this patient's last hours; enabling her deep learning.

One powerful aspect the vignette teases out illustrates attributes of effective role-modelling shown by Rebekah's mentor:

> *whose behaviour, example or success can be emulated by others…*
>
> (College of Paramedics, 2017b: 23)

Her mentor provides a positive patient-centred performance for Rebekah to follow in future, including demonstrating caring behaviour, a person-focused approach, using coaching skills, constructive feedback, and facilitating reflection. Rebekah explains how this episode integrated theory and practice as she explores and reorientates (Taylor, 1979; 1987) what she comprehends, whilst navigating through complexity. This time the Gold Standards Framework was in place with patient information on hand for the paramedic team and the script of the back story of the patient's wishes and plan available, with the family embraced in the decision-making. This scenario therefore portrays many elements helping in steadying Rebekah's wobbly tightrope.

> *I can see how I am developing now as I look back. This experience really shows how a patient can have a good plan for their care when they are dying, and the difference a skilled paramedic can make to this. As I reflect, I feel so much better about palliative care now than I did before, and what I am learning from what we do for this patient and can use in future...*
>
> *This is a recent call…it came through as highest priority for cardiac arrest at 7 o'clock at night. But it isn't a cardiac arrest, the patient is increasingly short of breath and having some bleeding as well, so I feel a bit hesitant, I have to switch gear as the situation isn't as expected. I take a breath to calm my anxiety a bit…*
>
> *The patient is at home with her family round her… The family give us the Gold Standards Framework folder and tell us the patient has a terminal illness. This is the first time I have seen the Gold Standards Framework actually in place. My mentor quietly says he knows that I haven't had much of this type of experience and he knows I have anxieties as I am not sure what to do and what to say. I am uneasy, but he smiles and says 'Take a lead in asking the family what the situation is…don't worry I am here with you all the time'.*
>
> *I start to talk to the family, this isn't too difficult as I ask about the history using the more primary-care history taking approach we have been taught about this year. I*

read the documentation in the Gold Standards Framework. The family tell me 'she hasn't been diagnosed long…her plan is agreed and she wants to stay at home…but we thought she would have longer and she's so unwell now. We didn't expect this…yet…Shouldn't she go to hospital. I don't think we will be able to look after her'. I recognize they have panicked and need support in place. At first, as I do my observations, I think yes this is probably clinically indicated and that could help her symptoms and it's quite straightforward isn't it?

But I feel uncomfortable, both patient and family have recently been told she has cancer, her advance care plan and wishes are that she wants to stay at home. Her family say they know that she wants to stay at home and they agree with that, but 'she's unwell, isn't hospital best'?

I take a minute to think things through a bit and discuss with my mentor: she has a terminal illness so will whisking her to hospital via A&E or emergency oncology service really be best? She has breathlessness and some bleeding; I know from our theory teaching that the palliative care team can do lots to manage her symptoms and she already has their input. Now we need to talk to the patient on her own and ask her what she wants.

My mentor suggests that I ask the family to leave the patient's bedroom so we can talk to the patient alone- smiling reassuringly he encourages me to be part of the conversation. He calmly asks her what she wants to do- to stay at home or go to hospital? She has capacity. She says she doesn't want to be a burden to her family. My mentor nods at me- so I ask again calmly looking at her 'what do ***you*** *want'? I am quite patient with the patient to gain her wishes as I ask her four or five times…each time doing what I have seen my mentor do- give time and pause to enable her to reply- and she says 'I want to stay at home'. My mentor nods encouragingly and suggests that we contact the palliative care team and also see whether a family member can stay with her tonight, and she agrees…looking relieved and grateful.*

I then go and explain to the family that the patient has capacity to make the decision and ask who could stay the night while plans are put in place for next day. They say the patient's niece can stay the night.

My mentor contacts the palliative care team, he has their out-of-hours number. I listen in as this isn't something I have done before. The duty nurse is helpful and reassuring. She listens to all we handover, advising they are already arranging a hospice bed for the patient. This is what the patient had said she would agree to (it's in her plan) if somewhere can be found. So, this decision fits with her wishes. I ask about her condition, what they might do to manage her symptoms, and her current medication and get some advice as to what the family can give during the night. I am on a roll, I am learning so much- theory and practice can be joined up!

My mentor says 'go and explain the plan to the family and patient'. I feel prickles of anxiety at doing this, but I understand things more and it feels so good to be able to have a plan in place. I ask the family whether they want me to explain her diagnosis, her medicines and what symptom management the palliative care team may be able to put in place. They do…it's all so new- a blur for them. They seem more relaxed, and I'm finding that as I explain it all to them, it makes it much clearer for me too. So, she remains at home as she and her family want.

Afterwards my mentor and I debrief. We have quite a long drive and we can spend time reflecting on this case. I tell him it is my first time for such a palliative care situation. He explains that we did our best for the patient, as we considered the whole scenario not just her medical symptoms and reflected what the patient wanted, which I agree with. He gives me lots of encouraging feedback about how I talk with the patient: 'you were calm and caring and encouraged her to say what she really felt by giving her permission to say what she wanted- you gave her time'.

He notes the growing confidence I show when talking to the palliative care team and the way I explain things to the family, teaching them about the condition and likely future plan as I have seen him do. 'I could see you becoming more confident'. He patiently encourages me to explore what I have learnt about palliative care, how to talk and listen effectively and to describe what I have observed him doing and explain why I thought he did this.

When we follow up the next day a bed has been found in the hospice for her. I feel so pleased that everything has clicked into place! I know we have made the right decision, if we had taken her to hospital that could ultimately have delayed the

process of getting her a palliative care bed, and this patient would be an hour away from home. She might have died in hospital. Taking her all that way as well when the hospice was only four miles down the road from her actual home address. I guess the family were worrying about what would happen if she died while she was at home. I feel so much better about this- the discussion and reflection really helped me see how the best decision for this patient was made. I feel much more confident about what I will say and do and who to call on in future. And obviously the palliative care number is now in my phone!

(Rebekah Moving vignette)

Rebekah shows a transformed appreciation of the nuances of this situation compared with her perspective and discomfort when previously interviewed. She recognizes this is not an easy situation, that there is big investment needed to orchestrate a 'good enough' plan for the patient; piecing together insights with support from other performers.

She appreciates the family has anxieties but shows her empathy for the patient, and her desire to tease out what the patient wants despite the family's perspective. She shows compassionate emotional labour i.e., responsiveness to the family's emotion (Kozlowski et al., 2017) in an appropriate way. This is explored more deeply later in this chapter.

She weighs up whether the patient might need hospital care for clinical symptoms, but her over-riding consideration is to support the patient in her preferred place of care; very different from her earlier heart-felt call for certainty and someone like a General Practitioner to make all the decisions. Rebekah is picking up more cues and she is analysing the information gained, but not now slavishly following guidance around the decision being made. She is seeing the implementation and value of the Gold Standards Framework (Thomas, undated). Seemingly, Rebekah is getting her bearings and finding her 'centre of gravity' on the wobbling tightrope.

Having the available tools - the documented wishes and advance plans for the patient (very different tools from the paramedic medical toolkit) - in place and accessible via the Gold Standards Framework (Thomas, undated) seems to have eliminated any concerns about legal or ethical constraints in this scenario. For Rebekah, the importance of the supporting cast is explicit, comprising the palliative care team and her mentor, in enabling the eliciting and enactment of the patient's wishes.

Her mentor encourages her to be part of the conversation, helping her understand how to draw out different views and needs of family and patient, informing the decision made. He was key in terms of role-modelling the 'script' with/for the patient, contacting and engaging with the palliative care team to inform the agreed plan, He demonstrates empathy to the patient and advanced accurate empathy (Egan, 2014) to Rebekah by successfully sensing her feelings and needs, to make these more transparent to her. He demonstrates wisdom, encouraging her to take a closer look at herself and feel more comfortable taking a more central lead role in this scene. He provides explicit and insightful feedback, encouraging Rebekah in reflecting on the scenario, and both their performances to tease out deep learning and how the decision was informed, and supported- helping her tacit knowledge.

Whereas Rebekah indicated previously that she felt scared when facing some situations in which she had found herself, and was worried about her future registration when a patient is left at home, this time she seems to agree, and is content with, the decision and plan both cognitively and emotionally. She shows she understands key principles, still needing guidance in relation to actions and priorities, thus demonstrating having moved to being an advanced beginner (Benner, 1984).

This process seemingly mirrors moving from Exploration to Reorientation phases of experiential learning described by Taylor (1979, 1987); by exploring the care plan in place and reaffirming and understanding (reorientation) the situation (experience) from the standpoint of the patient/family and palliative care team, Rebekah now has her bearings.

The 'social experience' and collaborative discussion with other clinicians as explored by Rycroft-Malone et al (2009) and Wyatt (2003) are also key features of the decision-making process in this scenario. Luckily the cast are assembled though the story is set in the evening. Previous scenarios were unscripted, however, this time, the script is recorded as a care plan and rehearsed with the cast; the palliative care team are available, offering advice and support. This exemplifies the best of what can be in place for 'the good death' as:

> *Time is short for the dying. Towards the end of life the pace of change may be rapid, and without good planning and proactive management, the speed of events can catch out the best of us. Enabling dying patients to remain at home involves a close collaboration of many people, services, and agencies, both generalist and specialist and, at best, an agreed system or managed plan of care.*

(Thomas, undated: 69)

Taryn's perspective is changed as she reflects on experiences during a primary care General Practitioner placement, which influences and transforms her whole approach to assessing patients. From observing how General Practitioner s work, she recognizes that dialogue related to the history of the presenting complaint can be more vital, when deciding care management, than going in and taking physical observations first, which is the paramedic primary survey approach. This, as with 'Rebekah's' moving vignette scene, shows moving away from a more medicalized approach to patient assessment – potentially altering the patterns and context of decisions being made. Rebekah (Scene 2) explicitly talks about applying a different primary care assessment approach which was taught during classroom learning, trying different approaches 'for real'.

Taryn also indicates that this experience led to Exploration/Reorientation (Taylor, 1979, 1987) appreciating the primary care approach and how she has reflected on and absorbed this (Taylor's Equilibrium stage) into her toolkit for assessment and decision-making. She has chosen a different perspective that subsequently informs/transforms her approach to practice, part of a competent performance (Benner, 1984).

> *… that was quite eye-opening because we …heavily rely on history taking but have our obs. machine that we use on everyone (laughs). GPs hardly ever take anyone's observations, they take a lot of history and then …decide there and then what they are going to do. Very …based on history. We … had drummed into us over the three years that history is key to everything but I think the GP placement really highlighted that. …They were able to make decisions based on people's presenting complaint (and) the history of it, … it quite surprised me…that I hardly ever saw GPs take blood pressure. Since then I've spent a bit more time focusing on history rather than just (taking) observations to find out if things are okay or not.*

(Taryn Int 2)

Holly also focuses on her General Practitioner placement experience, comparing the different lens and perspective of their approach, a longer-term, slower-paced approach to consultations, with that of paramedics in emergency situations. Observing and listening to General Practitioner consultations and reflection on these, has provided her with a better understanding of how to make an effective referral and engage in a conversation of equals with General Practitioners. She is confident in taking time to determine for herself

what to do and what plan or direction to take in response to the given scenario; showing attributes of competence (Benner, 1984).

> *The surgery was great and so supportive to paramedic students…I noticed how much… rapport the GPs had with their patients as they, unlike paramedics, have a longer-term relationship with their patients and have access to lots of information about the patient's history. I spent a lot of time observing them and thinking about how they worked. You know sometimes we can be too reactive, you know you've just got to think to yourself where else can I refer this person, what can I do for this person, when making treatment plans? …After this placement I am much more confident to call a GP and have a conversation rather than just take the patient to hospital.*
>
> (Holly Int 2)

Holly also shows Reorientation (Taylor, 1987), as she is integrating insights from her General Practitioner experience and moving towards Equilibrium in applying new learning in her practice.

Reflective and collaborative conversations- The community of practice

Eraut (undated; 1994) identified the role and value of students working alongside colleagues in their learning of tacit intuitive workplace knowledge, whilst learning the practice routines (roles/scripts) needed for situated understanding and competence. Key aspects, he suggests, which enable positioned understanding to inform decision-making, include reflective conversations, underpinning theory and evidence, feedback and questioning. These were illustrated in detail within Rebekah's scene. The General Practitioner experiences of Taryn and Holly provided evidence and primary care scripts that have truly transformed their approach and developing competence.

Georgie shares the value of discussing a difficult case and how her personal reflection helps in drawing out learnings. This illustrates her metacognitive monitoring and reflective learning process (Eraut, undated, p1) and aspects of 'backstage' work in the 'debrief' and reflection she undertakes to gain her emotional bearings, achieving closure.

> *I went to a job that affected me quite a bit. It was very immediate (in) how it affected me....and once I had a…debrief and a discussion about it, it was easier for*

me to …learn from it and…lay it to rest… I definitely think I've got better in terms of that I reflect a lot more …(and it) helps me to process it. I quite like to reflect and think about things.

(Georgie Int 2)

Surprisingly, few students made much of the opportunities to discuss their needs for emotional support beyond reflective and supportive conversations with crewmates- perhaps because the immediacy of the debriefing, feedback, support and processing of the experience were normally sufficient? Many talked about the automatic reflection and debriefing discussion that happens with their mentor and crewmate between calls and at the end of the patient encounters, particularly a thorny one. Georgie elaborates how debriefing discussions facilitate reflection-on-action after complicated cases, enabling comparison of situations, though different, to gain insights for future decision-making.

I've found debriefing after complex cases helpful as it enables us to discuss the available options and the decision that was made. But I find it difficult because even if you go to two patients who have exactly the same symptoms, what is best for one is not best for the other. I feel it's always helpful to discuss so that when I face a situation which is very similar, I can use that past experience to help to guide me in terms of my decision-making.

(Georgie Int 2)

For Rebekah, reflective discussion after the end of life situation helped to confirm that the 'right' decision had been taken, and further, they knew the eventual outcome and both patient and family had an appropriate end to their story. There is an emotional investment in coming to a good plan and decision and a motivation to reflect and replay the performance to draw learnings and tacit knowledge from these episodes (Eraut, undated).

Taryn elaborates that discussing cases with her mentor or having a debrief, offer important opportunities to reflect, recognising the lack of rulebook and scripting. She accepts this and the myriad of patient presentations with poise (Taylor, 1987) and situational discrimination (Dreyfus and Dreyfus, 1980).

After…more complex cases there usually is a debrief and we discuss … not just what happened but also what to do if any of alternatives had happened… saying

'well in this instance we did take the patient to hospital but if we hadn't taken them to hospital what would (we) have… done for this patient?' 'Cos …if you just had a glance over the cases we go to (and think they) are fairly similar, actually when you …look deeper into them, each instance of a person self-harming is completely different … some things would have been appropriate for that patient that wouldn't have been appropriate for the other patient…

(Taryn Int 2)

Discussions/debriefing will, she recognises, be of value even when registered. She values sharing thoughts with colleagues supporting collaborative decision-making, noting that whilst registrants are accountable, they never need to feel alone. As well as feeling more confident in sharing ideas with General Practitioners, for Taryn, the crew and colleagues provide a supportive community of practice.

You can… bounce… off your crewmates as well… even the paramedic (who is) lead clinician and the registered professional… the buck stops with you as it were. It doesn't mean that you have to make the decision completely on your own.

(Taryn Int 2)

Eliza also agrees that there is real value in discussion and reflection. Like Taryn, Rebekah and Holly she recognises how exploring one situation adds to the bank of experiences from reflecting 'on action' (Schön, 1993) which helps in reflecting 'in action', informing future decisions (Wyatt, 2003).

We did have quite extended discussions afterwards …(about) what we could have done differently …is there anything else we could have tried? I think we all realized there was nothing else that we could have done, we did access everything we could …in that locality and we tried phoning multiple places to try and have some support and we'd spoken to our local Duty Locality Officer that night…We…discussed it at length on scene and then afterwards … It went on for so long, there was so much involved at the same time it was a 'good' incident to be involved in. You know what we did you can apply to other situations.

(Eliza Int 2)

For Marie professional reflective discussions help her re-examine scenarios, synthesizing options by piecing together the 'bigger picture'. Her lens is patient-focused being consciously aware that to enact the patient's wishes may be uncomfortable; she accepts this as part of being patient-centred.

> *I focused on what the patient's wishes were and not what's best for us, despite the fact that not offering active treatment might feel uncomfortable for us. This I feel comes with experience, but of course is not in (the guidelines). Now I know I can draw on a larger bank of options than I could last year. My box/bucket of experience has been helped by discussing the situation with others to help to put all the pieces together …a positive reappraisal of the situation.*
>
> (Marie Int 2)

Marie's additional experience of options provides an enlarged cast to gain a full and coherent picture rather than the 'mish-mash' Georgie reported earlier. For Marie, the family's perspective informs the decision-making process and key members of the cast. She is swimming comfortably at the 'deep end' now.

> *I think discussing it with people and the clinical advice line like that and the GP because they know the patient's history and… that gave us permission… also chatting with the family making sure they are alright and what we're doing is (ok)…*
>
> (Marie Int 2)

Marie highlights the way two-way discussions helped her gain a deeper, more complete and more organised picture of the patient and situation, facilitating deeper thinking and reflection, modifying her perspective. As with Rebekah, rehearsing and explaining the scenario to others, enables her to become clearer, bringing elements together more consciously for her.

> *…to discuss it with someone…that also helps me get all my facts right. I…sit there and think oh I didn't think of that before. Which I think is quite good sometimes given the history of the patient... Actually, when you do try and explain to someone else that has now highlighted something to me so actually now I should think about that…*

(Marie Int 2)

Eliza explains her growing understanding of the alternative perspective of the Mental Health Crisis Team, referral criteria and decision-making process. Alongside Taryn and Georgie, Eliza recognizes how learning in the context of one patient can translate into informed care for future patients.

> *I know that alcohol impairs the patient's ability to make decisions and their capacity so that an accurate mental health assessment is not possible, not until the patient has sobered up. It was very helpful…to talk to the crisis team because they have a different viewpoint. If they know the patient they …explain what might have worked before and also can be helpful in sharing suggestions for strategies to help us …manage the patient. I actually talked with them, and during the phone call I became clearer about when it was possible to involve them and what they can actually do. This was a great relief to understand this and later with my mentor discussed how this might help not only for that one patient but …in the future.*

(Eliza Int 1)

Eliza's deeper understanding of the role of the Mental Health Crisis Team developed through direct conversation with them, providing her with a more insightful and reality-based appreciation of inter-agency working. She now understands why a referral and action by the Crisis Team would not have been appropriate at that time, illustrating the value of learning from, rather than about, other services.

Rob's collaborative community of practice is exemplified by sharing of ideas and scenarios with a General Practitioner he chose to be his (informal) mentor. This, he explains, has helped him to stand back from the culture of high acuity out-of-hospital practice, and feel comfortable with the more primary care 'watchful waiting' approach.

> *I've been sufficiently distanced from ambulance culture this year and I realize there is nothing wrong in calling for advice. I am a lot more at peace with that now, and that's mainly down to my discussions with an old school GP (who) follows that Archimedes quote 'Medicine is the art of entertaining the patient while the rest of the body heals itself.'*

(Rob Int 2)

Rob evokes alternative dramatization of the paramedic role – from the manipulation of (high tech) equipment and performing fast-paced clinical procedures for example cannulation, taking and interpreting Electrocardiographs to, for example, sitting having tea and talking with (entertaining) a lonely older person who does not want to go to hospital as part of assessment and history taking.

Role of the practice educator/mentor

Practitioner development is shaped by practice-based experience and key colleagues with whom the student works, as shown in the moving vignette Rebekah Scene 2.

The College of Paramedics (2107b) identifies 6 multidimensional aspects to the educator role (students mainly referred to support from 'mentors') including the role of coach. The terms mentor, educator, facilitator, coach and so on are slippery and overlapping. All share similar attributes, processes and tools to enable the development and achievement of learners. The College of Paramedics (2017b) defines the coaching role as encompassing:

> *the skill of guiding the learner with primarily practical skills and tasks as well as the knowledge and professional behaviours that underpin them... Coaching tends to work best in a task orientated situation… for a shorter period (and)…more focused than mentoring…A coach is a 'question asker' that…supports the reflection of the learner to unlock...(their) potential.*

(College of Paramedics, 2017: 35)

There are different models and frameworks of coaching and mentoring, though Gray, Garvey and Lane (2016), for example, do not separate the concepts as clearly as the College of Paramedics. The context, phase or stage of the learner, how directive or non-directive the relationship needs to be and ability to have a two-way relationship and dialogue are emphasized. The role that the student's mentor or supervisor adopts whilst on shift is crucial to their effective development. All students shared positive examples of support from their mentors, which are not likely to reflect the full gamut of relationships between learners and registrants in practice.

From all the findings related to mentors and mentorship shared during the data collection, I developed a coding matrix of what seemed to be the needs of students, matched with the behaviours and attributes of their mentors, through the three stages of their development I had identified, from 'swaying', to 'steadying', then 'skilled performers' in waiting (Table 9 overleaf).

A key step-change articulated by students was the value of working with mentors/crewmates who encouraged them to assume the lead clinician role – supporting them and using coaching in a process to move the student reliance on a mentor-led role, where they observe the mentor and others, to a student-led performance in patient assessment, management and decision-making.

Table 9 Coding of Student and Mentor relationships needs and behaviours (drawing on Taylor (1979, 1987)

Student needs		
Disorientation/ Exploration- Swaying	**Exploration/ Reorientation- Steadying**	**Reorientation/Equilibrium- Skilled Performance**
• Disorientated • Confused • Lacks context • Desires rules and principles to follow • Requires clear direction • To feel safe and supported • Translating 'theory' into 'real world' • Benefits from frequent mentor- led feedback • Debriefing after every case	• Safe foundation from which to explore own abilities and understandings • Comparison and testing out different approaches, methods and models • Experiential learning in different contexts and settings • Self-assessment • Developing networks and contacts • In-vivo 'clinical supervision' • Reflection and processing • Observing and practicing	• Lead clinician • Self-confidence, insight and self-efficacy • Ability to see the 'bigger picture' • Able to 'watch and wait' as appropriate • Acting a team leader • Coaching and teaching others including students and patients/families • Connectedness with others • Health and care system awareness
Mentor behaviours and relationship attributes		
Disorientation/ Exploration	**Exploration/ Reorientation**	**Reorientation/Equilibrium**
• Orientation • Support • Role modelling • Constant observation	• Encourages questioning • Supervision may be more intermittent	• Encourages student self-assessment • Steps back appropriately

• Teaching • Direct supervision • Feedback and debriefing • Encouraging regular reflection	• Coaching skills • Delegates appropriately • Encourages regular reflection, analysis and re-framing of context • Encourages discussion and feedback with other agencies and practitioners • Supports student in developing a wider network • Enables student rehearsals	• Facilitates personal and team leadership skills development • Encourages students to set own learning goals • Enables the student to teach others

The 'good enough' mentor provides boundaries, guiding principles and a steadying hand on the tightrope. The patient episode on which Marie is reflecting in the extract below involves an end-of-life situation and the tension between whether to undertake observations and active treatments or to make the patient comfortable as he faces his final hours at home.

> *My mentor at the time, she's the one who said 'we're not doing that (taking 'the obs'), that's just going to distress him, there's no point'.*
>
> (Marie Int 1)

Georgie, indicates how prior discussion and rehearsal with her mentor, has led to her recognizing what now seem 'obvious' priorities for this patient; more confident despite possible medical options available, to watch and wait calmly whilst taking the lead clinician role herself.

> *I've an example of taking the lead with a patient with dementia at the end of life. It was important to calm her, she was very agitated. The patient had a DNACPR and wishes in place. We spent time establishing this by contacting the family and her care team. Technically there were treatments we could have done if we were following the guidelines to the letter, but this wouldn't have been in keeping with what we learnt she wanted. In fact, this is just the sort of situation I'd talked through with my mentor a couple of weeks before, so this seemed obvious. Even though monitors were going off, I felt it was entirely appropriate to not intervene, to not be heroic but to honour her wishes and refer her to her doctor.*

(Georgie Int 2)

Georgie explicitly recognizes and appears comfortable with the in-situ difference between 'technical rules', i.e. what guidelines say, and the situated, contextualized patient, about whom the practitioner may not have the whole picture. She articulates the effectiveness of running through such situations with her mentor. For Georgie the scripting afforded by the patient's wishes and the rehearsal was of paramount importance, informing her decision; giving her confidence to articulate her plan of care for not over-medicalizing the patient's final hours. She is comfortable with not being 'the hero' for this patient-centred and empathetic approach. Georgie has confidence in not taking a medically led strategy; the clarity provided by the Do Not Attempt Cardiopulmonary Resuscitation and wishes being in place cements the plan to not dive in with medical interventions.

Georgie (as observed earlier by Holly and others) still recognizes that such decisions are difficult (better to have some scripting than working without a script). She compares one paramedic performance (heroics and action) with a quieter, watchful approach.

Taryn sums up her mentor's approach, giving her permission to use her initiative and lead, helping to build her confidence and intuition as to what is 'right'. The supervision and coaching style of her mentor encourages her in the lead clinician role, feeling trusted and supported, more independent rather than leaning on him; moving from understudy to lead performer:

> *…(previously) I would always ask their permission before I did anything. This year my mentor said to me at the beginning that he doesn't want me to ask his permission, he'd soon stop me if I was doing something wrong, so it was (to) build my confidence to do what I thought was right and I haven't been stopped so far… So (I have) been doing it right ... the decision-making hasn't really changed at all really.*

(Taryn Int 2)

Jenny's mentor really steps back, giving permission, indicating his trust in her to perform safely, demonstrating his confidence in her in the leading role:

> *I have a perfect example…, my Practice Educator was seeing me as lead clinician and he would stand back (often admiring pictures of spitfires in the hall!)... We worked on the Rapid Response Vehicle, so just the two of us. He would do nothing,*

that was his way of teaching… 'I taught you everything I know, go ahead and do it. If I think that you are stuck…sort it out for yourself. If you are really stuck I will jump in.'

(Jenny Int 2)

For Marie watching others and having a professional discussion helped in the integration of theory and 'how to' in practice. She understands there is no training that covers everything, and that real world experience is essential. Here her mentor is articulating his thinking and reasoning to help Marie better understand what to ask as part of assessment and decision-making.

It's great you know when you are at university and sometimes it will prepare you and sometimes it won't. You have to experience it out on placement …because that's where you gain your practical side for it …You really (are) able to watch other people, …see how my mentor deals with it and…I'll ask him about it afterwards and he'll say 'This is why I asked that...'

(Marie Int 2)

Managing Your emotions

Whilst other students offer glimpses of how they manage their emotions, during debriefs or when reflecting, Jenny gives a lush portrayal of her emotional labour and strategies for 'deep acting' (Hoshschild, 1983) and compassionate emotional labour (Kozlowski et al., 2017). She movingly shares aspects of her emotional labour to suppress and manage the emotions triggered in her practice (Hochschild, 1983; Smith, 2002; 2012). Jenny has emotional and cognitive awareness and recognizes the emotion of the family, responding by shifting the focus of patient management from curing to caring- characteristics of compassionate emotional labour (Kozlowski et al., 2017).

For Jenny, managing emotion in her practice performance evokes the metaphor of the 'curtain', sometimes drawn between her personal emotional self, backstage, and her frontstage professional performing self.

The success of her performance is illustrated in the following moving vignette scenario. Jenny describes a particularly complex situation, as so often, it is an end-of-life situation. A Do Not Attempt Cardiopulmonary Resuscitation form is in place and the family are

clearly emotional. Jenny notes that her mentor specifically asks afterwards whether she is all right and she says she was fine. He gives her very insightful and helpful feedback about how skilled and professional her performance is, and that her emotion management and effective emotional labour enables her to project being caring, to support her in containing patient and family emotions and self-manage. The value and importance of debriefing and support is also crystallized here.

Jenny Scene 1- Emotional labour- The curtains between front and backstage

> *I have become really aware of how I manage my feelings. I am not cold, just maybe more able to control them in the moment. I have a patient I want to tell you about -this could have been an awful scenario, but I've come to terms with it. He has been recently discharged from hospital to die at home as per his wishes, carers are present, and he seems to be in the last hours of his life. He has a terminal diagnosis of cancer. His breathing has suddenly deteriorated, and he is gasping with very laboured breathing. For me this is a moral, and ethical and legal conundrum of what do I do.*
>
> *I make a decision that we aren't going to aggressively intervene until I seek extra help. I decide to put him on oxygen therapy to assist with his breathing. He looks more comfortable now in the semi-reclining, sitting up position rather than lying flat. I try to communicate with him to see if he has any pain. He isn't really able to verbalise this at all because his breathing's very laboured. We supplement his oxygen as much as we can, so we know he is not struggling for air.*
>
> *I decide to call the out of hours GP, this I know means you have to go through 111- they advise there can be a half hour period for a GP to call back. This actually takes at least 45 minutes. It feels such a long time waiting. During this period of time, the patient deteriorates massively, and I agonise about what do I do that's right and what do I do that's legal? I make the decision to do nothing active. I make the patient comfortable. The patient continues to deteriorate, and we review his pain relief.*
>
> *For me it's a very difficult decision. I know it's necessary, but not doing anything really active, the action of not acting that's what feels difficult. My heart goes out to him and his carers as he continues to go downhill. I know we're often so quick to*

intervene, to stick people with needles for every drug under the sun and convey them to hospital. What a contrast, sitting on your hands so to speak; knowing it's right but feeling torn that I am not doing more...

This gentleman wants to die in his home, his carers are there holding his hand and he goes peacefully… It's frustrating, five minutes after he passes away the GP calls me back, which goes through the whole rigmarole of 'We haven't been seen this patient for x days, you're going to have to call the police.' So, it then becomes a bit of a circus, because even though this patient had terminal cancer, and is known to palliative care, the aftercare was not arranged because of his recent discharge so there was a bit of a gap. We find out later that Macmillan are due to go in the next day, but he deteriorated too quickly.

Then the police came. We are on scene for a long time. It gives us enough time to get in touch with the patient's family who live quite a way away and are able to arrive and we position the patient in a way that is comfortable and respectful. I can't just leave him looking undignified and uncomfortable. I feel I have done my best for him and for his carers and family which is positive.

Afterwards we talk and reflect. My mentor says, 'Are you ok?' And I say 'Fine'. He says, 'you were so controlled, your demeanour so caring yet so professional… and that's something I didn't expect to see in someone who's been in such a relatively short period of time, because that's a very difficult balance'.

I like the analogy of the curtain- which was drawn in place during my time with the patient. And then, when I get backstage to our crew room, it is ok for the curtains to open, and I can emote. That's the beauty of our job as well, we can build strong relationships with our crew-mates -sometimes I see more of my crewmate than my partner! So, we can go 'well actually that was bloody awful, let's go to MacDonald's and eat five sundaes, and cry into an apple pie…' and then do that, feel absolutely dreadful …all the calories…then you pick yourself up and go and do it all again.

There've been occasions where my emotions have got the better of me, and I've definitely been aware that my feelings are there…I've worked to keep them under the surface in front of patients. Not so much putting on a front, the professional

curtain, so they know that I care but I'm not letting my emotions spill onto their emotions.

I think that sometimes it's appropriate to break the fourth wall. Sometimes the patient and family need to see that their health professional is a human being, but not that I am losing control of the situation -they need to see me in control to feel reassured that I'm not going to lose it to the detriment of them or their family member. They can actually see me as a human being and that I am going to do what's best for them.

(Jenny Moving vignette)

Larson and Yao (2005) in their consideration of emotional labour and its relationship with empathy, suggest that deep acting involves the practitioner trying to either modify their emotional behaviours and expression for the specific experience, or amend their situated perceptions using memory from previous situations, and by using their imagination. Whilst, according to Hochshild (1983, 2012), in surface acting there is a dissonance (gap) between the individual's feeling and what is expressed; in deep acting which involves emotional effort/labour, the actor (practitioner) comes to trust their emotions and to use them therapeutically as Jenny has described.

For Jenny dealing with emotions becomes an exercise in holding back her feelings. She explains her growing understanding about things that trigger an emotional response in her, but also having had more experience, she knows where the limits are in terms of not being able to save or to make all patients ok. It seemed that she was now more resilient, though not less caring, but her approach has changed because she has had more life and practice experience and she can take each patient experience on its own account.

Theodosius (2008) contends that as patients are vulnerable, the practitioner needs to moderate the power imbalance between themselves and the patient as part of establishing an effective, person-centred helping relationship and that such emotional labour involves a reciprocity of emotions as Jenny has acknowledged.

Boyle (2005) describes how emotional process work for paramedics (as a central element of emotional labour) takes place not only before, during, but also following a patient interaction in - Jenny takes us through these stages in her scene.

Where there are personal emotions, these are hidden from view, and, as Jenny indicated, for her a curtain prevents the patient and family from viewing frontstage how she is feeling. Jenny indicates her awareness of working (labouring) to keep the outward professional demeanour in place. However, she also indicates that she is aware that sometimes it is right and appropriate for this to slip, for the curtain to be slightly opened to enable the patient and/or family to see her as a human being, not merely a professional.

Boyle (2005) and Williams (2012, 2013a, 2013b) pick up the notion of the offstage requirements, for Boyle (for practitioners) this is partners and spouses (fully offstage) for Williams (for student paramedics) the role of the mentor (paramedic educator) in role modelling and supporting students is acknowledged (onstage and backstage). Backstage debriefing takes place not only with the crew on ambulances/cars but in crew-rooms and call centres. Often linked with 'traumatic' scenes, it is recognized as emotionally supportive, what is not clear is how far its' significance and impact on learning and role performance (in day to day practice) is acknowledged and enacted.

Boyle recognized four emotional labour practices that she believed were specific to paramedics, shown in Jenny's scene:

> *the ability to manage patients' and one's own anxiety; managing people who are out of their usual environment; being able to cope with a constant state of uncertainty; the ability to simultaneously 'care for' and 'care about' others. (2005, p51)*

Eliza Snapshot 1- Compartmentalization

Eliza's strategy to deal with the emotional aspects is to screen-off and pigeonhole – but not deny- her feelings as shown in this snapshot:

> *I think I have become quite good at dealing with things, almost compartmentalizing certain situations and emotions. Rarely now are there things that trigger an emotional response. I don't think I've become less caring, my approach is changed*

just because I've become better and had more time. I don't think it's a bad thing. It doesn't affect my ability to do my job at the same time it's not a case of I have been there, seen it... I've had more experience and I know that I can't save or contribute to everyone's life in a positive way. You know give them treatment that will save their life or whatever... I've come to accept what my job involves. I don't think it changes me or my mental health or my ability to do my job. Maybe I am less emotional than when I started because I've had more life experience and come to terms with what is possible and what is not for patients- I now know I cannot always make it ok.

I think if I went back home and thought about every patient in an emotional sense I wouldn't be able to continue every day in my job. At the same time there are patients that will stick with me, certain situations, which isn't a negative thing. An example of the way that I deal with the sad stuff is when I told someone that their relative had died…I put that in a place and said to myself 'okay it was difficult and sad but I had to do it'. I spoke to them I hope with compassion and care…I put it away behind my screen ready to go in my box in the corner. It was sad for them and for me because I had to tell them, but it doesn't affect me afterwards. I go home and carry on my day because it is part of my job.

(Eliza Snapshot vignette)

Marie agrees that, with experience, she is better able to understand and manage her feelings and, as with Jenny and Eliza, she has developed personalized emotion management strategies and faith in being able to cope with her emotions.

I've learnt…certain techniques, ways of coping with certain things…the first time you experience it you kind of have all these emotions but being supported (then) next time… you're better. You feel a bit strongly (at first) and … I've had two years to develop …You have to be patient because then when you do go to another incident you can go 'I can deal with this'. It doesn't make it any better but I've actually witness(ed) this… at least I know how to deal with it from there.

(Marie Int 1)

By the end of year 3 she recognizes she is emotionally stronger. Further experience and thinking back on a situation, she elaborates, helps with developing resilience and cognitive reappraisal, additionally making space enables processing of her feelings too.

> *I would use experience or emotions that you'd draw on. I think …it's built my resilience a little bit and my coping strategies as well… also talking it through with someone who wasn't there kind of helps me explain it properly… if they were there you know I wouldn't need to. I can think it through step-by-step…Sometimes things come up and I thought 'oh I didn't think of that at the time'…and maybe feel (I can) say that made me feel like that at the time.*
>
> *Or…the other way round so the emotion might be there but you don't need to talk about it in the future. I suppose it gets you to process it….You can do… positive reappraisal …look at it again… this was good… you can justify why you did something… I think that it is a really good thing that I've done.*
>
> (Marie Int 2)

Dissonance is reduced by justification of the effort and processes involved in processing practice experiences and by valuing providing good care. This also, as Marie describes, supports her in building her resilience.

Personal/professional emotions sometimes resonate as for Rob:

> *One of the saddest patients I've ever seen was a gentleman dying of lung cancer who was 76, and precisely like my grandfather... It resonated… (I knew) it wasn't my grandfather but (I think) that validated my approach. Yes I felt sad and maybe went home to cry but provided professional care…*
>
> (Rob Int 2)

From the responses of Jenny, Eliza, Marie and Rob it seems that they were expressing compassionate emotional labour responding not just to the emotions of the patient, but also to that of other people including family at difficult times including end-of-life and mental health scenarios. Interestingly Kozlowski et al. (2017) suggested that the papers studied demonstrated that doctors tend to deny emotions and try and exclude them from recognising the emotional aspects. This is not the case for the students, for example in Eliza's acceptance of her emotions, Jenny's use of the curtain and 'breaking the fourth

wall', and Rob's feeling of authentication of his approach to care, all aware of their feelings and using conscious strategies to manage them. Jenny allows others to see her as human whilst being an advocate for the patient and respecting the patient's wishes- not excluded but registered.

Williams (2011; 2012a; 2012b) has done much to identify and raise awareness of the role of emotion and emotion work in student paramedic practice, predicated on Boyle's earlier work (2005). Williams (2012a) in her interviews with student paramedics identified themes related to struggling with emotion and suppressing emotion and objectifying patients and not seeing the patient as a speaking subject. Williams notes (2012a) that the protocol driven approach (even more common in practice in 2010 than currently) to her did seem to help to focus students on the technological aspect of 'what needs to be done'. Conversely, the situations to which I guided students to reflect, are those that are very clearly frequently outside clear-cut guidelines and protocols and which do not seem to have triggered objectification and depersonalised approaches to the patient.

Boyle (2005) identified that paramedics used a number of techniques of surface acting including humour, expressing emotions they knew were not authentic and the use of an emotional 'shield', being hardened to the experiences encountered and managing their own emotions. In relation to deep acting, Boyle (2005) recorded that practitioners held back emotional attachment, distancing and objectifying the patient or sharing ill-chosen emotions with families when they are faced with the dissonance between their role to save lives and act/do rather than listen/watch and wait when facing patient at the end of life for example. Perhaps this is due to differences in institutional and course cultures- psychosocial, holistic approaches are emphasized in the UEA curriculum. The students seem to be revealing 'empathetic' portrayals of themselves which may not be the whole picture; neither do they yet seem 'battle hardened' by their experience.

Chapter summary

The ways that students' growing repository of experiences, understandings and acclimatization to practice within supportive, cooperative reflective partnerships reveals their development towards insightful, safe and skilled performances. Their storying shows growth in awareness of the holistic and contextualized facets of decision-making. They

are beginning to consciously initiate care planning in the knowledge of available options and viewing the scenario from diverse positions and perspectives. Complexity and messiness provoke less discomfort, and insight into their emotions and judgement is shown as they move from advanced beginner towards competence (Benner, 2001).

THE SKILLED PERFORMANCE

This chapter covers student peregrination to the end of their programme. Their stories reveal varying degrees of preparedness for required independent, skilled decision-making performances, played out on multiple stages. Qualities and characteristics of the emotionally intelligent and confident paramedic decision-maker are illustrated by these themes woven through the extracts and vignettes which follow:

- Positionality -Competence/proficiency; routine/adaptive expertise
- Professional identity and confidence
- The person-focused subjective gaze

Positionality -Competence or proficiency; routine or adaptive expertise?

At the end of the second round of interviews I noted in my field notes (24/05/2017):

> *The difference between the first and second round of interviews is striking, as is how self-aware and insightful they are! Each student offers at least one example of having synthesised and pulled together ideas and experience so they are able to use this process to make their own decisions with more confidence- even creativity- than might previously been the situation. They seem to accept uncertainty, show openness to doubt and ambiguity, flexibility and insightfulness in managing novel situations. They seem much more confident with who they are and accepting that every person and situation is different.*

Professional identity

As has been shown earlier, crucial to a steadier, more skilful and balanced performance on the practice tightrope, is dexterity in decision-making within uncertain, dynamic, frequently risky and emotion-laden scenarios, where rules cannot be slavishly applied. The skilled performance, therefore, is not merely about the achievement of technocratic skills, it incorporates the development of emotional competence and resilience (Moffett et al, 2021), supporting a confident professional identity (Wald, 2015).

Professional identity encompasses professional values and behaviours strongly informed by compassionate caring (Wald, 2015), with patient advocacy supporting shared decision-making where possible. Wald (2015) identifies, for medical education, how professional identity formation is nurtured by socialization within a community of practice, drawing on the 'fertilizer' of mentorship, feedback and positive role modelling, reflective activities

and the student's reflective capacity to navigate ethical struggles. The process of developing a professional identity involves the student's peregrination though stages two to four of Kegan, Noam and Rogers (1982) stages of professional identity formation to an integrated professional identity. Kegan's work may seem old, but remains seminal in more recent iterations of professional identity (e.g. Creuss. et al., 2015). To avoid identity dissonance, the student moves from focusing on the centrality of their own perspective, expectations and needs, to appreciating multiple viewpoints. The student, Kegan et al. (1982) suggest, is idealistic, seeking to do the right thing, having had opportunity to practice playing the role, internalising expected professional values, attitudes and behaviours.

Jenny articulates her sense of herself as a professional, differentiating between being able to use technical skills ('being a clinician') from being self-governing as a paramedic. Her example demonstrates that she can separate her identity and role as an autonomous practitioner, who she now is and wants to be as a professional, from the symbols and rituals of para**medicine** (psychomotor competence)- valuing doing the right thing for that patient (Cruess et al., 2015).

> *I think that's probably where the whole …being … an autonomous practitioner, it's not just what you do outwardly but how you deal with it inwardly. How true to yourself and your values you are when you deal with yourself as a practitioner.*
>
> *For me the jump that I've made in the last year is between being a clinician into being the lead and autonomous in my practice, with permission from my mentor. The clinician in me thinks about the clinical skills and what I can do, what's in my tool box and… remit- I can cannulate, I can intubate, I can decompress your chest, I can scoop you up and tie a nice bow around you and deliver you to hospital. The autonomous practitioner in me, looks at all that and says is that the right thing to do? Am I able to do it just because I can do it? It doesn't mean I should do it.*
>
> *…that's been something that's come- I wouldn't even say slowly, it… just happened… one day, you're still thinking in the box, and then something happens and you start thinking outside the box. I mean, when there's a DNACPR in place do I ask permission, or beg forgiveness?*
>
> (Jenny, Int 2)

Eliza too reveals key aspects of her professional identity, including her belief in the importance of doing 'a good job'; the accomplished performer's interpersonal skills being key. Eliza's confidence in the care she has delivered and self-efficacy seem to be implicit aspects of her professional identity.

> *(It's) the way that I interact with them at that time when I meet them (that) may make a difference to them. And as long as I know that I have done the right thing at that time and spoken to them in the way that I wanted to be spoken to, then I can know that actually I did a good job.*
>
> (Eliza Int 2)

As Bandura (1982) noted, the stronger the individual's self-belief in their ability to take appropriate actions, to have belief in their capability and care delivery and to succeed, in Eliza's parlance, doing a 'good job', the more confidence and self-efficacy is felt. For Stankov et al. (2014), confidence is a tendency to act in a particular way, whilst for Bandura (1982) self-efficacy develops in part from reflection and review of past performance deemed 'Mastery Experiences', when challenges are successfully overcome.

Jenny seems comfortable and accepting of when and why to take the gentler approach, appearing to have self-belief and mastery of what she can do, together with emotional and cognitive self-regulation.

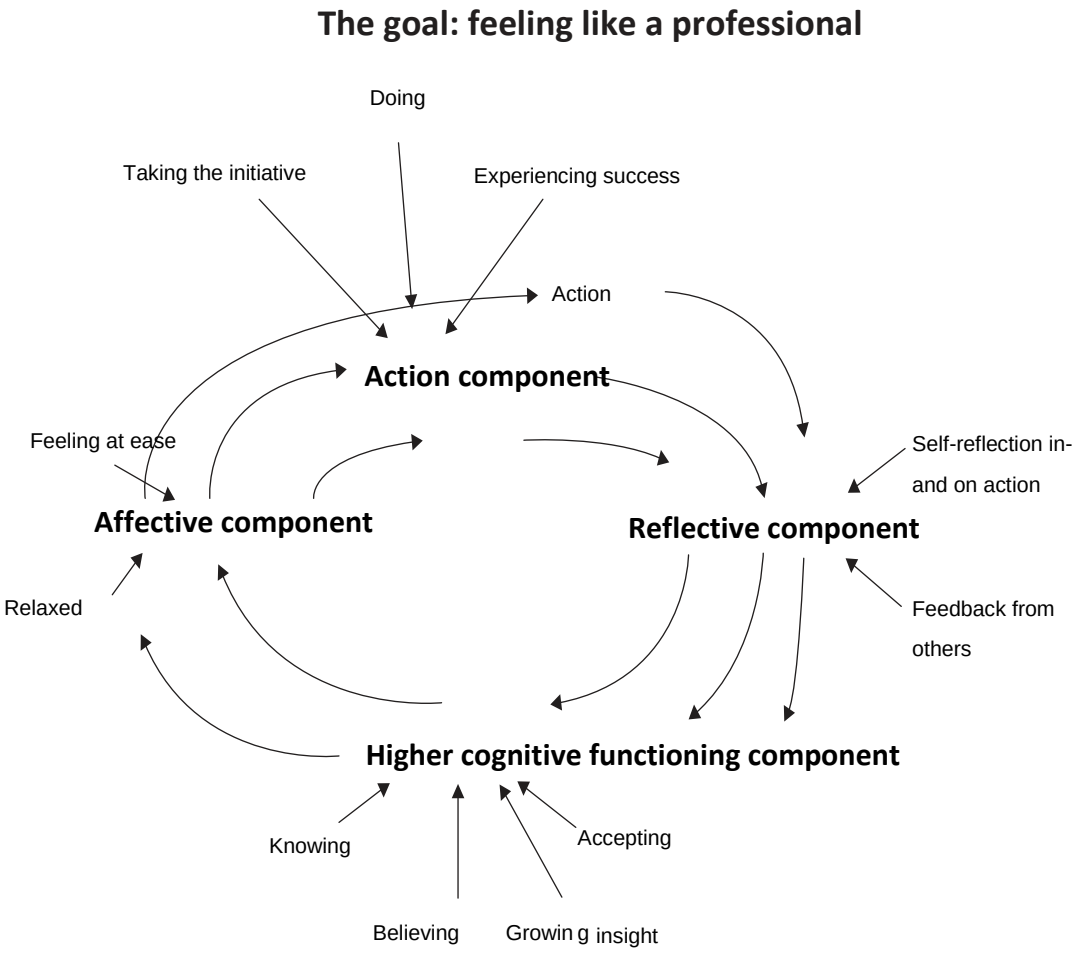
Marie, however, still feels uncomfortable with some dissonance whilst in similar situations.

> *So it was almost like... going against what naturally feels right… you know when I …first went in we started ventilation and intervening… And suddenly to withdraw (these) even though for the patient to feel…I need to do that…(it's) quite a challenge …between wanting to do in terms of intervention… and weighing that up with the persons wishes… what actually might be best for this person now…*
>
> (Marie Int 2)

This seems not to be because she disbelieves her capability, rather that affectively she is not yet fully at ease with such situations. Professional confidence and identity is a complex, multi-faceted concept (Holland, Middleton and Uys, 2012). As well as perceptions of self-belief and efficacy, the confident practitioner also feels positive about

themselves, accepts feedback, recognizing the need to undertake further work to continue developing their knowledge-base, being insightful as to how others see them (Holland, Middleton and Uys, 2012). This leads to confidence and consideration of oneself as a professional (Holland, Middleton and Uys, 2012). This incorporates affective elements (being at ease), having insight and being reflectively responsive to practice scenarios and the acceptance of feedback from others. As can be seen in Figure 3 below, there are also metacognitive elements, self-belief and insightfulness nurtured by affirmation from their practice community.

Figure 3 A diagrammatic representation of the attributes of professional confidence and how they interact (Holland, Middleton and Uys, 2012: 219)



There may be conflicting scripts/agendas which may perhaps never be entirely resolved, students, perhaps even Jenny, may not be fully at ease in all circumstances. Perhaps the sense of enhanced ease develops from coming to terms with tough decision-making, rather than that students now find it an easy craft as such.

Integrating current clinical skills and symbols of paramedic practice (taking physical observations, ventilation etc.) with a 'watch and wait' approach has remained uncomfortable for Marie. Professional standards and expectations do evolve (Creuss et al., 2015). In paramedic practice, the profession continues to evolve from delivering pre-hospital medical interventions ('all guns blazing') to a role where a slower-paced approach including withdrawal of medical interventions and focusing on care and comfort may be emphasized. Marie therefore is maturing in her identity, but her professional confidence related to acceptance of such situations and ease around not taking life-saving action is not yet fully developed (Holland, Middleton and Uys, 2012).

Georgie recognizes an important norm of her professional identity and practice is gaining a sense of the whole scene, rather than diving into resuscitation. This accords with the fourth stage of medical professional identity development (Kegan, Noam and Rogers, 1982; Creuss et al, 2015).

> *I've changed over this last year…to gather all information…When people…resuscitate without reviewing the bigger picture (and) knowing every (aspect) of what's going on …that's an approach I try to avoid.*
>
> (Georgie Int 2)

Rob's exploration and insight into his professional identity, alluded to in the previous chapter is further clarified as he articulates his understanding of the professional space he perceives himself to be occupying between the:

> *clinical ambulance emergency type bubble and the more primary care*, GP *view of the world…*
>
> (Rob Int 2)

The third scene from the moving vignette 'Rob' teases out nuances of his insightfulness into his identity and situatedness. Having successfully bridged the dissonance felt previously between 'ambulance' and 'primary care' professional values and behaviours , this is now consciously integrated (Cruess et al., 2015). Previously, he was more critical of some professional colleagues- now he is re-viewing his positionality. Part of his developing professional identity seems to have evolved because of his recognition that there is a more shared understanding/episteme (Foucault, 1972) than he previously appreciated. Rob's previous scenes demonstrated a critically reflective stance, with high metacognitive functioning in terms of knowing himself, his biases and his ability to act.

Now it seems feedback, further experience and role-modelling has helped him to feel more at ease, so his 'fit' as a professional seems more secure. This illustrates the components of professional confidence following Holland, Middleton and Uys' (2012) depiction.

> *I'm not as alone as I thought before. I think a lot of my colleagues are in a similar place. I have a reputation for being a little bolder and I think a lot of that is that I got very lucky, I had very high-quality placement in primary and secondary care. I did more learning there so perhaps I approach things more with GP eyes on, rather than primarily from the ambulance viewpoint...if you're aware that that's your bias is no bad thing. Actually, most of my colleagues are with me in spirit if not actually in practice. The theory has set me up well and I am very curious, so I tend to explore and probe, question and reflect. Every day is a learning day!*
>
> *At the end of year two I was aware that I was quite off piste, at least where some more traditionally trained paramedics were, in terms of my risk appetite, my recognition of the need to treat each patient as a unique person and to understand from their frame of reference what was meaningful and would meet their needs. I'm more at peace with that now, I know that there is a spectrum of rightness.*
>
> *I realize that decisions need to be reasonable, that I have the toolkit, the academic side has given me the knowledge and having gone to high quality non-ambulance placements that has given me a different perspective and lots of learning. The paramedic profession is changing, we need to use the evidence, to become more grown-up in our approach, not hang onto the traditional ambulance culture of being submissive, somewhat militaristic and macho. We can learn a lot from nurses, allied health practitioners and GPs, I find it validating to share my perspectives with them. I don't feel as alone as I did, now I come towards the end of my third year.*
>
> *I did a shift with an exceptional paramedic, it was a happy accident... and realized all the stuff that I want to do is what he does all the time. I saw he's quite comfortable with the slightly bolder approach to end-of-life care. He says things like... 'maybe you've had a small stroke but actually no one's going to pull you*

about and do lots of scans and treat you for it so shall we just relax and move forward with what you need and want now'.

I have learnt to think things through to the end of the task. Exposure to knowledge set me up quite well and with experience of wider primary and secondary health care, I feel that I have solid foundations on which to grow my career.

(Rob Moving vignette)

In terms of his professional identity, Rob's scene evokes an ethical and caring professional outlook. His personal and professional identities seem to be fusing and his view, behaviour and attitude (Wald, 2015) is that of a thoughtful, learning and resilient practitioner-in-waiting.

Competence and beyond

For Benner (2001) the competent practitioner positions themselves mindfully, methodically reflecting on the situation from which clinical management plans emerge. They still require further practice and experience in complex situations with conflicting challenges. Benner contends that proficient performers comprehend the scene holistically, respond flexibly, recognizing the shades of meaning which enable skilled inferences to be drawn from principles, with less laboured analysis, but less intuitively than the expert practitioner.

More recently, literature examining adaptive expertise has been growing, in some cases responding to the recent turmoil in health and care practice necessitating rapid adjustment to complex and new problems (van der Schaaf, Schuurmans, and Van Tartwijk, 2020). Croskerry (for example 2019; 2018; 2017; 2002), in extensive publications on clinical decision-making, argues that 'routine' expertise is not adequate and that enhanced 'adaptive' expertise is required in the complex and dynamic world of practice to enhance patient safety, recognize biases and assumptions and develop mindfulness as well as creativity in response to the specifics of the scene. This topical focus on adaptive expertise is beginning to recognize holistic elements of the situated decision, synthesizing practitioner domains involved, as well as the need to be wise and shrewd in complex and distressing situations (Croskerry, 2018).

Repositioning and reframing their sense of self is Taylor's (1987) Reorientation phase of experiential learning during which she suggests that learners recognise their learning,

synthesising the concepts and perspectives gained from experience, with agency over their development. In making the transition to the fourth stage (Taylor, 1979; 1987), Equilibrium, learners consolidate and transfer their learning into new scenarios and, she suggests, the student's emotional experience is less intense. These learners are reproducing their practice post-hoc rather than concurrent classroom experience (as with Taylor's learners). Kozlowski et al.'s (2017) literature review of emotion vis-à-vis decision-making, indicated that in relation to clinical decision-making, it is practitioner awareness of the influence of their emotions on decision-making (rather than reduced emotional impact) and their self-belief in managing their emotions that were crucial. This emotional intelligence also includes the ability to empathise with patients and families, using emotional intelligence to mediate emotions when making nuanced person-focused ethical decisions. For Kozlowski et al. (2017), there was no denial of emotions; emotional distress in others evoking empathetic responses and compassionate emotional labour with insight into self and others with:

> *real time and ongoing insight into personal emotions and the ability to manage these emotions during decision-making (p9).*

Eliza Snapshot 2- The overdose

Eliza, contrasting with negative and dismissive attitudes and behaviours observed in some clinicians working with patients with mental health difficulties, identifies attributes she distinguishes in a good practitioner. She teases out a thumbnail sketch illustrating skilled application of interpersonal skills, calmness, empathy, emotional intelligence, recognising the need to gain the patient's trust, giving time to uncover what is underlying the scenario. She demonstrates holistic understanding of the scene, viewing shades of meaning from the patient's standpoint, perhaps modelling proficiency not merely competence (Benner, 2001):

> *It's about being non-judgmental, open to discussion, non-dismissive…I will go round the houses to help. It takes time and genuineness. I will listen, stick up for patients, be their advocate. Sometimes I feel anxious, or upset as many patients have dreadful lives, but I need to be self- aware.*
>
> *In my mind I hold a clear image of this very difficult patient. A young man who's taken a paracetamol overdose. His parents call for an ambulance but haven't told*

him, so the patient's reaction is really aggressive…I try to establish rapport differently… I'm only able to talk to him through his bedroom door. To say it is difficult to find out whether his dose was toxic and exactly what he'd taken is an understatement!

..I take the softly, softly, calm approach enabling me to move from talking through the door to him, to begin to understand from his perspective what's been happening, how he now feels, so I can assess the risk.

I don't bombard him with questions; I tell him we are here to help, to find out what has led to events this evening …that I know this may be difficult for him. I ask him to tell me what happened before he took the overdose and what he's taken.

I eventually work my way into his room. We start to chat more easily though he says loudly several times 'I am not going to hospital'! I give him time, gradually, slowly asking structured questions to find out how he's feeling now, what he has taken, how much, when and why he decided to take them. He calms and answers my questions…I have patience, checking what he is saying by reflecting back to him, so he knows I am listening carefully.

He's taken at least 18 paracetamol tablets a couple of hours ago. I explain exactly what paracetamol will do to him following an overdose and why it's important to me that he comes with us to hospital. I give a quite rapid description of the effects of paracetamol overdose because I think he believed it would be a quick way to kill himself -which it is not. He now seems to trust what I am saying. Once he is given that information, and starts to think about it, it is like flipping a switch… Just like that he says 'alright I'll go to Hospital' . It is very sudden, and I breathe a quiet but huge sigh of relief. I thank him for agreeing to allow us to take him to hospital.

It can go critically wrong this soft approach…This 'let's take time to hear your side of things' whilst gently probing questions about 'what brings you here today'. But it beats going in all guns blazing! I know there are some people who have a very different approach to mental health in the pre-hospital environment, a lot of time their approach to overall management of the patient and situation is that they push it. This can trip the switch, but this time triggering violence and aggression. The stigma that comes then can create a kind of wariness in patients with professionals because of their past experiences.

(Eliza Snapshot vignette)

Using the metaphor of 'tripping the switch', Eliza seems to be emotionally tuned in to the reciprocal and transactional nature of the interaction between paramedic/patient. The emotional intelligence shown in this scene enabled tricky territory to be navigated, trust to be established with a collaborative way forward agreed. Conversely, when this interaction is not nuanced, she recognizes that this can provoke aggressive responses from patients, reinforcing negative stereotypes about the emergency services (by patients) or about mental health patients (by paramedics).

Her self-confidence, level of insight and reflection and her sensitivity to feedback from the patient is striking, as she leads this complex interaction (Holland, Middleton and Uys, 2012). Also, whilst naturally anxious, she is uses cues from the patient to guide her interaction with him without her own feelings adversely colouring her decision-making, (Kozlowski et a., 2017) and with the astuteness Croskerry (2017) suggests are illustrative of adaptive decision-making.

Capacity to work with uncertainty

A competent practitioner needs to mature in tolerating uncertainty as previously explored. This is illustrated by greater certainty, confidence and insight into their own knowledge base, with accompanying sense that it is reasonable to be 'good enough', not to know everything. These attributes show they encounter many categories of uncertainty about themselves as a practitioner, uncertainties when making comparisons with others, as well as about the meaning of healthcare and practice, with the lack of clear recipes for complex decisions (Moffett et al., 2021). The students have, to varying degrees, adjusted and steadied their swaying tightrope, showing differing degrees of competence/'normal expertise' and proficiency/'adaptive expertise' (Benner, 2001; van der Schaaf, Schuurmans and Van Tartwijk, 2020).

Moffett et al. (2021) suggest that at times of uncertainty and transition, in this case preparing for the next step to registered paramedic, learners may express negativity and enhanced uncertainty. This is posited as creating an obstruction to learning and growth, with attempts to 'self-preserve' by attributing their negative experiences to patients to try to maintain the façade of competence (Moffett et al., 2021). This impression

management (Goffman, 1959) does not appear to have been featured in stories recounted by students.

However, if the curriculum and learning provide experiences of uncertainty which are supported, and where learners do not lose face, confidence, or trust in their educators (Moffett et al., 2021), then this is fruitful, and deep learning can follow.

Some students seem to be demonstrating adaptive expertise, having moved from ritualized decision rules to meaningful conceptual knowledge, motivated to find flexible patient-focused care decisions and management plans (Hatano and Inagaki, 1984; van der Shaaf, Schuurmans and van Tartwijk, 2020). Additionally, the vignettes and extracts show the students are resilient and insightful, also key elements of adaptive expertise and decision-making. Having had *"conscious and frequent experience with various complex tasks"* (van der Shaaf, Schuurmans and van Tartwijk, 2020, p2) with genuine, fair and compassionate support from educators. This was shown previously, in exploring the role of reflection, mentor support, experience with other disciplines and emotionally supportive interactions and strategies, which van der Shaaf, Schuurmans and van Tartwijk (2020) and Moffett et al. (2021) suggest are key to successful management of uncertainty and inculcation of adaptive expertise and flexible, creative, emotionally intelligent decision-making.

Not only do skilled performers have to have a capacity to tolerate uncertainty, they need to appropriately manage their emotions, empathise compassionately with patients whilst accepting when the reality of being 'good enough' does not match their ideals. Further, to be safe practitioners, they need to be comfortable when asking for help (Moffett, et al., 2021), using novel and challenging situations as spurs for learning.

Eliza seems more content when recognising that she has not experienced every single presentation, giving the examples of major trauma and myocardial infarction where she hasn't had that much practice. She suggests she is much more comfortable with the unknown than previously and will carry on learning (and that's ok). The performance she reports is confident, flexible and situationally specific. Recognising when to move outside the rules and guidance safely, mirrors attributes of competence/proficiency (Dreyfus and Dreyfus, 1980; Benner 1984, 2001), with healthy doses of resilience and mature tolerance of uncertainty (van der Schaaf, Schuurmans, and van Tartwijk, 2020).

You can't (see everything), you just have to trust…that you know the guidelines and treatment plans. It's a case of recognising (and) following your treatment plans so if you feel prepared for about 95% or 96% of the job … There are situations I have not encountered yet, that I don't feel prepared for, but … I am not too worried…because I know myself I have to revise and review different pathways … for these patients.

...Now I am seeing guidelines are just to guide you…I am going to be registered in a matter of weeks with (a) licence that I can make my decisions and maybe I can go outside (them) and do other things (that are) best for the patient at the time or situationally dependent…Maybe there are other situations where you wouldn't go outside guidelines but in this patient situation at this time …, some of it is time-dependent, others resource dependent… You may have two patients with an identical clinical presentation in completely different geographical areas, different times of the day, which will be different because of the dictation of external factors. The fact that I have flexibility and autonomy to change the way I'm going to treat both that's definitely changed over the last year. (I've)…more experience….more confidence in myself…using your own judgement (and) taking on board everything you've learnt. It's about combining it all together in the moment and getting the response you need at the time.

(Eliza Int 2)

Confidence and knowing your limits

As Eraut (1994) indicates:

> *Deliberative processes such as planning, problem-solving, analysing, evaluation and decision-making lie at the heart of professional work. These processes cannot be accomplished by using procedural knowledge alone or by following a manual. They require unique combinations of propositional knowledge, situational knowledge and professional judgement. (p112).*

Benner's competent practitioner (1984; 2001) works independently, handling 'crowdedness' with a good working underpinning knowledge base. For these paramedic students 'crowdedness' involves the unique in-context balancing of risk/patient needs and preferences, as well as uncertainty, moral/ethical/legal aspects, their own reflections

and the emotions of all involved. For them ‘crowdedness’ also includes their own insightfulness, emotional intelligence and self-management, in the absence of fixed rules and often when limited or less than optimal possibilities are available, and confidence may wobble.

Students show in their accounts that they have engaged with uncertainty where this has catalysed learning and change rather than proved to be an obstacle to learning (Moffett, 2021). Some students seem to be demonstrating proficiency (Benner, 1984; 2001), demonstrating holism and flexibility in complex, unpredictable and unique situations. For them managing ‘crowdedness’ is predicated on identifying what is key and how, intuitively, to sift the ‘messiness’ and complexity in a wise and insightful way and focus on this one patient/family’s unique circumstances.

Rob recognises the transition from having a mentor/educator beside him, as he steps into the registered role. Exploring his metacognition, which Eraut (undated) indicates is one of four key aspects of professional decision-making, he analyses his ‘toolbox’ and boundaries. He articulates awareness of his competence and conscious incompetence with critical insightfulness and acknowledges that he cannot know everything- being ‘good enough’, having awareness of what he does not know, being a safe standpoint.

Rob Scene 3- The reflective and reflexive paramedic

> *There’s this box of things I know are harmless and self-limiting and can be seen by the GP next week. It’s what's not in the box, that's the stuff that I need to be managing now. Either watchfully wait, get an appointment to see the GP in a week. Nine times out of ten it will have gone, we'll never know what it was, or you take it along to the GP and they'll give you a name for it. I think that's an incredibly contrived way of saying something very simple, that it doesn't matter if you don't know things as long as you are aware of what you don't know, as well as what you do know, are ok with this and know where to get more information if you need to.*
>
> *I’m aware that I am living in the middle of the reality that two seemingly identical patients can be so different… I can tease out what is the same and what is different. I found in my first year that I made peace with the fact that there's not necessarily a right answer. It actually became quite clear recently because my educator, and my associate educator and I were all speaking about identical*

patients, and considering three completely different options but actually none of us was wrong, we all just had slightly different views on it. Everything we did was safe and effective, but actually still worked.

It's not where people like to be, they like to live in certainty, which can lead to being risk averse, making decisions focused on protecting your registration rather than considering the bigger picture. Many people like things like trauma because you tick it off as you go. You know that you are always doing right…there's no swampiness and ambiguity- its medicine by numbers.

I think you have to come to terms with that; things are different, nothing is quite what it seems, and I wasn't wrong to tell them to go home and drink fluids and wait four days and see the GP, and you weren't wrong to make the GP come out and see them today. It's about managing the risks, working with the patient to make the best decision for that person at that time, and learning from every experience.

(Rob Moving vignette)

His deep reflection stunningly articulates tacit knowledge, ability to work with complexity, describing his metacognitive self-monitoring when making real-world decisions, and thoughtfulness in taking calculated risks. All are characteristics of adaptive expertise (Van der Schaaf, Schuurmans and Van Tartwijk, 2020). He recognizes that he experiences less tension than previously, especially around comparing his stance with that of others (Moffett et al., 2021). Uncertainty in comparing self with others tends to be a characteristic of learners rather than experienced professionals (ibid). Rob specifically articulates the centrality of doubt and ambiguity in practice and his responsibility in gathering all the disparate pieces of information with flexibility in acting or not without the fixedness of believing he is always right. These elements accord with adaptive expertise, but challenge the *"moral certainty…and authority"* with which Lingard et al. (2002, p614) imbued the way medical management of uncertainty is replicated and passed on to medical students.

Rob demonstrates his risk awareness. Contrasting with Harenčárová's (2017) findings in paramedics in Slovakia which focused on high acuity cases, he does not 'suppress' (ignore risk) nor rely on procedures, rather his account suggests he undertakes 'mental rehearsal' by reflecting in action to run through the options encompassed by the situation, possible

interventions and outcomes. As Croskerry (2017; 2018) indicates, adaptive decision-making, experience and learning acquired from exploring and resolving problems with successful transfer to novel situations, facilitates ongoing enhancement and development of practitioner capability.

Van der Schaafe, Schuurmans and Tartwijk (2020) suggest that developing adaptive expertise takes many years of experience. However, it appears to be more than merely 'time served'. In other words, experience, as Benner (1984) indicated, incorporates periods in practice and placement but only when deep 'triple loop' thinking and reflection occurs to challenge biases, assumptions and promote in-the-moment decision-making and reflexivity.

Development of situational and self-awareness through experiencing complex real-world scenarios can, with support, feedback and opportunities to reflect deeply, provide the scaffolding to demonstrate proficiency earlier than perhaps Benner (1984, 2001) envisaged. This is shown by Rob and Eliza.

Additional attributes of adaptive expertise with novel problems, shown by person-focused and situated, sometimes creative solutions (Van der Schaafe, Schuurmans and Tartwijk, 2020), is shown by some students, including Eliza, before registration.

Rob demonstrates the value and perceptiveness he has gained from placement experiences with other professionals and within other parts of the healthcare system, continuing to show the effectiveness of deeper levels of reflection on meanings and assumptions in his practice (Van der Schaafe, Schuurmans and Tartwijk (2020). His scene shows intuitive and conscious/analytically-fused practice knowledge from diverse placements/standpoints – seeing the situation holistically as a proficient practitioner (Benner, 1984, 2001) and being honest when he does not know the answer which Moffett et al. (2021) indicate as being a hallmark of effective management of uncertainty. The extracts and vignettes already presented integrate a number of ways of knowing, linking: knowing that, knowing why, knowing how and professional/scientific knowledge, coloured by situated knowledge, judgement and clinical decision-making (Eraut, 1994).

Marie recognises her repository of accumulated experience, but will still face tough situations, needing alertness for when she needs to draw on support, or when her survival skills or health are stretched. Like Rob, she identifies aspects of self-awareness and insight, including limits to her experience, being comfortable with support to enable

safe practice (Moffett et al., 2021). She is aware of how fatigue and cognitive load could affect her decision-making; this insightfulness being another aspect of adaptive decision-making and expertise (Croskerry, 2018).

> *I think now that I've had three years' experience...I (have) a bank of knowledge developed and … my bucket (of) experience… it's okay if you come across something challenging, there's always someone to support you, ...also someone to ring as well if you're unsure or if it's nerve wracking. That's why I manage to identify when I feel out of my depth. I suppose that's linked to coping strategies… You need to know yourself really well...when you're tired, when you're unwell, because that might have an effect on management of patients.*
>
> (Marie Int 2)

Georgie's skilled performance also demonstrates aspects of adaptive flexibility and decision-making. She focuses on the whole situation, gathering all information to understand fully, to develop individualised management plans rather than rigidly applying protocols and rules. These are attributes of adaptive decision-making, where no singular option is best in all ways (Beresford and Sloper, 2008).

Her confidence with complexity and crowdedness appears to have grown over the last year, previously she could not easily work out what the plan should be.

> *…Over this last year I very much took the position…that I try to…(gather) all the information before I come to a decision…I've witnessed quite a lot of practice where people reach a solution without reviewing the bigger picture of what's going on …gathering some observations, gaining the history, doing a full patient assessment, then coming…to the point …that I know everything that's going on (so) this is what I think needs to happen…this was something I… struggled with last year and came to a stop. I didn't know what is to happen (then) and what's the best decision to make…(I've) definitely improved over the last year.*
>
> (Georgie Int 2)

Prepared for registration?

By the end of year three many more were confident in bouncing ideas off the General Practitioner, mental health crisis team colleagues and others, recognising and drawing

upon support from wider multi-professional teams and agencies. In this I saw what Taylor (1979, 1987) calls the Equilibrium Phase, with students sharing their clinical reasoning and plans for patient care with a wider range of colleagues, more confidently, as well as expanding and refining their enhanced sense of the 'bigger picture' of the holistic patient in their contextualised drama.

Some students (interview 1) indicated that they were uncomfortable that there were no easy formulae 'taught' nor specific guidance to draw on that would fit the individual in complex situations. The following extract demonstrates how Georgie's thinking about decision-making and her understanding changed between the first and second interviews as she progressed a further year in her programme. In her first interview, the fact that all patients were different was difficult for her. Now, she recognises that because situations and people are unique, it is not possible to be prepared for every eventuality. She now shows her ability to navigate this messiness, providing excellent feedback for curriculum development:

> *They prepared us quite well …(with)* enquiry-based learning *packages that we've done. We've covered quite a range of psychosocial issues…I think they never could have prepared us fully because… everyone is completely different and every situation is unique. Something we…very much focused on (were) the psychosocial (aspects) in isolation and not the management (which) I felt was something we weren't as much prepared for....but could we be?*
>
> (Georgie, Int 2)

Georgie, like Rob, understands that no groundwork prepares students for every situation. Koufidids et al's., study (2020) of medical students exploring the context of decision-making, posited that Problem-based Learning (sic) which offered clear and specific cases (with characteristic signs/symptoms) rather than nuanced and ambiguous scenarios, did not reflect practice reality. Additionally, if management plans triggered by Problem-based Learning suggest a recipe and 'normal' plan for intervention, this contradicts reality. Ambiguity in cases enabled learner development so they were less likely to experience paralysis and falling back on procedural rituals, as their 'theory' learning mirrored the paradoxes and messiness of reality (Koufidids et al., 2020).

Georgie, as registrant-in-waiting, is sufficiently confident to prioritise patient involvement and flexibility, including their wishes in the decision made, adapting the plan as

appropriate from the patient's perspective. This flexibility, listening and responding to the patient illustrate aspects of adaptive expertise and shared-decision-making.

> *What also is changed for me is patient involvement. It's always appropriate in every case where possible … to involve the patient and see what they want. Oftentimes you think to yourself … this person is definitely going to want to go to hospital and then it's surprising and they go 'oh no it's fine I will get my daughter to drive me to the doctor's tomorrow morning'...*
>
> (Georgie Int 2)

Rebekah has grown in understanding and insight, but still lacks confidence, still struggling with what lies beneath patient presentations, as she does not believe her 'bucket of experience' has been as well filled as some other peers. Comparing her scene with Rob's, the composite vignette, Marie, Georgie and Eliza's narratives shows that, by the end of programme, students vary in their feelings of readiness for the next step, with Rebekah at the less confident end of the continuum than many.

Rebekah Scene 3- Final rehearsals…but not yet ready to perform solo…

> *…Now at the end of the course looking back over three years, thinking about it, sometimes I can see there've been missed opportunities, that I didn't think to dig more deeply. Sometimes I still get overwhelmed when I try to work out what is really going on and how to act…it's as if I do not have all the pieces yet…*
>
> *One example is that of a frequent caller, there were quite a pile of patient report forms on the table, probably a hundred! We didn't know the patient and, I am sorry to say, if we hadn't known she was a frequent caller probably we'd have taken her to hospital, though on reflection we should have spent more time with her. Because of all the paperwork we decided to leave her at home as it had only been a few hours since another crew went to her. I remember I felt 'oh no not again'! I now realize that there must have been more underneath her frequent calls, that we hadn't explored this. I didn't think about this, only that there was a pile of forms from previous crews.*
>
> *What will I maybe do in future? Perhaps she needed safeguarding or putting through vulnerable adult referral or maybe contacting her GP. On reflection we*

really should have. It did not occur to us. I feel guilty, I pigeonholed her as a 'frequent flyer'.

Would I approach this scenario differently in future…yes I would definitely! I think I understand more about what might be going on for the patient.

Another tricky scenario is going to something where I think we are going to a cardiac arrest, and it isn't. It's nerve wracking. Once I walked in to see the patient was conscious and breathing, so I took take a deep breath and had to think about going a different route. This was quite difficult for me, as I was prepared to switch into CPR mode...I could see the patient wanted to stay at home. But she didn't want to say that because the family were in the room, and they were saying they couldn't cope. She kept saying she didn't want to be a burden to anyone…which is probably quite common in these situations…it was quite difficult to hear her say that. I didn't know how to respond, but, ultimately, I needed to find out what that patient's wishes were.

Sometimes I feel in the middle, trying to work out what's best, if the patient says one thing and the family another, or maybe my mentor suggests one thing and other clinicians don't agree – that makes me feel very anxious and uncomfortable.

Often, I feel that knowing the patient's wishes makes me more confident and comfortable to make difficult decisions.

My mentor and I have discussed the gaps in my experience, and we've spent time discussing situations we've had and how to draw from this for my future practice. It's about developing contacts and picking up cues.

I still feel that lack of clearer all-inclusive guidance makes it difficult for me when I go to new situations. If I looked at the Joint Royal Colleges Ambulance Committee guidelines for medical issues that doesn't help me to think about the whole picture with everything going on. It's still challenging, I still don't feel very confident. No, I really don't feel at all ready yet.

(Rebekah Moving vignette)

For Rob at one end of the adaptive decision-making continuum, this integration of propositional, situational and personal knowledges (Eraut, 1994) informing professional

judgement and reasoning is evidenced, for Rebekah, more experience and reflective support will enable her further development. Rebekah seems still to be hindered by the discomfort of uncertainty and complexity, indicating her continuing reliance on feedback and guidance of her mentor. She is still unsteady on the tightrope without support and has not yet synthesised her own recipe blend of 'theory', situational and professional meanings. Further experience and reflections are likely to build confidence to build and enhance her comfort to when encountering novel situations without a recipe/script to apply.

Lifelong learning

Collegiate conversations can go beyond the immediate team and be truly eye-opening in terms of role-modelling learning from critical incidents and team reflective practice forums.

Jenny was the only student who talked explicitly about her acceptance that important learning arises from mistakes and situations where things do not go right. Her professional confidence and identity arises from her belief in the power of learning, for even skilled and expert practitioners, which is derived from these difficult situations. At the end of year three she reflects upon a clinical audit day undertaken by an air ambulance team with whom she had an elective placement. She notes that she was sharing the room with some of the most senior and experienced people that she had worked with.

Jenny Scene 2- Always learning

> *I am at a clinical discussion and audit day …in a room with probably some of the most intelligent people I've ever met. The lowest role holder's a critical care paramedic, there are anaesthetists, doctors, consultants, senior consultants and then educational senior consultants of God knows how many years' experience…and then there's me, a student paramedic! The purpose of the day is to share jobs undertaken and talk about where they've gone wrong and how you can improve practice. I am listening to a bunch of probably the most smart-pants people I'm ever going to meet...*

I'm on my elective with this team, and I have been doing a clinical audit for them which was looking at all their jobs over 12-months and reviewing against a set of criteria to see whether they'd administered a drug effectively, correctly, on time, in the right dose. There were errors, they did not have a 100% success rate. This is part of my quality improvement project.

It is amazing to stand in front of a group of such experienced senior people and go 'well actually guys you aren't perfect, you mucked up there' and for them to agree 'yes actually we did…let's talk about this, see where we went wrong, and where we can do better in future'. That for me was a real eye opener and 'ahhh you don't have to be perfect'. It's great modelling, that even people at the top of their game, they're carrying on and they're acknowledging and owning it to improve.

Owning your mistakes...that's something I will take away from my degree- perhaps more than some of the rest of the cohort. I'm not saying something that should get in the way of your sense of yourself as a practitioner, but the more open you are about your mistakes, the more you're giving yourself chances to learn from them and for other people to input into your learning.

I'm now happy to accept that I really know nothing and the more little bits of information you know, the more I realize I don't know anything…I'll always be a learner. There will always be areas I'll want to know more about, so I'll never stop… I don't think I have the mentality to stop, I don't think I'll ever be complacent- I will always be striving to improve and grow.

(Jenny Moving vignette)

The sense of inclusion, all contributing within an emotionally and socially supportive environment is conveyed as not only an 'ah-ha' moment for Jenny, but continuing supportive supervision and reflective practice undertaken by skilled performers.

Carbonell et al. (2014) suggest that practitioners with adaptive expertise continue to learn and have expanded metacognitive skills, seeking out challenge. If growth is fostered by a strong supportive community, this will enable ongoing development. When coupled with tolerance of mistakes and the expectation of high standards of practice and accountability, this is a powerful crucible for nurturing adaptive expertise. The team portrayed within Jenny's scene seem to embody these characteristics, alongside

confidence in strong personal and team professional identities, this feeds her growing skilfulness.

From the paramedic gaze to seeing the patient as an holistic subject

As discussed in the literature review chapter, Foucault's (1973) work on the medical gaze led to sociological exploration of the extent to which medical discourses define and shape the patient- whether as a body/object or as a full subject. As the paramedic profession develops, the medicalized approach, and the major part of the workload no longer focuses on emergency and time critical calls alone, the decision-making approach and assessment of the patient requires a more individually tailored/holistic approach informed by the subjective voices of patients/carers- hearing and seeing the patient.

Jayne in the focus group:

> *Paramedics in their training now should be taking a more holistic approach of the patient just as we (are) taught to but unfortunately some paramedics don't... They worry about their registration because they've been taught that 'this is your guideline, if it's not in there take them to hospital'. I think as the profession develops and more people become graduate paramedics and psychosocial (issues) are really pushed into to what makes us a clinician, I think that these problems will be addressed. It makes sense to not take someone like that in and I've been in a situation where we've had to take someone into hospital and who died in A&E which was definitely not what he wanted.*

The paramedic 'gaze' Jayne is alluding to did not 'see' the patient; the focus was on following the protocol, when 'it's not in the protocol' the patient's 'body' is defined by the relationship between the technical approach to practice deployed by some paramedic actors; the complex and private subjectivity of the patient not being explored or known, nor influencing the decision- no 'big picture'.

By the end of year three, students showed they could see this 'bigger picture'. They were more confident about making tricky decisions and frequently explicitly recognize the role that having had more practice experience and placements outside the ambulance setting has made on their practice stance and identity.

The good death

This composite vignette recounts a moving story of a contextualized, genuinely person-focused decision for another dying patient. The likely diagnosis of a fracture was not the over-riding concern, the patient and his daughter's wishes- an holistic approach and his comfort- were the major factors considered. This vignette demonstrates reflexivity in the student's response, despite the fact that this situation was outside prevailing ambulance guidelines. There was confidence and flexibility shown in the decision made, even though one of the two crews present illustrated a perspective primarily informed by the desire to avoid any potential risks to them, falling back on rules, a characteristic Carbonell et al. (2014) assert, demonstrating routine expertise rather than adaptive expertise.

A compacted version of this composite vignette was tested with the focus group, their elaborations demonstrated a universal recognition of the issues raised and agreement with this person-focused decision. This led me to further develop the composite vignette, augmenting it with the insights and responses of focus group students as well as those interviewed. The 'gaze' depicted is not medicalised, being person-focused and the student leading the scene is advocating for the patient throughout.

> *I am with a patient who's fallen out of bed and has hip tenderness…most likely has a fractured hip. He is very ill, very distressed as well as being short of breath. He has a DNACPR in place. He's rapidly deteriorating. We arrive as backup crew to help with lifting him as the first team are planning on sending him to hospital for an x-ray.*
>
> *His daughter arrives saying 'does he really need to go to hospital, it isn't what he wants at all'. They've had a review with the GP a few days ago and the patient says he does not want to go to hospital…he wants to die at home. He's planned his last hours, music he wants to listen to, with his cat on his bed and so on. There are anticipatory medications which we administer. We clean him up as he's messed his bed but don't pull him about too much. I know we need to protect his dignity as well as his wishes. I contact the palliative care team who come before we leave, so I handover to them. That's so good, that they come before we leave and he's now in expert hands.*

The other crew, are unhappy saying 'he's probably got a fracture so needs to go for x-rays, we cannot just leave him here. We need to take him to hospital to protect our backs…' I say 'we've made him comfortable (we'd lifted him back into bed, washed him, put him in clean pyjamas and changed his bed), what's the point of an x-ray as he won't be operated on and he is likely to die on a trolley in A&E…not what he wants at all'. The other crew sniff, 'It's not our job to wash patients and make beds!' I reply: 'it's about his comfort and dignity in his last hours'. In a way this is the 'art' of paramedicine. Yes, we need the 'science' but it's how we use our imagination to make it the best it can be for our patients.

I explain 'you have a myth in your heads about what secondary care will do- he's not fit for an anaesthetic even if he survives the journey to hospital. Guidelines are just that, recommendations providing direction, but not to be followed slavishly and applied to all patients. As professionals, we have to be confident and flexible to make the best decision we can based on the individual patient, their wishes and the situation. Wouldn't we want our loved ones treated with dignity and respect and made comfortable'? We need to acknowledge that we practice in a world of doubt and challenge- uncertainty is a fact of life. We do the best we can.

(Composite vignette)

One end of the continuum of tolerance of uncertainty (actions to preserve face and own competence by avoiding risk) is shown in the reactions of the colleagues who shied away from the uncomfortable decision in this composite vignette), discomforted by a decision that did not rely on the default ritual procedure of transporting the patient to hospital, and thereby, they believed, protecting themselves (Moffett et al., 2021).

The composite vignette powerfully illustrates tension between whether to act (taking the patient to hospital) or to recognize this patient was in the final chapter of his life and should be made comfortable and given analgesia. The latter position motivated by caring artistry of compassionate emotional labour (Kozlowski, 2017). The vignette demonstrates practice at the other end of the continuum, characterized by tolerance of uncertainty, accepting this and being flexible, person-centered in their clinical judgement and management plan. The scene describes, as many students did, the desire to uphold the patient's wishes, demonstrating in their behaviour and attitude the enaction of care and values related to preservation of dignity, respect, care and compassion. This embodies

proficiency and adaptive expertise, drawing on underpinning knowledge/science (the 'what will/what will not' happen next) and the art of caring for this patient in that moment.

Georgie and Taryn articulate growing confidence and ability to tolerate ambiguity in the way their approach to decision-making has, like that of Eliza and Rob, been shaped by having more experience and reflecting both on and in action. Georgie now implicitly has available words, scripts to guide tricky situated conversations.

> *Yes every patient… (and) every clinical situation is different. It is not …one size fits all. Having …placement time over the three years has definitely shaped the way I make my decisions and gather…information…It's definitely good to reflect because…I've been to this patient before…it is a different person but with similar presentations…Mental health is one of those things that you can't use the same sentence on everybody and that you can't use the same set of questions or words …you…got to go with what the patient says…I have learned to appreciate that a bit more.*
>
> (Georgie Int 2)

Taryn identifies how she has now learnt to take time to get to the bottom of what is going on, and her realization that this was not always the case, that some decisions were reached too quickly. This illustrates two key elements of Eraut's (undated) attributes of professional practice- taking time, assessing and reassessing over a lengthy process when making decisions.

> *You really have to give them time…to process what's going on and to talk…it worried me a little bit about people who before I might have left behind (at home) before …and not given time to.*
>
> (Taryn Int 2)

Confidently walking the tightrope of decision-making is not just about a greater pool of experience on which to draw. Students are reflecting on their patient management and decisions, recognizing and managing the slower pace of interactions needed when piecing together the patient's story, so the decision made would be safe but not risk averse.

… in terms of making treatment plans I think definitely considering all the options rather than just the initial symptoms that are given. Sometimes you get a bit blinkered by what comes through (the call system)…, especially (as a) new student you do get quite blinkered by what it says is going to be wrong.

(Holly Int 2)

In the snapshot vignette below Taryn, having had more experience with mental health patients, something not all of her peers have, reflects on taking the lead clinician role. Taryn was with her mentor and another student paramedic with a female patient of a similar age. She realized it was more appropriate that she interacted with the patient rather than the other student who was an older male, thereby demonstrated her emotional intelligence. She demonstrates ability to read between the lines of what the patient was saying, sensitive to subtle cues to build a full and complete picture.

Taryn Snapshot- Taking it slowly

We didn't charge in, I just went and sat next to her. She just opened up, this was nice because I didn't have to push much to get information. I think by taking it slowly and not doing the whole physical observations that it was more about making sense of what it was all about. As we were talking I found that her physical health was fine. I started asking her about what she would like, what input she really wanted. She did say she wanted some help with her emotions but she didn't know what to do, nor where to go. From initially deciding on a plan that the patient would go to her GP, it emerged that the patient planned to take an overdose. There were little clues … So I carried on the conversation. I did ask her if she thought about doing something to harm herself and she said she has thought about this before. I then asked her if she was going to do anything and at first she said no. But then she seemed to be hinting that she didn't want to be here anymore. These little clues led me to the decision she wasn't as safe being left at home as we'd originally thought. I'd found out more about what she was thinking, and she agreed, perhaps needing to feel safe so she came along with us.

I was working with another student paramedic, a male in his first year with the Trust. He asked me to explain my reasoning as he didn't understand how I'd come to that decision. He hadn't had much experience, so I explained the importance of

going through talking slowly and picking up hints and cues from the patient of what underlies the situation. I explained I was piecing together the clues and signals from her. I shared how this led me to the decision that the patient was not safe to be left at home, as she was needing more of a place of safety. Following this I saw how the other student seemed to suddenly realise that sometimes you can go at a slow pace, and the value that has for more fully understanding the situation. In fact, the other student said to me that he had always gone in and done observations and primary survey straightaway but saw that sometimes those things can be left because the patient just needs to talk.

(Taryn Snapshot vignette)

What is also interesting is response of the other student. This was in-house, work-based student, about halfway through his training and with limited experience. He asked Taryn to explain her reasoning as he did not understand why she had begun to feel the patient was at risk, when initially the decision had seemed clear that the patient was safe to be left at home with her mother. He told her that he was surprised that she had been going so slowly in the discussion with the patient and her approach with the patient. Taryn explained that he now realised, which he had not previously, that sometimes you cannot just go in and undertake physical interventions. Sometimes it is not appropriate, sometimes a softly, softly approach gets to the heart of the matter.

This particular episode clearly exposes the more rule bound approach of the novice with routine expertise (Benner, 2001; Kozlowski et al., 2017) where the student would have chosen quite quickly to leave the patient, having accepted what was being said on the surface that there was no physical problem and no need to convey the patient. Taryn's performance illustrates adaptive expertise and professional confidence in using tacit knowledge/intuition (Eraut, 1994; undated) to start slowly and try to discover clues, giving her a much fuller picture about what might behind this call. Taryn recognised that it was good to talk this over with the student, and that this was probably where she was earlier in her training. The student in Taryn's scenario is more clearly at novice/advanced beginner level, showing limited situational perception and awareness (Dreyfus and Dreyfus, 1980).

Ready to go

Listening to students, I noted that several reflected back on the third year, and their journey towards the end of the beginning of their careers. On the one hand reflecting on how the course team provided space for students to grow and start the transition towards independent practice as a registrant and on the other how, for many being, encouraged to act as 'lead clinician' in practice this seemed a natural next step.

Jenny Snapshot- Fly away my pretties

Jenny said (looking relaxed and happy and imitating birds in flight with her hands) that she felt that the lecturing team gave permission to make the transition to registration as they were:

> *…very hands off. I've actually really appreciated that because it feels like they've gone 'we've given the base knowledge, we've given you your toolkit, it is up to you now to go and build on that and use it'. It's almost like in the first year you are overprotective parents, but didn't let go of our hands. The second year you kind of focus on the training reins and the third year was like 'go off, try not to get hit by traffic! If you do, we're here to come and pat you down and make sure you're all right'. But that's natural progression. I wouldn't say there's been any more of 'we're going to give you great big knowledge about this' there's been a few bits to add but 'we're here if you need us but go- you know fly away my pretties'. I don't necessarily want to be fully fledged but stop hanging over my shoulder and let me get on with it now.*

(Jenny Snapshot vignette)

Holly's mentor supported her making the transition to independent practice by encouraging her to teach other students, mostly new work-based Trust students and students needing more support, as her mentor gets the best out of struggling students, having high standards which are communicated clearly. This seems to be a good example of how congruence between espoused theory and theory-in- action (Argyris and Schon, 1974) can be enabled by working with other students, taking the lead clinician role and explicitly teaching and role modelling for other students.

Another way my confidence has really grown was because my mentor encouraged me this… year to take the lead clinician role. This… involved teaching and supervising new students and practicing managing the team. I found it really good in keeping my knowledge more up to date because you know that you've got to convey that to someone else so you make sure you are aware of what you know or don't know.

(Holly Int 2)

For Holly and Taryn taking the role of lead clinician and educator/teacher to fellow students seem to have been key in integrating theory and practice within 'paramedic praxis' about which Clarke; and also Fellows cited by the College of Paramedics (2017b) have written, where the active and engaged student is able to slide the 'Zip' i.e. the theory and practice teeth so they make a strong interconnection as the student provides patient care.

REFLECTIONS, CONCLUSIONS AND RECOMMENDATIONS

This chapter aims to bring together critical reflections on the strengths and limitations of this research and consider the main findings of the research, making recommendations for paramedic curricula, dissemination and further research. These consider the preparation of paramedic students for the swampiness and uncertainty of complex decision-making, promoting acceptance of harsh realities and dilemmas of real-world practise, and tolerance of uncertainty to support student wellbeing.

The chapter is structured under the following sections:

- What has been omitted and why
- Reflections on the research experience
- How far have the research questions been answered?
- Researcher recommendations
- The contribution of this thesis

What has been omitted and why

I could have prioritized space within the literature review and analysis for consideration of metacognition and its interrelationship with clinical decision-making, not from a *"neural and computational mechanis(tic)"* way (Yeung and Summerfield, 2012, p1310) but from the standpoint of these shifting and indefinite scenarios. The notion of metacognition is somewhat unclear due to multiple connotations and words used to explore thinking about one's thinking, and the 'inner workings' of cognition about cognition are slippery (Akturk and Sahin, 2011). The distinctions between cognition and metacognition are also challenging to tease out (Akturk and Sahin, 2011). Whilst the inclusion of concepts of metacognition/cognition could have added further development to the analysis and discussion of how awareness of knowing about their thinking and its place in their learning (from the student's perspective) was occurring, this was not one of the key themes emerging from the research findings. It was for this reason, as well as for reasons of space and depth given to the way feedback, reflection, debriefing, collaborative support, the mentor's role and qualities and ways of developing tolerance of risk/ambiguity and emotions that were being strongly articulated as being so central to student development. Arguably this is a gap, literature which is indeed important, but which did not emerge as overtly as the other key concepts which have been explored in the findings' chapters.

Another key omission is the non-inclusion of any of the vast and growing literature related to simulation and its role in supporting student learning for practice, and, in this case, simulation in classroom/remote settings away from real world practice. Whilst I recommend adaptations and revisions to the strategy and foci of scenarios to be used in simulation, as well as those used in enquiry-based learning (drawing on the rich vignettes generated during the research process), the pedagogical foundations for each of these educational strategies is felt, to me, to be part of the next stage i.e., the dissemination and implementation of the insights from this research and operationalization of curriculum changes. The focus of my research being practice 'out there' not preparation 'in here'.

The practice world students now face is affected by COVID and changes in the scope, range and foci of paramedic practice and the growing body of literature about and from out-of-hospital practice. In the final chapter 'Epilogue', I explore this further as the data was collected a number of years ago, reflecting the learning context and community in the 'pre-COVID world'.

Reflections on the Research Experience

Case study research is rooted in the *"real noise"* (Hodkinson and Hodkinson, 2001:3), the dilemmas and reality of practice. However, as such rich data was revealed, some noteworthy insights may have been excluded. The thick description (Denzin, 1989) and vignettes generated, by their sheer volume, meant that difficult decisions needed to be made about what to include and exclude from this thesis. A challenging and painful process indeed! Data was extensively explored and two cycles of coding employed to identify themes (see Appendix 4), find meaning, make sense of the emerging connections and develop a range of vignettes as discussed earlier. As meaningful connections surfaced, understandings and connotations became clearer. Use of field notes, and reflexive wakefulness, I hoped, prevented dilution of meanings or collapsing of the individual voice during the analysis and distilling of the findings.

The research was undertaken before a significant burgeoning in decision-making literature and research applied to paramedic practice, so, whilst I revisited the evidence when revising the literature review and analysing the research narratives and texts, the

central notion of the importance of uncertainty might, as I reflect retrospectively, have been considered more overtly in the framing of the research aims and question.

This research considered both normal and atypical scenes (Hodkinson and Hodkinson, 2001), differing student developmental trajectories and students' perception of the role of experience and complex relationships with others, and their impact on their growth as decision-makers. The mentor's role, unsurprisingly, was illuminated as being crucial, with a framework of the attributes and behaviours of the effective mentor as coach emerging, as discussed previously and later in this chapter.

A missing piece of the case was that no mentors were included, so their perspectives and viewpoints are absent, as is their perception and storying of student development. This triangulation would help future research to develop a more inclusive and complete understanding of the development of complex learnings about assessment and patient management, by checking the resonance of themes and findings and by bringing together the standpoints of both learners and educators in practice (Patton, 1999), as well as identifying ways mentors and lecturers would find helpful for their support and development.

Research participants

The number of students involved was twelve in total; with seven out of eight interviewees being female (each interviewed twice) and one in four focus group attendees being male. It is unclear how far their perceptions, narratives and practice relationships were gendered and socially constructed, nor how representative their individual and collated narratives are of other learners. The proportion of male to female paramedics on the Health and Care Professions Council register in 2015 was 35%; rising to 45% by 2021 (NHS, 2021). With this in mind, and recognising that gendered identities are changing and fluid, further research to explore gendered aspects of experience, and whether the changing gender balance in students and registrants is affecting the paramedic 'gaze' might further illuminate this.

Interviewing is a craft, an *"active process where interviewer and interviewee through their relationship produce knowledge"* (Brinkmann and Kvale, 2015a; 2015b: 21). In this case, there was the potential for a power imbalance between myself and the participants; being a professional conversation within a structured landscape, which *"typically involves*

a clear power asymmetry" (Brinkmann and Kvale, 2015a: 37) of which I was very much aware. Strategies employed to acknowledge and mediate power imbalances included providing a professionally friendly, empathetic and relaxed environment, and using a small number of open questions with minimal prompts to enhance the reciprocity of the dialogues (Ely et al; 1997; Creswell, 2013). Development of vignettes and scenes was designed to reveal rather than mute participant voices, using their own words or only partially fictionalised from the essence of their storying. This I hope I have done, being truthful to the essence of each student's peregrination.

Sample size in qualitative case studies is difficult to determine, the subject of continuing debate. Some, for example Sandelowski (1991; 2000, 2001), contend that whilst numbers matter in qualitative research to reveal the effort and density involved, counting numbers lacks meaning. For her, it is the transparency and way meanings and re-presentation of interpretations and conclusions illuminate, rather than a quest for data saturation which is the key. Charmaz (2006) notes that sampling for developing theory (as in grounded theory) will differ from that aiming at representativeness. Whilst I did not seek additional participants, I did seek additional data (further sampling) whilst developing the theory around clinical decision-making from the codes and themes emerging from the first round of data collection (Charmaz, 2006).

Member checking was also undertaken by sharing and discussion of five composite vignettes with the focus group, which established that the analysis to that point resonated with their experience (Merriam, 1998) and therefore did not rely on participants' reviewing of the transcript of the focus group alone. However, a weakness was that the 'polished' (Creswell, 2009) vignettes were not shared. This would be something I would I seek to ensure in future research.

The additional findings from the focus group confirmed the authenticity of the emerging themes, whilst the second round of interviews further explored interviewees' development to the point of eligibility to register, the developing theory therefore being richer and more trustworthy. As a solo researcher on a doctorate, expanding the sample further would also make the project unfeasible in terms of maintaining the quality and depth of all the methodological processes I have undertaken.

As participants were drawn from the first cohort of the BSc programme, and self-selected by volunteering to come forward, it is unclear how representative or not the findings

would be with other cohorts undertaking the same programme as the curriculum evolved and bedded in. I sought to uncover the essence /distillation of experiences from this group, not necessarily representative of other groups. Students did not appear uneasy about taking part, rather there was willingness to share, often with pauses for thinking time so that the recollected story could be organised and then shared with me. This seems to indicate their motivation to be accurate and genuine in their narratives.

The 'sample size' is congruent with a constructivist perspective of seeking to reveal something of the complex and diverse practice worlds and social relationships (Charmaz, 2006). I therefore do not claim 'saturation' nor representativeness, rather illuminating the lived experiences of these students, and ways university and practice educators can begin to understand how students develop expertise managing uncertainty and/in clinical decision-making and build this into their toolkit and curricula.

Lapadat (2000) suggested that sharing transcripts with participants also has the purpose of stimulating elaboration of issues contained within the text. I was saddened that although all participants had agreed to comment on their transcripts, most did not. This may have added further illumination/elaboration, and have empowered or been confirming for the interviewees. In other responses received from interviewees there was, unlike the findings of Kvale (1996), no sense of anxiety nor embarrassment expressed about the lack of coherence in the transcriptions of the research conversations.

Reconstruction of narratives and vignettes

There were limits to my wakefulness and reflexivity, as not all assumptions, filters and decisions made during analysis are evident to the researcher, notwithstanding strategies to triangulate, and check the emerging data and interpretations. Probst (2015) counsels locating oneself in the depiction by *"gazing two ways"* (p38) - at the data and at oneself. However, this is affected by what is consciously recognised as needing reflection and what can be revealed within the constraints of a thesis; and the balancing of moving *"into the room"* (Probst, 2015: 46), whilst avoiding taking over this room.

Creswell and Miller (2000) suggest the fusion of three lenses, those of the wakeful researcher, that of the participants and the prism of the audience for the final thesis/report will enhance trustworthiness. These three filters should be recognised and actively inform the researcher's view and interpretations of the data. The findings

therefore need to be repeatedly studied and re-examined to confirm that the interpretations are both meaningful and authentic to the participant's narratives. However, the overwhelmingness and richness of the data and the process of creating the vignettes and interpreting the findings, may still have been affected by myself and my gaze.

How far have the research questions been answered?

These were:

How does learning on this graduate programme allow for complex psychosocial issues to be understood, assessed and managed by the paramedic?

With the following the sub-questions:

- How do students develop decision making skills of sufficient complexity in uncertain conditions?
- How can the curriculum be improved/amended?

It is unsurprising that moving from the mire of real world uncertainty in clinical decision-making to an equilibrium, across the swaying tightrope to become an independent practitioner in waiting, is both challenging and complex. Student peregrinations towards emerging as confident practitioners, comfortable to navigate difficult decisions and manage uncertainty, were storied in complex, multi-layered ways.

As shown in the findings' chapters, the reality of the students' experiences in practise was profound. Nevertheless, student narratives generally demonstrated a great capacity for learning whilst managing uncertainty, absorbing insights and differing perspectives from other practitioners, consequently developing their professional identity.

The key elements contributing to student development were shown to be:

- Experiential learning supported by reflection, debriefing and feedback
- The support of a community of practice, drawing from the knowledge and alternative standpoints of other professionals and networks
- The skilled mentor's adaptation of their coaching approach
- Confidence and understanding of:
    - The evidence/knowledge-base

- The patient/person
- Contextual factors
- Oneself- insight and emotion management
- Managing uncertainty

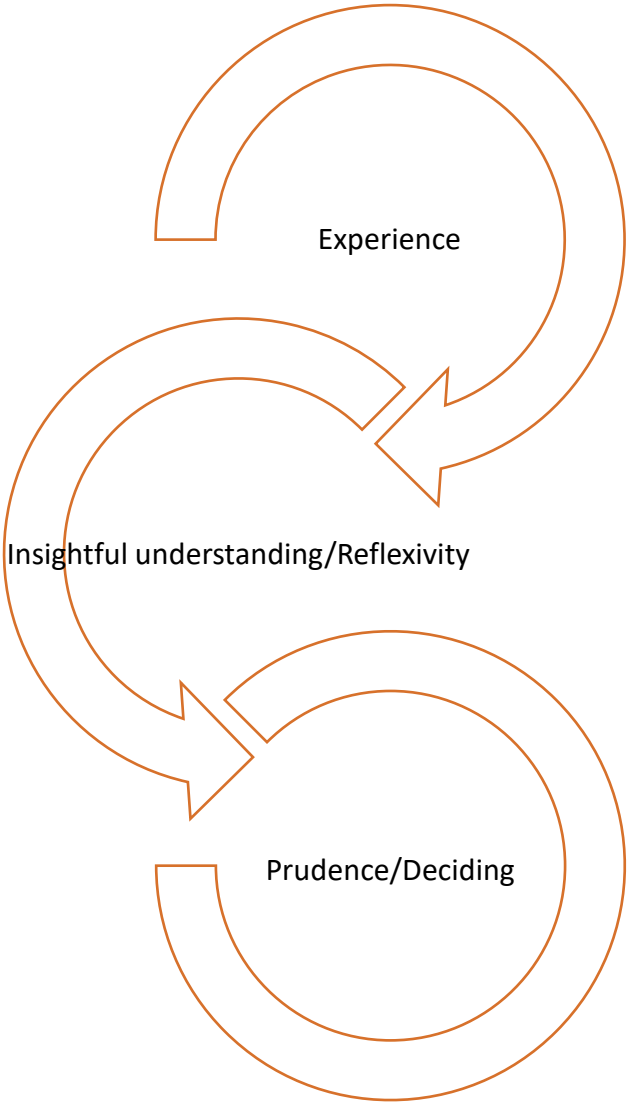
These in part accord with NHS Education for Scotland (undated) (which is widely drawn on and applied in England), factors that affect clinical decision-making (the first 3 points above). Additionally, the research findings show the importance of developing strategies to manage emotion and uncertainty with central roles for reflection, feedback and professional discussions about clinical decision-making, even when registered.

Van der Schaafe, Schuurmans and Tartwijk (2020) summarize three key aspects of training (sic) for developing adaptive expertise. Firstly, repeated exposure to multifaceted and convoluted scenarios requiring dexterity and application of non-routine skills, which begin to facilitate students in tolerating uncertainty- as explored previously. Secondly, experience with colleagues from other professions and across diverse situations fostering appreciation of other professional standpoints and more complete insight into patient journeys across the health and care system. Students confirmed the power of such alternative viewpoints and experiences when discussing the value of placements with General Practitioners and practices. Thirdly adaptive expertise development is enabled by reflection and feedback- especially when biases, assumptions, options and meanings are considered. Again, this was powerfully illustrated by students in their interviews. Learners explained the value of supervision, role modelling, good coaching and appropriate support, which enabled the development of flexibility with non-routine aspects of practice within the learner's 'zone of proximal development' (Vygotsky 1978).

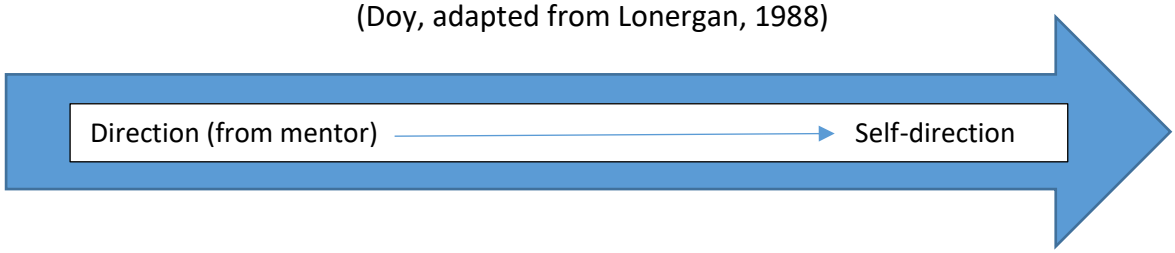
Adaptive experts react to unusual and unique practice scenarios more successfully and creatively, differentiating their interconnected knowledge and pattern recognition and confidence in letting go of assumptions, from that of novices or Benner's competent practitioner- the expectation at the level of first registering. Routine experts continue improving effectiveness in task completion (Schwartz et al. 2005). In order to develop the adaptive expertise that paramedic practice requires, the practitioner progresses from experience, to understanding insightfully, enabling reflexivity and then to judicious decision-making (adapted from Lonergan, 1988).

The role, attributes and supervision and coaching behaviours of mentors was shown to be crucial, as was the opportunity to reflect on and discuss patient scenarios within a rich community of practise, and most particularly the opportunity to profit from the alternative perspectives of practitioners in primary, mental health and acute hospital-based services.

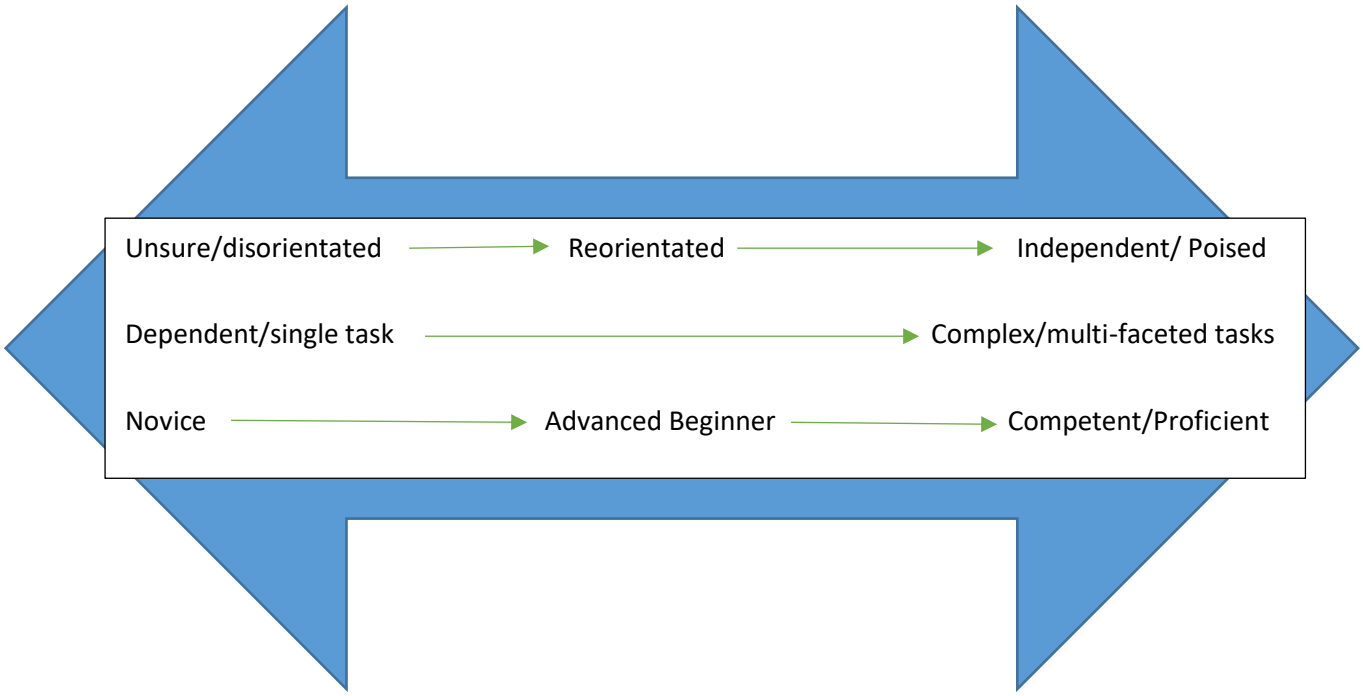
Figure 4 Phases of adaptive expertise development



(Doy, adapted from Lonergan, 1988)



'Good enough' mentors were able to steer the student through their disorientation and uncertainty (mentor as a container/conductor) towards a sense of balance and independence (mentor as coach, encourager and supervisor to mentor as enabler). Clinical decision-making was shown to be multifaceted and not just 'joining the dots' (NHS Education for Scotland, undated).



Coaching approach

A framework/process for optimum coaching and mentorship emerged from the findings, reflecting Taylor's (1979; 1987) research on experiential learning from the student's standpoint. The three stages are below (see also Table 9) marrying student needs and mentor behaviours/relationship attributes:

1. Container/ conductor -facilitating exploration and 'holding' the learner during the disorientation and exploitation phases of their experience;
2. Encourager of reflection, giver of feedback, questioner, networker as the student continues to explore and then to reorientate with more exposure and developing sense of self;

3. Enabler and delegator, encouraging the student as leader of the clinical encounter and teacher of patient/carers and peers, confident as an educator to be appropriately 'hands off'.

The QAA Qualifications framework (2014) states that level 6 award holders will have

> *'an appreciation of the uncertainty, ambiguity and limits of knowledge, the ability to manage their own learning ...'. Also will be able to 'exercise... initiative and personal responsibility (and) decision-making in complex and unpredictable contexts'.*

The vignettes and scenes explored in the findings chapters demonstrate that students did move in their expertise in decision-making, with some at the end of the programme for example Rebekah, demonstrating attributes of the advanced beginner/competence. Others like Rob, demonstrating holistic understanding, seeing the situation and the decision holistically, perceiving 'the whole'- a proficient practitioner (Benner 1984; 2001) with adaptive expertise. For clarity, Benner's notion of proficiency (1984; 2001) does not equate to use of the legal term 'proficiency' for threshold standards for registration (Health and Care Professions Council, 2014) (Benner's competence level). Rob and others exceeding the minimum required for registration i.e. proficiency, and adaptive rather than merely routine expertise (Carbonell et al., 2014; Van der Schaafe, Schuurmans and Tartwijk, 2021).

All showed an evolving grasp of the slipperiness and circuitous nature of person-focused clinical decision-making, especially when faced with mental health and end of life scenarios. The vignettes and scenes illustrate insightfulness and ability to own their responsibilities when faced with such decisions, demonstrating the QAA provisos for graduate award holders. However, as the research sample did not include any DipHE/FD learners, it is not possible to compare the difference, if any, in clinical decision-making and management of uncertainty between learners completing level 5 and level 6 awards in the same or similar situations.

Ryan and Halliwell's research (2012) indicated that historical in-house training routes tended to lead to surface rather than deep learning, with greater use of intuition. They further contended that in university students there was a greater use of mnemonics and templates and hypothetical-deductive reasoning and that they tended to use intuition less. In the UEA students the findings seemed to show a move away from the comfort of

protocols and templates to combining hypothetical-deductive reasoning with intuition as they progressed between year two and the end of their studies. Whilst future research into the differences, if any between DipHE/FD students at the point of registration might be of interest, as the threshold level for registration is now BSc level, this would now be of limited value.

Researcher recommendations

This section addresses the response to the final research question:

- How can the curriculum be amended/improved?

As indicated earlier, some answers emerged to underpin the recommendations for the curriculum, student support and mentor recognition and development, which are likely to enhance student preparation for making complex and risky decisions.

From the research I conclude that the curriculum needs to explicitly structure the learning activities and process to reveal the tension between protocol-driven tasks and the swampy, uncertain environments in which real-world decisions are taken.

Learning and curriculum development

These recommendations aim to:

- enhance the awareness of paramedic team lecturers of the need to make explicit the messiness, uncertainty and lack of universal 'right' formulae inherent in practice;
- identify ways to enhance student understanding and acceptance of the hard truth that clinical decision-making in practice is messy, complex, uncertain, without perfect clarity and total self-confidence in all situations;
- provide supported ways for learners to develop strategies to manage self and the scene when facing messy, ambiguous outcomes and decisions;
- encourage learners to undertake deeper reflection and build skills of adaptive expertise and clinical decision-making;
- influence curriculum development for both 'theory'/classroom experiences to prepare learners to be effective coachees and coaches of the future by integrating the phased coaching framework in theory and practice.

University teaching and experiential learning

1. The process of moving from educator directed and 'teacher'/mentor structured experiences to self- directed and student-led led learning to be made explicit to students.
2. The notion that reliance on external educator scaffolding (external locus of control) and mnemonics and belief that rules can be universally applied needs to be challenged.
3. Develop clear explanatory guidance contextualising the importance of developing strategies to manage uncertainty to be threaded through the spiralling curriculum and real-world clinical decision-making.
4. Direct teaching making explicit about the need and ways to develop tolerance of uncertainty and the contrast between task focused and people focused care.
5. Guidance and handbooks to contain visual images to aid with conceptualisation of risk and uncertainty.
6. Simulation, enquiry-based learning scenarios (not just text-based), vignettes, case presentations especially (but not exclusively) those focusing on psychosocial aspects including mental health and end-of-life situations should be complex, nuanced, ambiguous and encourage debate rather than tending to lead students towards a 'normal off the shelf' recipe. Recognise dichotomy between where there is 'normally' a right way and flow charts to follow, versus 'messy stuff'.
7. Use of powerful metaphors for Simulation and enquiry-based learning cases and scenarios such as those articulated within the research data:
    - Entering the Swamp
    - The Legal Minefield
    - Walking the Tightrope
    - Medicine by Numbers versus Thinking Outside the Box
    - All Guns Blazing or Watch and Wait
    - The Good Death
    - We can't force them…unfortunately…
8. In years two and three of the programme, holistic enquiry-based learning and SIM scenarios, consider integrating more 'routinised' aspects of care with ambiguous, tricky and unique aspects:

- Conflicting perspectives and views practitioner/patients; practitioner/practitioner; student/practitioner
- Ethical and values-based tensions linked to exploration of moral distress
- Hard truths about dilemmas in/of practice
- Peregrination from yearning for certainty and rules, to acceptance of ambiguity and coming to terms with uncertainty.

9. Encourage group discussion, and spaces for reflecting on messiness steered by (contained by) lecturers using vignettes and scenarios. Engagement with mess and anxiety in this conceptual way, enabling acceptance and movement towards tolerating the quandaries faced as a professional.
10. Review of debriefing following enquiry-based learning and Simulation to facilitate deep reflection and processing with an explicit focus on students moving towards earlier adaptive decision-making and expertise.
11. Consider the inclusion of opportunities for student-led case presentations following practice placements to encourage critical reflection and reflexivity i.e. sharing their story-telling.
12. Promote the 'art' of clinical decision-making encouraging the use of metaphors and images/poetry/ media as part of reflection, debriefing and processing of learning.
13. Provide role play preparation for being a coachee and the developmental phases of coaching. This may be within more structured simulation or where the student explicitly has to play a character other than themselves to test out other perspectives and personae and make explicit the phases and attributes of good enough coaching across the programme.
14. Consider ways that practice/placement learning and networks can be further developed – especially during these challenging COVID times- to provide interprofessional experiences and 'lenses' and an insight into patient journeys through the health and care system.

Dissemination/impact of the research

Dissemination wider than UK-centric paramedic journals

1 Share the findings of this research via journals:

- Emergency Medicine Journal- Steadying the Swaying Tightrope

- International Journal of Qualitative Health Care- Coaching for Adaptive Expertise
- British Paramedic Journal- Steadying the Swaying Tightrope
- Qualitative Health Research- use of vignettes in exploring and preparing students for real-world dilemmas and uncertainty
- Canadian Medical Association Open Access Journal
  or BMC Health Service Research-Supporting the development of adaptive expertise in students
- Australasian Journal of Paramedicine (this journal is on an 'hiatus' currently (as of August 2022) and being reviewed- a new journal may replace this

2 Presentations at the College of Paramedics National Conference and National Paramedic Student Conference

3 An international conference in due course

4 An open publication/book for students to help them start to view the paramedic role more realistically. The vignettes developed as part of this research will be integral to an accessible publication for pre-programme and early course reading.

Mentor preparation and support

As mentors' views and needs were not sought, I propose only two recommendations as future research is needed to gain their perspective and to enable the co-construction of their preparation and updating.

1. Acknowledge and share the phases and attributes of the structured coaching approach.
2. Develop a tool-kit/aide- memoire for encouraging focused critical reflection by students and mentor feedback on dilemmas, uncertainty, ethical and values-based tensions and conflicting /alternate standpoints.

Further research and actions

1 As indicated earlier, this research did not explore mentor/educator perspectives of their peregrinations whilst supporting students progressing from uncertainty and disorientation through to acceptance and ability to lead the more skilled performance. This is an important and missing piece of this case which may reveal mentor training and

support needs, as well as skills and insights into strategies and tools used in day to day supervision of learners.

- explicitly identify the mentor's role in preparing students for uncertainty and adaptive expertise;
- focus on how mentors will appreciate and develop their role and skills of effective feedback;
- review resources for mentors with 'bite-sized' information and stimulus materials.

2 Further research into the links between uncertainty and use of creative strategies to lessen and manage uncertainty may help to support student wellbeing and ameliorate moral distress. George and Lowe (2019) propose that there is over-reliance on promoting resilience as the strategy for managing the inevitable uncertainty of/in practice, suggesting, as I found, that some learners will struggle to understand, accept or integrate the subjective 'messy' aspects of practice – some perhaps even rejecting these and some groups of patients. Ofri (2017) commends the use of reflection, moments of meditation and creativity, drawing on an humanities approach which if:

> *Well integrated…can be the key to transforming medical knowledge into clinical wisdom.*
>
> (Ofri, 2017: 1657)

What is the contribution of this thesis?

Although the direction of travel is qualitative and increasingly focused on student reasoning/confidence and competence development, there was a gap that had not previously concentrated deeply on student perceptions, reflections, experiences, as learners and what helps/hinders them in developing effective clinical decision-making in their uncertain practice world.

This thesis has illuminated and provided insight into the lived practice experiences of students within the increasingly complex and uncertain caseload they face; vision which can be further developed and augmented by future research into mentor perceptions. The findings and literature presented suggest learning and curriculum strategies to

enhance student clinical decision-making, by explicitly acknowledging the role of uncertainty and ways to foster adaptive expertise and decision-making.

The centrality of the hard truths of uncertainty, messiness and complexity were revealed in this research with lush and powerful scenarios and metaphors, alongside the ways that students were supported to steady their journey across the swaying tightrope towards their skilled performance. The centrality of reflection, feedback, alternative perspectives and emotion management within a supportive community of practice have been revealed, strategies that are key to perceptive clinical decision-making and to student confidence, wisdom and wellbeing.

Reflecting again on the tutorial with Jenny and the original curriculum design which sought to juxtapose ambiguity with 'the rules', I feel more confident to justify 'Rosie's fluffy pink stuff' as this research has provided insight into how the curriculum needs to explicitly embody uncertainty and the 'art' and humanity of paramedicine alongside the 'science' and following of 'rules'.

EPILOGUE

Epilogue

The research data was collected in 2015 and 2016, from the first cohort of the UEA BSc (Hons) Paramedic Science cohort, as previously explained. The genesis of this thesis has been lengthy, due to work-related and personal and caring pressures, and it was not my intention to have had such a long journey in developing and submitting this work. So, the data and findings relate to a particular period in the evolution and development of the paramedic profession as well as being lived in practice by the students in a 'pre-COVID' context.

Changes in the paramedic profession and continuing relevance of my research findings

I may, unintentionally, have appeared to be suggesting in the discussion earlier about the background and historical context to this research, that the developing role of the paramedic was merely following in the footsteps of nursing. This was certainly not what I intended to convey. It is true that many professions 'allied' to medicine, including both nursing and paramedicine, have needed to emerge from the medical model and grow into their own professionally defined role, thereby developing their own body of knowledge and research-base. The journey to all degree-level registration and the iterations of the paramedic curriculum and career framework (College of Paramedics, 2014; 2015; 2017a; 2019) attest to a rapid and changing evolution of the role and skillset of the 21st century paramedic.

Role development has not always led to smooth and straight pathways to service evolution and career development for paramedics. The example of the Emergency Care Practitioner role is one such case. Between 2005 and 2008 the community paramedic and the Emergency Care Practitioner roles were suggested and piloted, with a much more primary care focused role, reducing avoidable admissions and having the preparation to help them to make safe decisions to see, treat (using Patient Group Directions) and discharge patients at home working to an enhanced scope of practice. These roles, rather than merely providing 'pre- hospital' care, encompassed some of the workload within primary and community sectors which had started to become a larger part of ambulance service activity. This emerging out-of-hospital care emphasis was an important driver of the Emergency Care Practitioner role in the United Kingdom, as a response to the rapid

change emerging roles and changing boundaries within primary care and emergency services. The strategic direction was for the Emergency Care Practitioner to take on a key emerging role in response, in part, to the outcomes of the changing primary care GP contract as well as the changing demography of the population. It was recognised in developing the Emergency Care Practitioner initiative that there were similarities between the paramedic concept, the nurse practitioner concept and emergency nurse practitioner roles for example but was conceptualised to something quite different and innovative. In fact, according to Doy and Turner (2004) who cite the UEA pilot group of Emergency Care Practitioner of trainees: The emergency care practitioner occupies the space between the general practitioner, the nurse and the paramedic (Doy and Turner, 2004, p365). There was a short and somewhat frenetic period of activity when representatives from ambulance services and universities and other stakeholders including skills for health and linked closely to the Higher Education Ambulance Development Group met to develop the curriculum framework competencies for this role. Even though in 2006 the competencies and curriculum framework including assessment modality and scope of practice were published by the Department of Health and Skills for Health, operational pressures in some ambulance trusts and other policy initiatives tended to turn the microscope, and therefore the driving forces, away from the development of the Emergency Care Practitioner role and the drive to keep people appropriately out of hospital continued but often without the Emergency Care Practitioner role, and without the necessary strategic vision to develop the resources to match this care and service need. In designing the curriculum, we were very mindful of the need to enable students to develop tolerance of ambiguity and to recognise the relevance of psychosocial understandings to the role of the paramedic in the 'there and then', notwithstanding the continuing drivers towards medicalisation and hyper-acute practice.

The experience of the Emergency Care Practitioner role and curriculum and the changing workforce across health and care not merely in pre/out-of-hospital practice influenced a more psychosocially care orientated curriculum with primary care especially emphasised in year three of the programme. Currently, against the background of huge workforce challenges and changing patient caseloads and complexity, as discussed earlier, the lens is again turned to first contact, specialist and advanced paramedic roles – leading to a 'reinvention' of these roles. Paramedic students are being prepared for employability in

diverse careers in emerging and transforming roles, where networks and interprofessional learning and supervision communities will need to be developed and curated, the importance of which for learner reflection and development was shown in my research findings.

Eaton et al., (2021) agree in their 'realist review' that the paramedic role in the United Kingdom and elsewhere, notably Australia, the United States of America and Canada, for example, is growing in relation to primary and urgent care. Surgeries are now reimbursed under the Additional Roles Reimbursement Scheme (2020) for employing a number of different professions including paramedics in primary care. This has spurred the development of primary care, first contact and advanced practice paramedic roles. With the advent of independent prescribing and these specialist and advanced roles for paramedics, together with education and supervision to support this (Eaton et al., 2021; Eaton, Mahtani and Catterall, 2018), there are many more opportunities across health and care open for paramedics. This is both positive in terms of the evolving role and autonomy, however this has led to paramedics moving away from ambulance services affecting capacity and retention planning. Culturally the paramedic in primary/urgent/acute hospital practice may be valued and accepted. In other cases, there are role and boundary challenges (Eaton et al., 2021; Eaton, Mahtani and Catterall, 2018).

Agerwal et al., (202, pE332) in exploring the role of the community paramedic in Canada, found that the community paramedic role:

> *involves effective communication, cooperation and shared decision-making among health providers, each with clear and defined roles. Collaboration and coordination between the silos of primary care and others (e.g., community care, acute care) are needed to manage complex health and social conditions, particularly for older adults who live longer in communities and have multiple chronic conditions.*

This accords with developing primary care roles and cross-system and integrated health and care initiatives in the United Kingdom with the flexible way paramedics are being utilized. Agarwal et al. (2022) contend that in the United Kingdom self-regulation and is supporting the emergence of a stronger paramedic identity and role scope out with medical authority. This is demonstrated by paramedics for example running clinics or triaging calls in primary care; holding a caseload of nursing and care homes and visiting patients in their own home; or being part of a multi-professional team running clinics face

to face or remotely in range of settings including being the attending clinician in out-of-hours services.

Unlike the Ontario experience of the Community Paramedic role and training (Agarwal et al., 2022), the United Kingdom the emergency of the role of First Contact Practitioner (Health Education England, 2021) – a "Primary Care Educational Roadmap" (p2) defines and articulates the knowledge, skills and attributes required and the educational pathway from first contact practitioner to advanced practitioner. The findings from my research and the recommendations detailed earlier, support the onward development of students in achieving and consolidating several of the key capabilities of the first contact practitioner role (Health Education England, 2021, p26) including providing person-centred care with shared decision-making, and managing "undifferentiated" presentations and facilitating interprofessional learning for example by supporting the management and tolerance of risk and uncertainty and flexibility/adaptive expertise.

Increasingly in the United Kingdom, beyond the first contact role as such, paramedics are working in diverse roles including mental health, public health and as hospice paramedics offering specialist palliative care for example. Their stories are being published increasingly in accessible journals such as the Journal of Paramedic Practice or disseminated via social media such as Twitter©.

My research findings identified the powerful understandings and insights from cross-system experiences, especially the learnings from observing GPs, and face to face and direct phone contact, for example with mental health services and their important to support the growth of effective networks for students. These I anticipate may serve to facilitate enhanced confidence when students make the transition to registrants, as well as for supporting cultural acceptance and the embedding of these developing and specialized roles.

It was always our intention to prepare our graduates for employability for a fulfilling career, equipping them with the capabilities to recognize and feel confident in making difficult decisions about complex psychosocial and individualized person-centred care, confident to work across out of hospital care in a variety of settings, and able to progress to new and emerging primary, specialist and advanced practice roles. The findings from my research and the recommendations would seem to continue to be relevant and perhaps more important in the context of changing workforce needs and roles, and the

greater caseload of mental health needs in patients. Increasingly frontline ambulance practitioners are filling the gap between specialist mental health services, bridging access challenges in primary care in urgent care delivery. Additionally, as my findings and vignettes show, with the increasing desire for the patient's chosen place to die being at home, and the caseload of complex co-morbidities and mental health presentations requiring paramedics to manage uncertainty and demonstrate adaptive expertise, facing hard truths. Therefore, support/coaching/reflection and feedback, whether in practice or during simulation, remains not only relevant but essential as shown in my research findings and vignettes.

From our own graduates, for example, we have alumni as team leaders of multi-professional teams including in mental health, others as clinical leads in the A&E of local acute Trusts. Others are undertaking and embedding quality improvement, assuming leadership roles and undertaking research. There has, over the last five years, been a great burgeoning of doctoral research undertaken by paramedics. Since Malcolm Woollard was the first paramedic to be made a professor in 2005, and Andy Newton was made the first Consultant Paramedic (2006) there has been an exponential growth in research undertaken by paramedics.

A search of the doctoral register hosted by paramedicphd.com for the United Kingdom undertaken in 2016 yielded eight results- one of which was a nurse. As of 16 August 2022, there are 65 listed doctorates undertaken by paramedics in the United Kingdom, and of these 12 focus on mental health. Whilst this may not reflect the totality of doctoral research this gives a picture of the rapid growth of doctoral endeavour. The site advises that the database represents 26 countries and that most of the 220 doctorates currently listed are from Australia, with the United Kingdom second to this.

For this reason, I aimed to publish one article at least in the Australasian Journal of Paramedicine to build on their strategy for disseminating high impact research. This journal is currently, however, on 'hiatus' meaning it is being reviewed and there is a possibility of the emergence of a new journal in its' place.

Emerging COVID-related implications

The experience of current students undertaking practice placements is not necessarily the same as that lived by the research participants in 2015-2016. The negative effects of delays in ambulance response times on patients and the public is widely reported and recent data (NHS, 2022) shows that response times data for July 2022 were the lengthiest or equal to the longest response times recorded. Le Blancq (2022), a student paramedic eloquently shares his concerns about student learning in current practice, when:

I have also had shifts which start and end in a hospital car park. We arrive to take over an ambulance and patient from a crew who should have gone home half an hour ago. We then might continue this cycle 3–4 times, moving from ambulance to ambulance until we are released for a break.

There is some learning that can be found here for the dedicated student in the re-assessment of the handed-over patient, but it is nowhere near the same experience of elucidating a history first hand in the community (Le Blancq, 2022, p301),

Not only, le Blancq (2022) contends, and anecdotal evidence from current students and mentors supports this, is meaningful learning problematic, but fundamental skills, for example cannulation and agreeing the plan of care, he argues (Le Blancq, 2022), have already been completed by other practitioners. Therefore, the opportunities to practice these under supervision in practice (rather than during simulation) can be limited.

From the experience of the UEA course team, amendments to placements, their reorganization, pausing, deferment, cancellation and rescheduling have been reported as stressful and challenging for students, mentors, the UEA team and all in practice charged with arranging placements when capacity is on a knife-edge. The Health and Care Professions Council with the Council of Deans (2020), in April that year, recognized the unparalleled placement and practice situation, issuing a joint statement for allied healthcare profession students with varying arrangements depending on the year of study of the student. The impact on the 'Classes of 2019 and 2020' i.e., those in years one and two of their programme (undertaking a three-year programme) who are now graduating or entering their final year of study and the full impact of the disruption to their practice learning and confidence in the real world is not yet fully clear.

Theoretical content was often rearranged and delivered well ahead of practice placement experience, with the potential to lessen the bridging of theory and practice application (College of Paramedics 2017b; Le Blancq, 2022). The provision of additional simulation and remote, simulated or virtual placements builds on previous literature, though brought to the fore by COVID, about the value of simulation (Taylor et al., 2021; Taylor and Salmon, 2021) which, with purposefully planned and evidence-based models is able to deliver high quality learning. Taylor et al. (2021) note that increasing placements in practice is becoming unsustainable, notwithstanding multiple national and local initiatives to expand placement capacity, and remind that there is equivocal data about the value of in-vivo placements, as amplified by Le Blancq (2022). For Taylor et al., (2021), a range of assets to support learning and the evolution of a virtual practice setting (a ward) enabled a two-week virtual placement to be facilitated for year one dietetics students. Taylor et al., (2021) agree with Taylor and Salmon (2021), whose simulated approach was a Peer-Enhanced E-Placement for therapy students, that there is great value in the peer learning opportunities such a placement can offer.

The findings and recommendations from my research indicate that reflection, feedback and debriefing in supportive communities are key to effective and confident development by students in the uncertain world of practice. The recommendations given in the previous chapter in relation to the development of simulation and enquiry-based learning scenarios and group activities integrating ambiguity, risk, uncertainty and emotion management, when delivered in a safe simulation environment and with support including that of peers support well-designed remote/simulated and virtual placements as a pedagogical approach.

Wheeler and Dippenaar's (2020) review of simulation-based learning and pedagogy explored the general scope of the literature to provide a synopsis. Whilst psychomotor/clinical skills are often considered to be the core of simulated practice, as Taylor et al., 2021; Taylor and Salmon, 2021 and Wheeler and Dippenaar, 2020) identify, the student's behaviours, professionalism and knowledgebase as well as their responses and teamworking can be rehearsed and assessed. Wheeler and Dippenaar (2020) note that students have differing opinions about simulation whether this is virtual/remotely delivered of face to face in person in skills suites or using immersive modalities. So, whilst there is some positive evidence about simulation and its use to prepare students for practice or to replace practice placement learning hours, how far this mitigates against

the disruption that the 'COVID- generation' of paramedic students are experiencing is not fully understood. As capacity for placements continues to be problematic, such initiatives, whilst not included in my recommendations, do have the potential to provide rich structured simulated learning either replacing lost placement hours or adding to 'rehearsal' time and the more immediate integration of theory and practice.

To mitigate the potential lack of, and/or lessened real world practice opportunities, the case for the recommendations I have proposed may be even more relevant. In designing simulation scenarios and enquiry-based learning triggers and cases, with complexity/messiness, ambiguity and nuancing for the hard truth of the reality of practice being integral – particularly in the second and third years of study, these factors are more explicitly revealed to be key to students' development of clinical decision-making and management of uncertainty in-vivo. The vignettes already constructed as part of this research, and internal work by the school's simulation leads and team to design inclusive patient and family cases, whilst decolonizing the curriculum, has the potential to spur greater embedding of the management of uncertainty and person-centred, individualized care and decisions, not only at UEA but more widely.

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Appendix 1 Programme Information

DIAGRAM OF THE PROGRAMME

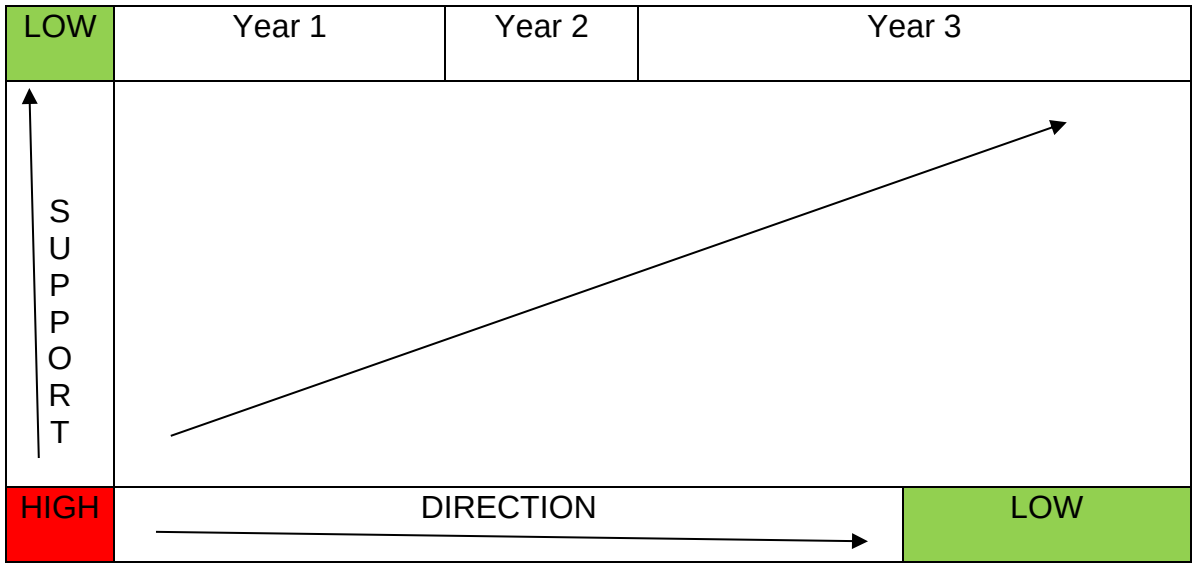
Year 1	**Semester 1** September - December (12)	**Semester 2** January - April (12)	**Integrative Period** April - to July (12)
	Foundations of Paramedic Practice (40 credits) Includes **Practice –based Learning (1)**		
	Communication and Personal development (20 credits)	**Evidence-based Practice (1) (20 credits)**	
	Psychosocial Aspects of Out of Hospital Care (20 credits)		**Practice-based learning (2) (20 credits)**
Year 2	**Semester 1** August- November (12)	**Semester 2** November-March (12)	**Integrative Period** April - July (Critical care placements after April)
	Developing Paramedic Practice (60 credits) Includes **Practice-based Learning (4)**		
	Current issues in Paramedic and Out of Hospital Practice (20 credits)	**Evidence-based Practice (2) (20 credits)**	
		Critical Care (includes Practice-based Learning (3)) (20 credits)	
Year 3	**Semester 1** September -December (15)	**Semester 2** January -March (12)	**Integrative Period** April- June (9)
	Clinical Assessment, Examination & Decision Making Skills (Primary/Urgent Care- includes practice-based learning 5) (40 credits)		
	Student Assessed Independent Learning (SAIL) (20 credits) (includes non-assessed elective)	**Leadership, Practice Education, Teamwork and Transition into Paramedic Practice (includes Practice-based Learning 6) (20 credits)**	
	Service Improvement Project (40 credits)		

KEY= Purple for psychosocial aspects and SAIL.

EXTRACT FROM CURRICULUM PHILOSOPHY

The programme is constructed as a spiral curriculum (Bruner, 1960) - so we revisit ideas/skills/attributes to extend and deepen learning until the student has gained in-depth understanding of their complexity. So for example: clinical assessment, reasoning and decision-making will be explored in Year 1 focusing on time critical emergency presentations, in Year 2 clinical assessment and decision-making will focus on critical care and more complex decision-making and in Year 3 the student will develop skills to enable them to make decisions where there is a high level of uncertainty and prepare them for greater independence as a practitioner.

The programme will be more structured and directed at the outset and in practice will utilise Grow's Stages of Development of Learning Autonomy (1991) facilitating student development by providing them with lots of support and direction early on, gradually enabling them to increase their confidence and self-direction:



Knowles's Principles of Androgogy (1990:39); adapted and applied in recognition of the students' curricular learning needs in professional education (Flemming et al 2011, Porter and Meddings 2007).

Knowles' Principles	Achieved through the following programme activities during the programme	Students learning and assessment level across the three years
Self-concept moves from one of being a dependant	Lectures, skills workshops, simulation, scenario and EBL as well as seminars.	Supervised Observer to Supervised Participant

personality towards one of being self-directed learner	Placement and portfolio learning. Directed, personal study and self-assessment using Professionalism Portfolio and Paramedic Attributes. Continuity of mentorship in EEAST placements in Year 1.	Year 1
Accumulation of a growing reservoir of experience that becomes an increasing resource for learning in a new context	Lectures and seminars. Critical clinical enquiry and reasoning and clinical decision making Skill workshops and simulation prior to placements Placement and portfolio learning Critical reflection on practice learning Effective portfolio use in advancing learning and seeking opportunities	Supervised Participant to Supervised Practitioner Year 2
Readiness to learn becomes orientated increasingly to the development of skills linked to new professional roles	Experience in a range of placement areas and agencies and in critical care environments to support more complex decision making and clinical reasoning. Placement and portfolio learning with particular reference to interagency / inter-professional practice. The Paramedic within the multidisciplinary team. Structured critical reflection Skill- based learning and workshops.	Supervised Participant to Supervised Practitioner Year 2 Supervised Practitioner to Competent Practitioner Year 3
Ability to become responsive to clinical events with immediacy of application with a shift from	Workshops and skill based learning linked to simulation and scenario case management.	Supervised Practitioner to Competent Practitioner

'subject-centeredness' to one of assessing and managing individual needs in a holistic manner	Lectures and seminars Critical clinical enquiry Placement learning Structured critical reflection. Oral examination.	Practicing towards an autonomous role in final module. Year 2/3
Self-directed and ability to support the learning of others and to act as a patient advocate and standard prodder	Leadership and service improvement lectures, workshop and projects. Mentorship activities and practice placement experience.	Supervised Practitioner to Competent Practitioner

Enquiry-based Learning (EBL): We value the experiences students bring from their life, and we will use these experiences to help solve problems and to help students work as a member of a group this. The trigger material is presented to students before learning takes places and supported by lectures, online resources, facilitated tutorials and independent and group exploration. Clinical assessments and diagnoses are developed and action/care plans are put together during the EBL process. The EBL package may have a number of triggers, for example looking at a whole family or moving from assessing the patients, through the care pathway. Students will develop their skills in analysing and problem-solving during this process. EBL will be a particular feature of the Psychosocial Aspects of Healthcare (Year 1), Current Issues in Paramedic Practice (Year 2) and Clinical Assessment, Examination & Decision Making Skills (Primary/Urgent Care) (Year 3) modules.

EBL encourages independent learning facilitating analytic and critical thinking skills, and the ability to find evidence systematically from diverse sources, to appraise the evidence and to present this to peers. The main idea behind EBL is that 'the starting point for learning should be a problem, a query or a puzzle that the learner wishes to solve' (Boud, 1985:13). It centres the curriculum around key problems (and issues) in professional practice and supports complex decision-making by moving student thinking from simple/concrete to critical/analytic approaches.

EBL confronts students with problems from practice to stimulate learning. By "adapting to, and participating in change, and self-directed learning are composite competencies … each will require the development of … the skills of communication, critical reasoning, a logical and analytical approach to problems, reasoned decision making, and self-evaluation." (Engel, C in Boud & Felletti, 1991:24)[2]

The appropriate increased use of EBL during the programme equates moving from Level 2 to Level 3 of Barrows' Taxonomy (1986).[1]

STEPS IN THE TUTORIAL PROCESS OF ENQUIRY-BASED LEARNING	
1.	Clarify unfamiliar terms and concepts
2.	Define the problem(s)
3.	Identify possible hypotheses or explanations
4.	Make a systematic inventory of connections and categories
5.	Arrange explanations into a tentative solution
6.	Formulate learning objectives
7.	Agree how group and members will conduct enquiry and presentation of findings
8.	Gather information resources and undertake private study
9.	Share the results of information gathering and private study
10.	Scrutinise evidence
11.	Formulate clinical judgements
12.	Develop action plan
13	Evaluate learning and group process

(adapted from David D et al: 1999: Problem-based

YEAR: 1	CREDITS: 20 theory	LEVEL: 4
MODULE TITLE: Psychosocial Aspects of Out of Hospital Care		
Contact Hours: 96 of which 48 are face to face supported by 48 hours of directed study and EBL preparation	**Directed/ Self- Directed Hours: 96**	

MODULE AIM

The module will complement the Foundations in Paramedic Practice module by introducing important themes from sociology and psychology. The ability to use these two fields of science will be related to health and assessment. The wider implications of health policy, public health and health promotion will also be considered.

This will be delivered by blended learning using a mixture of flipped lectures, directed reading, lectures and seminars. Group work and Enquiry Based Learning (EBL) will support application to practice.

The EBL packages will focus on:

- mental health difficulties – mood disorders; psychosis
- dementia
- learning disabilities & autism
- stress
- vulnerable groups- including the homeless

MODULE OUTCOMES

This module will enable the student to:-

3.1 Demonstrate awareness of psychosocial concepts and their potential effects on ealthcare
3.2 Appreciation of the interaction between psychosocial aspects and patient presentation
3.3 Recognise individual difference including culture, gender and anti-Discriminatory practice
3.4 Appreciate person-centred care and its application to care of people with dementia, mental health difficulties, learning disabilities & autism and marginalised groups
3.5 Demonstrate respect for others
3.6 Appreciate approaches to health promotion and health education and their role in health service structure and organisation
3.7 Demonstrate understanding of the aetiology and effects of stress on the individual

INDICATIVE MODULE CONTENT

This module will cover sociology and psychology related to healthcare.

Sociology

Epidemiology
Life Style and its meaning
Sociology and its effects on the body
Health inequalities (poverty, welfare and social exclusion)
The health service (organisation, development and policy)
Power
Gender
Culture, race and religion
Social interaction (society, community and belonging)
Health policy

Psychology

Perception
Memory and problem solving
Behaviour
Developmental
Nature v Nurture
Health Psychology
Psychopathology (including stress)
Breaking bad news
Theories of pain, effects on individuals, total pain

Public Health, Health Promotion
Introduction to Health Promotion and Health Education
Prejudice, stigma and discrimination
Attitude
Mental Health Promotion
Concordance
Person-centered care, social inclusion and application to people with a learning difficulty/disability and autism, vulnerable groups, common mental health problems

Introduction to Mental Health and Mental Capacity Acts
- Consent, capacity

ASSESSMENT

FORMATIVE

- Reflections x2 on EBL
- EBL presentations
- Poster plan

SUMMATIVE

Group Poster Presentation and written summary

The poster presentation will take place according to the module timetable. You will work collaboratively in separate groups [4-5 students per group] to provide a poster presentation of the key issues related to the client group selected. Each student must take part in presenting your group poster to the rest of the group. The group may use a range of methods of presentation including role play, and may involve the rest of the cohort in any interaction you feel can enhance your presentation.

The key elements will relate to:

- Communication - group communication and evidence of teamwork
- Awareness of psychosocial concepts and their potential effects on healthcare – the group must decide on one aspect of health promotion related to one of the key client groups explored during this module
- Appreciation of the interaction between psychosocial aspects and patient presentation
- Demonstrates respect for others
- The evidence base – a detailed reference list must be included with the poster

The poster presentation, which should last approximately 20 minutes, must demonstrate the collaborative work undertaken and the individual student's contribution to the group enterprise.

PROGRAMME: BSc (Hons) Paramedic Science		
YEAR: 2	**CREDITS: 20**	**LEVEL: 5**
MODULE TITLE: Current issues in Paramedic and Out of Hospital Practice		
Contact Hours: 48	**Directed/ Self-Directed Hours: 152**	

MODULE AIM

This module expands the elements of sociology and psychology related to healthcare following on from the module Psychosocial Aspects of Out of Hospital Care. It explores these sciences in relation to the patients as individuals, focusing on enhancing inclusion and access to healthcare, care provision for people living with dementia, those requiring palliative and end of life care, older people with frailty, people with multiple co-morbidities, homelessness, substance misuse, multi-cultural care, care for travellers and other hard to engage groups. Students will be encouraged to explore dilemmas and difficulties including social attitudes, how services are funded, organised, designed and delivered and to analyse the role of the paramedic in supporting individualised care and enhancing access to care and continuity of care within our of hospital services.

MODULE OUTCOMES

The module will enable students to:-

7.1 Demonstrate critical appreciation of the interaction between psychosocial aspects and patient presentation
7.2 Analyse the role of social exclusion and stigma on health and illness
7.3 Analyse the causes and effects of loss and adjustment on the individual and the role of the paramedic in supporting the patient/ family
1.4 Recognise individual difference including culture, gender and anti-discriminatory practice
7.5 Show awareness of own beliefs and their effects on others
7.6 Analyse approaches to health promotion and health education and their role in health service structure and organisation
7.7 Critically explore the role of politics, policy and social construction of health and illness on the provision and access to services
7.8 Demonstrate in-depth appreciation of the range of services involved across pathways for patients with complex needs

INDICATIVE MODULE CONTENT

- Sociology of poverty, social inclusion, stigma and marginalisation
- Access to services
- Race, ethnicity and migration
- Culture and health – multi-cultural care
- Public Health and Health Promotion including role of the media; patient education
- Team work

- The expert patient
- Dementia
- Palliative and End of Life Care - loss, bereavement and carer/family support
- Older people with frailty
- Long-term conditions and complex comorbidities
- Integration of services
- Substance misuse
- Ethical and moral perspectives
- Safeguarding
- Professional issues and requirements
- Resilience
- Topical issues and dilemmas

ASSESSMENT

FORMATIVE

EBL presentations

Group debate

Student selected activity

Professional issues/HCPC role play

SUMMATIVE
The assessment comprises:
Patchwork assessment comprising selections from:

- EBL work
- Preparation for debate
- Reflections on professional issues
- Analysis of learning from student selected activity and learning contract
- Integrating narrative

UEA MODULE OUTLINE TEMPLATE

Section 1 General Information		
Module Title: Studies Outside Paramedicine - Supported Assessed Independent Learning (SAIL)		
Module code:	**Credit value: 20** **Total student effort hours: 200**	**Level (3, 4, 5, 6 or 7):** **6**

Section 2 Module Description and Learning Outcomes	
Description What is this module about?	 Welcome to SAIL **"Paramedics need to be highly inquisitive, diplomatic and person-centred individuals with an eye for detail and a thirst for knowledge."**

	The module will provide a vessel for you to continue your development as a learner from being more dependent to being self-directed (Grow, 1991). This will help you as you move from level 5 to level 6 outcomes and expectations. After registration as a paramedic, you will be required to keep your skills and knowledge up to date and to adopt a 'lifelong learning' approach to your professional identity. The SAIL module is intended to give you a structure in which to develop the independent learning skills and the reflective mind-set which are key parts of your ongoing development as a professional. The SAIL module also contains an elective placement component that will contribute to your personal and professional development.
Learning Objectives What will you learn? (subject specific and transferable skills)	SAIL is designed to offer the experience of self-guided and self-paced autonomous learning within a supported reflective framework. By asking you to think about learning as a potentially transformative process, the module will help you to: • Get to know your own disposition as a learner; • Evolve strategies for managing your own learning and motivating yourself; • Become more comfortable with the uncertainty that self-guided learning can generate; • Identify and meet a learning need drawing on a range of available resources; • Exercise initiative, creativity and ownership in your personal learning SAIL will offer formative opportunities for sharing your learning and gaining feedback from module organisers and your fellow students before finishing with a summative assessment workshop which will measure the extent of your engagement with your chosen course and your own development. **Course Choice Parameters** We will provide a selection of online courses of between 2 and 8 weeks' duration from which you can choose. Courses will be grouped broadly by theme and sorted by level of intensity.

The course you choose must be in a taught format and must not be a clinically orientated subject.

The timing and duration of courses will necessarily vary, and SAIL's online component will be designed to accommodate this. Please note that you must have begun your chosen course by the date of Workshop 2, which includes the formative assessment activity.

It may be possible for you to select a course that's not on our list, or indeed to undertake two shorter courses within the SAIL timeframe. Any course that you do undertake must delivered online and must be completed within the timeframe in the module.

Managing your time and energy is a key part of self-guided learning. We want you to enjoy learning something new and thinking about your own learning in this context, but remember that you do have to meet the module assessment deadline.

Bear in mind that your performance on the SAIL module is assessed not by the degree of success in your chosen course or skill, but by your level of engagement with the independent learning process and the quality of your reflection on it. A longer course is likely to give you more opportunity to explore and reflect on your own learning!

During the module you are likely to feel uncomfortable and unsure – that's fine!!! Sometimes new learning can and should take us from our comfort zone, raise questions and uncertainties – as you move through the learning process, engage and make decisions this should resolve.

This process is well recognised in leadership and change management theory and practice.

	(From changeactivation.com/modules/conducting-gap-analysis/ accessed on 29/02/16)
Learning outcomes? What will you be able to do by the end of the module?	At the beginning of the SAIL module, we will ask you to choose an online course which you believe will contribute to your personal and/or professional development. You must choose a taught course from outside UEA, and one which is not clinically orientated. You will use your chosen course to explore the experience of self-guided learning, including how you manage it and what you learn about yourself in the process. This module will enable you to: Articulate the gap your chosen course will help to fill in your understanding • Articulate the value of the learning undertaken for themselves and their future career – oral or artefact. • *Demonstrate synthesis and creativity in identification of a need or priority and meeting that need in a novel and individual way – something that is new to you* • *Need to rewrite the above learning outcome or explain in more simple/usble language – how did you come up with your idea and why it's a good idea – why have you chosen it ?justify/evaluate* • Demonstrate ownership of your personal learning and development leading to personal efficacy/effectiveness – *this is linked to the fact that you are creating your own learning outcomes.* • Develop a plan that will enable you to meet your learning need • Critically reflect throughout on what you discover about the experience of self-guided learning, • *An in depth and balanced reflection, reflect on the learning process,* • Evaluate how you have developed as a learner, both as a professional and as a person, through taking your chosen course and completing the assessment artefact – *what did you actually learn on the course, why is this important*

	• PLUS ONE STUDENT SELECTED LEARNING OUTCOME to be negotiated with your personal adviser and developed at the beginning of the module. You will also: • Evidence the process of planning an elective placement experience and identify the skills that this planning process required • Critically examine your professional identity and transferrable skills within a different practice environment • *See elective handbook* • PLUS ONE STUDENT SELECTED LEARNING OUTCOME to be negotiated with your personal adviser and developed at the beginning of the module.
Links Where does this fit in to your programme?	As you move towards qualification and ultimately registration as a paramedic your level of autonomy and need for continued personal development is key. This course will enable you to take your first steps into identifying and acting upon your specific learning needs. The qualities and attributes you are developing and augmenting during this module will support you in undertaking the final module of the programme: Leadership, Practice Education, Teamwork and Transition into Paramedic Practice. The skills you will develop throughout this module will serve to enhance your employability and your ability to continue to drive your own learning.

Section 5 **Teaching Sessions**
Lecture Programme (where applicable)– details for each lecture

Workshop 1 (September)	This workshop will take place at the beginning of the SAIL module, providing the context for the module and answering any questions students may have. During the workshop students will identify their own learning and professional developments needs and consider the courses available in the light of these needs. They will establish learning outcomes - that is,

	what they hope to learn from the course; what personal attributes they will develop as a result of taking it; and how it will help them get closer to becoming the paramedic they want to be.
Online component	The course Blackboard site will provide a social and reflective learning space throughout the SAIL module. It will help students to manage the dual focus of undertaking learning and simultaneously thinking about that learning. Students will be expected to contribute to the discussion forum and to share their experiences, observations and questions around online learning. During each week of their chosen course participants will also make a reflective journal entry on Blackboard akin to field notes or a research diary (the "captain's log"). This will act as a record of the learning journey and will also feed into the final assessment activity.
Workshop 2 (October)	The workshop will offer a midway opportunity to pause and reflect on the progress you have made so far with the learning outcomes you set in Workshop 1. It will also include a formative assessment element. This will consist of a microteach presentation based on what you have learned from your chosen course so far (we understand that some participants may not have finished their courses by this point). Students will present to a small group of their peers and receive feedback which will support the design and creation of their summative assessed work.
Workshop 3 (November)	At the end of the course students' learning will be present (formative) at a final workshop in which you'll feed back to the whole group on what you've learned and where it has brought you. We will ask you to show us how you engaged with your own learning and how it has helped you develop as a person and as a professional. "Teach us what you've learned– both from your chosen course and about yourself as a learner"

Appendix 2 ETHICAL APPROVAL

SCHOOL OF EDUCATION AND LIFELONG LEARNING RESEARCH ETHICS COMMITTEE

APPLICATION FOR ETHICAL APPROVAL OF A RESEARCH PROJECT

This form is for all staff and students across the UEA who are planning educational research. Applicants are advised to consult the school and university guidelines before preparing their application by visiting https://www.uea.ac.uk/research/our-research-integrity and reading the EDU Research Ethics Handbook. The Research Ethics page of the EDU website provides links to the University Research Ethics Committee, the UEA ethics policy guidelines, ethics guidelines from BERA and the ESRC, and resources from the academic literature, as well as relevant policy updates: www.uea.ac.uk/edu/research/researchethics. If you are involved in counselling research you should consult the BACP Guidelines for Research Ethics: www.bacp.co.uk/research/ethical_guidelines.php.

Applications must be approved by the Research Ethics Committee before beginning data generation or approaching potential research participants.

- Staff and Postgraduate (PGR) student applications (including the required attachments) must be submitted electronically to Dawn Corby d.corby@uea.ac.uk, two weeks before a scheduled committee meeting.
- Undergraduate students and other students must follow the procedures determined by their course of study.

APPLICANT DETAILS	
Name:	Rosie Doy
School:	HSC
Current Status:	**Staff / PGR Student** **(delete as applicable)**
UEA Email address:	**r.doy@uea.ac.uk**
If PGR Student, name of primary supervisor and programme of study: **Esther Priyadharshini; EdD**	
If UG student or other student, name of Course and Module:	

The following paperwork must be submitted to EDU REC **BEFORE** the application can be approved. Applications with missing/incomplete sections will be returned to the applicant for submission at the next EDU REC meeting.	
Required paperwork	✓ **Applicant Tick to confirm**
Application Form (fully completed)	✓
Participant Information sheet (EDU template)	✓
Participant Consent form (EDU templates appropriate for nature of participants i.e. adult/parent/carer etc.)	✓
Other supporting documents (for e.g. questionnaires, interview/focus group questions, stimulus materials, observation checklists, letters of invitation, recruitment posters etc)	✓

2. PROPOSED RESEARCH PROJECT DETAILS:	
Title:	Deciding the Right Place of Care: Dilemmas and Decision-making in Paramedic Practice
Start/End Dates:	June 2016 to May 2017 (data collection) with submission 30th September 2018

3. FUNDER DETAILS (IF APPLICABLE):	
Funder:	N/A
	Has funding been applied for? YES NO Application Date:
	Has funding been awarded? YES NO
Will ethical approval also be sought for this project from another source? NO	
	If "yes" what is this source?

4. APPLICATION FORM FOR RESEARCH INVOLVING HUMAN PARTICIPANTS:

4.1 Briefly outline, using lay language, your research focus and questions or aims (no more than 300 words).

The main research issue is to explore the experience of student paramedics (in the 1st cohort of a new BSc (Hons) programme running in HSC at UEA) to see where they may need better support (in the particular area of 'difficult' decision making in non-emergency situations). The 'Research Problem' is to identify whether the curriculum and practice-based learning are supporting students in their assessment, decision-making and management of patients who do not require emergency and time critical care. The focus will be on student experience and reflections on working with patients whose needs are complex, ambiguous, span social and psychological aspects and where traditional practice may not yet have 'caught up' with the 'vision' for the profession and where key patient pathways may not always be in place. These situations include mental health and end of life episodes of care. In doing this, I will also be able to identify where the gaps are in the current (UEA) educational provision to enhance the curriculum and to better prepare students for the reality of the paramedic role in a rural setting. Paramedics work independently and are frequently the first point of contact for patients, with potential (given effective decision-making and clinical skills, referral pathways and access to a range of services) to have a huge and effective impact on reducing Accident and Emergency visits, admissions to hospital and to enable care to be provided in the right place and the right time. It is therefore key that students are well prepared to practice effectively with risk and ambiguity as protocol-driven trauma and critical care work is now a small proportion of practice (no more than 5-10% of calls). In rural Norfolk, particular patient groups: those living with dementia, older people with frailty, patients with long-term medical conditions, those living with mental health problems and patients at the end of their lives are now the largest groups calling on the service of the paramedic workforce. In 'real life' practice– students (and registered paramedics) struggle with ambiguity/complexity- these areas of practice are not well covered in in the Joint Royal Colleges Ambulance Liaison Committee Guidelines (ASA, 2013) – the core guidance for paramedics. The paramedic workforce needs to manage the ambiguity, complexity and individual person-centered decisions required in day to day practice. Therefore, part of the education and professionalization of the workforce to move beyond protocol based practice is needed in order to make effective decisions and appropriately support keeping patients in their own homes.

The main research question:
How can the programme support students in improving their decision-making to be more patient-centred in non- emergency situations for which there are no clearly defined protocols? – this will explore for example decision-making at the end of life, care episodes when there is ambiguity and complexity or when psychosocial needs are uppermost in the patient's presentation.

The purpose of this case study will be to understand the experiences of and discover how paramedic students in practice in Norfolk and Waveney learn to make difficult person-centred decisions, what meanings they give to their actions, and what aspects and risks worry them. At this stage in the research, 'difficult decisions' are defined as those in non-life threatening situations, where there is ambiguity (for example some risk

....; end of life; mental health; older people with frailty and patients who want to stay at home and who often traditionally would be conveyed to hospital 'just in case'...).

The overall objective is for the findings of this study then to be able to speak to/inform not just the BSc curriculum and student experience but also other courses (including post registration continuing professional development (CPD) for paramedics including specialist and advanced practice) and other professions. This is not the immediate aim/outcome of the project, but a longer term objective as the Paramedic Evidence-based Education Project Report (2013) and the College of Paramedics (2015) address post qualification education requirements. The 'shape' of specialist and advanced practice for paramedics is emerging but there may be an opportunity to influence the development and implementation of the curriculum for post qualifying development as a longer term outcome from this research.

4.2 Briefly outline your proposed research methods, including who will be your research participants and where you will be working (no more than 300 words).

- **Please provide details of any relevant demographic detail of participants (age, gender, race, ethnicity etc)**

The research methods will comprise a qualitative longitudinal case study using narrative inquiry. As my research is seeking to understand what decisions in practice, students perceive as being problematic, how their understanding changes over time and how the programme can better support improving their decision-making to be more patient-centered (and appropriately manage risk) in non- emergency situations, an exploratory case study approach (Creswell, 2013) will be used.

Patient encounters are dynamic, unique and unpredictable and involve relationships between the student practitioner and the patient/family/carer, the case study is an approach that is congruent and is a method/approach that is able to capture more of the holism using a 'Gestalt' prism to view the case (Sturman, 1999; Nisbet & Watt, 1984 cited by Cohen, Manion and Morrison, 2011).

My qualitative longitudinal case study will seek to explore the different, unique and exceptional as well as 'every day' stories students tell around their practice and decision making and how we as educators may learn from these. I will also draw on narrative inquiry as a meaningful framework for the research to focus on the affective and relationship aspects of decision-making as a more joint enterprise between paramedic and patient. The primary sources of data will be semi-structured interviews and a focus group with students and the unpacking of their stories. I will also draw on policy, guidance and curriculum documentation.

I will focus on the September 2014 Paramedic BSc cohort (the first intake to the programme) following selected students over years 2 and 3 of the programme to explore how their understanding, confidence and capability in making difficult decisions, in non- life

threatening situations, changes (the subject of the case study). These students will all be experiencing practice in the East of England and primarily in Norfolk and Waveney. Most practice experience will take place in 3 Ambulance hubs (based around Norwich (East Norfolk stations), Waveney (Great Yarmouth/Lowestoft and Eastern coastal stations; and West Norfolk stations) with some placements in acute hospital and community/primary care. So the objective is to better understand how decision-making changes in a graduate student population and the contextual factors that affect this, using the lens of the case study and the stories students share about their experiences.

The student group comprises 30 students some of whom commenced the programme following A level study, many others of whom are mature students with a range of previous experiences and academic qualifications; some have made a career change to undertake the programme and have family and caring responsibilities.

Data will be gathered in the following ways:

* In-depth semi-structured interviews with a sample of 10 year 2 paramedic students (round 1)- I have drafted a semi-structured interview schedule to be the framework for the first round of interviews- see Appendix 1.

* A focus group for 8-10 students from the cohort who have not been involved in the interviews to triangulate emerging themes and ideas emerging from interviewee narratives as presented as composite vignettes. This will take place early in year 3 of the programme.

* Appraisal of Trust, professional body and national protocols and guidelines, policy, published patient experience surveys and curriculum guidance articulating what is currently considered best - practice and the direction of travel for the paramedic role

* Curriculum and programme documentation

* Round 2 interviews- re-interviewing the 10 students again towards the end of year 3 of the programme

* My reflexivity

* Collaboration and co-production of interpretation and meanings with research participants

As indicated there will be 2 rounds of semi structured interviews. Following the first round of individual interviews involving 10 students, I will facilitate a focus group for 8-10 students who have not been involved in the individual interviews. The 1st round will take place at the end of year 2 of their programme and the 2nd towards the end of year 3 as they prepare to graduate and become registered practitioners.
Examples of themes emerging from the interviews will be gathered together and developed into vignettes (see also Section 4.8) from key ideas and themes -these will be both individual, anonymized vignettes and composite vignettes- the latter being used within the

focus group taking place between rounds 1 and 2 of the interviews to check the emerging ideas/themes/categories with other students from the peer group of those students being interviewed.

Key policy and guidance documentation examined will include the programme and professional body learning outcomes and domains (College of Paramedics, 2015) and standards (Health and Care Professions Council, 2014) and the teaching approaches and assessments the students undertake that link to/support complex decision-making.

4.3 Briefly explain how you plan to gain access to prospective research participants. (no more than 300 words).

- **If children/young people (or other vulnerable people, such as people with mental illness) are to be involved, give details of how gatekeeper permission will be obtained. Please provide any relevant documentation (letters of invite, emails etc) that might be relevant**
- **Is there any sense in which participants might be 'obliged' to participate – as in the case of students, prisoners or patients – or are volunteers being recruited? How will you ensure fully informed and freely given consent in the recruitment process? Entitlement to withdraw consent must be indicated and when that entitlement lapses.**

A sample from the Year 2 undergraduate paramedic science student cohort in HSC- currently 30 students- will be interviewed once at the end of year 2 of their programme and once towards the end of their third and final year. Additionally, a focus group of 8-10 students (these will not include any who are being interviewed) will also be convened between the first and second rounds of interviews. Therefore, approximately 2:3 students in the cohort will be able to contribute to the research. As far as possible and practical I will try for a balance of male and female students and a range of ages from candidates within the group.

The interim Head of School and the Course Director are aware of the research project.

Possible participants will be provided with a brief outline of the research to enable them to provide informed consent as to whether they wish to be involved in the two rounds of semi-structured interviews or the focus group to be convened between the 1st and 2nd rounds of the interviews. This is detailed further below in section 4.6. Students will volunteer to participate and will (see participant information sheet) be able to withdraw their consent at any time.

4.4 Please state who will have access to the data and what measures will be adopted to maintain the confidentiality of the research subject and to comply with data protection requirements e.g. will the data be anonymised? (No more than 300 words.)

Myself and my research supervisors will have access to the data; and participants will be provided with the transcripts of their interviews and their individual vignette so they can check and clarify.

All participants will be assigned an alias (to assist with anonymity) which will be used when using direct quotations in the thesis and also for individual vignettes generated. In the case of a vignette drawn from the narrative of one participant (whose identity will be disguised) the participant will be asked to check and consent to its use.

As part of this process I intend to develop composite vignette(s) constructed from the narratives of the interviewees as a 'reality check' of the trustworthiness of the emerging ideas and concepts (Ely et al., 1997) whilst ensuring anonymity of individual participants. These will be used within the focus group.

During the coding and analyzing process I will seek peer review of this process by involving my research supervisors in verifying, confirming and validating the data, themes and ideas and in repeating the process to identify further themes, concepts and categories. A third way of verifying will involve the research participants themselves by returning to the study participants and asking them to validate the emerging themes and categories and vignette.

The initial data analysis will also further inform the round 2 interviews- the students having completed a further year of the curriculum and practice experience. Following the completion of the data gathering process, the relationships between the core concepts will be examined and compared in a range of ways- with the literature, theory and policy/guidance, with themes articulated at the end of year 2 and the narratives of participants by the end of year 3- to make sense and meaning of the students' experiences, development and learning and how far the curriculum has enabled their development for the 'real world' as a practitioner.

4.5 Will you require access to data on participants held by a third party? In cases where participants will be identified from information held by another party (for example, a doctor or school) describe the arrangements you intend to make to gain access to this information (no more than 300 words).

N/A

4.6 Please give details of how consent is to be obtained (no more than 300 words).

Copies of proposed information sheets and consent forms, written in simple, non-technical language, MUST accompany this proposal form. You may need more than one information sheet and consent form for different types of participants. (Do not include the text of these documents in this space).

Possible participants will be provided with a brief outline of the research to enable them to provide informed consent as to whether they wish to be involved in the two rounds of semi-structured interviews or the focus group to be convened between the 1st and 2nd rounds of the interviews. Information and an overview of the research will provided by a presentation to the group and an information leaflet (approved as part of the Ethical Approval process) will be provided in hard copy as well as by email to all students in this cohort. Students will have at least 14 days to decide whether they wish to participate and I will make it clear to them that they are free to choose whether to participate and may withdraw at any time. I will advise students that I will randomly allocate them to the interviews or focus group unless they explicitly express a preference for individual interview or focus group participation.

Consent will also be sought for the audio-recording of the interviews for accuracy.
I will also indicate that I will come back for more information/checking of the transcripts and vignettes with the interviewees as well as sharing emerging findings/outcomes. All participants will be assigned an alias (to assist with anonymity) which will be used when using direct quotations in the thesis and also for individual vignettes generated. Any composite vignettes developed will also be developed to facilitate anonymity and the collation of key ideas and themes emerging.

An important aspect to consent is to ensure that it is continuing, to that end I will check before each interview and at the start of the focus group that students remain consenting and are reminded of what they have provided their consent for.

Participants will be informed of the processes to assure confidentiality and also of my withdrawal from any assessment related aspects of the programme.

A limitation inherent in this study is that students may not always feel comfortable in being open about their experiences, perceptions and feelings nor about examples where they experienced poor practice or believed that the care interaction resulted in sub-optimal outcomes for the patient. I must also be aware that in re-telling their experiences, some students may become distressed, I will therefore offer 'safety netting' and participants will be reminded that they may withdraw their consent and leave the interview or focus group- this is explained more fully in section 4.11 below.

4.7 If any payment or incentive will be made to any participant, please explain what it is and provide the justification (no more than 300 words).

N/A

4.8 What is the anticipated use of the data, forms of publication and dissemination of findings etc.? (No more than 300 words.)

The vignettes generated provide tangible examples in a way that disguises the individual narrators and explores sensitive experiences; to check out (in the focus group) how 'real', familiar and true to the experiences of others the composite vignette(s) feel so that participants can add to, comment on and problematize.

The findings from the study, including the individual and composite vignettes will be used in the final thesis and potentially in future scholarly publications. Longer term, the findings may also contribute to regional and national curriculum development and educational models.

The vignettes generated during the research process will (following further development and modification once the thesis has been completed) have the potential to be effective and useful material for Enquiry-based Learning within the programme and potentially within other curricula and learning events and potential publications. The educational value of composite vignettes has already been explored within the work of Spalding and Phillips (2007) and Blickem (2008) -in relation to education of professionals.

4.9 Findings of this research/project would usually be made available to participants. Please provide details of the form and timescale for feedback. What commitments will be made to participants regarding feedback? How will these obligations be verified? If findings are not to be provided to participants, explain why. (No more than 300 words.)

Research findings will be shared with participants across the research process:

- Transcripts and individual vignettes will be made available to each interviewee in digital format following round 1 of the interviews
- Focus Group attendees will be provided with the transcript of the group meeting
- Following round 2 of the interviews- again transcripts will be shared

Participants will be advised of all of this as part of the pre-research information provided to them. The findings will normally be shared within 3 months of the interview/focus group meeting and participants will have a month to provide feedback.

At the end of the research project students will be thanked for their involvement (participants will already have indicated on the consent form if they wish to be informed of the research findings) and asked for the address (and whether hard copy or via email) to which information should be sent- as by this time students will be preparing to graduate.

4.10 Please add here any other ethical considerations the ethics committee may need to be made aware of (no more than 300 words).

- **If you are conducting research in a space where individuals may also choose not to participate, how will you ensure they will not be included in any data collection or adversely affected by non-participation? An example of this might be in a classroom where observation and video recording of a new teaching strategy is being assessed. If consent for all students to be videoed is not received, how will you ensure that a) those children will not be videoed and/or b) that if they are removed from that space, that they are not negatively affected by that?**

As the two research methods I will be using involve closeness with research participants there are specific ethical issues related to positionality, insider/outsiderness, values and biases and the collection, analysis and interpretation/reinterpretation of the rich data uncovered of which the researcher needs to be sensitively aware and insightful and reflexive (Josselson, 2007). There is a potential conflict in that I am a lecturer to the programme. My main input as lecturer, facilitator and assessor is in the first 16 months of the programme and so, in planning the timeline for the research study, I have been able to avoid when I will be most involved in the programme- this having now largely been completed. I am also stepping away from involvement in summative assessment the students in the cohort. I will still, however, be personal adviser to a number of students in the cohort. Should this trigger ethical concerns or concerns for students, a change of Adviser can be arranged.

As I am exploring the private, lived experiences of students, it is important to recognise that possible ethical difficulties run through **all** stages of the research process (Brinkmann and Kvale, 2015). Therefore during the research process I propose to maintain ethical awareness throughout from the design, through data collection, analysis, verification and the writing up of the final thesis.

The potential power imbalance in the relationships within my project require me to explicitly articulate the power the interviewees have as they 'own' their stories and experience, without which my research would not be possible as well as remaining vigilant to my power base as a lecturer and researcher.

During in the interview, focus group and data analysis, the collaborative involvement of participants in the process will not only be designed in to support the verification of the findings but as a deliberate strategy to give some power back to the students (Anyan, 2013: Brinkmann and Kvale, 2015). during the research journey. A tension is present (Clandinin and Connelly, 2000) between needing to meet university ethical requirements before students sign and consent to involvement in the research which means they will be given pre-prepared forms and information sheets; these may not continue to be appropriate. The collaborative narrative process over time means that roles may change during the research's lifetime and, best practice indicates, that transcripts, data interpretation and development of the research thesis, be undertaken collectively- so participants' consent can be truly informed.

I will need watchful alertness to the impact on the students, their anxieties and issues of trust and role will be present; emerging during the research process. As a lecturer and researcher I have a duty of care, and as indicated in section 4.11 safety netting will be put in place in the event that any student becomes distressed or requires additional support.

In the anonymization of the vignettes and findings, I will be careful to ensure that neither the student nor any patients nor practitioners are identifiable. In the case of poor practice being shared where there are patient safety or safeguarding issues, I will encourage the student to share this with the link lecturer to the given practice hub area (if this was not done at the time) so that appropriate learning in practice can be enabled. This is consistent with current 'normal' practice.

4.11 What risks or costs to the participants are entailed in involvement in the research/project? Are there any potential physical, psychological or disclosure dangers that can be anticipated? What is the possible harm to the participant or society from their participation or from the project as a whole? What procedures have been established for the care and protection of participants (e.g. insurance, medical cover, counselling or other support) and the control of any information gained from them or about them?

A limitation inherent in this study is that students may not always feel comfortable in being open about their experiences, perceptions and feelings nor about examples where they experienced poor practice or believed that the care interaction resulted in sub-optimal outcomes for the patient. I must also be aware that in re-telling their experiences, some students may become distressed, I will therefore offer 'safety netting' and participants will be reminded that they may withdraw their consent and leave the interview or focus group. Safety netting will include signposting students to support available from the Dean of Students (discussion will take place with them prior to the interviews taking places to prepare them for possible contacts) and/or implementation of the new Distressing Incidents Process, the Concerns about a Student Process, the Student Early Warning and Support and Information System (SEWSIS) and/or support from the Course Director or Personal Adviser. In addition to the standard support services (UEA, School and Trust clinical support and debriefing), when students have experienced difficult situations there is a need to support and monitor students over a longer period; the school already has a number of supportive mechanisms in place (as detailed above) which can be drawn on as needed.

4.12 What is the possible benefit to the participant or society from their participation or from the project as a whole?

Participation in the research will help in shaping understanding of the complexity and meaning around difficult decisions. This will enable any gaps in support and learning to be identified and will suggest ways that the curriculum can be further developed. The ultimate

aim is to understand better what will equip graduating paramedics to improve patient-centered care, the patient experience and safety in complex care episodes.

Ultimately providing a curriculum which enables the registered paramedic to deliver the right care, to the right patient in the right setting thereby avoiding unnecessary, unwanted and expensive hospital-based care (College of Paramedics, 2015) is the aim for pre-registration education.

As the health and social care services are facing huge challenges and admission to hospital for many patients is not the best outcome, I hope that the project can help to enhance paramedic decision-making and patient-centered care, encourage care closer to home, thereby reducing unnecessary hospitalization and distress not just in Norfolk but beyond.

Paramedics work independently and are frequently the first point of contact for patients, with potential (given effective decision-making and clinical skills, referral pathways and access to a range of services) to have a huge and effective impact on reducing Accident and Emergency visits, admissions to hospital and to enable care to be provided in the right place and the right time. Currently a case is being made for paramedics to be permitted to prescribe, which will not be supported until there is evidence of effective education to support this (NHS England, 2015). As with other professions such as nursing who now have prescribing rights, this would enable the appropriately prepared paramedic to see, assess, treat and discharge patients in the community- avoiding delays to treatment incurred when conveying a patient to hospital or 'handing off' the patient to a doctor. A possible impact/benefit of this research could be provide a foundation on which to further develop the registrant to take the role of prescriber when the law permits.

4.13 Comment on any cultural, social or gender-based characteristics of the participants which have affected the design of the project or which may affect its conduct. This may be particularly relevant if conducting research overseas or with a particular cultural group

- **You should also comment on any cultural, social or gender-based characteristics of you as the researcher that may also affect the design of the project or which may affect its conduct**

The group is mixed in terms of ages and gender; there are no BME students. I have not identified any particular cultural, social or gender-based characteristics relevant to the research design.

I am aware that I am older than the students and female which may be both facilitative as well as limiting during the interview and focus group situations.

4.14 Identify any significant environmental impacts arising from your research/project and the measures you will take to minimise risk of impact.

N/A

4.15 Please state any precautions being taken to protect your health and safety. Have you taken out travel and health insurance for the full period of the research? If not, why not. Have you read and acted upon FCO travel advice (https://www.gov.uk/foreign-travel-advice)? If acted upon, how?

- **Provide details including the date that you have accessed information from FCO or other relevant organization**
- **If you have undertaken the EDU Risk Assessment form for Field Study activities, please indicate if this was approved and date of approval**

N/A

4.16 Please state any precautions being taken to protect the health and safety of other researchers and others associated with the project (as distinct from the participants or the applicant).

N/A

4.17 The UEA's staff and students will seek to comply with travel and research guidance provided by the British Government and the Governments (and Embassies) of host countries. This pertains to research permission, in-country ethical clearance, visas, health and safety information, and other travel advisory notices where applicable. If this research project is being undertaken outside the UK, has formal permission/a research permit been sought to conduct this research? Please describe the action you have taken and if a formal permit has not been sought please explain why this is not necessary/appropriate (for very short studies it is not always appropriate to apply for formal clearance, for example).

N/A

4.18 Are there any procedures in place for external monitoring of the research, for instance by a funding agency?

N/A

5. DECLARATION:

Please complete the following boxes with YES, NO, or NOT APPLICABLE:

I have read (and discussed with my supervisor if student) the University's Research Ethics Policy, Principle and Procedures, and consulted the British Educational Research Association's Revised Ethical Guidelines for Educational Research and other available documentation on the EDU Research Ethics webpage and, when appropriate, the BACP Guidelines for Research Ethics.	✓
I am aware of the relevant sections of the Data Protection Act (1998): http://www.hmso.gov.uk/acts/acts1998/19980029.htm and Freedom of Information Act (2005).	YES
Data gathering activities involving schools and other organizations will be carried out only with the agreement of the head of school/organization, or an authorised representative, and after adequate notice has been given.	N/A
The purpose and procedures of the research, and the potential benefits and costs of participating (e.g. the amount of their time involved), will be fully explained to prospective research participants at the outset.	YES
My full identity will be revealed to potential participants.	YES
Prospective participants will be informed that data collected will be treated in the strictest confidence and will only be reported in anonymised form unless identified explicitly and agreed upon	YES
All potential participants will be asked to give their explicit, written consent to participating in the research, and, where consent is given, separate copies of this will be retained by both researcher and participant.	YES
In addition to the consent of the individuals concerned, the signed consent of a parent/carer will be required to sanction the participation of minors (i.e. persons under 16 years of age).	N/A
Undue pressure will not be placed on individuals or institutions to participate in research activities.	NO
The treatment of potential research participants will in no way be prejudiced if they choose not to participate in the project.	NO
I will provide participants with my UEA contact details (*not* my personal contact details) and those of my supervisor, in order that they are able to make contact in relation to any aspect of the research, should they wish to do so. I will notify participants that complaints can be made to the Head of School.	YES
Participants will be made aware that they may freely withdraw from the project at any time without risk or prejudice.	YES
Research will be carried out with regard for mutually convenient times and negotiated in a way that seeks to minimise disruption to schedules and burdens on participants	YES
At all times during the conduct of the research I will behave in an appropriate, professional manner and take steps to ensure that neither myself nor research participants are placed at risk.	YES
The dignity and interests of research participants will be respected at all times, and steps will be taken to ensure that no harm will result from participating in the research	YES
The views of all participants in the research will be respected.	YES
Special efforts will be made to be sensitive to differences relating to age, culture, disability, race, sex, religion and sexual orientation, amongst research participants, when planning, conducting and reporting on the research.	YES
Data generated by the research (e.g. transcripts of research interviews) will be kept in a safe and secure location and will be used purely for the purposes of the research project (including dissemination of findings). No-one other than research colleagues, professional transcribers and supervisors will have access to any identifiable raw data collected, unless written permission has been explicitly given by the identified research participant.	YES
Research participants will have the right of access to any data pertaining to them.	YES

All necessary steps will be taken to protect the privacy and ensure the anonymity and non-traceability of participants – e.g. by the use of pseudonyms, for both individual and institutional participants, in any written reports of the research and other forms of dissemination.	YES

I am satisfied that all ethical issues have been identified and that satisfactory procedures are in place to deal with those issues in this research project. I will abide by the procedures described in this form.

Name of Applicant:	**Rosie Doy**
Date:	**26/02/16**

PGR Supervisor declaration (for PGR student research only)

I have discussed the ethics of the proposed research with the student and am satisfied that all ethical issues have been identified and that satisfactory procedures are in place to deal with those issues in this research project.

Name of PGR Supervisor:	**Esther Priyadharshini**
Date:	**26/02/16**

APPENDIX 2b

INTERVIEW QUESTIONS: ROUND 1:

Introductory Question: 'Often patients who do not have emergency/critical care requirements and who ought not to be conveyed to hospital present with mental health, end of life or complex psychosocial needs.

Can you recall such an occasion?' 'Can you tell me about this?'

Follow up: non-verbal affirmations and minimal prompts such as head nods, ok, mmm, and emphasis on 'red flag' words in the responses will be used.

Probing: 'Can you tell me more about that?' 'Is this a typical experience?' 'Have you other examples of this?' 'How do you feel about that now?'

Specifying Questions: 'What did you (your paramedic educator/other members of the team) do?' 'How did you feel?' 'What happened next?'

Interpreting Questions: 'You mean that...?' 'so you felt...?'

Introductory Question: 'Have you experienced a patient episode where there was conflict between what the patient/family wanted and care resources available?- can you give me an example of this?'

Probing: 'Was this resolved? How?' 'What about risk assessment?' 'What resources would have helped?'

Specifying Questions: 'What did you (your paramedic educator/other members of the team) do?' 'How did you feel?' 'What happened next?' 'Did you need further support? If so what was available...did this help?'

Introductory Question: 'Regarding outcomes when the patient has unmet psychosocial needs… How would you define a 'good' person-centred outcome from a patient's point of view?'

Follow up: …'From the family's perspective…?'

Follow up: …'and from the professional's perspective?'

Probing Question: 'in your experience what helps the practitioner make a safe person-centred decision when there is no straightforward guideline to follow…?'

Introductory Question: ''Looking back on the last 2 years of your programme how do you feel the programme so far has prepared you for the realities of managing patients with psychosocial needs in practice?'

Probing: 'What has been helpful…and why?' 'Any gaps..?'

Exit Question: 'is there anything else you would like to share about your experiences of making decisions when patient have end of life, mental health, complex long-term conditions, dementia etc…?'

Finally: If anything we have talked about today has stirred up issues for you please do contact your Personal Adviser or Course Director or the Dean of Students office for support.

Closure: Thank you very much for sharing your experiences. I will contact you with the transcript of your interview and draft vignette so you can review it for the purposes of checking accuracy, for you to clarify as needed.

APPENDIX 2c

FOCUS GROUP PLAN AND QUESTIONS:

The focus group will be for between 8 and 10 students, not involved in the individual interview process. The focus group will take place between rounds 1 and 2 of the interviews, for up to 90 minutes. Informed consent will be sought from participants who will be provided with information about the research project. In selecting participants, I will seek to get a balance of male and female students and a range of ages represented, to facilitate as great a range of voices as possible.

To enhance ease of access, the group will be convened on a day when the students will be attending university after careful consideration of the demands of the timetable.

As moderator, I will carefully set up the room, welcome participants, ensure that students are consenting to both attendance and recording of the session. I will also explain again the purpose of the group, negotiate ground rules and confirm the arrangements for preserving confidentiality and anonymization of contributions. During the discussion I will listen carefully and sensitively be attentive to group dynamics and the 'emotional temperature' as well as facilitating quieter participants, moving the discussion on to prevent any participant monopolising the discussion. I will give permission for any distressed student to leave the room to compose themselves so long as they return when calmer so that I am sure they are safe.

Engagement of the Group:

Introduction: 'Often patients who do not have emergency/critical care requirements and who ought not to be conveyed to hospital present with mental health, end of life or complex psychosocial needs.

I asked some of your colleagues if they could recall such an occasion? And from their responses I have compiled some of the emerging issues and themes into vignettes.

During this focus group I will be asking you for your thoughts and feelings about these vignettes. Your thoughts and reflections will add further richness to the emerging themes and will serve as a way of verifying my emerging analysis.'

Exploratory and Probing Questions:

Will encourage elaboration and clarification.

Concluding the Group:

I will check and ask whether anyone has anything to add. Following this I will explain the process for their involvement in checking the transcripts.

APPENDIX 2d

Rosie Doy
Reader in Health Sciences
22/02/2016

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Deciding the Right Place of Care: Dilemmas and Decision-making in Paramedic Practice

PARTICIPANT INFORMATION STATEMENT

(1) What is this study about?

You are invited to take part in a research study about how decisions are made for the 90-95% of patients whose needs are not life-threatening and time critical. Deciding what to do can be more difficult when the patient has social care, mental health, end of life and long-term needs and who does not need to be transported to hospital but who may not have the support they need to meet their needs in their home.

I am undertaking a case study with individual interviews and a focus group to gather your experiences so that I can explore and analyse your experiences as a paramedic student as you encounter complex patient situations. The study will draw on data from current guidance, policy and literature regarding the changing role and context of the paramedic role and your real lived experiences to better underatnd how the BSc curriculum
can be enhanced by drawing on the experiences and development of its students.

You have been invited to participate in this study because you are a member of the September 2014 BSc (Hons) Paramedic Science group, the first on the new course and are now in year 2 with a growing bank of practice experience. This Participant Information Statement tells you about the research study. Knowing what is involved will help you decide if you want to take part in the research. Please read this sheet carefully and ask questions about anything that you don't understand or want to know more about.

Participation in this research study is voluntary. By giving your consent to take part in this study you are telling us that you:

- ✓ Understand what you have read.
- ✓ Agree to take part in the research study as outlined below.
- ✓ Agree to the use of your personal information as described.

(2) Who is running the study?

Rosie Doy is conducting this study as the basis for the degree of Doctor of Education at The University of East Anglia. This will take place under the supervision of Doctor Esther Priyadharshini and Professor Nicola Spalding.

Potential Conflict of Interest: I am a module co-ordinator for 2 modules of the programme of study that the student participants undertake- these have already been delivered and assessed for this cohort. I have withdrawn from all future assessment activities for this group of students. I am personal adviser to 9 of the 30 students in the cohort.

(3) What will the study involve for me?

The study involves individual interviews (of 10 students) and a focus group (involving 8-10 students who have not be involved in the interviews). You will be asked to either:

1 be individually interviewed for between 45 and 60 minutes in June 2016 and participate in a further individual interview for between 45-60 minutes in May 2017.

- From those who consent to be interviewed I will select to ensure male and female students are represented and a range of ages, to facilitate a range of views and voices
- Interviews will take place at UEA in a quiet meeting room **(Round 1)**
- The interviews will be audio-recorded to capture your reflections as accurately as possible
- The interviews will focus on your experiences with patients/families whose needs are not time critical and your reflections on what the outcomes were and how decisions were made about their care and management
- The interviews will be transcribed as the emerging ideas and themes identified (this will be done by me, with some involvement of my supervisors as a quality check)
- I will share your transcript with you so that you can correct, clarify and make amendments
- I will anonymise you, giving you a disguised identity and draw key ideas and themes into an individual short anonymised portrait (vignette) highlighting some of the key ideas and themes you discussed during your interview
- I will also draw together the emerging themes and ideas from a number of interviews and combine these into vignettes that will be shared with the focus group to see how 'real' and authentic these feel to other peer students

Round 2 Interviews

- These will again be recorded and, as before, your anonymised identity will be used
- Questions and reflections during the interview will focus on your understanding, feelings and actions to explore your development
- You will again be invited to review the transcript
- You will also be invited to review the relevant parts of the developing dissertation

2 **If you are not involved** in the individual interviews you have the opportunity to participate in a focus group of 8-10 of your cohort lasting up to 90 minutes to be convened in October 2016

- ✓ if you are involved in the focus group you will not be asked to participate in any interviews
- ✓ from those who have provided consent, I will *select* to ensure male and female students are represented and a range of ages, to facilitate a range of views and voices
- ✓ The focus group will take place at UEA and will be audio-recorded to capture your reflections as accurately as possible
- ✓ I will draw together the emerging themes and ideas the 1st round of interviews and combine these into vignettes which will be shared with the focus group to see how 'real' and authentic these feel to you and to gain further clarification, explanation and insights from the group
- ✓ The focus group recording will be transcribed and I will share this with you to check for accuracy
- ✓ All focus group members will be given an anonymised identity
- ✓ You will also be invited to review the relevant parts of the developing dissertation

(4) How much of my time will the study take?

The study will take about 2 hours (for those being interviewed) and 1.5 hours for those of you involved in the focus group. As you will be invited to review your transcript, vignette and, as appropriate elements of the disseratation, this is likely to mean a further day spread over July 2016- summer 2018.

(5) Do I have to be in the study? Can I withdraw from the study once I've started?

Being in this study is completely voluntary and you do not have to take part. Your decision whether to participate will not affect your current or future relationship with the researchers or anyone else at the University of East Anglia.

If you decide to take part in the study and then change your mind later, you are free to withdraw at any time. You can do this by emailing me to advise me of your decision. There will be no consequences for you if you do choose at any time to withdraw from the study.

If you take part in an interview you are free to stop the interview at any time. Unless you say that you want us to keep them, any recordings will be erased and the information you have provided will not be included in the study results. You may also refuse to answer any questions that you do not wish to answer during the interview. If you decide at a later time to withdraw from the study your information will be removed from our study records and will not be included in the study results, up to the point that we have analysed and published the results and this would include the submission of the dissertation for assessment purposes.

If you take part in a focus group, you are free to stop participating at any stage or to refuse to answer any of the questions. However, it will not be possible to withdraw your individual comments from our records once the group has started, as it is a group discussion.

If you decide to withdraw from the study, we will not collect any more information from you. Any information that we have already collected, however, and that has been included in anonymised form within a composite vignette will be kept in our study records and may be included in the study results.

(6) Are there any risks or costs associated with being in the study?

There is a risk that in sharing your practice reflections you may experience feelings of distress, frustration or anger as you may be revisiting difficult patient care episodes. In this event, you may briefly leave the interview or focus group or ask for the interview to be suspended and/or reconvened. In the event that you are distressed you will be supported in gaining access to appropriate support mechanisms for example the Dean of Students services, your GP, Occupational Health.

I will normally (as far as possible) arrange the interviews and focus group on days when you are scheduled to attend UEA and taking account of the requirements of your timetable to avoid you incurring additional travel expenses. I do not anticipate that there will be additional costs for you associated with taking part in this study.

(7) Are there any benefits associated with being in the study?

Your contribution will enable a broader discussion and understanding of the real life issues around making decisions related to patients with complex non-time critical needs. Your insights will also contribute to the development and review of the BSc (Hons) Paramedic Science curriculum here at UEA and perhaps more broadly into pre- and post- registration paramedic education. The ultimate aim being to enhance the holistic care for patients in Norfolk and Waveney and beyond and to influence practice education support and organisation.

(8) What will happen to information about me that is collected during the study?

Audio-recordings will be taken of individual interviews and the focus group- these will be transcibed and analysed to develop vignettes (described earlier) which you will be able to review. Composite vignettes will be developed drawing from ideas and insights from a number of students (using anonymised identities) and these will be shared with focus group participants. Anonymised extracts from interviews, focus group and vignettes will be included within the final dissertation. I also anticipate drawing on the anonymised data in future publications in professional and academic journals and conference presentations.

My supervisors (named earlier) will have access during the study to the transcripts, vignettes, data analysis and drafts of the dissertation for the purposes of quality assuring the emerging findings and developing dissertation.

Personal information will be kept confidential and you will be assigned an anonymised identity.

In circumstances where patient safety issues or poor practice is revealed it may be necessary to report this using the appropriate UEA processes.

It is not intended that information collected during this study will be used for future research studies. The data will be kept for 10 years and then destoyed.

By providing your consent, you are agreeing to us collecting personal information about you for the purposes of this research study. Your information will only be used for the purposes outlined in this Participant Information Statement, unless you consent otherwise. Data management will follow the 1998 Data Protection Act and the University of East Anglia Research Data Management Policy (2013).

Your information will be stored securely and your identity/information will be kept strictly confidential, except as required by law. Study findings may be published. Although every effort will be made to protect your identity, there is a risk that you might be identifiable in publications due to the nature of the study and size of your cohirt and/or the results. In this instance, data will be stored for a period of 10 years and then destroyed.

(9) What if I would like further information about the study?

When you have read this information, Rosie Doy will be available to discuss it with you further and answer any questions you may have. If you would like to know more at any stage during the study, please feel free to contact
Dr Esther Priyaharshini, Senior Lecturer, EDU, e.priya@uea.ac.uk, T: 01603 592858
Or
Nicola Spalding, Professor of Occupational Therapy, n.spalding@uea.ac.uk, T: 01603 593075

(10) Will I be told the results of the study?

You have a right to receive feedback about the overall results of this study. You can tell me that you wish to receive feedback in addition to being able to review your own tarnscripts, vignettes and dissertation extrats to which your experience and data has contributed. This feedback will be in the form of an executive summary of the overall results. You will automatically be provided with this feedback after the study is finished unless you indicate that you do not wish to provide me with contact details so that this can be shared following your graduation.

(11) What if I have a complaint or any concerns about the study?

Research involving humans in UK is reviewed by an independent group of people called a Human Research Ethics Committee (HREC). The ethical aspects of this study have been approved under the regulations of the University of East Anglia's School of Education and Lifelong Learning Research Ethics Committee.

If there is a problem please let me know. You can contact me via the University at the following address:
Rosie Doy
School of Health Sciences
University of East Anglia
NORWICH NR4 7TJ
r.doy@uea.ac.uk

If you would like to speak to someone else you can contact my supervisors:

Dr Esther Priyaharshini, Senior Lecturer, EDU, e.priya@uea.ac.uk, T: 01603 592858
or
Professor Nicola Spalding, Professor of Occupational Therapy, HSC, n.spalding@uea.ac.uk, T: 01603 593075

If you are concerned about the way this study is being conducted or you wish to make a complaint to someone independent from the study, please contact please contact the Head of the School of Education and Lifelong Learning, Dr Nalini Boodhoo, at n.boodhoo@uea.ac.uk.

(12) OK, I want to take part – what do I do next?

You need to fill in one copy of the consent form and and return it to me by email to r.doy@uea.ac.uk.

Please keep the letter, information sheet and the 2nd copy of the consent form for your information.

This information sheet is for you to keep

PARTICIPANT CONSENT FORM (1st Copy to Researcher)

I, ... [PRINT NAME], agree to take part in this research study.

In giving my consent I state that:

- ✓ I understand the purpose of the study, what I will be asked to do, and any risks/benefits involved.
- ✓ I have read the Participant Information Statement and have been able to discuss my involvement in the study with the researchers if I wished to do so.
- ✓ The researchers have answered any questions that I had about the study and I am happy with the answers.
- ✓ I understand that being in this study is completely voluntary and I do not have to take part. My decision whether to be in the study will not affect my relationship with the researchers or anyone else at the University of East Anglia now or in the future.
- ✓ I understand that I can withdraw from the study at any time.
- ✓ I understand that I may stop the interview at any time if I do not wish to continue, and that unless I indicate otherwise any recordings will then be erased and the information provided will not be included in the study. I also understand that I may refuse to answer any questions I don't wish to answer.

OR

- ✓ I understand that I may leave the focus group at any time if I do not wish to continue. I also understand that it will not be possible to withdraw my comments once the group has started as it is a group discussion.
- ✓ I understand that personal information about me that is collected over the course of this project will be stored securely and will only be used for purposes that I have agreed to. I understand that information about me will only be told to others with my permission, except as required by law.
- ✓ I understand that the results of this study may be published, and that publications will not contain my name or any identifiable information about me.

I consent to:

- **Audio-recording** YES ☐ NO ☐
- **Reviewing transcripts** YES ☐ NO ☐
- **Reviewing my vignette, composite vignette elements** YES ☐ NO ☐
- **Would you like to receive feedback about the overall results of this study?** YES ☐ NO ☐

If you answered **YES**, please indicate your preferred form of feedback and address:

☐ Postal: _____

_____

☐ Email: _____

.....
Signature

....
PRINT name

.....
Date

PARTICIPANT CONSENT FORM (2nd Copy to Participant)

I, ... [PRINT NAME], agree to take part in this research study.

In giving my consent I state that:

- ✓ I understand the purpose of the study, what I will be asked to do, and any risks/benefits involved.
- ✓ I have read the Participant Information Statement and have been able to discuss my involvement in the study with the researchers if I wished to do so.
- ✓ The researchers have answered any questions that I had about the study and I am happy with the answers.
- ✓ I understand that being in this study is completely voluntary and I do not have to take part. My decision whether to be in the study will not affect my relationship with the researchers or anyone else at the University of East Anglia now or in the future.
- ✓ I understand that I can withdraw from the study at any time.
- ✓ I understand that I may stop the interview at any time if I do not wish to continue, and that unless I indicate otherwise any recordings will then be erased and the information provided will not be included in the study. I also understand that I may refuse to answer any questions I don't wish to answer.

OR

- ✓ I understand that I may leave the focus group at any time if I do not wish to continue. I also understand that it will not be possible to withdraw my comments once the group has started as it is a group discussion.
- ✓ I understand that personal information about me that is collected over the course of this project will be stored securely and will only be used for purposes that I have agreed to. I understand that information about me will only be told to others with my permission, except as required by law.
- ✓ I understand that the results of this study may be published, and that publications will not contain my name or any identifiable information about me.

I consent to:

- **Audio-recording** YES ☐ NO ☐
- **Reviewing transcripts** YES ☐ NO ☐
- **Reviewing my vignette, composite vignette elements** YES ☐ NO ☐
- **Would you like to receive feedback about the overall results of this study?** YES ☐ NO ☐

If you answered **YES**, please indicate your preferred form of feedback and address:

☐ Postal: _____

_____

☐ Email: _____

.....

Signature

....

PRINT name

.....

Date

.....

APPENDIX 2e

DATA GATHERING METHODS:

- In-depth interviews with a sample of 10 year 2 paramedic students; followed through and re-interviewed in year 3 of the programme (June 2016 and May 2017)
- Generate vignettes
- Facilitate focus group (8-10 students not involved in the individual interviews)
- Appraise Trust, professional body and national protocols and guidelines articulating what is considered best - practice (Feb- May 2016; update during 16/17)
- Review of the literature and of published patient experience surveys (ongoing)
- My reflexivity, reflective memos
- Collaboration and co-production of interpretation and meanings

TIMELINE PROPOSED:

December 2015

1. Refine interview and focus group questions

March 2016

2. Apply to EDU Research Ethics Committee

June 2016

3. Conduct 10 interviews

July- December 2016

4. Transcription of interviews and data analysis- vignettes developed

26th September 2016

5. 10,000-word literature review formative assessment

October 2016

6. Focus Group (8-10 students)- test initial ideas using vignette(s)

January- April 2017

7. Continue data analysis and write-ups

May 2017

8. 2nd round of interviews with the same 10 students

June- December 2017

9. Continue data analysis

January- June 2017

10. Drafting and continue data analysis

27th March 2017:

11. 10,000- word methodology formative assessment

25th September 2017:

12. 15,000 formative assessment- Issues Emerging from the Data

26th March 2018:

13. 15,000 formative assessment- Results and Conclusions

30th September 2018:

14. 60,000-word Final Thesis submission

APPENDIX 2f EDU ETHICS APPLICATION FEEDBACK 2014-2015

APPLICANT DETAILS	
Name:	Rosie Doy
School:	HSC
Current Status:	**Staff / PGR Student** **(delete as applicable)**
UEA Email address:	**r.doy@uea.ac.uk**

EDU Recommendation	✓
Approved, data collection can begin	✓
Minor revisions/further details required (see feedback below)	
Not Approved, resubmission required (see feedback below)	

EDU REC feedback to applicant: Committee meeting date …16.3.16……..

Comments: the committee found this to be a very impressive application and one that deals with a potentially sensitive issue. We are happy to approve your project and you may begin data collection.
You have covered all of the relevant areas successfully and have provided a very detailed account of how you will address issues over positionality and power regarding your relationship with the participants. This is identified clearly in your 'conflict of interest' statement in the PIS and this is an example of good practice in this area. We believe that this helps to assure your participants of their right to withdraw too. You have also provided clear evidence of the issue over the anonymity assurances of your cohort (which is small) and the care taken regarding anonymity of any potential patients they may refer to in the development of your vignettes.
Congratulations on developing a strong application and good luck with the project itself

Ethical approval has now been given: Kate Russell

Signed: EDU Chair, Research Ethics Committee

Appendix 3 PARTICIPANT PSEUDONYMS

Interviewees	**Focus Group**
Eliza	Jayne
Georgie	Katie
Holly	Mark
Jenny	Mary
Marie	
Rebekah	
Rob	
Taryn	

Appendix 4 CONSOLIDATED CHART OF THEMES

InVivo Coding from Round 1 Interviews	**Themes from Round 1 interviews**	**Focus Group InVivo Coding**	**Focus Group Themes**	**Coding from Round 2 interviews**	**Themes from Round 2 interviews**
'you feel on your own' Knowing how to navigate the system No safety net in place Not having direct access/not 24-hour (as we are) Depends on the receptiveness/support of the professional/GP Conflict between crew and GP No room at the inn	**Frustration/ gaps/lack of referral pathways 1**	Crisis Team won't assess Crisis team not accessible Crisis team needs to change	**Gaps in specialist Mental health services 1**	Different services in different localities Talking to the Crisis team Getting advice Different expertise in different settings	**Understand other agencies' criteria and reasoning 3**
'No one recipe' Each situation is different Medicine by numbers How the programme has helped to make me feel at home with how linked social is with psychological The little things matter (caring for the cat/dog etc.) Can't decide if I was right or not?	**Lack of tick box approach/each patient is different 1** **Right/not right- a spectrum? 2**	everyone's coping mechanisms are different not assessing by numbers we've had more training than some colleagues should take holistic approach coming off the algorithm	**Holistic psychosocial care 2/3**	Lots of experience Lack of exposure (less confidence) Large or small bucket of experience Conversations with other healthcare professionals Exposure (placements) in other settings	**Experience and confidence in making complex decisions 3**

				Thinking on your feet Gathering all the information	
When there is no End of Life plan/paperwork/anticipatory medicines/support in place 'we had to resuscitate' 'wrong choice for the patient' Working outside your remit Confusion between Mental Capacity Act and Mental Health Act Safeguarding Dissonance Feeling guilty Doing the best you can Generalizing own views about end of life conversations Supporting the patient's wishes What's lawful What to treat and when to treat	**Best interests/law/what guidelines say 1**	Had to take to hospital (no DNAR) She died on the way to hospital Patient reluctantly agreed to go to hospital Wasn't the right thing to do Personal responsibility as it's not best for the patient Coping with emotions (patient, family and self)	**Emotional labour 2**	Opening the professional curtain Not letting my emotions spill onto theirs Not losing control Almost breaking the 4th wall- so the patient see you are human Back in the crew room my curtain is open Sharing and supporting It touched a nerve Going home and crying	**Front stage and backstage 2**

				Developing better strategies to deal with feelings	
Putting our foot down Encourage Careful (slow) to build trust Imbalance of power (patient and professional) Trying to persuade them (hard versus soft approach)	**Power/persuasion 1**				
What more could we do/nothing more we could have done Serious incident appraisal if it goes wrong Going to court Blame/ fear of professional misconduct Protecting our registration What is best for us (rather than the patient) Walking the tightrope (difficult balance can fall)	**Risk tolerance versus protecting registration (risk discourse) 1**	wouldn't put my registration on the line		Try to minimize risk Step outside the guidelines Moving from thinking in the abstract to drawing on experience and being confident to go off piste Taking the person in context Watch and wait Conservative Management Less defensive practice No one guideline Making peace with the decision	**Contextualized decisions 3**

Needing more 'practical tools' When patients won't just tell you 'pull out of my box all of the options available to me' Discovering the trigger	**Not knowing what to say 1**			Sitting with patient and being calm Taking it slow Not what I would like/ what the patient wants Listening carefully Picking up little clues Establishing a rapport quickly Responding to 'I want to die' Not just doing the obs Picking up the signals	**What lies beneath 3**
A 'vicious cycle' Doing the ABCDE Nothing we can do Treatable symptoms	**'There's nothing medical'… 1**	not a medical issue	**low priority 1**		

'Gucci' perception of trauma and critical care - Look at the clinical interventions we can do Mental health is not our work - We can't do anything - It doesn't make a difference Falls- not another 'granny downer'	**Valuing (or not) different aspects of paramedic work 1**	Treat according to perceived remit/not our job 'It never used to be like this' (They) Don't have consideration of psychosocial elements of the job People don't realize (about the psychosocial stuff) when they join		Physically ok but needs mental health input (and pursues this)	
Lack of privacy Patients feeling judged 'it's not the appropriate place' Safer than remaining at home	**Hospital as a place of safety 1**	long wait they'll sober up they'll discharge themselves the patient) hates going to hospital	**A&E a safe place but not the right place 1**		
Use of tools Refusal to answer questions Crisis team won't assess (if drunk) Assessing capacity versus patient rights and best interests	**Capacity/alcohol 1**	between a rock and a hard place	**Risk and capacity 1**	Moral, legal and ethical conundrum What do we do that is right and what is legal Putting all the parts of the story together	**The can of worms 1**
'A typical overdose' Being manipulative It's not serious self-harm	**Stigma and stereotyping of mental health patients 1**	stigma attached to self-harmers		Lots of PRFs	**Missed opportunities 2**

We can't do anything		(some colleagues) reject mental health completely The frequent caller		If we didn't know she was a frequent caller Should have done more Safeguarding and vulnerability Having to 'sell' the patient	
Working collaboratively with the patient Taking things slowly Just sit with the patient Doing the 'little things' - Smith's 'little gestures of caring' (1992)	**Building a rapport 2**	Non dismissive Listen to the patient Don't trivialize Non judgmental Good models			
Can't rely just on what the (JRCALC) guidelines say How risky is it? Safeguarding A legal minefield What the police and lawfully do Assessing what they have actually taken	**Responding to crisis/suicide and self-harm 1**	Suicide as opposed to self-harm It's common A lot of patients like this	**Complexity of mental health patient in crisis 1**	Overdose decisions are usually straightforward Potential volatility and violence Own safety	**Safety 1**
Conflict at the end of life Patient's wishes differ from family's	**Conflicting narratives 1**	What's best for family not the patient This is my patient	**Best interests of whom patient v family 2**	Educating the family and carers Responding to family concerns	**Confidence in making the right decision- doing or not doing 3**

Relative having 'a piece of the puzzle' End of life/wishes Everyone shied away from making the decision Being on different pages Mediation Was it right or not? Making peace (with the complex decision) x2 Seeing the whole person when making a contested/complex decision	**Reflection on action 2**	Let's keep her where she is comfortable It can be fixed at home		Family panic It's not that serious Guidelines, rules/DNAR and the patient at that moment Talking through decisions and decision making Willing to try extra things (so long as it's safe)	
Caring Mentors/DLOs /Managers/GPs/Crisis Team/Police Cultural differences and attitudes Alone but not alone Debriefing after 'jobs' Mentor/Educator Professional conversations Own resilience Family -i.e. backstage	**Support of other professionals and support systems and coping during and after 'jobs' 2** **Debriefing and reflection 2**	you have a partner…you have a plan		Not asking permission- having a professional discussion Practice pegged to best practice of peers (not just paramedics) Supervision The wider AHP team's expertise Nothing wrong in asking for advice Advice as to what to do	**Clinical supervision and networks 2**

Resources and plans not in place/not everyone aware as we are Dissonance 'no matter how much teaching we get on a subject if the services aren't there there's only so much you can do' They've given us the theory but it's not like that in practice Not seen tools used in practice	**Difference between theory/textbook and practice/reality 1**	We've had more training		The academic side gives me confidence A box of experience A bank of knowledge You've been hands off We have the toolkit	**Having in depth-understanding (from knowledge/academic prep) 2** **Fly my pretties 3**
Remaining at home (preferred place of death) The state of the room Making referrals No hard and fast rules How to come to a final decision	**Leave at home? 1**	Threatening harm Feeling forced to take to A&E May have an assessment (MH) there Not being seen for a long time Probably will abscond Safety netting Worse in hospital Delving into the history	**Safe or not to leave at home 1**		
Intuition Common sense	**Tacit knowledge (Eraut) 2**				
Going in all guns blazing 'watch and wait'	**Straddling 2 worlds-culture 2**	Hard and soft approach	**Developing/changing as a profession 2**	I felt alone, there are more of us now	**Graduateness 3**

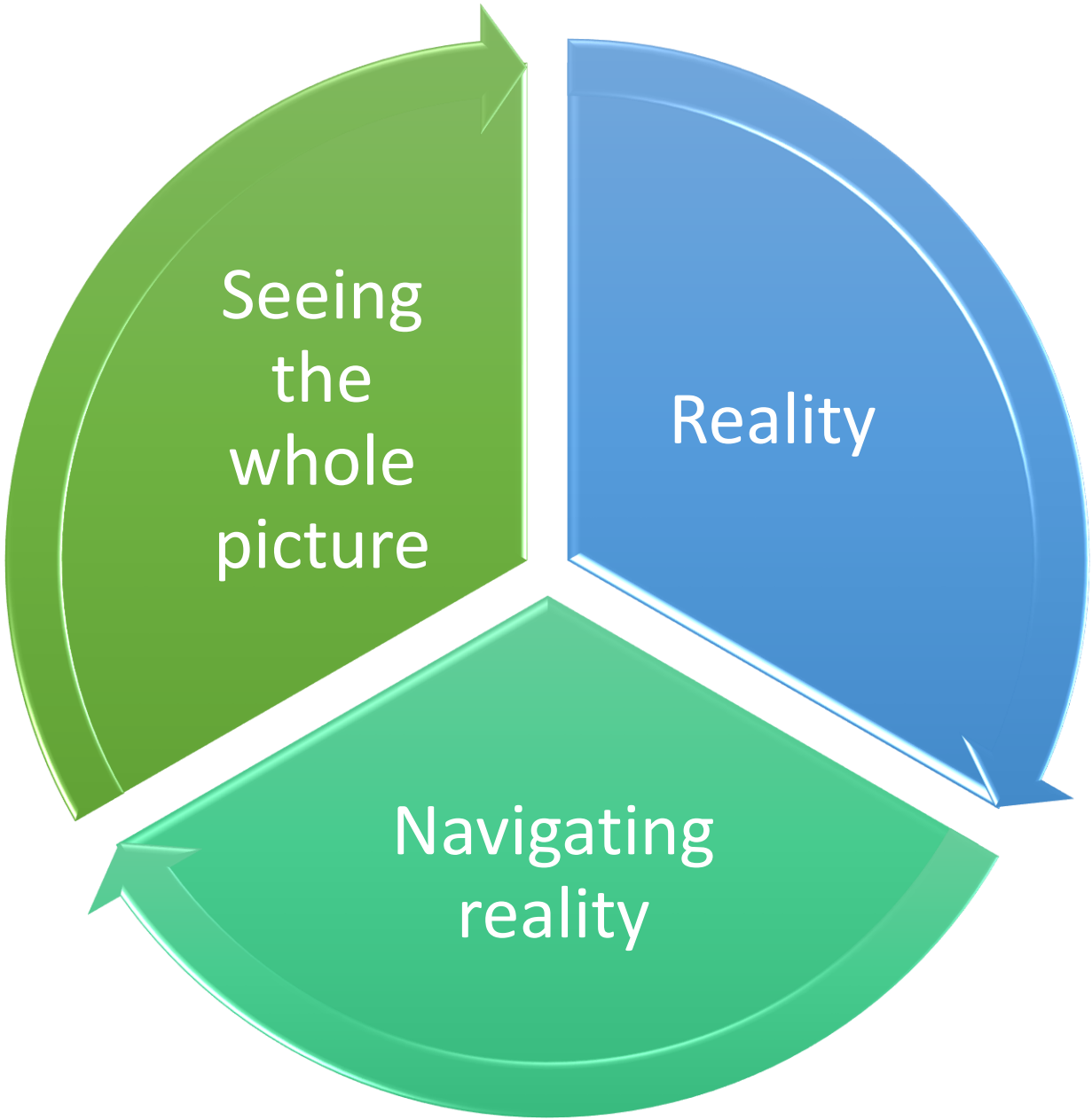
Ambulance culture and the wider context GPs on the cheap		Trained to follow guidelines Young profession 'I've no idea why you still do this' Asking why are we giving this? Leading change This doesn't work anymore…let's change it		Non ambulance placements Unlocking level 6 thinking Evaporating the culture of fear Competent practitioners know what to do but feel they can't do Hardest decision not to do anything Technically could intervene if following guidelines/letter versus spirit of 'the rules' Being in the 'grey area' Will no longer operate on someone else's registration Gaming the information to	

				influence the out of hours doctor	
Would colleagues find this reasonable? Being professionally uncomfortable Reasonable decision from patient but against 'protocol'	**Confidence 3**	Just an assessment tool overrule delve going off piste the bigger picture safety netting	**The bigger picture in making difficult decisions 3**	Learning from the whole team It's ok not to know everything	
		Sticking up for the patient Open to discussion Being the patient's advocate Being patient	**Role model 2**	Doing all the decision-making Being the lead clinician Mentor just confirming what I am doing No longer asking permission (being given permission) Mentor saying 'yes I support your decisions' Supported practice in making decisions Educator in the hall Teaching junior students Managing conflict yourself	**Mentor as coach 2**

				Not just being reactive Thinking things through to the end Building the big picture Gathering all the information Important to take a full history Knowing the options Involving the patient Uncertainties How has the programme with psychosocial aspects Not putting things into 'little boxes of certainty' Knowing or not what happens next	**Metacognition and decision-making (insightfulness) 3**

				(in the patient journey) Knowing yourself Being more assertive Running everything over in my head Explaining your decisions and thinking Scary to be on my own without a mentor	**Reflection in action 3**

Consolidated themes addressing the research aim: the explore how BSc Paramedic Science students develop decision-making skills (complex):


Seeing the whole picture
Reality
Navigating reality

A- REALITY SUB-THEMES:

1. **Gaps in services**
2. **Hospital or home**
3. **There's no rule book**
4. **They don't all agree/conflicting narratives (professionals/family/patient)**
5. **Not our job/it's not medical**
6. **Mental health stigma and complexity**
7. **Theory versus reality**
8. **Front stage**
9. **It's risky**
10. **Swampiness**
11. **Not knowing what to say**
12. **Capacity/rights/the can of worms**
13. **Developing as a profession**

B- NAVIGATING REALITY:

1. **Building a rapport**
2. **Taking it slowly**
3. **Support, supervision, debriefing and networks**
4. **Reflection on action**
5. **Coaching**
6. **Experience/exposure**
7. **Good role model(s)**
8. **Emotional labour/backstage work**
9. **Learning to walk the tightrope**
10. **Having the knowledge**
11. **Straddling 2 worlds**
12. **The right/not right spectrum**

SEEING THE WHOLE PICTURE:

1. **Contextualised decisions**
2. **Person-focused/holistic approach (comfortable with the psychosocial aspects)**

A: Reality (it's a swamp)

- Theory: reality tensions (gaps in service etc)
- No rule book/recipe
- Risk versus defensive practice: Conflicting approaches and narratives

B- Navigating Reality (Walking the swaying tightrope)

- Support, supervision and backstage work
- Coaching and taking the lead
- Experience/exposure (bucket of experience)

C- Seeing the whole picture (Managing the conundrum/making peace with the decision)

- Confidence not to act
- Having the toolkit
- What lies beneath
- Making peace with the decision
- The spectrum of rightness/wrongness

3. **Confidence**
4. **What lies beneath**
5. **We have the toolkit**
6. **Not doing**
7. **Graduateness**
8. **Ok with no little boxes of certainty**
9. **Insight and self-awareness**
10. **Metacognition (reflection in action)**
11. **Making peace with the decision**

Vignette 1	Vignette 2	Vignette 3	Vignette 4	Vignette 5
Has been drinking MH history Patient decision-making and capacity-threatening behaviour Risk Crisis team won't come out/ no services Have to take to hospital- "A&E a safe place but not the right place"	Suicide and self- harm, overdose/ cutting when is it serious/not 'serious'? How do you assess/how do the specialists assess? Suicidal ideation versus vague thoughts Risk Refusal to go to hospital Role of police- help/escalate Who to involve	Establishing rapport Sex of crew attending "getting to the root cause" Refusal to access MH services Privacy/time/dignity/the wait in A&E What happens next?	Planned 'good death' for their "final chapters" but no paperwork DNAEBL Conflict family/ care home and patient Own feelings/beliefs/ societal attitude	Managing symptoms at home versus following the rubric/ checklist Defensive practice versus contextualised practice- what helps/hinders Leave at home or take to hospital What difference does GP and other support for shared decision-making lead to? Feeling professionally uncomfortable

Vignette 1 (Mental Health):

“patient in crisis”
“risk and capacity”
“Crisis Team won’t assess”
“A&E a safe place but not the right place”
“not a medical issue”

Vignette 2 (Mental Health):

Suicide and self-harm, overdose/cutting when is it not 'serious'?
How do you assess/how do the specialists assess?
Suicidal ideation versus vague thoughts/ Risk
Legal framework- capacity and what about Mental Health Act
Refusal to go to hospital
Role of police- help/escalate
Who to involve
And then what?

Vignette 5 (End of Life):

This was largely drawn from Rob's first interview, the patient episode underlying this was compressed in the portrait vignette in the previous chapter.

Managing symptoms at home versus following the rubric/checklist
What difference does GP and other support for shared decision-making make?
Defensive practice versus contextualized practice- what helps/hinders
Leave at home or take to hospital
Medical needs i.e. likely fractured Neck of Femur
Defensive versus "courageous practice"
Feeling professionally uncomfortable

Dramaturgical Coding of Composite Vignette 1:

Assessing Risk Keeping Safe	OBJ (Participant objectives/motives)
Crisis team won't assess (patient is drunk) Long wait in A&E Patient capacity "no medical reason to take to hospital" "he picked up a knife"	CON (Conflicts and obstacles)
Deliberation Wait and see	TAC (strategies/tactics to deal with conflicts)
Thoughtful "deliberation" Realistic	ATT (Attitudes)
Frustration Worry (about leaving patient at home)	EMO (Emotions)

Fear	
No services when you need them Nowhere else to take him except A&E We are on our own	SUB (Subtexts)

Focus Group response to that composite Vignette:

In Vivo Coding:

Composite vignette	**Focus Group response:**
"patient in crisis"	"It's common" "A lot of patients like this" "I don't know what available"
"risk and capacity"	"between a rock and a hard place" "suicide as opposed to self-harm" "wouldn't put my registration on the line" "just an assessment tool"; "overrule"; "delve" "you have a partner…you have a plan?"… "everyone's coping mechanisms are different" "the bigger picture" "safety netting"
"Crisis Team won't assess"	"not accessible" "Crisis team needs to change"
"A&E a safe place but not the right place"	"long wait" "they'll sober up" "they'll discharge themselves" "hates going to hospital"
"not a medical issue"	"low priority"
	"stigma attached to self-harmers"

Focus Group response to that composite Vignette:

Dramaturgical Coding:

Assessing Risk Keeping Safe	"just an assessment tool"; "overrule"; "delve" "you have a partner…you have a plan?"… "safety netting"	OBJ (Participant objectives/motives)
Crisis team won't assess (patient is drunk) Long wait in A&E Patient capacity "no medical reason to take to hospital" "he picked up a knife"	"wouldn't put my registration on the line" "low priority" "they'll discharge themselves" "hates going to hospital"	CON (Conflicts and obstacles)
Deliberation Wait and see	"the bigger picture"	TAC (strategies/tactics to deal with conflicts)
Thoughtful "deliberation" Realistic	"everyone's coping mechanisms are different" "suicide as opposed to self-harm"	ATT (Attitudes)
Frustration Worry (about leaving patient at home) Fear	"not accessible" "Crisis team needs to change" "between a rock and a hard place"	EMO (Emotions)
No services when you need them Nowhere else to take him except A&E We are on our own	"stigma attached to self-harmers" "long wait" "they'll sober up"	SUB (Subtexts)

Dramaturgical Coding of Eliza's narrative of the drama surrounding the suicidal teenaged girl explored in the portrait in the previous chapter:

In relation to the drama recounted about the young girl who wanted to drown herself introduced in the portrait vignette of Eliza, there were a significant number of characters in this intense scene (both on-stage at the friend's house) and off-stage at her parent's house. In terms or perspectives and positions for the plot and staging:

- The patient (and her notebook detailing her thoughts in words and pictures). At first 'standoffish' and not wishing to engage with the clinicians
- The friend and her father- apparently willing for the patient to stay there overnight
- The patient's parents (very worried but in the end apparently happy to let the patient do what she wished and stay over with her friend as they seemed not to want to "go against her")
- Police officers (Eliza recognised they could not invoke Section 136 as the patient was not in a public place) who stated that "kids run off all the time…it doesn't mean they are going to kill themselves"
- The clinicians- unclear about what was actually going on. Was the patient 'being manipulative', was the patient "serious" about the desire to kill herself? What were the "dynamics of the relationship between the patient and her parents"? Trying to piece the whole drama together whilst feeling that being at her friend's house might be an excuse for her to go off and harm herself.

Assessing risk Keeping safe Uncovering the whole story Preventing her suicide attempt Take to hospital Safeguarding	"degree of planning and risk identified" "she'd written extensively about her plan" "practice attempts" "so many people involved" "adamant…she didn't want to go to hospital" "right help…in the right place" "going to hospital would put a barrier in the way of her carrying out her plan"	OBJ (Participant objectives/motives)

Different viewpoints Patient not talking Capacity and rights Outside the guidelines	"it took a long, long time" "she's being manipulative" "kids run away all the time…doesn't mean they will kill themselves" "balance the patient's right to make her own decisions about treatment" "what everyone else feels comfortable with"	CON (Conflicts and obstacles)
Consult all players Softly, softly Minimize conflict Find a medical reason	Talking with all Long time getting to know the patient and trying to get her to open up "her clinical observations not right…tachycardic" Reading her notebook "put our foot down"	TAC (strategies/tactics to deal with conflicts)
She's being manipulative There is significant risk	"so many opposing views" Teasing out details "even if she was being manipulative…the notebook shows her serious intentions" She didn't want to talk about her feelings	ATT (Attitudes)
Worry (about leaving patient at home) Discomfort Facing a dilemma Shock	Not covered by the guidelines "dealing with people's emotions and dynamic situations" Patient agreed (quite suddenly and easily) to go to hospital	EMO (Emotions)
What's the agenda? Are games being played?	Why was she angry that the team had read her notebook?	SUB (Subtexts)

What is really going on here? Where are the boundaries?	What really lies under all this? With her parents…? Why did the patient just capitulate? There's a transactional exchange going on	

Appendix 5 SNAPSHOT VIGNETTE- THE FOCUS GROUP

The focus group takes place on a Monday, 3rd October 2016, starting at 12.30- as it is over the students' lunch break due to their timetable being quite busy- I had advised them I would have refreshments and some food to keep them going. We are in a classroom, one of the ground floor with windows and I have pushed the tables to the sides of the room and arranged the chairs in a semi-circle. The refreshments are on a trolley placed to one side so students can help themselves as the arrive before sitting down. The computer and data projector are on as I want to show as well as read each vignette as we move on from discussing one to the next and so on. I have checked the two digital recorders with external microphones and one is placed on each side of the room.

Six students had indicated they would attend, at 12.20 two of the four students arrive, help themselves to drinks and snacks and dead on 12.30 another two students arrive. We wait a few minutes while I checked the digital recorders, in the hope that the final two would arrive. I ask them if they have read and completed their consent forms (which I have sent each three times, firstly when kicking off the research before the summer, then two weeks ago and finally last week to those who had contacted me to confirm their attendance) and offer a fresh hard copy to those who have forgotten to bring this. The room is cool but not cold and some weak sun is filtering through the windows at the back of the room. The students are tucking in and chatting to each other, I am anxious but we need to start even though not all students have arrived as they have a session at 13.30. I collect the consent forms before we formally start the focus group.

I look around the group, they look up at me, I talk through the consent and research process, checking the students understand and consent to the process. I explain that I am recording the session, will transcribe it and clarify student questions.

I explain about the composite vignettes and how they have been developed and that these will be shared with the group to gather their views and experiences and to see if their experiences are similar or not, whether their feelings and thoughts are comparable or not as this enables me to gather 12 different viewpoints together and to check emerging themes for the 'ring of truth'. I go through the process of gaining feedback from students on the transcript and explain that any names will be removed or disguised and that the transcript will not include all the ums and ers… because I started doing this with the 1:1 interviews and it interrupted the flow. This will give students the opportunity to correct or clarify things. I clarify that I will be re-interviewing the students who were interviewed individually towards the end of year 3. This will explore how their experiences have changed. In the meantime, I would be looking at some of the theory and exploring the issues that students have raised with a view to feeding insights into the curriculum to further improve it, to derive possible publications from the rich data and

so on. Student identities will be disguised. Transcripts will only identify students by initials so they know who is who when offering clarification and insights. These initials would be changed and all identities disguised when using any extracts within the research, thesis, enquiry-based learning etc. I ask if students are happy with this and are consenting; all confirmed this was ok.

Smiling at each and giving each eye contact I say "what I have are five scenarios. This is the first one (this is mental health focused-MH 1). As I said drawn from different elements from the interviews… (I give time for students to read it fully)…….

Composite Vignette 1: *" During a night shift we went to a patient who was in crisis, had drunk a lot of alcohol, hadn't done anything at that time towards ending their life but was threatening that if we left he would try to end his life. The mental health service- the Crisis Team- knew him but as he was drunk wouldn't be able to assess him that night. It was difficult for us to assess capacity and how risky it would be to leave him at home as 'A&E was be a safe place but not the right place'. We spent a lot of time deliberating, as we knew he would have a long wait in A&E and take hours to sober up, and that there was no medical reason to take him to hospital; he became threatening and picked up a knife."*

….There is quite a lot in there I say, so maybe you could comment on whether things in this vignette are similar or not to things that you've experienced…?

Immediately students start to answer:

Mary: *"Quite common I'd say"*

Jayne*:"…especially the thinking that A&E is a safe place but not the right place." I ask this second student to say a bit more about this…" well I think you just know that they're not just going to explore mental health when they're under the influence of alcohol. We don't, I don't feel it safe to leave him at home when he's threatening self-harm or worse and especially when he does that right in front of you by picking up a knife so I know you would feel forced to take him to A&E knowing he might get a mental health assessment there, but it wouldn't be for a while."* (Enthusiastic nods and grunts of agreement from two other students).

Katie*: "A lot of patients we've had in the same sort of situation, they want some help but A&E is the only option when the Crisis Team are not available or cannot access the patient but when they get to A& E they are given a fairly low priority as they haven't got a medical issue. They realize well 'I'm just going to sit here for hours and not going to be seen, they're not going to give me any sort of attention'. A lot of time they just discharge themselves. Many times, we've been back to A&E to check up on a patient and see how a patient's doing and they say 'well actually they walked out' or they discharged themselves because there's no medical reason for them to be receiving attention. And a lot of times is out of hours and the mental health team it doesn't sort of happen at those hours so they end up back in the same…there's been no definitive outcome for them."*

Mark: *"Following on from what my colleagues have said about attendance at A&E, they may well abscond. If they abscond it's part of a wider workload on the hospital itself, they've got a patient who'll potentially harm them self or members of the public that has absconded but it's between a rock and a hard place …you've got leave at home or take to hospital which are the options so you wouldn't want to leave a gentleman with these issues at home but you've also got to consider taking him to hospital as has been said, he'll probably abscond from the department and either come back into the system a few hours later or not."*

As I listen, all students are elaborating on this type of situation, with multiple examples from each being shared about what is or is not available especially out-of-hours, the frustration expressed by mental health patients with services including how they have reported as being "hated" by staff in A&E. I hear complex and troublesome examples of capacity and risk assessment being explored and Mark, like Rob, talks about the shortcomings of the suicide risk assessment tool in JRCALC when used to score, but recognizes its value *"I feel there's really intent to tend to self-harm there but it sort of helps you to get into the history as well so you can sort of say 'you have a partner? You have a plan?' and all that, so you start to delve into it and when you have a systematic approach you can think about it in one go, not "you haven't got a plan…"*. I remember that Georgie talked about drilling down in questioning around suicidality.

The group members are now very eager to chip in and there is a feeling of energy in the room as they share their experiences and thoughts ranging through stigmatization and the attitudes of some colleagues of those who self-harm especially related to people taking overdoses of paracetamol.

Katie *"I think a lot of people think that they are just being silly just taking a few paracetamol, and actually just inconvenience everybody as opposed to the ones we go to who really have the intention and you go to them almost too late. But I think the way we should approach those who self-harm is that they need something, there's a reason why they've done what they've done, so I think just not being dismissive of that just because yeah it was just a few paracetamol and it will give you tummy ache and make you feel rubbish."*

At times several students try to talk at once at this point. At one point two students are bouncing points off each other about a patient whom they both know.

I am filled with a feeling of pride evoked by the mature, open and thoughtful discussions. I recognize that I am really pleased to hear explicitly and implicitly in what they are saying, that what I had hoped when the curriculum was being developed, i.e. a more holistic patient-centered approach would inform the values and behaviours of our BSc Graduates is being articulated, and its feels genuine. As an explicit example, Jayne says

"paramedics in their training now should be taking a more holistic approach of the patient just as nurses do but unfortunately some paramedics don't take that approach. They worry about their registration because they've been taught that 'this is your guideline, if it's not in there take

them to hospital'. And I think as the profession develops and more people become graduate paramedics and psychosocial (issues) are really pushed in to what makes us a clinical, I think that these problems will be addressed."

I could have gone on and on with this snapshot vignette as there was so much emerging from the group and the ideas were coming thick and fast, not just related to this first composite vignette, but in relation to all five shared…There was really almost not enough time with the group, though each vignette was shared and evoked enthusiastic and wide ranging reflective discussions. I was really relieved, eager and motivated to drill into this rich data and to examine the interrelationships and connections with the emerging themes from the first round of interviews.

Appendix 6 Composite vignettes

Mental Health 1:

During a night shift we went to a patient who was in crisis, had drunk a lot of alcohol, hadn't done anything at that time towards ending their life but was threatening that if we left he would try to end his life. The mental health service- the Crisis Team- knew him but as he was drunk wouldn't be able to assess him that night. It was difficult for us to assess his capacity and how risky it would be to leave him at home as "A&E was be a safe place but not the right place". We spent a lot of time deliberating, as we knew he would have a long wait in A&E and take hours to sober up, and that there was no medical reason to take him to hospital; he became threatening and picked up a knife.

Mental Health 2:

We were called by the police to a patient who had tried to hang herself, but had been stopped. Medically she was ok (we'd done our normal checks) but we needed to find somewhere safe for her as A&E was not the right place and she said she would try again if left alone. She hadn't had any previous contact with mental health services and she had capacity. We contacted the nearest mental health hospital and they agreed she needed to be admitted but they did not have a bed. The patient didn't really want to go to hospital. My colleague was frustrated as we were tied up for hours with this patient. I've seen the approach like "well if you stay here your Mum will come tomorrow and find you dead" trying to scare her, and the softer approach "come on let's go now, we want to help, you won't always feel this way".

Mental Health 3:

Sometimes it's hard to assess risk and clearly the patient isn't coping and may have taken an overdose, and we know what's been taken and it's ok from Toxbase. But the patient is having a bad day or has self-harmed...quite superficial cuts but there's nothing medically wrong. That's tricky, trying to get to the root cause and decide whether they're safe to be left at home. It's hard as you have to pull different tools out of the toolbox. In time critical cases you follow the check list, with these mental health situations it feels uncomfortable as these patients may have a lack of support and maybe the patient has a lack of trust in mental health and acute hospital services. You need to spend a lot of time with them to get a better sense about what to do and you can't assess by numbers. These decisions are hard when you haven't had as much training as mental health workers have, although we have had more than many of our colleagues. I've seen some colleagues who would take the patient to A&E anyway to cover their backs.

End of Life:

I remember going to a patient who'd fallen out of bed and had hip tenderness, so most likely had a fractured hip. He was very, very ill and very distressed as well as being short of breath and had a DNA CPR in place and was rapidly deteriorating. But obviously there were interventions we could do and when the backup crew came to help us with lifting him we were planning on sending him to hospital for an x-ray. His daughter arrived and said "does he really need to go to hospital it isn't what he wants at all". She said that they'd had a review with the GP a few days ago and the patient had said he did not want to go to hospital as he wanted to die at home. He'd planned his last hours, the music he wanted to listen to and so on. There were anticipatory medications which we administered and we cleaned him up as he had messed his bed and so on. We phoned the GP who backed up what the daughter had said. We also contacted the palliative care team who came before we left so we could handover to them. That's was so good, that they'd come before we left.

The other crew, they were unhappy saying "he's probably got a fracture so needs to go for an x-ray, we need to take him to hospital to protect our backs…" the GP and my mentor said "let's make him comfortable, what is the point of an x-ray as he won't be operated on and he is likely to die on a trolley in A&E…not what he wants at all". It was quite uncomfortable as the Ambulance Guidelines don't cover this…

The legal minefield:

Sometimes I feel that myself and my colleagues are wading into a legal midfield. A few times I've come across situations where the family are saying "they must go to hospital" or "don't move them" and they are very strong willed and maybe the patient just seems to go along with it. There may be no plans in place for example to keep a patient at home and no paperwork re a DNA CPR and then the team, we have to commence resuscitation. Acting in the best interests of the patient, especially where the patient doesn't have the capacity to consent and the family for example don't seem to grasp how unwell the patient is, is also frustrating and difficult. Another difficulty I've experienced can be when the patient has capacity and the family want to make the decision and there's nothing legal in place, or when a patient is clearly suicidal but has capacity…

Appendix 7 Extracts' Mapping

Interviews	Swaying…	Section	Steadying…	Section	Skilled…	Section
Eliza tracked	XXX	Not in the guidelines/ emotions Capacity/young person/refusal Lack of services/alcohol and MH and crisis team (learning their criteria)	XX	Reflective conversations/ Services Learnings for future Appreciating other viewpoints Managing uncertainty/ emotions	XX	Doing a good job Person-focused Outside guidelines Bringing it all together Skilled MH Managing emotions (resilience?)
Georgie tracked	XXXXXXXXXX	Every pt is diff lack of script/what do you say? Subtle questioning No 2 people are the same We have the knowledge but not all the 'how to'… Safety-netting Rock and hard place /support/MH capacity/refusal/ threat of police	XXX	Reflective conversations/ Debriefing No 2 patients the same/experience helps Honour patient's wishes/comfort with doing nothing medical Rehearsal with mentor	XXXXX	Bigger picture/holistic gaze/patient involvement/ ok with ever patient being different Preparedness – can't be prepped for everything Can't use the same script
Holly tracked	XXXXX	Differences Gaps in service Begging for section Can't assess capacity	X	Learning from GP exp Watch and wait	XX	Consider all options Don't be blinkered

		Advance plan/DNAR/role of relatives and GP/a better death? Being (un)prepped Police/capacity DNARCPR		Discussions with mentor/lead role		Teaching/keeping knowledge fresh Being assertive
Jenny tracked	XXX	Difference DSH Best interests/capacity Crisis Team/ what's a crisis?	X	Lead clinician 'I've taught you everything I know' Mentor/lead role Managing emotions	X	Clinician/autonomous practitioner Out of the box
Marie tracked	XXX	In at the deep end Every situ is different Big variation (GP) Police/force We can't force-unfortunately CPR no docs	XXXXXX	What's good for the patient (not us) Discussion/ reflective conversations Bucket of experience Not in the guidance (that's ok) New insights Mentor boundaries (EoL) Mentor as container Theory and linking practice Questioning mentor Managing emotions/	XX	Ok to go against what feels natural/not 'do' Knowing limits Ok to ask for support (being safe and insightful)

				processing		
Rebekah tracked	XX	Different styles (Overdose) Being prepped/GSF gap What's psychosocial Novice Risky situations				
Rob tracked	XX	Uncertainty Out of comfort zone	XX	Knowing/self awareness/more at peace underpinning knowledge personal/ professional emotions	XX	Different views Competence/limits/being bold Challenging practice
Taryn tracked	XXXX	Being (un)prepared/ training MH/ MH crisis Impact of service user stories No room...getting lost in the system	XXXX	GP/wider experience/ exp learning Reflective conversations/ Debrief Similar but not (and that's ok) Support from sharing ideas/buck stops here Don't ask permission	X	Time
FG						
Jayne tracked 29/09	XXXXX	Being prepped/ more training 'it's not my job' Negative attitudes			XX	Gaze

		MH/alcohol and crisis				
Katie tracked 29/09	XXXXX	Revolving door A&E not the right place Difficult relationships Capacity/ Protecting registration Bad death ? Conflicting views Protecting registration				
Mark tracked 29/09	XX	Rock and Hard place Critique of suicide assessment tools and different ways of dealing with MH				
Mary tracked 29/09	XXXX	Stigma/MH and crisis Person-focused understanding Covering your backs Low priority/nothing medical Bad death/no DNAR				
CVs	CV4 (Uncertainty) MH3 MH1 MH2 CV5 Wading into the legal minefield				CV The Good Death	
Rob Moving Vignette	Scene 1- Conflicting Role Expectations-				Scene 3- The Reflective and Reflexive Paramedic	

	The Suicidal Patient Scene Scene 2- No Little Boxes of Certainty				Scene 4 The Good Death Scene 5 The End...of the Beginning...	
Rebekah Moving Vignette	Scene 1- I am not ready yet to be a 'performer' …it's chaotic and really not easy at all		Scene 2- Rehearsing the Paramedic Role and The Supporting Cast		Rebekah Scene 3- Final Rehearsals…but not yet ready to perform solo…	
Eliza Snapshot Vignettes			Scene 1- Emotional Labour- Compartmentalization		Scene 2- The Overdose	
Taryn Snapshot Vignette					Snapshot- Taking it Slowly	Why you refer Holistic/reading between the lines (rule free) Role modelling Teaching reflection
Jenny M/V and S/V			Jenny Scene 1- Emotional Labour- The Curtains between Front and Backstage		Jenny Scene 2- Always Learning	Owning mistakes/safety Confidence Fly away my pretties

					Snapshot- Fly away my pretties	Emotion mgt
Focus Group Snapshot	Appendix 5					