EVALUATION OF ADVANCED PAEDIATRIC AND NEONATAL PRACTICE WORKFORCE DEVELOPMENT

PHASE 1 – JUNE 2018

Part of Cheshire & Merseyside Women and Children’s Partnership – ‘Improving Me’
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Executive Summary
This report is the first of three phases of a longitudinal evaluation of the Advanced Clinical Practitioner (ACP) specialist education modules, delivered by Kids Health Matters, in partnership with Liverpool John Moores University. The specialist education modules are funded as an NHS Vanguard project, innovating advanced practice education through blended learning and flipped classroom approaches. Graduates from the Masters-level programme will be fully qualified Advanced Clinical Practitioners, specialising in paediatric or neonatal care, which will support the diminishing paediatric medical workforce. There are currently two cohorts on the programme, the first of which will graduate in October 2018.

The dataset is comprised of findings from an on-line survey and two Focus Groups.

The evaluation identified a range of themes within the following broad areas of:

- The Advanced Clinical Practice role, and what it means to innovate through the ACP role
- impact and making a difference to the teams, services and organisations where trainees are working
- pedagogy and the model of delivery, and how this is experienced by trainees.

Organisationally, there are distinct challenges in establishing and sustaining the ACP role; new roles require changes to services and understanding and acceptance from other healthcare professionals and a move away from traditional working practices. At an individual level, trainee ACPs have a high degree of confidence in articulating their role to others, although enacting the role is often bound up with personal apprehension and fear. Nevertheless, trainee ACPs report an enthusiasm for their role, and whilst there is apprehension regarding the increased accountability level, they report an enjoyment of the liberty in being able to autonomously manage the care of children and their families.

Data was not collected within this phase from the clinical settings that trainee ACPs are working in and this could be a consideration for future phases. Many of the frustrations concerning role identity, role boundaries, and role transition may be facilitated by application of a specific ‘change approach’, providing a systematic and managed approach to implementation. Further,
collecting data from clinical settings could be extended to include outcomes for children and families, and any measures that provide insight into any ‘Return on Investment’. Whilst a broadly positive impact on the service was identified, there appears to be an inconsistent approach to service innovation, outcomes and Return on Investment. Creation of a common outcome framework could form part of the ‘change approach’.

It is also evident that trainees are undergoing significant personal growth, ranging from increased resilience to improved digital confidence and literacy, improved time management, and the ability to manage stress.

Trainees were very positive about the flipped classroom, and the experience of blended learning. For trainees in employment with busy family lives, the accessibility of the specialist modules promotes learning, as it is a convenient way to study. Moreover, it affords trainees the opportunity to understand how they learn better, by understanding their ‘saturation’ point, as well as developing self-organising and time management skills. There is a vibrant community of learning, and relationships were reported as strong, facilitative and positive between trainees. The team from Kids Health Matters were highly valued by trainees, and the educational and personal support is delivered through the cultivation of strong interpersonal relationships; this is highly commendable although may be difficult to replicate at scale.

As this is first phase of the evaluation, key questions remain about: overall attainment, how the ACP role continues to be developed and sustained, and ultimately how the role impacts upon improved outcomes for children and families. Moreover, attention to outcomes and ‘return on investment’ may be useful foci for future evaluation points, supported by data collection in clinical settings/organisations.

Note on terminology – there are a range of study trainees, some who will work as Advanced Paediatric Nurse Practitioners, others as Advanced Neonatal Nurse Practitioners, or Advanced Paediatric Paramedics, and the overarching title for all advanced practitioners is Advanced Clinical Practitioner. For consistency, the terms ‘trainee’ will be used to denote the study trainees, and the overarching term Advanced Clinical Practitioner (ACP) will be used to encompass all variations of specialty.
# Contents

List of Figures .......................................................................................................................... 6
List of Abbreviations ................................................................................................................ 7
1. National Context ................................................................................................................ 8
2. Cheshire and Merseyside Vanguard & The Workforce Transformation Project ................. 10
   Advanced Clinical Practice .................................................................................................. 11
   Overview of the Educational Content ................................................................................ 13
3. The Approach to Evaluation ............................................................................................. 15
   3.1. Evaluation Questions ................................................................................................. 16
   3.2. Phase 1 Evaluation Design and Methods .................................................................. 17
4. Analysis ................................................................................................................................ 18
5. Summary of Findings ........................................................................................................ 19
   5.1. On-line Survey ........................................................................................................... 19
   5.2. Focus Group Qualitative Dataset ................................................................................ 21
6. Discussion of Findings ........................................................................................................ 25
   6.1. The Role of the ACP .................................................................................................. 25
       6.1.1. The Decision-Making Process .......................................................................... 26
   6.2. Role Identity ................................................................................................................ 29
       6.2.1. Linking workforce planning, workforce development and service innovation ..... 33
       6.2.2. Transition and autonomous decision-making ...................................................... 37
   6.3. The Role of Praxis ....................................................................................................... 38
   6.4. Personal development: emotional responses and resilience ......................................... 39
7. Impact .................................................................................................................................... 40
   7.1. Services for Children, Young People and Their Families ............................................ 40
   7.2. Impact - Interpersonal: Peers and Teams .................................................................... 41
   7.3. Pedagogy & Mode of Delivery ..................................................................................... 42
       7.3.1. The Flipped Classroom ....................................................................................... 42
       7.3.2. Blended Learning ................................................................................................. 44
   7.4. Support, Mentorship and Supervision ......................................................................... 47
   7.5. Factors Conducive to Learning ................................................................................. 48
8. Next Steps for the Evaluation Process ............................................................................. 50
8.1. Phase 2: Post Graduation Evaluation ................................................................. 50
8.2. Phase 3: Longer Term Impact Evaluation ............................................................ 50

Appendix 1 .................................................................................................................. 52
Appendix 2 .................................................................................................................. 56
Appendix 3 .................................................................................................................. 74
List of Figures

Figure 1 Overview of the MSc Advanced Paediatric and Neonatal Practice Programme .......... 14
Figure 2 Diagram showing layers of context, from national to local level .............................. 15
Figure 3 Kolb's Learning Cycle.......................................................................................... 45
List of Abbreviations
ANNP  Advanced Neonatal Nurse Practitioner
ACP   Advanced Clinical Practitioner
APNP  Advanced Paediatric Nurse Practitioner
FG    Focus Group
GP    General Practitioner
HEI   Higher Education Institute
KHM   Kids Health Matters
MSc   Masters Degree
1. National Context
There are currently a range of pressures identified in the delivery of health services for children and young people, both in terms of quality and outcomes, acute service usage, and workforce pressures.

Whilst overall child health has improved in the last 40-50 years, there is a change in the presenting conditions, from acute childhood illness to more chronic recurring illnesses. However infant morbidity and mortality in under 5-year olds within the UK is not keeping pace with the reductions in other OECD (Organisation for Economic Co-operation and Development) countries\(^1\). Moreover, hospitalisation rates, particularly in children under 5-years old have been steadily increasing\(^2\). There is a view that health services for children and young people remain largely geared to an epidemiological picture of 40-50 years ago, rather than current needs.

Commentators on health policy have also attributed increased hospitalisation rates to access to primary care services\(^3\). In terms of providing expert paediatric care, it is noted that only 30-40% of GPs have specialist paediatric training\(^4\). The diminished access to paediatric expertise in primary care is also compounded by GP workforce pressures overall, with an additional 5,000 GPs required to support service delivery\(^5\).

Within acute service provision, there is also concern about the paediatric medical expertise available now, and in training for future delivery\(^6\). Whilst paediatric consultant numbers have risen slightly, workload has also increased, and there has been a reduction in Speciality and

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Associate Specialist numbers. The ‘fill’ rate for training posts has reduced, meaning fewer posts filled in the future, and shifts in recruitment because of the planned departure from the EU (Economic Union) are exacerbating the existing workforce pressures. This has resulted in significant concern for a paediatric workforce to meet both demand, and importantly, quality standards, now and in the future.

In summary, paediatric health services are under increasing pressure relating to a complex interplay of factors including: workforce and skills shortages, an increase in the number of emergency admissions (with the concomitant financial pressures), and a disparity in health outcomes.

The health policy response is summarised in the *Five Year Forward View*, a key component of which is to innovate new models of care. The policy is underpinned by funding to 50 Vanguard services and projects\(^7\), with the aim of exploring and developing new models of care. Some of the Vanguard projects emphasise the interface between primary and secondary care, promoting fluidity of care across this interface, which in turn requires new skills and roles within the workforce. Consequently, workforce solutions have included the promotion of role diversity, such as the development of Advanced Clinical Practitioners\(^8\); this also responds to the underlying workforce capacity pressures identified above.

Whilst the needs of children and young people may be reflected within different projects as part of a Vanguard scheme, the Cheshire and Merseyside Vanguard (part of the Acute Care Vanguard Collaborations) was the only initiative focused on the needs of women, children and young people.

\(^7\) [https://www.england.nhs.uk/new-care-models/vanguards/](https://www.england.nhs.uk/new-care-models/vanguards/)

2. Cheshire and Merseyside Vanguard & The Workforce Transformation Project

The Vanguard scheme is supported by a Cheshire and Merseyside Women’s and Children’s Partnership (CMWCP). The Partnership includes the 27 NHS organisations that deliver services to women and children across the region and includes provider Trusts, clinical commissioning groups and health networks.

One of the primary objectives of the CMWCP was to address acute paediatric and neonatal workforce challenges as the precursor to service redesign across the region; including those at the primary and secondary care interface. To address significant workforce challenges (outlined above), one identified solution was to develop a group of Advanced Clinical Practitioners, with well-developed paediatric or neonatal skills and expertise. Many Higher Education Institutes (HEI) which offer a Masters-level ACP qualification do not offer specific educational input on paediatric and neonatal care.

Kids Health Matters have created paediatric and neonatal clinical modules which can be offered as part of a 3-pathway Masters-level ACP qualification, therefore taking advantage of an existing HEI’s infrastructure and quality assurance but simultaneously offering specialist paediatric and neonatal modules.

These modules include:

- Neonatal Critical Care Modules
- Ambulatory Paediatric Care Modules
- Acute Paediatric Care Modules
- Paediatric and Neonatal Physical Assessment and Physiology Module

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Advanced Clinical Practice

An Advanced Clinical Practitioner is a professional with advanced clinical skills who can assess, diagnose and treat their patients. Commonly nurses have become ACPs although the qualification is open to other non-medical professions such as paramedics, clinical pharmacists, allied health professionals.

The ACP role is defined\(^\text{10}\) as:

> Advanced clinical practice is delivered by experienced, registered health and care practitioners. It is a level of practice characterised by a high degree of autonomy and complex decision making. This is underpinned by a master’s level award or equivalent that encompasses the four pillars of clinical practice, leadership and management, education and research, with demonstration of core capabilities and area specific clinical competence. Advanced clinical practice embodies the ability to manage clinical care in partnership with individuals, families and carers. It includes the analysis and synthesis of complex problems across a range of settings, enabling innovative solutions to enhance people’s experience and improve outcomes.

The ACP qualification is at Level 7, or Masters level award, and practitioners are required to have studied and be competent in the ‘four pillars’ of advanced clinical practice which are:

1. Clinical Practice
2. Leadership and Management
3. Education
4. Research

\(^{10}\) Multi-professional framework for advanced clinical practice in England (2017) Health Education England
The specialist educational modules developed by KHM are currently being used by trainees studying for a Masters in Advanced Practice at Liverpool John Moore’s University; two cohorts have been funded with 18 in the first, and 31 in the second cohort. If all trainees graduate and secure ACP posts, this is an additional 49 posts into the paediatric workforce.

The specific aims of the project are:

- To create primary care-based paediatric training hubs to serve as a vehicle for the diffusion of paediatric expertise from their (traditional) acute care origins into the community setting
- To create a paediatric and neonatal non-medical workforce that is not bound by traditional primary/secondary divisions
- To support clinical leadership for the development and support of a paediatric community-based workforce (medical and non-medical) that will deliver the new models of care to children, young people and their families
- To develop a community-facing paediatric training option, to be piloted in the North West that operationalises the wider national debate regarding the current training model and the degree to which it is matched to the acute and community-based health needs of UK children.
- To develop the advanced paediatric and neonatal (nurse) practitioner (AP(N)P) workforce for frontline paediatric service delivery across a variety of primary and secondary care settings to address local service redesign innovations as well as improve, delivery, access and quality of care for children, young people and their families.

The hybrid design across a HEI (Liverpool John Moores University) and a local social enterprise (KHM) has several advantages, namely:

- The amplification of the existing paediatric and neonatal advanced practice educational offer at regional HEIs through creation of an ambulatory paediatric pathway
- The creation of a ‘consistency of product’ regarding paediatric and neonatal advanced practice development that is also pliable enough to adapt to local-led service developments
• The provision of a stable, skilled paediatric/neonatal-specific workforce that contribute to the stabilisation of the service gaps in paediatric and neonatal medical training rotas

• Ability to capitalise on previous NHS workforce innovations (and the associated learning); e.g. the fledging ACP role, the brand-new physician associate role, and other advanced practice, non-medical roles that could contribute to the paediatric workforce

• The development of an innovative model of education and training for new workforce roles that is transferable to the wider NHS and applicable to other organisations, population groups and role developments

Overview of the Educational Content

The overall structure of the Masters programme – and the responsibilities divided between KHM and HEI is presented in Figure 1 below.

Trainee ACPs are using 0.6wte of their substantive role in Year 1 to undertake their study comprising of:

1. weekly participation in web-based, live, scheduled sessions
2. on-line self-directed content
3. achievement of associated clinical hours and competencies,

whilst working in a supernumerary way. In Year 2, study time reduces to 0.4wte and their substantive role transitions to a novice ACP role, working in a supernumerary way, whilst consolidating new skills, and completing their dissertation and research components of the Masters programme.
The purpose of the evaluation is to explore the delivery and impact of the ACP role in the two cohorts. The evaluation is timed to occur 15-16 months after the start of Cohort 1 (so with Year 1 completed, moving into Year 2), and 4-5 months after the start of Cohort 2 (still in the middle of Year 1). Future evaluation points will examine the graduation of the first Cohort, and a final third evaluation point, approximately 6 months post-graduation from the programme.

The diagram below illustrates the contextual layers and their corresponding aims surrounding the project:
3. The Approach to Evaluation

A longitudinal approach to the evaluation has been agreed with the Programme Team, related to:

- the duration of the programme (2 years)
- the anticipated changes in individuals, from trainee to novice ACP, and graduate ACP in practice
- capturing individual responses to the programme in the two different cohorts, at different points on the programme
- ongoing design and improvement of the programme
- the anticipated period of consolidation for qualified ACPs post-programme.
3.1. Evaluation Questions

The evaluation questions were derived from discussion and attention to influencing factors and preceding work:\(^{11}\):

- the stage of the project
- the progress of existing trainees
- what is important to the KHM Team to continue to improve the overall design of educational content
- what is important to funding bodies and the wider academic, learning and development community

The agreed evaluation questions were:

- What is the trainee ACP’s experience of role identity?
- What is the experience of trainees during their role transition - from trainee to proficient ACP?
- How do other health care professionals respond and interact with both the trainee ACP, and the qualified ACP?
- What is the impact of the ACP within the clinical setting?
- What is the trainee’s experience of this model of delivery – the ‘flipped classroom’?
- What are the factors conducive to learning, for example, the role of the ACP community and peer support?
- What is the role and experience of formal teaching support, mentorship and supervision?

3.2. Phase 1 Evaluation Design and Methods

A Participation Information Sheet was developed (Appendix 1) and disseminated electronically to all trainees, in both cohorts, by the KHM Team in early January 2018.

An on-line survey was developed to gather quantitative information and inform the areas for further consideration within the Focus Groups. The survey was jointly developed with the KHM Team and the Evaluation Team; invitations to participate were sent out from the KHM Team; the covering e-mail assured responders their responses would not be personally identifiable. An on-line survey was opened at the beginning of January 2018, with 43 responses in total, representing an 88% response rate. A summary of the survey questions and responses can be found in Appendix 2.

Following this, two focus groups were held, commencing with trainees in the first cohort firstly with trainees who embarked on the Masters programme in September 2016, and secondly with trainees in the most recent cohort, which commenced in September 2017. For the first group, on-line and face-to-face discussions were held with two facilitators (total number of participants was 14, 4 in person, 10 on-line), and for the second focus group, one on-line group was facilitated, followed by a larger group working with two facilitators (total number of participants was 30, 13 in person, and 17 on-line). The facilitators were the author of this report and the co-facilitator is a Paediatric registrar who has an interest in the paediatric training generally, and the evaluation process.

To ensure everyone had time to consider the questions, trainees were provided with a copy of the Focus Group questions in advance of the session and encouraged to write notes; these were also collected to form part of the qualitative dataset. For on-line groups, comments which are ‘texted’ in as chat were also recorded, and these also formed part of the qualitative dataset.

Following the first Focus Group, the facilitators held a debrief session, designed to identify practical and methodological areas for improvement. The Focus Group schedule remained
unchanged as it was felt trainees responded well to the questions, and the main areas for improvement were practical.

Both sessions had some practical challenges:

- In the first Focus Group, the face-to-face group met in the same room where the facilitator worked with the on-line group therefore there are multiple occasions where not all comments are fully audible. Further, some technical issues with the recording of the on-line group meant that not all discussion was captured. Where ‘chat’ dialogue was provided, this was included in the analysis; here trainees would contribute to the discussion via the ‘chat’ function, as opposed to verbally. Further, most of the trainees contributed via the audio function only rather than audio and video; this limited the degree of rapport that could be established, and it also made it more difficult to attribute comments to trainees during the analysis phase. For the purposes of presenting the analysis, it is usual practice to attribute quotations to each trainee, however, for reasons outlined, this was not possible. The presentation of more illustrative quotes from C2 is not intended to suggest that the themes were stronger or more prevalent, it simply reflects that more data was recorded for C2. Where there were specific insights, the facilitators have used their own notes to provide a second-hand account of what was reported in the Focus Groups.

- In the second Focus Group, the facilitators worked in two separate groups coming together for a plenary review of findings. Both sessions were recorded and there was some overlap in themes and findings, and not all trainees fully participated, with some more vocal than others.

The focus group schedules can be found in Appendix 3, and in total 44 trainees participated.

The recordings were partially transcribed and supplemented from the facilitator’s notes, both from the Focus Group sessions.

4. Analysis
The outputs of each of the methods constitute the overall dataset for the Phase 1 Evaluation, namely:

- Survey results
- Focus group recordings

Survey results are collated and presented visually in Appendix 1.

The focus group recordings and any narrative comments from the survey were thematically analysed. Approaching the qualitative data in this way offers flexibility across theoretical and epistemological approaches, and as there is no rigid framework or ‘recipe’ to follow, it is more suited to real-world evaluations.

The approach could be described as semi-inductive – the themes identified are influenced by the evaluation questions (which in turn were influenced by a scan of the evidence base), and what is of key interest to the KHM Team and project sponsors.

A theme can be described as “repeated patterns of meaning” and includes semantic and latent themes. Semantic themes can be described as more ‘surface’ themes, whereas latent themes are more concerned at sense-making the underlying assumptions, beliefs, values and concepts.

5. Summary of Findings

5.1. On-line Survey

The on-line survey provided initial insight into many of the themes which were explored in more detail at the Focus Groups.

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12 drawing on the approach of Braun and Clark (2006)
Demographics of the trainees reveal that the majority (30) have a first degree, with 13 having undertaken some form of post-graduate study. Many trainees were aged between 30-39 (23) or 40-49 (16), and the majority came from hospital settings (including neonatal and tertiary units) (40), with only 3 trainees in community services.

One of the motivating factors for trainees was the presence of other ACPs in their clinical settings, acting as role models, and a desire for personal development. The three most integral characteristics of the ACP role were:

1) Ability to demonstrate team leadership, resilience and determination managing complex or unpredictable situations
2) Ability to utilise best practice research to guide clinical practice
3) In-depth knowledge of paediatric anatomy and physiology

Most trainees (17) felt confident in describing the ACP role to others.

Within the organisation, there was a range of ‘organisational readiness’ reported, from no plan (1) to extremely clear plans (3), however, for most trainees (23) there was a moderate degree of planning in progress with additional work required. A similar set of results was seen in relation to plans for the individual roles of trainees.

A strong and consistent understanding was reported on the differentiation of the ACP role from previous nursing roles, and between ACP and medical roles.

The content of clinical modules, clinical placements and the workplace were all seen as preparing the trainees for the ACP role, although in respect of clinical decision-making, most trainees felt they were ‘becoming prepared’ (22).

Understanding of the ACP role was reported as ‘very clearly understood’ for consultants (18), and other ACPs (22). Understanding varied in other professional groups, with most registered nurses ‘understanding well’ (19). Doctors in training reported as only ‘moderately understanding’ the role (17), along with most of other allied health professionals, non-registered staff, managerial staff, and administrative staff (20, 18, 16, 16).
There was a clear increase in confidence in digital technology prior to the course with 3 trainees reported as having ‘no confidence’ and 16 ‘moderately confident’ to being immersed in the course, with 17 reporting ‘moderately confident’ and 15 ‘very confident’.

Whilst there was a variety of ways to access the digital content in terms of hardware, location and software, all trainees appeared to have a positive engagement with digital technology and reported focus, motivation, engagement, and participation. Similarly, the flipped classroom delivery was reported as associated with improved understanding, learning independence, connectedness (other learners and lecturers), participation and attainment.

5.2. Focus Group Qualitative Dataset

It is interesting to note that the themes were consistent across the dataset and could faithfully be described as repeated patterns. A summary of the themes from the qualitative dataset is presented below:

**The Decision-Making Process**: there are two elements to this theme; firstly, what motivated the individual decision to apply for the Masters programme and secondly, the organisational decision-making to facilitate a staff member to enter the Masters programme.

Individual decision making was concerned with what motivates and drives nurses to make personal and, in some cases, financial sacrifice, these were identified as: personal ambition and desire to progress clinically as opposed to managerially, the ability to improve and extend the care given to children and families and being able to support team members and minimise the impact of workforce shortages, particularly amongst medical colleagues. The importance of role models was also seen as quite influential.

There was variation in the organisational decision-making processes to agree to support nurses on the programme, for some this was relatively straightforward and for others, it was described as a protracted process with many different sub-processes and checks to complete.
**Role Identity:** many of the trainees cited their emotional response (fear, anxiety, apprehension) regarding their new identity, and how this was mitigated (or not for some) by the presence of other ACPs in their clinical setting, and/or from a good level of understanding about the role, and its potential to improve services. Trainees described ‘bridging’ the medical and nursing worlds, bringing advantages of both perspectives to contribute something novel, which in turn progressed care for children and families. There was considerable role confusion and associated frustration linked to working in different roles across different shifts in the week; this indicates that some clinical settings struggled to facilitate a smooth progression and implementation of the ACP role, with a focus on maintaining nursing staff ratios.

**Workforce development and service innovation:** it was apparent from the qualitative data that there was a wide variation in how workforce development and service innovation interplayed in different settings, for different individuals. For some, there was considerable frustration where the role was not facilitated, and its potential to improve services not fully realised. For others, where other ACPs had started to develop the service, and the role was considered much more established, there was less focus on service innovation, instead sustaining the workforce was more important. For trainees without other ACPs in their area, there was free reign to develop the service, although some organisational and leadership support to do this was required.

**Transition and autonomous decision-making:** linked to role identity is the transition to a different kind of role, that has full responsibility for a higher level of decision-making. Some commented that this was indeed a frightening proposition, and this needed support and understanding.

**The role of praxis:** praxis can be described as the integration of theory, practice and art; this perspective may seem particularly appealing for the role of the ACP, taking a blend of nursing and medical roles and offering a different unique contribution. Whilst this is not explicitly identified within this evaluation point, the concept of role identity may benefit from considering this idea.

**Personal development, emotional responses and resilience:** evident amongst the trainees was an overwhelming sense of fear and trepidation about their new role, yet simultaneously,
trainees described excitement and happiness at the prospect of developing into a new role. Trainees also commented that they had improved their time management skills, and importantly, had developed as much personally as well as professionally.

**Impact on Services for Young People, Children and their Families:** many described the potential to ‘make a difference’ to children and their families as a key driver, and for many trainees, they were starting to see an improvement in the quality of care provided related to continuity of care, ability to enrich the medical and nursing care components with the addition of an advanced clinical perspective, and additional time to discuss the overall clinical picture with parents. For others, the service impact felt more ambiguous, related to where service development plans were up to. For some trainees, they felt inhibited in their ability to make an impact, related to their organisational/key leaders understanding of the role, and a rigidity in the way the role was being implemented.

**Interpersonal, peers and teams:** trainees commented that they felt rewarded to relieve some of the workforce pressures experienced in their services. Other trainees were welcomed by peer ACPs – they are ‘admitted to the tribe’ – this was both gratifying but also a potential concern, in that for some, they felt this was too cosy, and they wanted to continue to receive positive challenge on their clinical skills, especially assessment and diagnosis. Some trainees experienced ‘professional jealousy’ from other nurses.

**Flipped classroom:** this was overwhelmingly seen as a positive feature, although for the 2016 cohort, this was also a source of stress, when content was not accessible in time to allow sufficient preparation. There was a clear absence of comment about workload and the need to engage with learning content at a deeper level, therefore it may be assumed that the additional workload burden was acceptable.

**Blended learning:** trainees described their lack of IT literacy as an issue prior to starting the course, although it was unclear if this had in any way inhibited their overall progress and attainment. Trainees described the ability to iterate between content and practice, through return to the on-line content, as a strong feature which was highly valued. Moreover, the
ability to study flexibly and access content 24/7 was also seen as a distinct advantage, enabling trainees to manage other demands from work, family and home with their study commitment.

**Support, supervision and mentorship:** trainees commented this was a strong feature of their experience, with positive support from their ‘learning community’ and their professional community of ACPs in practice, in different settings. Trainees felt senior medics (namely registrars and consultants) were very supportive of their roles and were generous with their time for supervision. Engagement with more junior doctors was difficult, often as they were focused on their own development and progression, but also linked to the regular turnover of doctors linked to changing placements.

**Factors conducive to learning:** trainees were overwhelmingly positive about the support experienced from the KHM Team, their advocacy, individualised support based on the needs of trainees, and a highly personable approach.

Each of the themes is explored in more detail in the next section, linking into relevant evidence.
6. Discussion of Findings

6.1. The Role of the ACP

Advanced practice can be differentiated from mainstream nursing practice by the level of education (masters or doctoral) and “depth and breadth of knowledge, degree of data synthesis, and complexity of skills and interventions”\textsuperscript{14}. Further, the role is characterised by “complex clinical reasoning and decision making; increased autonomy; highly developed communication skills; increased depth of knowledge, skills, and competencies; ability to manage organizations, systems, and environments; expert and specialized practice; utilization of evidence-based practice; and critical analysis of health policy”\textsuperscript{15}. The ACP role builds on the foundations of nursing practice but also extends into the medical sphere, encompassing a biological understanding of pathology, presenting signs and symptoms, and clinical interventions. The ACP is neither a nurse, nor a doctor, it is indeed a new kind of role.

Advanced Clinical Practice as a discipline continues to expand in the UK, with trainee ACP places drawing from a range of professional backgrounds including for example pharmacy, paramedics and mental health therapists. Within the UK, there are 3,000 to 5,000 Advanced Nurse Practitioners (NMP)\textsuperscript{16}, working at an equivalent level to junior doctors or above. Further, non-medical prescribing has also increased to over 45,000 nurses (a key feature of advanced practice although a practitioner can be an NMP without being an Advanced Clinical Practitioner).

There is often confusion about the role within the nursing profession, the wider healthcare team\textsuperscript{17} and inevitably, the general population; this is unsurprising given the lack of regulation and variance in accreditation, titles, grading and remuneration. Further, there is scant reliable sources of the numbers of ACP’s within the UK, compounded by changing numbers of HEI’s who

\textsuperscript{17} See for example, Coombes, R. (2008) Dr Nurse will see you now. BMJ 2008;337:a1522
will deliver the programme (linked to the relatively low numbers of students, discussed below). In the context of workforce development, the numbers of ACP’s are small – compared with the policy initiative to increase the number of GPs by 5,000 (outlined in the Government’s Five Year Forward View policy document\(^\text{18}\)) and the advantages of working at scale, where health systems can capitalise on existing infrastructure developed over many years of providing medical education.

The ability to offer masters programmes to nurses already in practice is fraught with problems, both for HEI’s and service areas. The frail viability of such programmes, where there is low volume (small numbers) but high cost (related to level of expertise) is a concern for many HEIs\(^\text{19}\). The solution developed by Kids Health Matters as a Cheshire & Merseyside Vanguard project has been to develop a modular approach, with common foundations and ‘branches’ for specialisms including ambulatory paediatrics, paediatric acute care, and neonatal critical care, also providing joint offers for education of senior medics, at registrar level. Moreover, by offering clinical supervision from existing ACPs and medics already in service, the trainee is supported to develop and apply their skills and knowledge in context throughout their study. KHM’s modules can be hosted within any HEI, therefore avoiding the creation of quality assessment infrastructure, and making best use of in-house expertise and resources.

### 6.1.1. The Decision-Making Process

The Decision-Making Process: there are two elements to this theme; firstly, what motivated the individual decision to apply for the programme and secondly, the organisational decision-making to facilitate a staff member to enter the programme.


Personal and individual motivations to undertake a Masters programme requiring significant personal investment (time, and in certain instances, financial investment) varied, although the desire for personal development and career progression were rated most highly by most trainees; trainees also reported a high degree of influence related to ACP role models they had encountered during their career. One trainee commented “(I) worked close to them (ACP’s) and always aspired to do their work”. The opportunity to increase earnings as an ACP was a motivator for some, although less than personal aspirations (above); similarly, development into the role as required by the employer/workplace was also less of a motivator. For some, an ability to continue to practice clinically rather than have management responsibilities was highly attractive.

One trainee commented, “it appealed to me as a way of having more clinical exposure, was senior nurse/TL/SL and more managerial but wanted more clinical as my passion is nursing”

A trainee remarked, “I always wanted to be a nurse practitioner from starting nursing. I never wanted to go the management route of progression.... always wanted to be clinical. In our area we have APNPs but their role I feel still is not established. due to this I was the only person applied for the course. I am only 3 years qualified so applied as soon as my experience allowed. during the quick process there was always a query would I actually get to do it due to funding. so I was more nervous about actually getting to do it rather than the content lol.”

Another trainee said “it didn’t ever make sense to me to have your senior most qualified nurses in an office. This role put the people who need to be out on the floor!”

It was evident that for some trainees, they had found a highly valued mechanism to improve the quality of care for children and their families. The ACP role allowed them to extend their practice and provide more rounded care for children and families:

A trainee observed, (The programme is) “Intellectually and personally satisfying - making a difference - it’s what we came into nursing for, feel I’m making more of a difference than in my previous role, watching other APNPs and the difference they make to children, then that’s what I want, that’s why I’m doing it.”
The second element concerns obtaining organisational support to be on the programme. In applying for a place, trainees described a range of experiences and timescales, from several years and multiple applications, to only a few weeks, and little time to prepare. Other trainees described convoluted decision-making processes within their organisations; some had to demonstrate links to their Personal Development Plan, whilst for others, the decision-making was more relational and seemingly informal. Inevitably, funding was an issue for some trainees:

one trainee commented, “During that time I had a lot of problems with the security of funding too and for me this was quite difficult because I was doubtsing whether I could do the job and gave me more time to over think things.”

There was some mention of advanced planning of how the new role would impact on outcomes for families, service outcomes generally, and further, any ‘Return on Investment’ measures, but consistently there appeared to be an absence of specific outcomes as part of the role implementation and intended impact on services. This may be an omission more generally or may indicate some underlying beliefs and assumptions that because the culmination is an individual academic award, any impact is attributable to the person, rather than seeing the newly qualified ACP as part of an overall workforce development initiative; this idea is also suggested in a similar evaluation from 2009.20

Many trainees described a range of emotions once they were confirmed as having a place on the programme: fear, excitement, anticipation – whilst the apprehension was described as stressful, overall, trainees felt positive about commencing the programme.

One trainee reflected on how they felt, “Nervous, anxious, apprehensive, fear of unknown – will I be able to do it?”

6.2. Role Identity

Many of the trainees cited their emotional response (fear, anxiety, apprehension) regarding their new identity, mitigating factors, and general understanding of their new role within their setting. Trainees commented on their emotional response to role transition, ranging from stress and anxiety, to a sense of freedom and excitement, and this is noted in the literature, “the insecurities and self-doubt, either obvious or hidden, are well documented, in that most new ACPs will experience this at the beginning of their career. Feelings of frustration and inadequacy are common during one’s first year as an ACP.”

Trainees described ‘bridging’ the medical and nursing worlds, and this was highly valued as a unique feature of the role. One trainee commented on their role, it concerned, “Being a broker between nursing and medical colleagues - interpret, translate, and progress the care for a child”.

This ‘bridging’ of roles is described within the literature, “inherent in both the Canadian and American conceptualisations of advanced nursing practice is the notion of role expansion, whereby the boundaries between nursing practice and neighbouring professions such as medicine are shifted and sometimes blurred”; trainees commented that whilst this was anxiety-provoking, it was an attractive and exciting feature of the ACP role.

This positivity was evident in survey responses; despite the relatively short time in the trainee role, there was a high level of confidence reported in the survey, in relation to the ability to describe the role to others (17 being very confident, 8 extremely confident in describing the role to a new staff nurse). This was further evident from the understanding reported on how

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the ACP role is differentiated from other nursing and medical roles, implying a certain degree of clarity in role boundaries.

Role identity was hindered by some role confusion related to working in new and old roles within the same working week. Whilst trainees did not identify the underlying reasons for this, it can be assumed that trainees were included in the nursing staff ratios as part of the nursing complement on a particular shift or were designated as supernumerary on shifts when in their training role. Such differentiation across shifts worked within the same week was challenging, one trainee commented,

“Dual job role - trainee APNP, next day Band 5 nurse - self able to distinguish, and also how others differentiate, gets harder as you progress through the course, because (you are) more settled and familiar with the role, and can see lots of things you can do but are prevented from doing so”.

Knowledge cannot be unknown or forgotten from shift to shift and the inability to practice as an ACP to improve care for children was clearly a source of frustration. Many trainees described frustrations and anxieties associated with ‘split roles’. This kind of working seemed to arise from expectations about continuing in their role prior to the programme for some of the time, for some it entailed continuing to hold managerial responsibilities, and for others it involved a clear shift-by-shift differentiation of being in their prior nursing role (and part of the staff rota of registered nurses – ‘being in the numbers’) to being supernumerary as a trainee ACP. For some the demarcation led to absurd practice, with one day being able to treat ‘as an ACP’ and other days, be limited to a pure nursing perspective. This rather mechanistic approach may be an insight to some organisations who view the programme as an individual endeavour, with little bearing on the service or the workforce development for the organisation as a whole.

One of the issues for the ACP role is that the genesis of the role was conceived as a solution to the medical workforce gap; there were insufficient numbers of doctors to meet demand. The
frame of the question in this instance has strongly influenced how the solution is conceived: expressed simply:

➢ **We don’t have enough doctors**
  o **Nurses can be trained as an ACP to do many of the doctor’s tasks**
    ▪ **ACP**s are a ‘mini-doctor’

Trainees felt positive about this as an impact, particularly on their colleagues and overall service:

“**Trust are struggling - numbers of doctors - so will help out on the rota, even supernumerary is a help to them now, but even better once fully on the rota**” however it was also evident that the ACP role was something qualitatively different, and this was important to be understood and operationalised.

This type of simplistic equivalency is erroneous and in practice, constrains and limits the evolution of the ACP role, for example, placing an ACP on the medical rota assumes they will function as a medic. Whilst this can be a solution, this approach does not acknowledge the specific nursing attributes of the ACP role, and this type of simplistic categorising can perpetuate role confusion within services, and moreover, be detrimental for individuals, perhaps related to unrealistic expectations.

A trainee commented, “**It had been a challenging adapting to the role at work. what other nurses and Dr’s expect of you. They see you as a senior nurse so almost trust you to know what you’re doing but I am constantly telling people I am still learning and still need to observe and have feedback on what I am doing. it’s great that they have confidence in you but scary at the same time.**”

This is noted in the literature, “**filling service gaps does not equate to a sustainable career pathway and often leads to disillusionment with a post and to ACPs leaving their original unit or the profession. It is therefore vital that ACP and ACP master’s programs develop a relationship**
with seconding units to ensure that there is congruence between the advanced practitioner’s vision for the role and that of the organizational decision makers.”

This issue manifested clearly in discussion about rotas, and how ACPs should be used; it was clear from the discussion that there is significant variation in practice, in different trusts, and this in some part of influenced by the perspective of the consultant body. Trainees described being placed on junior doctor rotas, or more senior doctor rotas (registrars), whilst others commented what they felt was more representative of their role, and a better contribution to service impact, was a dedicated ACP rota, which could complement and support the medical rota. The following comments illustrate these challenges:

“Lots of changes in services simultaneously to changing role - consultants want us on the registrar rota, but in A&E (they) want you on the preceptorship programme, want an APNP rota but separate to registrar rota - where do we slot in?”

“Currently on service development over 2 separate sites, work on medical rota as trainees on ‘Tier 1’, but in 12 months moving to Tier 2 on the rota - quite scary”

“Going straight to reg rota - what are the feelings? Far from comfortable with this, but the consultant has decided, and you’ll fit in here, but in A&E, supervision, support, preceptorship, only difference - APNPs wouldn’t hold the bleep but would supervise the SHOs and junior doctors, but in a different area, they wouldn’t use an APNP as a registrar - lots of variation - APNPs used differently in terms of how they are placed on the rota”

(Facilitator asked if there should be more standardisation) “Yes probably, depends on how trusts set up their services, how they’re commissioned - best is to have two rotas running in complement to each other”

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The need to prepare the clinical context and wider organisation to establish role clarity at team, service and organisational levels is clear, and is also identified in a previous evaluation\textsuperscript{24} and commentary\textsuperscript{25}.

6.2.1. Linking workforce planning, workforce development and service innovation

Workforce planning, the long-term planning to ensure education, training and development of the healthcare workforce is a function undertaken by a range of bodies, depending on the healthcare arrangement of the time. Workforce development however encompasses the process of change within the workforce, including role development. Finally, service innovation can be defined as improvement that ultimately benefits the end user – the patient, and their carer, and may or may not also realise efficiency gains. Many of the trainees spoke of the KHM Teams’ efforts to visit their workplace, to present, define, negotiate and broker how the ACP role can be effective, and how to ensure the setting was receptive to change. Much of this was done informally, driven by interpersonal capacity, personal ambition and drive to succeed. Many of the trainees commented that this support had been incredibly useful in defining and sustaining the role.

One trainee said, “The unknown quantity of specialising in practice has been the biggest hinderance. It’s very unusual to specialise in a single patient group. Whilst there is support for this kind of work there is no parity or context in which means that articulating the role or developing the role remains a large part of the discussion in my organisation.”

However, if the assumption that the ACP role development constitutes an innovation, and it is desired that this is sustained and disseminated across not just the Cheshire and Merseyside


\textsuperscript{25} Morgan, C., Barry, C., & Barnes, K. (2012). Master’s programs in advanced nursing practice: new strategies to enhance course design for subspecialty training in neonatology and pediatrics. Advances in Medical Education and Practice, 3, 129–137.
conurbation, but nationally, then a planned consideration of the diffusion of innovation is required. There are several approaches to innovation\textsuperscript{26}, and on appraisal of these, the ACP development could be a ‘knowledge-based approach to innovation’ in which the organisation’s ‘absorptive capacity’ is critical; this seems to align with the findings from this phase of the evaluation, and earlier commentary\textsuperscript{27}.

The increasing prominence of ‘implementation science’\textsuperscript{28} further demonstrates the importance of framing ACP role development within a specific ‘change approach’. The trainees discussed this as happening informally and instinctively – as programmes continue to develop, mature, and potentially scale increased, a more focused and/or formal approach may need to be considered. Two trainees described a challenging experience, where they perceived their manager was suppressing their capabilities, related to a lack of understanding of the ACP role, and identified the need for an ‘implementation cycle’:

“\textit{Management sent us on this course, and they don’t know what’s involved in the course, and then they try to take control, they compare you to medical staff - you should be working to level of SHO, or registrar….., if there was a cycle of implementation of APNP course, this is the first year, then the second, this is what can be expected, if there was a clear communication between the trust management and a clear cycle of implementation to work with, this would be much better}.”

Another factor is the constant churn and turnover of staff within hospitals, medical staff, as they move through various training streams; consequently, trainee ACPs having to repeat explanations of their role, and start to build confidence and trust with new colleagues. There is perhaps little remedy to this – doctor turnover is a feature of a rich and successful training


\textsuperscript{27} Morgan, C., Barry, C., & Barnes, K. (2012). Master’s programs in advanced nursing practice: new strategies to enhance course design for subspecialty training in neonatology and pediatrics. \textit{Advances in Medical Education and Practice}, 3, 129–137.

environment, but this could perhaps be mitigated by reliance on a process to discuss the ACP role within the induction phase, in order that the organisational fulfils the role of educator, rather than an over-reliance on individual ACPs.

Role differentiation within healthcare has long been entrenched, and only in recent years as capacity and capability have become increasingly challenged, have role boundaries begun to become less opaque and more permeable to change. It remains difficult however to challenge role boundaries, with those in traditional roles fearing role encroachment, and perceiving the development of new roles as a threat to their own. These challenges and opportunities can be identified as a ‘third space’ between the traditional roles of nurse and doctor, described as “a site of interaction, contestation, tension and transformation between two cultural systems”. The concepts of hybridity, identity and agency afforded by this conceptual ‘third space’ have been suggested. From this perspective, the ACP role is a hybrid role, fusing and creating a new identity which in turn is a liberation for the ACP. The liberty is manifested within the ACP’s ‘agency’ – their ability and desire to act autonomously. One of the trainees illustrated this exactly: she described a difficult and challenging case on the ward, where nursing and medical perspectives were not aligned. The trainee ACP acted as a ‘broker’ between the two perspectives and exercised her ability to relate to the two professions to negotiate a better outcome for the child and their family; she was able to facilitate a consensus on this occasion, which reflected the different perspectives.

The need for unlearning and ‘rewiring’ of knowledge: trainees described the uncomfortable process of needing to ‘unlearn’ their accumulated nursing knowledge and expertise to create a

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32 Note illustrative quote is not available here due to technical issues with the recording, and this account is derived from the facilitator’s notes.
revised hierarchy of knowledge, very much informed by a medical model of learning. Trainees describe how this could stymie decision-making, create delays, and cause embarrassment, for example, “it took me over 30 minutes to make a decision, I was just over-thinking it”.

However, trainees commented that whilst it was uncomfortable to be returning to the ‘novice’ role, overall, this discomfort was deemed to be beneficial.

Trainees said, “Can’t praise the course enough, really enhanced my practice, it’s been difficult from being an experienced paramedic to becoming a complete newbie whilst trying to adapt to advanced practice and pediatrics only” and “Going back to learner role - well outside comfort zone”.

The concept of unlearning is discussed within the literature and applied at both individual and organisational levels; this theoretical framework may be helpful in supporting organisations in optimising the potential gains in service innovation from the ACP role as a workforce development initiative. At an individual level, we develop “generative models”33 that we can apply to a variety of situations – at a conceptual level, these are underpinned by assumptions, beliefs, values and prior experience. Such generative models allow human beings to generalise and critically make predictions about what is going to happen, an evolutionary feature which is also very useful in the modern world! Unlearning therefore can be described as a process of challenge to these underpinning assumptions, values, beliefs, and prior experience to form revised assumptions, values, beliefs – essentially, creating new knowledge which can subsequently be applied. It has been suggested that this process also needs to be applied at

an organisational level to avoid restrictive rules and inadvertent pitfalls\textsuperscript{34}; this is echoed by others\textsuperscript{35,36}.

6.2.2. Transition and autonomous decision-making

Trainees described the change in autonomy as a significant stressor: trainees moved from a contributor to decisions made about their patients, described as “\textit{being in the comfortable bubble of being a nurse}”, to the role of decision-maker, taking full accountability for any consequences. One trainee described an example where she had discharged a child who sadly subsequently died. The case was thoroughly reviewed, and it was found that there was no question of error or misjudgement from the ACP. However, the experience illustrated the stark contrast from the nursing role to the ACP role, and the inherent weight of accountability. Other trainees commented,

“\textit{Fear of making decisions}”

“\textit{Decision making – to do or not to do is another challenge}”

“\textit{The decision-making is overwhelming sometimes}”

\textsuperscript{34} Akgün, A., Byrne, J., Lynn, G., Keskin, H. (2007) Organizational unlearning as changes in beliefs and routines in organizations. \textit{Journal of Organizational Change Management}, Vol. 20 Issue: 6, pp.794-812,

\textsuperscript{35} Morgan, C., Barry, C., & Barnes, K. (2012). Master’s programs in advanced nursing practice: new strategies to enhance course design for subspecialty training in neonatology and pediatrics. \textit{Advances in Medical Education and Practice}, 3, 129–137.

On a positive note, the shift in accountability was also perceived as a liberty, whereby ACP’s could improve the overall experience for those in their care, removing unnecessary delays and ‘hand-off’s’.

A trainee commented, “Knowing about the difference that we’re going to be making, going to be the start of something, the start of a change, but just now knowing that doing a clinical exam and taking a history - small step - so build on this, and what we can bring to the trust at the end is really exciting.”

6.3. The Role of Praxis

Although ACP trainees consistently discussed the ability to diagnose, perform procedures and deliver medical care, when asked to rate what was most important, trainees rated the following:

- Ability to demonstrate team leadership, resilience and determination managing complex or unpredictable situations (28), followed by
- Ability to utilise best practice research to guide clinical practice (26)
- In-depth knowledge of paediatric anatomy and physiology (24), followed by
- Autonomy (12).

This contrasts with much lower ratings for ability to diagnose (11), ability to prescribe (3) and the ability to request diagnostic tests (1). Whilst the role of reflection and its place within the overall Masters programme was not identified within this phase of evaluation, its absence was noted by the evaluating team because it is often an embedded feature of all types of nursing development. It may be that the advanced anatomy and physiology knowledge was more salient for trainees, as novel and stimulating knowledge, or it may be that they were reflecting on more recent experiences of modular content (initial stages of the specialist education.

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37 Handoff is a common term denoting the transfer of information and responsibility of a patient from one professional to another, see https://www.ncbi.nlm.nih.gov/books/NBK2649/ for further discussion, and the negative consequences of handoffs.
modules are heavily focused on anatomy and physiology). However, the use of praxis could be a successful mitigation for the difficulties in role clarity discussed above, also mitigate incidences of ‘high trust/low challenge’ (again outlined above). Praxis is described as the integration of theory, practice and art; this seems to fit well with anticipated features of the ‘third space’ above\textsuperscript{38}. A ‘praxis framework’ is advocated, which could be used to facilitate the development of the ACP role, across an organisation. At future evaluation points, it will be useful to explore how relevant clinical reflection has been over time, and where and how reflection has happened: individual/team, with nursing colleagues/with wider multi-disciplinary team.

6.4. Personal development: emotional responses and resilience

Many trainees described the uncomfortable process of becoming ‘conscious incompetent’ vis-à-vis Johari’s Window\textsuperscript{39}, where there was a growing awareness of how much knowledge and expertise they needed to develop, to work successfully as an ACP. This experience of apprehension and ‘the imposter syndrome’ are all features of a significant transition and personal development.

A trainee commented, “Moving from a specialist role to novice brings a vulnerability, it made me think of the imposter syndrome - should I really be doing this? Your confidence gets a bit knocked.”

Yet overwhelmingly, trainees were positive about the role, and the inherent challenges in the development process, one trainee commented, “This is the job we’ll be in until retirement so it


needs to be fulfilling. I feel like the challenges and development of this role is extremely fulfilling.”

7. Impact

7.1. Services for Children, Young People and Their Families

Trainees commented that they had started to see impact on care they were part of, although this was described in a case by case basis, rather than being informed by outcomes or other service-level metrics. Some trainees had just begun to experience difference for children and families that they could directly attribute to their ACP role. A trainee described the impact of continuity for her patients; as she was the one constant professional responding to acute concerns, she was often a point of continuity in the care of children with multiple attendances:

“(I am the) stable person for children, offering continuity of care, more time to speak to parents, nice aspect that wasn’t anticipated as part of my role. Able to give guidance to parents that nurses don’t always have time to give. I have an overview of the clinical picture and this really helps.”

Continuity is known to be a favourable factor in safe, high quality care. The desire to make an impact was a clear driver for the trainees, with some commenting that the impact made any personal sacrifices worthwhile. Trainees described the need for service improvement, for example, improving patient flow, additional cover for discharge and it was the aspiration of managerial colleagues that the ACP role would facilitate these improvement, one trainee commented they were “convincing the Trust/CCG that the course would have a significant improvement on the care we deliver to children and families, reducing A&E

admissions” and another commented, “Aspirations – improved care for children and their families, impact – reduced admissions, children seen by the right clinician”.

7.2. Impact - Interpersonal: Peers and Teams

Some trainees relayed a ‘peer pressure’ to apply for the programme, both from other ACPs and other nursing colleagues. There was also some consternation about the range and level of expectations, one trainee commented, one trainee remarked “Sometimes the team expects too much” but this varied across the different settings that trainees worked in, for example, another trainee commented:

“I'm quite fortunate because I came from a DGH with quite an established APNP group so there has been a couple of practitioners that did the course of the five years ago that knows exactly where I am at the point in the course, there's no expectations that you know everything and that works really well for me”

Many trainees felt they were welcomed by medical colleagues, particularly by those working at ‘registrar’ level, as there was a degree of affinity and empathy with education, and with the treatment of children and their families. The ability to make a positive impact on the service through supplementing the workforce was viewed positively:

One trainee related “In my area (it’s) going to make a massive impact to doctors – who are really struggling - really drives me cos it’s such a positive impact to help out on the ground, didn't expect them to be as supportive as they have been, it just drives you knowing you're in the group and you've got so much support, and at the end, we’ll have so much more knowledge, getting loads from it so far, but it is hard, but do love it.”

Building on the experience of role models and joining a new ‘tribe’, trainees described the attraction of becoming a new kind of practitioner as very appealing, and for trainees who had other ACP’s in their workplace, they had a natural network of personal support and resources to draw upon. However, some trainees described this familiarity as a potential negative: where
trainee ACPs were applying their skills in practice, qualified ACP’s could easily make assumptions about their competence, and exert a low level of challenge and rigour to the trainee’s work, for example, in the assessment and diagnosis of a child. The underbelly of high trust is low challenge, which can lead to unsafe care, noting that “High trust relations can lead to dysfunctional “cosy” relationships which stifle innovation and at the extreme may lead to corrupt practice.” Mitigation of this may require ongoing organisational and professional focus on role identity and praxis, perhaps accompanied by an ongoing programme of continuing professional development.

7.3. Pedagogy & Mode of Delivery

7.3.1. The Flipped Classroom

The specialist educational modules are delivered using a ‘flipped classroom’ and ‘blended learning’, using a variety of technology. The flipped classroom is not widely used in medical education although there are advocates of this approach because of the flexibility and the fit with “(1) clinical problem solving, (2) learning how to acquire knowledge, (3) developing bedside manner, (4) teamwork, (5) technology training, and (6) clinical research” The shift into used the flipped classroom is slow as “real barriers exist”. The advantage of the flipped classroom requires a case-based approach to learning and can respond to the varying strengths and limitations of individual students. Knowledge is imparted prior to the classroom session (in this case, via on-line content) at the trainee’s pace and time of choosing. The classroom phase then builds on this knowledge, thereby promoting higher levels of learning (as per Bloom’s taxonomy), which is tailored to individuals. It is described as

42 These skills were derived from a survey, although total number of participants is not stated - The Ohio State University College of Medicine. College of Medicine News: The State of Medical Education. http://medicine.osu.edu/news/archive/2014/11/20/the-state-of-medical-education.aspx.
a mechanism to move from passive to accelerated learning. The evidence-base for the flipped classroom is still emerging but early findings are positive.

Design principles have been proposed for flipped classrooms:

- Provide an opportunity for students to gain first exposure prior to class
- Provide an incentive for students to prepare for class
- Provide a mechanism to assess student understanding
- Clear connections between in-class and out-of-class activities
- Provide clearly defined and well-structured guidance
- Provide enough time to carry out assignments
- Provide facilitation for building a learning community
- Provide prompt adaptive feedback
- Provide technologies which are familiar and easy to access

Whilst each of these were not addressed specifically within the Focus Groups, 2016 cohort trainees commented on the difficulty of accessing and completing preparation work, where this was not available; this was a feature of combined design and delivery stages which is likely to only be a feature for the first cohort, although trainees felt strongly this was a significant stressor.

A trainee commented, “Flipped classroom learning was a huge advantage to the course, having all the module learning available at hand when needed, initially there was some disadvantages with the timing of the module content and it wouldn’t be available until the day prior to the...”

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scheduled session this for me meant some juggling around and late nights trying to catch up when working shifts also, but this did improve as the course continued.”

Another trainee commented, “Very good, the internet based framework is very flexible, though difficulties when they were uploaded too close to the study day with little time to study, there are repetitions and differences with lecturers….excellent, a lot of experience”

Some trainees were more confident than others in using the technology, although of the less confident trainees, they did appear to be developing their skills, supported by the KHM Team. Overall, it was evident for all trainees that they had gained much from the flipped classroom delivery, although, on occasion, it did appear that the terms ‘flipped classroom’ and ‘blended learning’ were used interchangeably, so trainees referred to content being delivered on-line, some synchronously, and other sessions asynchronously. Nevertheless, feedback was very positive: “flipped content brilliant” and “the flipped classroom only brought benefits no disadvantages”.

7.3.2. Blended Learning

Blended learning within the specialist modules is delivery of on-line content as well as face-to-face content. Pre-recorded sessions by a variety of presenters and educators are offered, followed by dedicated teaching sessions, often on site within organisations or nearby HEI’s.

Trainees described the continual iteration between academic content, personal reflection and application in the workplace as a strong and positive feature. As all academic content remained accessible throughout the course, trainees were able to relate back to material studied earlier; this was commented on as a highly positive feature of the specialist modules, in terms of being able to consolidate knowledge and skill, whilst also being a very practical approach, and easy to use.
A trainee remarked, “Everything is recorded so we can always go back over things, oh I’ve done that, I’ll go back and refresh, plus the ability to work from home, this has been invaluable, if I had to go into uni, I would have had to step off the programme - no doubt about this.”

The ability to draw from the on-line content and iterate to practice was also shared with others in the team, creating a ‘ripple effect’\textsuperscript{48} of learning and developing knowledge:

“For me, back to unit, share some of knowledge with colleagues, they are really enthusiastic, share tips and tools, have discussion groups on the topics covered, so not just my development but development of all the team”

Though Kolb’s experiential learning cycle\textsuperscript{49} seems to be in operation, facilitating learning from the conceptual to the concrete, and back again, as presented below:

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{KolbsLearningCycle.png}
\caption{Kolb's Learning Cycle}
\end{figure}

\footnotesize

The ability to return to content 24/7, in ‘portions’ adjusted by the learner was also described as advantageous for trainees; this mode of delivery facilitated mature trainees who were often balancing a Masters programme with paid employment, and busy family lives. Further, blended learning was not identified as a less superior mode of delivery, one trainee commented, “I rarely get to Liverpool for sessions as it’s a long commute, but still feel very part of the group and supported by everyone.”

Another positive feature was an ability for trainees to manage their own ‘saturation’ points; in conventional lectures, content is delivered at a set time, for a set duration, and there can be no deviation. It is often unknown to the presenter how many trainees remain actively engaged for the duration of the lecture. However, trainees with autonomy over the start and completion times of content, can learn to recognise when they become disengaged or ‘saturated’, they can switch off and return once they feel cognitively refreshed.

Trainees described a range of confidence and proficiency levels with on-line learning, digital literacy more broadly. It was evident from the discussions that where digital confidence was low, this was a significant source of stress. Some trainees mentioned specific preparations
related to a programme delivered via blended learning, such as purchase of IT equipment, upgrade or installation of broadband; these preparations were concerned with accessibility, as opposed to development of skills and confidence in relation to digital literacy. For some trainees, such preparation constituted a significant financial outlay, with no access to financial support from the HEI or workplace; for some trainees, this could constitute a barrier to accepting a place on a programme.

One trainee reflected that they had no IT skills “Had to learn and use technology. I have never used before but support from other students and Katie and Sarah really helped. I found it difficult to engage when learning online however when it came to revision the recorded sessions really helped”

Another said, “(I) needed to purchase computer and accessories”

Students who have experienced on-line learning in any form, continue to have good attainment, even when underlying intellectual capability is controlled for\(^{50}\). This indicates that digital confidence and IT preparation is key, and additional preparation modules could preface the course content, focusing on ‘how to learn on-line’ or alternatively focusing on the development of study skills, such as the on-line packages which are available\(^{51}\). The KHM Team may also wish to consider how to improve digital literacy prior to the programme from an inclusion perspective, to avoid any potential for divide between ‘digital natives’ and ‘digital strangers’.

7.4. Support, Mentorship and Supervision

There was overwhelmingly positive feedback for the support received about the KHM Team, and this was characterised by support that was personable, individualised, and supportive. The


\(^{51}\)See for example Study4Skills at [https://plus.google.com/103075954436446685549](https://plus.google.com/103075954436446685549)
relationship feature was a very strong supportive factor for some trainees, particularly those who experienced IT difficulties and challenges. It was evident to the evaluation team that the KHM Team exerted a lot of effort into cultivating strong interpersonal connections with trainees and that this was highly valued. There was an absence of comment about accessing university infrastructure/resources or accessing infrastructure/resources within training departments although these are available. If the project develops and operates at a bigger scale, there may need to be some attention on how individualised support can be maintained.

Some trainees were very positive about the support within their clinical setting, with one trainee commenting, “Excellent support from mentors on unit. Some staff assume because you have been doing a nursing job for years that you don’t require support when you do and I have felt like I have floundered”.

7.5. Factors Conducive to Learning

The clinical modules, clinical placements and the trainees’ workplace were all reported as positive factors in preparing for the ACP roles, moving from ‘becoming prepared’ to ‘fully prepared’ for most trainees.

Trainees observed how they had developed the ability to manage their own stress more effectively, extending the positive impact from the workplace but also into their personal lives. Many discussed the time pressures and constant prioritisation as stressful, although reviewing priorities did facilitate a clear focus on studying. This indicates a personal growth process which is underway, and which is critical to the ACP role: there are “a number of personal characteristics can enhance APN role development and facilitate effective working for the practitioner including self-confidence, stamina, assertiveness, conflict resolution skills and political astuteness”52.

Trainees were very positive about the community of learning, that this was generally supportive and facilitative, with one trainee commenting,

“Group support with what’s app group, sounded off when we needed to, shared the good and the bad, and support from Katie and Sarah”

However, some trainees observed the constant stream of updates and communication through social media channels and the ‘what’s app’ group, meant that it was difficult to switch off and it became easy to assume everyone else was making better progress, perpetuating low confidence in some.

When trainees were discussing how they related to other professionals, whilst there was a clear affinity with experienced ACP’s, trainee ACP’s recognised the value in learning from a range of professionals including junior doctors at different levels53 to consultants, but also pharmacists, allied health professionals, paramedics, and radiographers. Whilst ACP’s perceived being a nurse as integral to their new identity, they highly valued accessing a range of multi-disciplinary perspectives. For example, one trainee commented “I like that you get to spend time with different departments because it gives a better insight into the overall care of the baby i.e. following foetal centre.”

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8. Next Steps for the Evaluation Process

The next phases of this longitudinal evaluation are concerned firstly with a post-graduation evaluation, followed by an evaluation exploring how skills have been consolidated and the ACP roles firmly embedded.

8.1. Phase 2: Post Graduation Evaluation

Proposed Evaluation Questions:

- What has been the experience of the delivery of specialist educational modules, successes and challenges?
- What has been the developmental experience – personal, professional?
- Are there any reflections on the impact on personal wellbeing, positives and negatives, throughout the content of the specialist educational modules?
- What are the anticipated challenges for the novice but qualified ACP?
- What is the experience of skill consolidation for the ACP, within the team/service, and for children and families?
- What support is available within the team/service to enable a period of knowledge and skill consolidation?

8.2. Phase 3: Longer Term Impact Evaluation

Proposed Evaluation Questions:

- What have been the challenges of embedding the ACP role?
- What has been the impact of the role on the team/service, and for children and families?
- What are the ongoing educational needs for the ACP now?
- What are the leadership challenges going forward?
• What opportunities are there to present self as a role model to ACP aspirants?
• What is the nature of relationships with key team members from different professional backgrounds?
Appendix 1

Participant Information Sheet

MSc Advanced Paediatric and Neonatal Practice Programme

Why is the evaluation happening?
This evaluation is designed to describe, understand and disseminate the experience of students on the MSc Advanced Paediatric and Neonatal Practice, regarding the paediatric and neonatal clinical modules delivered by Kids Health Matters.

We are interested in:

- The APNP (Advanced Paediatric Nurse Practitioner)/ANNP (Advanced Neonatal Nurse Practitioner) role identity
- The experience of students during their role transition - from student (novice) Advanced Practitioner to qualified (competent/proficient) APNP/ANNP
- How other health care professionals respond and interact with both the student APNP/ANNP, and the qualified APNP/ANNP
- The impact of the APNP within the clinical setting
- The experience of this model of educational delivery – the ‘flipped classroom’
- Factors conducive to learning, for example, the role of the APNP community, peer and programme support
- Formal teaching support, mentorship and supervision

The evaluation is important to:

- Our funders: the Cheshire and Merseyside Woman and Children’s Partnership (the C/M Vanguard), the national New Models of Care (Vanguard) programme and Health Education England (both regionally and nationally); in order that they can understand the impact and return on their investment
- To the programme delivery team, at Kids’ Health Matters and Liverpool John Moores University (LJMU), to enhance the quality of the programme
To the wider APNP and education community, to disseminate our knowledge and understanding

**What is involved in the evaluation process?**
We will be exploring the areas above in a variety of methods starting in January 2018 and continuing periodically during your MSc programme.

We will be using the following methods:

- On-line survey
- Focus groups
- Telephone interviews
- Analysis of on-line access (anonymised)

We will write an Evaluation Report and a copy of this will be available to you as a contributor to the evaluation – the report will be published electronically on [www.kidshealthmatters.org.uk](http://www.kidshealthmatters.org.uk) with preliminary findings available by June 2018.

**Who is undertaking the evaluation?**
The programme team will be involved in the evaluation, supported by Karen Shawhan. Karen Shawhan is an experienced evaluator, and undertakes work within the NHS and education sector, (see pen portrait below).

**Principles guiding the work**
Although this is not a formal research project requiring ethical permission, we ensure we follow ethical principles in our work, this means:

- Taking part is voluntary
- Participants can withdraw from the process at any time
- Data we collect will either be anonymised (so as not to be personally attributable) or if this is not possible, we will seek permission to use it, particularly where data is used within our evaluation reports
• Data we collect will be used for this evaluation and to subsequently inform academic discussion (e.g. papers, conference presentations). It will be retained for 1 year after publication of the final report, when all raw data will be permanently deleted.

• Data we store is held securely and subject to best practice guidelines on information governance procedures. Kids Health Matters is registered with the Information Commissioner’s Office (ICO) and in full compliance with the Data Protection Act 1998.

If you have any concerns about the evaluation or you require further information about the evaluation please contact Katie Barnes (katie@kidshealthmatters.org.uk) or Karen Shawhan (karen@thinkbluejay.com)

Pen Portrait - Karen Shawhan

📞 0771 357 5595

✉️ karen@thinkbluejay.com

Karen is an experienced healthcare manager, educator and independent consultant. Initially working as a general nurse in acute medical nursing and intensive care, Karen has since worked in a variety of roles in healthcare management, consultancy, research and evaluation, teaching and education.

Recent experience includes:

• healthcare management - primary care workforce planning

• consultancy – mapping system-wide organizational development needs

• evaluation – evaluating a Vanguard mental health service, and various leadership development programmes

• research – understanding parental health choices for acutely ill children.
In respect of teaching and education, Karen has been a tutor and Cohort Director for two Elizabeth Garrett Anderson cohorts, and as a tutor on the Mary Seacole Programme when it was delivered by the Open University, and a module leader for a Masters programme for Advanced Paediatric Nurse Practitioners for four years at Liverpool John Moores University (JMU), as an Honorary/Associate Lecturer.
Appendix 2

APNP Programme Evaluation

Showing 43 of 43 responses
Showing all responses
Showing all questions
Response rate: 86%

1. Rate the extent to which the following factors were important to you in your decision to become an advanced practitioner and enrol in this course, where 1 is not important at all and 5 is extremely important.

1.1 Self development

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<tr>
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<td></td>
</tr>
<tr>
<td>2 Slightly important</td>
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<td></td>
</tr>
<tr>
<td>3 Moderately important</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>4 Very important</td>
<td>11</td>
<td>25.6%</td>
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<tr>
<td>5 Extremely important</td>
<td>32</td>
<td>74.4%</td>
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1.2 To enhance my career options

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<tbody>
<tr>
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<tr>
<td>2 Slightly important</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>3 Moderately important</td>
<td>4</td>
<td>9.3%</td>
</tr>
<tr>
<td>4 Very important</td>
<td>12</td>
<td>27.9%</td>
</tr>
<tr>
<td>5 Extremely important</td>
<td>26</td>
<td>60.5%</td>
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</table>

1.3 Pay increase
2. Of the following advanced clinical practice characteristics, please pick the top 3 that you feel are most integral to the role.
3 How confident do you feel in describing the APNP role to a new staff nurse, where 1 is not confident at all and 5 is extremely confident?

3.1 Describing the APNP role

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<thead>
<tr>
<th>Level</th>
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</thead>
<tbody>
<tr>
<td>1 Not confident at all</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>2 Slightly confident</td>
<td>3</td>
<td>7%</td>
</tr>
<tr>
<td>3 Moderately confident</td>
<td>15</td>
<td>34.9%</td>
</tr>
<tr>
<td>4 Very confident</td>
<td>17</td>
<td>39.5%</td>
</tr>
<tr>
<td>5 Extremely confident</td>
<td>8</td>
<td>18.6%</td>
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</tbody>
</table>

4 To what extent do you feel there is a plan for role development in your organisation with 1 being none at all and 5 being extremely clear.

4.1 A plan for advanced clinical practice in my organisation
4.2 A plan for my individual role after completion of the MSc programme

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<thead>
<tr>
<th>Description</th>
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<tbody>
<tr>
<td>1 None at all, for example, no planning in progress with little awareness of the need/intention to plan</td>
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<tr>
<td>2 Some, for example, some vague plans but little detail or engagement</td>
<td>12</td>
<td>27.9%</td>
</tr>
<tr>
<td>3 Moderate, for example, some planning in progress but without detail, agreement and wide engagement</td>
<td>16</td>
<td>37.2%</td>
</tr>
<tr>
<td>4 Good plans, for example, agreed published plans that require some further additions</td>
<td>10</td>
<td>23.3%</td>
</tr>
<tr>
<td>5 Extremely clear, for example, published, resourced plans that have been widely disseminated</td>
<td>5</td>
<td>11.6%</td>
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5 Rate how strongly you agree or disagree with the following statements. Since starting my clinical modules, I better understand...

5.1 how the advanced practice role differs from my current role

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<tbody>
<tr>
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<td>0</td>
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<tr>
<td>Disagree</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Neither Agree or Disagree</td>
<td>1 (2.3%)</td>
<td></td>
</tr>
<tr>
<td>Agree</td>
<td>20 (46.5%)</td>
<td></td>
</tr>
<tr>
<td>Strongly Agree</td>
<td>22 (51.2%)</td>
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5.2 the difference(s) between a traditional non-medical role (nurse or other) and an advanced practice non-medical role (nurse or other)

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<tr>
<th>Response</th>
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<tbody>
<tr>
<td>Strongly Disagree</td>
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<td>Disagree</td>
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<td></td>
</tr>
<tr>
<td>Neither Agree or Disagree</td>
<td>1 (2.3%)</td>
<td></td>
</tr>
<tr>
<td>Agree</td>
<td>21 (48.8%)</td>
<td></td>
</tr>
<tr>
<td>Strongly Agree</td>
<td>21 (48.8%)</td>
<td></td>
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6 To what extent have the following elements made you feel prepared for a future as an advanced practitioner with 1 being not at all prepared and 5 being fully prepared.

6.1 The Flexible and Scheduled content provided by the clinical modules

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<tr>
<th>Response</th>
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<tr>
<td>Not at all prepared</td>
<td>0</td>
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</tr>
<tr>
<td>Somewhat prepared</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Becoming prepared</td>
<td>13 (30.2%)</td>
<td></td>
</tr>
<tr>
<td>Very prepared</td>
<td>18 (41.9%)</td>
<td></td>
</tr>
<tr>
<td>Fully prepared</td>
<td>12 (27.9%)</td>
<td></td>
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</table>

6.2 Your clinical placements
6.3 Your workplace

7 To what extent have your clinical modules made you feel prepared for taking responsibility for clinical decision making, where 1 is not at all prepared and 5 is fully prepared.

7.1 Taking responsibility for clinical decision making

8 Rate how strongly you agree or disagree with the following statements about the support you receive for your training.

8.1 I feel well supported from the programme staff
8.2 I feel well supported from the clinical placement/mentoring staff

- 1 Strongly Disagree: 0
- 2 Disagree: 1 (2.3%)
- Neither Agree or Disagree: 3 (7%)
- 4 Agree: 16 (37.2%)
- 5 Strongly Agree: 23 (53.5%)

8.3 I feel well supported by my organisation

- 1 Strongly Disagree: 0
- 2 Disagree: 1 (2.3%)
- Neither Agree or Disagree: 9 (20.9%)
- 4 Agree: 19 (44.2%)
- 5 Strongly Agree: 14 (32.6%)

9 Who supervises the majority of your clinical practice?

- Advanced Nurse Practitioner: 25 (58.1%)
- Consultant: 8 (18.6%)
- Doctor in training (ST 1-4): 1 (2.3%)
- Doctor in training (ST 5-8): 9 (20.9%)
In your workplace, how well do you think the following groups understand the advanced practitioner role, where 1 is don't understand at all and 5 is very clearly understand?

10.1 Consultants

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<td>2</td>
<td>2</td>
<td>4.7%</td>
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<tr>
<td>3</td>
<td>5</td>
<td>11.6%</td>
</tr>
<tr>
<td>4</td>
<td>17</td>
<td>39.5%</td>
</tr>
<tr>
<td>5</td>
<td>18</td>
<td>41.9%</td>
</tr>
<tr>
<td>Don't work with this group</td>
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10.2 Doctors in training

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<tr>
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<tr>
<td>2</td>
<td>7</td>
<td>16.3%</td>
</tr>
<tr>
<td>3</td>
<td>11</td>
<td>25.6%</td>
</tr>
<tr>
<td>4</td>
<td>17</td>
<td>39.5%</td>
</tr>
<tr>
<td>5</td>
<td>7</td>
<td>16.3%</td>
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<tr>
<td>Don't work with this group</td>
<td>1</td>
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10.3 Other Advanced Clinical Practitioners

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<td>2</td>
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<td>0%</td>
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<tr>
<td>3</td>
<td>6</td>
<td>14%</td>
</tr>
<tr>
<td>4</td>
<td>13</td>
<td>30.2%</td>
</tr>
<tr>
<td>5</td>
<td>22</td>
<td>51.2%</td>
</tr>
<tr>
<td>Don't work with this group</td>
<td>2</td>
<td>4.7%</td>
</tr>
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</table>

10.4 Registered/Qualified Nurses
10.5 Other (Allied Health) Professionals

1. Don't understand at all: 1 (2.3%)
2. Slightly understand: 5 (11.6%)
3. Moderately understand: 20 (46.5%)
4. Understand well: 11 (25.6%)
5. Very clearly understand: 3 (7%)
I don't work with this group: 3 (7%)

10.6 Non-Registered Staff (i.e. HCA)

1. Don't understand at all: 0
2. Slightly understand: 9 (20.9%)
3. Moderately understand: 18 (41.9%)
4. Understand well: 14 (32.6%)
5. Very clearly understand: 2 (4.7%)
I don't work with this group: 0

10.7 Managerial Staff
10.8 Administrative Staff

1. Don't understand at all 1 (2.3%)
2. Slightly understand 7 (16.3%)
3. Moderately understand 16 (37.2%)
4. Understand well 13 (30.2%)
5. Very clearly understand 6 (14%)
I don't work with this group 0

11. To what extent would you rate your confidence in your use of digital technology (the internet, mobile applications, webcasting, word processing, powerpoint, etc.)?

11.1 Prior to starting the MSc programme

1. Not at all confident 3 (7.1%)
2. Slightly confident 9 (21.4%)
3. Moderately confident 16 (38.1%)
4. Very confident 12 (28.6%)
5. Extremely confident 2 (4.8%)

11.2 Currently
12. Which of the following digital devices do you use to support your learning? Check all that apply.

- Desktop computer: 16 (10.4%)
- Laptop computer: 41 (26.6%)
- Tablet/iPad: 24 (15.6%)
- Smartphone: 39 (25.3%)
- Printer: 34 (22.1%)

13. Where do you engage/access your FLEXIBLE content? Check all that apply.

- At home: 43 (51.8%)
- At work: 25 (30.1%)
- In the library or learning centre: 10 (12%)
- In a cafe or social space: 3 (3.6%)
- Other: 2 (2.4%)

14. Where do you most commonly engage/access your SCHEDULED content?

- Face to face: 22 (51.2%)
- Webcast Panopto: 12 (27.9%)
- About equal split face to face or webcast: 8 (18.6%)
- I don’t attend the live session at all and watch the archive instead: 1 (2.3%)
Rate how strongly you agree or disagree with the following statements. Compared to previous models of higher education I've experienced, by using a digital flipped classroom in this course...

15.1 I am more easily distracted.

1 Strongly Disagree 13 (30.2%)
2 Disagree 21 (48.8%)
3 Neither Agree or Disagree 6 (14%)
4 Agree 2 (4.7%)
5 Strongly Agree 1 (2.3%)

15.2 I find it harder to manage all the information.

1 Strongly Disagree 12 (27.9%)
2 Disagree 23 (53.5%)
3 Neither Agree or Disagree 6 (14%)
4 Agree 2 (4.7%)
5 Strongly Agree 0

15.3 I feel more isolated.

1 Strongly Disagree 12 (27.9%)
2 Disagree 23 (53.5%)
3 Neither Agree or Disagree 7 (16.3%)
4 Agree 1 (2.3%)
5 Strongly Agree 0

15.4 I find it harder to motivate myself.
15.5 I am less likely to attend Scheduled sessions while they occur.

1 Strongly Disagree: 18 (41.9%)
2 Disagree: 20 (46.5%)
3 Neither Agree or Disagree: 4 (9.3%)
4 Agree: 1 (2.3%)
5 Strongly Agree: 0

15.6 I am less likely to participate when I attend Scheduled sessions face to face.

1 Strongly Disagree: 19 (44.2%)
2 Disagree: 19 (44.2%)
3 Neither Agree or Disagree: 3 (7%)
4 Agree: 2 (4.7%)
5 Strongly Agree: 0

15.7 I am less likely to participate when I attend Scheduled sessions via webcast.

1 Strongly Disagree: 17 (39.5%)
2 Disagree: 18 (41.9%)
3 Neither Agree or Disagree: 3 (7%)
4 Agree: 4 (9.3%)
5 Strongly Agree: 1 (2.3%)
Rate how strongly you agree or disagree with the following statements. Compared to previous models of higher education/training course I've experienced, by using a digital flipped classroom in this course...

**16.1 I understand things better.**

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<td>1 Strongly Disagree</td>
<td>1</td>
<td>2.3%</td>
</tr>
<tr>
<td>2 Disagree</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>3 Neither Agree or Disagree</td>
<td>13</td>
<td>30.2%</td>
</tr>
<tr>
<td>4 Agree</td>
<td>26</td>
<td>60.5%</td>
</tr>
<tr>
<td>5 Strongly Agree</td>
<td>3</td>
<td>7%</td>
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**16.2 I am more independent in my learning.**

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<tr>
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<td>2.3%</td>
</tr>
<tr>
<td>2 Disagree</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>3 Neither Agree or Disagree</td>
<td>1</td>
<td>2.3%</td>
</tr>
<tr>
<td>4 Agree</td>
<td>27</td>
<td>62.8%</td>
</tr>
<tr>
<td>5 Strongly Agree</td>
<td>14</td>
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**16.3 I feel more connected with my lecturers/tutors.**

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<tr>
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<td>4.7%</td>
</tr>
<tr>
<td>3 Neither Agree or Disagree</td>
<td>8</td>
<td>18.6%</td>
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<tr>
<td>4 Agree</td>
<td>22</td>
<td>51.2%</td>
</tr>
<tr>
<td>5 Strongly Agree</td>
<td>10</td>
<td>23.3%</td>
</tr>
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**16.4 I feel more connected with other learners.**
16.5 I feel empowered to participate in Scheduled sessions.

1 Strongly Disagree 1 (2.3%)
2 Disagree 1 (2.3%)
3 Neither Agree or Disagree 11 (25.6%)
4 Agree 21 (48.8%)
5 Strongly Agree 9 (20.9%)

16.6 I feel more prepared for clinical placements.

1 Strongly Disagree 0
2 Disagree 0
3 Neither Agree or Disagree 5 (11.6%)
4 Agree 25 (58.1%)
5 Strongly Agree 13 (30.2%)

16.7 I feel more prepared for module assessments.

1 Strongly Disagree 1 (2.3%)
2 Disagree 0
3 Neither Agree or Disagree 4 (9.3%)
4 Agree 31 (72.1%)
5 Strongly Agree 7 (16.3%)
### 16.8 I can fit learning into my life more easily.

<table>
<thead>
<tr>
<th>Response</th>
<th>Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Strongly Disagree</td>
<td>1</td>
<td>2.3%</td>
</tr>
<tr>
<td>2 Disagree</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>3 Neither Agree or Disagree</td>
<td>1</td>
<td>2.3%</td>
</tr>
<tr>
<td>4 Agree</td>
<td>16</td>
<td>37.2%</td>
</tr>
<tr>
<td>5 Strongly Agree</td>
<td>25</td>
<td>58.1%</td>
</tr>
</tbody>
</table>

### 16.9 I can access learning that would be impossible to access physically.

<table>
<thead>
<tr>
<th>Response</th>
<th>Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Strongly Disagree</td>
<td>1</td>
<td>2.4%</td>
</tr>
<tr>
<td>2 Disagree</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>3 Neither Agree or Disagree</td>
<td>3</td>
<td>7.1%</td>
</tr>
<tr>
<td>4 Agree</td>
<td>18</td>
<td>42.9%</td>
</tr>
<tr>
<td>5 Strongly Agree</td>
<td>20</td>
<td>47.6%</td>
</tr>
</tbody>
</table>

### 17 Would you participate in a course with a similar model of delivery in the future?

- Yes: 43 (100%)
- No: 0

### 18 How old are you?

- < 30 years old: 2 (4.7%)
- 30 - 39: 23 (53.5%)
- 40 - 49: 16 (37.2%)
- > 50: 2 (4.7%)

### 19 What was your previous degree?

---
20. What subject was that degree in?

- Nursing: 38 (90.5%)
- Social Sciences: 1 (2.4%)
- Humanities: 0
- Arts: 0
- Science / bioscience: 0
- Other: 3 (7.1%)

20.a If you selected Other, please specify:

<table>
<thead>
<tr>
<th>Showing all 3 responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specialist Public Health-Health Visiting</td>
</tr>
<tr>
<td>Advanced Practice (Adults)</td>
</tr>
<tr>
<td>Paramedic Practice</td>
</tr>
</tbody>
</table>

21. What year did your MSc programme commence?

- 2016: 13 (31%)
- 2017: 29 (69%)

22. What type of training post are you currently in?
23 Which specialty pathway are you on?

- Neonatal: 9 (20.9%)
- Ambulatory Paediatric: 26 (60.5%)
- Acute Paediatric: 8 (18.6%)

24 Which clinical setting do you currently practice in?

- Community Services: 3 (7%)
- Primary Care: 0
- Acute Hospital Trust: 28 (65.1%)
- Tertiary Centre: 4 (9.3%)
- Level 1 Neonatal Unit: 0
- Level 2 Neonatal Unit: 2 (4.7%)
- Level 3 Neonatal Unit: 6 (14%)
Appendix 3

KHM Evaluation 17th January 2018

FACILITATION NOTES

Aim: To collect qualitative data from two focus groups to inform the overall evaluation

Summary Agenda

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>08.30</td>
<td>Arrive and set up</td>
</tr>
<tr>
<td>09.00</td>
<td>Commence on-line focus group, 11-14 participants, KS lead facilitator, Sally co-facilitator</td>
</tr>
<tr>
<td>10.30</td>
<td>Close on-line focus group</td>
</tr>
<tr>
<td>Break</td>
<td></td>
</tr>
<tr>
<td>11.00</td>
<td>Commence F2F focus groups – I large group of 16-18, working in 2 groups, KS and Sally facilitating group each</td>
</tr>
<tr>
<td>13.00</td>
<td>Close focus groups</td>
</tr>
<tr>
<td>13.00</td>
<td>Lunch and networking</td>
</tr>
</tbody>
</table>

Format for on-line and F2F Focus Groups

Introduce myself and Sally – our respective roles today.

Reference the Participant Information Sheet – ensure everyone has seen a copy.

Reference the discussion questions – ensure everyone has a copy.

Explain the purpose of today – this is one of the methods to collect qualitative information about your experience of the APNP programme. The focus group is scheduled to last 1.5/2 hours and on-line and in the classroom respectively.

Although this is not a formal research project requiring ethical permission, we ensure we follow ethical principles in our work, this means:

- Taking part is voluntary
- Participants can withdraw from the process at any time
• Data we collect will either be anonymised (so as not to be personally attributable) or if this is not possible, we will seek permission to use it, particularly where data is used within our evaluation reports
• Data we collect will be used for this evaluation only
• Data we store is held securely and subject to best practice information governance procedures
• We will be collecting written data today – from the work in small groups, and also using an audio recording of larger group discussion – this will then be transcribed for analysis purposes

Ground Rules
Suggest the following ground rules:

• Whilst we are collecting data for evaluation purposes, please assume information shared with colleagues should not be shared with other colleagues/outside of the room, unless there is permission to do so
• We will be as open and honest as we can to provide rich data
• We will work with inclusivity and support in mind, being respectful of the contributions of others, even where we may disagree
• We will work within the time boundaries of the focus group
• We will respect the differences in contribution from colleagues working on-line to those working face-to-face
• We will be asked to work in smaller groups and then in a larger group
• Is there anything else that we need to say about how we will work together?
<table>
<thead>
<tr>
<th>Time</th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>09.00</td>
<td>Introductions, schedule for the 1.5 hours, and ground rules</td>
</tr>
</tbody>
</table>
| Duration – 10 mins | Ensure everyone on-line and using web-cams, muting mics when not speaking  
|             | Encourage use of text chat also  
|             | Ensure recording commenced                                                                                                                  |
| 09.10      | Exploring your preparation for the programme:                                                                                                                                                           |
| Discussion 1 | Duration – 15 mins  
|             | What motivated you to apply for the programme?                                                                                               |
|             | What steps did you have to take?                                                                                                              |
|             | What were the key decisions – for you and others? (Work/ and also changes to family life/routines)                                           |
|             | What preparation did you undertake prior to starting the programme?                                                                            |
|             | Did you undertake any academic preparation for the programme?                                                                                |
|             | Did you undertake any preparation on your IT skills/IT resources?                                                                             |
|             | What were your feelings before starting the programme?                                                                                         |
|             | Discuss the findings to these questions, making notes on the sheets provided, and sharing discussion within the group.                          |
|             | Suggest everyone has a chance to share their thoughts                                                                                          |
|             | Text chat is great too.                                                                                                                       |
| 09.25      | How would you describe your experience on the programme so far? Consider if there are differences/similarities between your experience in respect of: |
| Discussion 2 | Duration – 15 mins  
|             | • The academic content  
|             | • The application to your clinical setting/team/service                                                                                      |
|             | What have you found stimulating?                                                                                                              |
|             | What have you found challenging?                                                                                                              |
| Time   | Discussion 3  | Duration – 15 mins | | Thinking of your experience on the programme so far, consider what the supportive factors are, and consider if anything is holding you back, again in respect of:  
|• The academic content  
|• The application to your clinical setting/team/service  
| What is helping you currently?  
| Is anything hindering you?  
| Specifically comment on the mentorship, supervision, support, and peer/community support.  
| Discuss the findings to these questions, making notes on the sheets provided, and sharing discussion within the group.  
| Suggest everyone has a chance to share their thoughts  
| Text chat is great too.  

| Time   | Discussion 4  | Duration – 15 mins | | Looking forward, what are your aspirations – for yourself, your team/service?  
| And looking forward, what do you think are going to be the challenges you face?  
| If you knew what you knew now when you were starting the programme, is there anything you would change?  
| Discuss the findings to these questions, making notes on the sheets provided, and sharing discussion within the group.  
| Suggest everyone has a chance to share their thoughts  
| Text chat is great too.  

Discuss the findings to these questions, making notes on the sheets provided, and sharing discussion within the group.  
Suggest everyone has a chance to share their thoughts  
Text chat is great too.
<table>
<thead>
<tr>
<th>Time</th>
<th>Duration</th>
<th>Activity</th>
</tr>
</thead>
</table>
| 10.10 | Duration – 10 mins | Plenary discussion and review:  
  - Summing up  
  - Was this different?  
  - The same?  
  - Anything to add?  
  - Any issues outstanding that the questions haven’t covered but that might be important for the evaluation? |
| 10.25 | Duration – 5 mins | Closing remarks – relay to the group that there will be other opportunities to comment.  
  If there is anything specific that you feel you want to add to about today’s focus group, how it was run, or you go on to reflect on something which you feel it is important for the evaluation team to hear, you can get in touch by e-mail – Karen’s address is on the Participation Information Sheet, Katie’s address you should have.  
  Thank everyone for their contributions. |
| 10.30 |            | CLOSE  
  Stop and save recording  
  Share any immediate facilitator reflections |
# Detailed Agenda – Face-to-Face Focus Group

<table>
<thead>
<tr>
<th>Time</th>
<th>Content</th>
</tr>
</thead>
</table>
| **11.00**     | One large group  
KS leading introductory session  
Introductions, schedule for the 2 hours, and ground rules  
Ensure recording commenced  
Move into two equally sized groups (either same room or two separate rooms), Karen facilitating one group, Sally facilitating the other |
| **11.15**     | Exploring your preparation for the programme:  
What motivated you to apply for the programme?  
What steps did you have to take?  
What were the key decisions – for you and others? (Work/ and also changes to family life/routines)  
What preparation did you undertake prior to starting the programme?  
Did you undertake any academic preparation for the programme?  
Did you undertake any preparation on your IT skills/IT resources?  
What were your feelings before starting the programme?  
Discuss the findings to these questions, making notes on the sheets provided, and sharing discussion within the group. |
| **11.35**     | How would you describe your experience on the programme so far? Consider if there are differences/similarities between your experience in respect of:  
- The academic content  
- The application to your clinical setting/team/service  
What have you found stimulating?  
What have you found challenging? |
<table>
<thead>
<tr>
<th>Time</th>
<th>Discussion</th>
<th>Duration – 20 mins</th>
<th>Activity</th>
</tr>
</thead>
</table>
| 11.55   | Discussion 3 |                     | Thinking of your experience on the programme so far, consider what the supportive factors are, and consider if anything is holding you back, again in respect of:  
- The academic content  
- The application to your clinical setting/team/service  

What is helping you currently?  
Is anything hindering you?  
Specifically comment on the mentorship, supervision, support, and peer/community support. |
| 12.15   | Discussion 4 |                     | Looking forward, what are your aspirations – for yourself, your team/service?  
And looking forward, what do you think are going to be the challenges you face?  
If you knew what you knew now when you were starting the programme, is there anything you would change?  

Discuss the findings to these questions, making notes on the sheets provided, and sharing discussion within the group. |
| 12.35   | Discussion 5 |                     | Plenary discussion and review:  
- Summing up  
- Was this different?  
- The same?  
- Anything to add?  

Discuss the findings to these questions, making notes on the sheets provided, and sharing discussion within the group. |

<table>
<thead>
<tr>
<th>Time</th>
<th>Discussion</th>
<th>Duration – 20 mins</th>
<th>Activity</th>
</tr>
</thead>
</table>
|         | Plenary     |                     | Summing up  
Was this different?  
The same?  
Anything to add?  

Discuss the findings to these questions, making notes on the sheets provided, and sharing discussion within the group. |
- Any issues outstanding that the questions haven’t covered but that might be important for the evaluation?

**12.55**  
**Duration – 5 mins**  
Closing remarks – relay to the group that there will be other opportunities to comment. If there is anything specific that you feel you want to add to about today’s focus group, how it was run, or you go on to reflect on something which you feel it is important for the evaluation team to hear, you can get in touch by e-mail – Karen’s address is on the Participation Information Sheet, Katie’s address you should have.

Thank everyone for their contributions.

**13.00**  
CLOSE  
Stop and save recording  
Share any immediate facilitator reflections