Identifying the challenges faced by novice community pharmacists and developing a peer support intervention to ease their transitions to independent practitioners

A thesis submitted to the University of Manchester for the degree of Doctor of Philosophy in the Faculty of Biology, Medicine and Health

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## Glossary

<table>
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<th>Acronym</th>
<th>Description</th>
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<tbody>
<tr>
<td>A&amp;E</td>
<td>Accident and Emergency department</td>
</tr>
<tr>
<td>ACT</td>
<td>Accuracy checking technician</td>
</tr>
<tr>
<td>NCPs</td>
<td>Novice community pharmacist</td>
</tr>
<tr>
<td>BNF</td>
<td>British National Formulary</td>
</tr>
<tr>
<td>CASP</td>
<td>Critical Appraisal Skills Programme</td>
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<tr>
<td>CPD</td>
<td>Continuing Professional Development</td>
</tr>
<tr>
<td>CPPE</td>
<td>Centre for Pharmacy Postgraduate Education</td>
</tr>
<tr>
<td>CD</td>
<td>Controlled drug</td>
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<tr>
<td>CQC</td>
<td>Care Quality Commission</td>
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<tr>
<td>ECP</td>
<td>Early career pharmacist</td>
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<tr>
<td>GB</td>
<td>Great Britain</td>
</tr>
<tr>
<td>GMC</td>
<td>General Medical Council</td>
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<tr>
<td>GP</td>
<td>General practitioner</td>
</tr>
<tr>
<td>GPhC</td>
<td>General Pharmaceutical Council</td>
</tr>
<tr>
<td>HEE</td>
<td>Health Education England</td>
</tr>
<tr>
<td>HEI</td>
<td>Higher education institution</td>
</tr>
<tr>
<td>MDS</td>
<td>Monitored dosage system</td>
</tr>
<tr>
<td>MPharm</td>
<td>Master of Pharmacy degree</td>
</tr>
<tr>
<td>MRC</td>
<td>Medical Research Council</td>
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<tr>
<td>MUR</td>
<td>Medicines use review</td>
</tr>
<tr>
<td>NCAS</td>
<td>National Clinical Assessment Service</td>
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<tr>
<td>NCPPPC</td>
<td>Novice Community Pharmacist Peer Coaching</td>
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<tr>
<td>NGD</td>
<td>Nominal group discussion</td>
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<tr>
<td>NGT</td>
<td>Nominal Group Technique</td>
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<tr>
<td>NHS</td>
<td>National Health Service</td>
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<tr>
<td>NPA</td>
<td>National Pharmacy Association</td>
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<tr>
<td>NVQ</td>
<td>National Vocational Qualification</td>
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<tr>
<td>OTC</td>
<td>Over the counter</td>
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<tr>
<td>PC</td>
<td>Pharmacy colleagues</td>
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<tr>
<td>PDA</td>
<td>Pharmacists Defence Association</td>
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<tr>
<td>PGD</td>
<td>Patient Group Direction</td>
</tr>
<tr>
<td>PIL</td>
<td>Patient information leaflet</td>
</tr>
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<td>PIS</td>
<td>Participant information sheet</td>
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<tr>
<td>PMR</td>
<td>Patient medication record</td>
</tr>
<tr>
<td>PRT</td>
<td>Pre-registration tutors</td>
</tr>
<tr>
<td>PRUK</td>
<td>Pharmacy Research United Kingdom</td>
</tr>
<tr>
<td>RCN</td>
<td>Royal College of Nursing</td>
</tr>
<tr>
<td>RPS</td>
<td>Royal Pharmaceutical Society</td>
</tr>
<tr>
<td>SOP</td>
<td>Standard operating procedure</td>
</tr>
<tr>
<td>SWOT</td>
<td>Strengths, weaknesses, opportunities, and threats analysis</td>
</tr>
<tr>
<td>TSI</td>
<td>Transition support intervention</td>
</tr>
<tr>
<td>UCLAN</td>
<td>University of Central Lancashire</td>
</tr>
<tr>
<td>UK</td>
<td>United Kingdom</td>
</tr>
<tr>
<td>USA</td>
<td>United States of America</td>
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Abstract
The University of Manchester, Esnath Magola
Doctor of Philosophy
Title: Identifying the challenges faced by novice community pharmacists and developing a peer support intervention to ease their transition to independent practitioners
Date 08/01/2018

Background: The transition from trainee to newly-registered (novice) practitioner is regarded as the most stressful and challenging of time of a healthcare professional’s career. Community pharmacists are unusual in that they transition into roles where they commonly work as the sole pharmacist, manage a team of support staff and are accountable from day one of professional registration (without any formal support structure), yet little research exists in this area. This study aimed to identify the transition challenges faced by novice community pharmacists and to develop and feasibility test an evidence-based intervention to ease their transitions to independent practitioners.

Methods: Medical Research Council guidance for developing complex interventions was used to frame this programme of work. During development, evidence from existing literature and an exploratory nominal group study identified and prioritised the challenges faced by novice community pharmacists. Findings informed the iterative design process for a peer-coaching intervention with the following components; a social media group, one-to-one coaching, a handbook, group activities and weekly clinical/practice scenarios for group discussion. Twelve novice community pharmacists were recruited purposively to participate in the draft intervention, which was evaluated using semi-structured telephone interviews.

Results: Twenty-five participants took part in homogenous group discussions consisting of novice community pharmacists, early career pharmacists, pre-registration tutors and pharmacy colleagues. Similarly to challenges reported by novice doctors and nurses, nominal group discussions identified the following challenges [in order of importance]; relationship management; lack of confidence; decision-making; being in charge and accountable; and adapting to the workplace. Relationship management was attributed to novices’ lack of affective skills. There were some differences however in the challenges reported by novice community pharmacists, such as power struggles (with managers or pharmacy colleagues), inverse hierarchy, professional isolation, target culture and full immediate accountability. A number of factors perpetuating these differences were perceived to increase the weight of professional accountability and augment stress; the retail community pharmacy context, the relative lack of support and isolation from peers. Hence, the draft intervention focussed on supporting the novice community pharmacist to develop cognitive and affective skills. All participants viewed the social media forum as the most valuable component because it provided a ‘safe’ confidential space for reassurance, feedback, and sharing or discussing practice experiences. Participants also valued one-to-one discussions with the coach, which supported meaningful reflection and developing self-awareness. Outcomes reported by all participants included increased self-efficacy, increased confidence in decision-making/managing others, an increased sense of preparedness and the ability to cope during transition. Through group components, novice community pharmacists developed ‘a sense of belonging’ and reported feeling less isolated in the workplace.

Conclusions: This novel programme of work revealed the challenges faced by novice community pharmacists during transition. Findings suggest that a lack of affective and cognitive skills, the demands of the job and professional isolation caused novices to experience psychosocial stress and high job strain. A group peer-coaching intervention designed to ease the transitions of novice community pharmacists was reported to be acceptable, feasible and beneficial. Study findings led to some recommendations for transition support interventions: incorporate psychosocial support with developmental activities; provide a supportive learning space for developmental discourse that is accessible facilitated and structured; and offer coaching and supported reflection from an experienced pharmacist coach.
Declaration

No portion of the work referred to in the thesis has been submitted in support of an application for another degree or qualification of this or any other university or other institute of learning;

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Many thanks go to all the study participants for their willingness to take part and their contribution to my research. Sincere thanks to the novice community pharmacists who allowed me to share their journey of transition to practice.

To my dad, thank you for helping me achieve my best and for your unwavering belief in me. I wish you had been here to see me finish what we started. To my husband Aubrey and my daughter Anaiah, who have lived every minute of my PhD, I couldn’t have done this without you being my sanctuary and support. To Clara, thank you for being you. Thank you to my mum, Caro, Mac and my extended family and friends, for your love prayers and support. To my two honorary sisters, Brenda and Dina, thank you for all the things you have done to help me follow my dream.

Dedication

This thesis is dedicated to my greatest champion; my dad.
The author

Esnath Magola grew up in Malawi, Southern Africa and moved to the UK in 1997. She began her pharmacy degree (MPharm) in 1998 at the University of Manchester and registered as a pharmacist in 2003. She completed her MSc in Community Pharmacy from Queens University Belfast in 2010, and soon after took up an Honorary Lecturer role in 2010 at the University of Manchester. She began her PhD (full-time) in 2014 and continues to practise (part-time) as a primary care pharmacist and teaching practitioner.
Introduction to the thesis

This thesis reports findings from a programme of work (comprising four phases) to develop an intervention to ease the transitions of novice community pharmacists (NCPs). ‘Transition’ begins when newly qualified (novice) healthcare professionals register as independent practitioners and acquire initial responsibility and accountability for patient care. It is recognised as the most stressful and challenging period of a practitioner’s career.¹ Research on novice nurses and doctors exploring transition has concluded that characteristics of the workplace environment and the manner in which novice practitioners respond to them, are responsible for the challenges faced by novice practitioners. The perceived impact of these challenges has demonstrated negative implications for the novice practitioner, their organisation, and quality of patient care.

Even though community pharmacists are playing an increasingly clinical and patient-facing role, little is known about their transitions to independent practitioners. NCPs move from being supervised by a pre-registration tutor to carry full professional responsibility, without any formal support in place. They work in private sector settings in relative isolation from professional peers, unlike other novice practitioners, who transition into multi-disciplinary teams. From day one, NCPs have to lead established teams, balance clinical and commercial job demands and manage workload pressures. Given these contextual challenges it is possible NCPs may also experience challenging transitions. This research study aims to explore the transitions of NCPs and develop an intervention to ease their transitions.

The thesis is organised within six chapters, the outline of which is described below.

**Chapter 1** describes the rationale for the research, the structure of the study within the Medical Research Council (MRC) guidance and the proposed programme of work.

**Chapter 2** provides background to the research area through a narrative review of the relevant literature. This review explores the challenges faced by novice nurses and doctors [presented as a journal article].

**Chapter 3** reports the findings of an exploratory study which aimed to identify the challenges faced by NCPs at transition, their perceived impact, and the coping strategies used by NCPs.

**Chapter 4** presents the intervention development process. Evidence and theory from previous chapters are combined with some additional activities to create a first draft of the intervention.
Chapter 5 reports the evaluation of the draft intervention in a feasibility study. Findings for the intervention’s feasibility, acceptability, and perceived impact/outcomes are presented.

Chapter 6 discusses the key findings of this thesis and their implications for practice. Recommendations for policy, practice, and education are proposed.
1. Chapter 1. The programme of work

1.1 Background to the research

When newly qualified (novice) healthcare professionals register as independent practitioners they become legally and professionally accountable for patient care, symbolising the start of transition. Meleis’ theory of transition proposes that the ‘nature of transition’ can facilitate or hinder a person’s ‘pattern of response’ to it.² That ‘pattern of response’ or ‘reaction’ is determined by the characteristics of transition and the conditions in which transition occurs. For novice practitioners, the ‘nature of transition’ describes the developmental role or situational change caused by becoming an independent practitioner. The ‘pattern of response’ describes how the novice practitioner reacts to transition and is influenced by personal and environmental conditions during transition.

Transition is a complex period of change and adjustment that is recognised as the most stressful and challenging of a practitioner’s career and may last up to three years following registration.³ Professional regulators recognise that novice practitioners may not immediately perform at expected levels of competence, because they lack ‘sustained exposure to practice’.⁴ This lack of competence negatively affects practitioner performance and has implications for patient safety. One such example is ‘the August effect’, where an annual rise in patient mortality of 6-8% during the second week of August is attributed to the transition of junior doctors into National Health Service (NHS) hospitals.⁵,⁶ In addition to raising patient safety concerns, extensive research in nursing and medicine has reported that transition can have negative implications for staff retention, professional development and the quality of care if novice practitioners experience challenges.⁷-⁹

Despite evidence from nursing and medicine to show that transition is challenging for novice practitioners, little is known about the transitions of novice pharmacists. The trainee route to registration as a pharmacist in Great Britain (GB) is through obtaining a Master of Pharmacy degree (MPharm) at a higher education institution (HEI) accredited by the General Pharmaceutical Council (GPhC).¹⁰,¹¹ In addition to attaining an MPharm degree¹, all trainee pharmacists must complete 52 weeks of practice-based training and pass the GPhC-set registration assessment.¹⁰ Not all universities offer practice-based training within their

¹ There are 28 fully-accredited providers and 3 provisionally-accredited providers (total 31) in the UK of MPharm degrees. One offers a 5-year sandwich course (Bradford, with two, 6-month placements completed during the degree) and two offer a 5-year integrated degree (Nottingham, Norwich, with the pre-registration year incorporated into the degree). The remaining providers offer a 4-year degree where pre-registration training is completed after graduation. Source: https://www.pharmacyregulation.org/education/pharmacist/MPharm
undergraduate curricula, so the pre-registration placements may be the only practice exposure some trainees get. By contrast, novice nurses and junior doctors complete 25-50% of their undergraduate and pre-registration training in placements through an overarching structure that unifies tertiary and workplace settings.\(^\text{11}\)

During pharmacy pre-registration training, a designated tutor supervises and assesses trainees for competence against the GPhC performance standards, and determines whether the trainee is competent to sit the GPhC registration assessment.\(^\text{10}\) The assessment is a nationally-set exam at the end of undergraduate education and pre-registration training. The trainee may also learn informally from non-pharmacist colleagues (managers, dispensing technicians and support staff) to achieve these standards.\(^\text{12}\) Recent research exploring the quality of pre-registration pharmacy training in GB has highlighted problems with current arrangements:\(^\text{13,14}\)

- ambiguity in performance standards,
- inconsistent tutor assessment and the lack of a continuum from undergraduate to postgraduate curricula (which does exist in medical education).\(^\text{15,16}\)

Essential skills such as application of knowledge/skills in context, self-assessment skills, independent learning and reflective practice by pre-registration pharmacy trainees and independent learning are also believed to be lacking.\(^\text{18}\) During recent quality assurance auditing of pre-registration training, attention was placed on the lack of performance management of pre-registration tutors, who currently have little training, minimal assessment and provide variable levels of support.\(^\text{13}\) Whilst recommendations to improve pharmacy education and training have been made to Health Education England (HEE), problems experienced at the point of entry into practice do not appear to be addressed.\(^\text{19}\)

After passing the registration exam, tutor supervision ends. Trainees formally register as pharmacists with the GPhC and transition begins. Most novice pharmacists (72%) go on to work in private sector community pharmacies with the remainder transitioning to hospital settings.\(^\text{20,21}\) A recent longitudinal study that explored the development of professionalism from pre-registration into early practice, highlighted that hospital pre-registration pharmacists and novice hospital pharmacists have more access to peer support than novice community pharmacists (NCPs).\(^\text{22,23}\) In hospital settings, most novice practitioners are supported by experienced multidisciplinary colleagues through structured support systems that are recommended by their professional and regulatory bodies. Research in community pharmacy settings also indicates that the transition to independent practice is made challenging by inconsistent induction to practice, a change of employing organisation at the start of transition and moving from a quiet to a busy store. A lack of experience of particular skills such as
providing pharmacy enhanced or advanced services, clinically checking prescriptions and being in charge of the pharmacy was also reported.\(^\text{24}\)

Moreover, novices transitioning to the community pharmacy setting form part of the primary care team, alongside general practitioners (GPs) and nurses, but usually work in isolation from experienced peers.\(^\text{25}\) In a typical community pharmacy the ‘responsible pharmacist’ on site leads the dispensing/healthcare team and takes responsibility for running the pharmacy safely and effectively.\(^\text{26}\) Tiered professional responsibility structures (as seen in medical education)\(^\text{17}\) and structured clinical career pathways (as seen in hospital pharmacy or nursing postgraduate development)\(^\text{27}\), are limited in community pharmacy. Instead, NCPs acquire full, immediate professional accountability and commonly follow managerial career pathways, factors reported as contributing to stress.\(^\text{25,28}\) They also lead/manage established teams and must balance clinical and commercial job demands.\(^\text{29-31}\) Studies involving novice and early career community pharmacists (ECPs) also suggest that learning and professional development may be impaired in community pharmacy.\(^\text{32}\) In particular, ECPs may struggle to apply knowledge in context, communicate effectively, make final decisions, learn independently, develop self-assessment or awareness skills, demonstrate effective leadership, and show reflective practice.\(^\text{24,33-35}\)

Effectively, this means that a ‘day-one’ NCP is expected to perform the professional responsibilities and manage the clinical/commercial workload of an experienced pharmacist. Participants in a recent study exploring how early career community pharmacists learned to develop safe working practices experienced low confidence, poor patient safety culture in practice, difficulties managing staff, professional isolation, a lack of feedback, conflict between clinical and commercial priorities, and feared reprisal when mistakes occurred.\(^\text{33}\) The study further suggested that it took six weeks to three years of independent practice for NCPs to feel competent. This is supported by Benner’s novice to expert theory which states that novice nurses are competent after two to three years of practice.\(^\text{3}\)

Rising workload demands in community pharmacy have coincided with a shift to an increasingly clinical pharmacist role.\(^\text{36}\) Patient-facing services such as medicines optimisation, public health and the management of long term conditions are becoming the expected norm for community pharmacists.\(^\text{37-40}\) With 90% of all daily consultations between patients and health care practitioners in the UK happening within primary care, demands on community pharmacy and the services it can offer to patients will continue to rise.\(^\text{41}\) Given this evolution to a more clinically-focussed role in the commercial context of the community pharmacy setting, it is conceivable that NCPs may experience challenging transitions. This research
therefore proposes to explore the transitions of NCPs and develop a complex intervention to ease their transition to independent practitioners. Guidance from the Medical Research Council (MRC) on developing complex interventions is used in the development, feasibility study and refinement of the intervention.  

1.2 Overall research aim
The research study’s overall aim is to develop an evidence-based support intervention to ease the transitions of NCPs. A programme of work comprised of four phases was developed to fulfil the research aim:- a literature review, an exploratory study using nominal group technique, an intervention development/modelling phase and a feasibility study. The aims and objectives of the four phases are now presented using the MRC model for complex intervention development.

1.3 Developing complex interventions
The processes and decisions made in the early stages of intervention development later determine the success, outcomes and effectiveness of that intervention. Many interventions fail because of a lack of investment made at design and development stages. Reasons for these failures include a disregard of variations in context, a lack of piloting/exploratory work, underpowered trials, and not understanding the mechanisms that make the intervention work. Greater investment and the inclusion of rigour in the development stages may have prevented these failures as it has been shown to increase chances of success for interventions. This is particularly the case with interventions perceived to be complex.

In order to avoid some of the pitfalls, guidance has been developed to support intervention design. The MRC’s framework for the ‘development and evaluation of complex interventions’ provides a systematic, iterative and robust model for developing interventions. Early on in the development process, it prompts researchers to demonstrate clarity in the intervention aims, use theory in the development process, and consider how the intervention will cause change. In addition to demonstrating that the process of intervention development was robust, the MRC model also informed the methodological approach to the research study.

1.3.1 The MRC guidance for developing complex interventions

1.3.1.1 Defining complex interventions
Complex interventions are defined as complex because they contain several interacting components. In the MRC guidance, Craig et al. further suggest that in addition to complexity of the intervention components, variability may also be observed in the types or numbers of
target groups, their behaviours, and outcomes. An intervention to ease the transitions of novice community pharmacists (NCPs) was likely to include peer support. It fits the criteria for a complex intervention because it contains:

- a number of interacting components (such as activities or relationships within the intervention or the number of sessions or techniques used to deliver the intervention)
- a target group of novice community pharmacists (NCPs) with diverse/variable workplace settings, experiences and backgrounds
- various complex behaviours (clinical/non-clinical/learning) from participants delivering the intervention and the NCPs receiving it
- various potential outcomes/effects that may vary between individuals
- flexible elements that can be adapted to different workplace settings

1.3.1.2 The development process

There are four main stages in the process of complex intervention development based on the most recent MRC model. They are summarised in the model in Figure 1.1 as development, feasibility/piloting, evaluation, and implementation stages. The progressive phases in the programme of work for this research were mapped to the MRC model to identify the stages addressed, namely development, feasibility, and evaluation. More specifically, activities described in the programme of work [phases 1-4 described in this thesis], incorporated development, modelling, feasibility testing and understanding the change process through evaluation.
Given that the proposed intervention was complex, a number of key considerations had to be made regarding its development and evaluation. These considerations are recommended in the MRC guidance and discussed with reference to this programme of work.

The first of these considerations is that the developer needs a thorough [practical and theoretical] understanding of the intervention’s mechanisms of change or the ‘causal chain’. Here, the developer needed to understand the challenges NCPs face, the cause, presentation and management of these challenges, and how components (or ‘ingredients’) of a proposed support intervention could ease these challenges. Thorough understanding was achieved by a literature review [phase 1 study], an exploratory study [phase 2 nominal group study], intervention design using additional activities [phase 3] and a feasibility study [phase 4]. Findings from these research activities helped ensure that intervention components were designed to address the causes or effects of challenges faced by NCPs, influence outcomes and provide evidence that predictions can be made about how intervention components interact. Unintended or unexpected effects resulting from interventions that are negative or positive may also be understood if mechanisms are evaluated.

Next, MRC guidance recommends a process evaluation to understand how an intervention functions, by considering implementation, mechanisms of impact, and context. Conducting a true realist and theory-driven process evaluation was outside the scope of the current
research, since it was not possible to explore contextual factors and the difference they made to the intervention. Rather, evaluation findings from the feasibility study aimed to provide some insight into implementation and the overall development process provided some understanding of processes and mechanisms. Process evaluation is important to intervention development because it helps explain unintended pathways/consequences and identifies/explains reasons for failure. By adopting a rigorous and systematic approach to intervention development, failure may be avoided. The intervention design phase of the programme of work aimed to inform the practical considerations for implementation and formalise the intervention structure and process. This allowed a road-map or process for implementation to be developed and evaluated during the phase 4 feasibility study.

Consideration of the outcomes is another important aspect of intervention design. Intervention outcomes may vary at the individual level, which may affect findings for effectiveness and influence sample sizes. The MRC guidance therefore recommends this variability in outcomes may also mean that multiple outcomes should be measured in preference to one single primary outcome. While this is an important consideration for intervention development, proposed outcomes in this study were theoretical and not yet demonstrated [due to the paucity of research on transition and transition support interventions for NCPs]. This meant evaluating the intervention’s effectiveness was beyond the scope of this research. Instead, this research aimed to identify outcomes and the extent of the likely variability in outcomes and provide understanding as to why outcomes were being observed prior to future evaluation of the intervention’s effectiveness.

A further necessary consideration is that contextual variation may influence how the intervention is used, implemented, and made effectual. MRC guidance states that context includes characteristics of the intervention setting and extends to social context, organisational culture, and beliefs. All these characteristics are expected to influence transition experiences, and may affect implementation, delivery, and outcomes of a transition support intervention (TSI). Even though details of the context were not explored during intervention evaluation, a degree of flexibility was needed to allow the intervention to be adapted to fit local requirements and the needs of individual NCPs.

The intervention development process subsequently mirrored the MRC guidance of a multi-phase and iterative process because of all the considerations to be made, the complexity of the transition period and the intervention, and the multifactorial nature of challenges faced by NCPs.
1.3.2 The programme of work within the structure of the MRC model

The proposed programme of work maps to three stages of the MRC model: development, feasibility, and evaluation. A description of this mapping result is summarised in Table 1.1.

Table 1.1 Mapping the programme of work to the MRC model

<table>
<thead>
<tr>
<th>Stages of MRC model</th>
<th>Relevant Methods in Programme of work</th>
<th>Thesis chapter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Development</td>
<td>Identifying the evidence base</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Identifying/developing the theory</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Phase 1 Literature review phase</td>
<td>Narrative literature review - transition challenges</td>
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<tr>
<td></td>
<td>Phase 2 Exploratory (Nominal group) study</td>
<td>Nominal group discussions with pharmacists and pharmacy colleagues</td>
</tr>
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<td></td>
<td>Phase 3 Intervention design phase</td>
<td>Findings from phase 1 (literature review) and 2 (nominal group study)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Scoping literature review for transition support interventions</td>
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<tr>
<td></td>
<td></td>
<td>Informal interviews</td>
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<tr>
<td></td>
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<td>Documentary analysis</td>
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<td></td>
<td></td>
<td>Stakeholder meeting</td>
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<tr>
<td>Modelling process and outcomes</td>
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<tr>
<td>Feasibility</td>
<td>Testing for acceptability, implementation and delivery</td>
<td>Running/delivering the intervention</td>
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<tr>
<td></td>
<td>Phase 4 Feasibility study</td>
<td>Reflective coach log</td>
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<td></td>
<td></td>
<td>Intervention monitoring log</td>
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<tr>
<td>Evaluation</td>
<td>Understanding change processes (by exploring intervention usefulness and outcomes)</td>
<td>Semi-structured interviews</td>
</tr>
<tr>
<td></td>
<td>Phase 4 Feasibility study</td>
<td>Intervention log (intervention processes and coach reflective diary)</td>
</tr>
</tbody>
</table>

1.3.2.1 The development stage

The literature review phase, nominal group study and intervention design phase all contributed to the development by providing empirical and theoretical evidence for transition, and transition support interventions (TSIs). The evidence was then used with additional activities for the intervention design phase, for the modelling process to be completed. This resulted in a draft intervention for the phase 4 feasibility study.
1.3.2.2 The feasibility stage
The phase 4 feasibility study of this programme of work aimed to test the intervention’s feasibility and acceptability, by exploring participant perceptions of the intervention and the intervention’s recruitment, retention and implementation.

1.3.2.3 The evaluation stage
The feasibility study also aimed to investigate the perceived usefulness/value of intervention components, identify outcomes, and understand how the intervention had produced any observed/reported changes or outcomes. Findings were used to further refine the intervention for future pilot-testing.

1.3.3 Methodological approaches to complex intervention design
MRC guidance for developing and evaluating complex interventions recommends the use of mixed methods in its design, particularly in the feasibility/piloting, evaluation and implementation stages. Understanding processes and causal chains is integral to rigorous intervention design because it provides an explanation of the intermediate mechanisms that produce effects and demonstrate effectiveness or variability in outcomes. MRC guidance states that the research approach most suited to understanding causal links is the qualitative approach, which has the added benefit of involving users. Understanding why an intervention is effective through process evaluation does not however replace the evaluation of outcomes which is used to demonstrate effectiveness of an intervention. Evaluation of effectiveness is best achieved through quantitative methods.

A mixed methods approach works on the premise that outcomes are clearly established and that suitable outcome measures are in place when conducting feasibility or pilot testing. As stated earlier, not enough was known about transition and transition support in the context of community pharmacy to establish outcomes. While possible outcomes/outcome measures have been identified and utilised in the nursing and medical settings, outcomes specific to the community pharmacy setting remain hypothetical. Any evaluation performed for this intervention had the sole purpose of contributing to intervention development/design, and not to assess effectiveness through quantitative methods. Therefore the most appropriate general approach needed to address this research question at this particular stage of development is the qualitative approach.

1.3.3.1 Qualitative research methods in complex intervention design
A qualitative approach was taken to both the exploratory and feasibility studies conducted as part of this programme of work. Since the research question sought to understand a complex
psychosocial phenomenon (in the case of this research, transition) from the perspective of the people it involves, quantitative methods were deemed inappropriate. Quantitative methods aim to test hypotheses, develop predictions, and use numerical data from a large, representative sample size: this produces generalizable findings which are applicable to the population. By contrast, qualitative research methods aim to answer specific humanistic ‘why and how’ questions and use rich, insightful data (of experiences, views or perceptions presented as text or images) obtained from a small group of participants in their natural settings. As such, qualitative results are not generalizable to the general population, however, findings may be transferable to specific contexts. Qualitative data collection requires social interaction with study participants through one-to-one or group interactions. The most commonly used forms of qualitative data collection methods are interviews, focus groups or observation.

MRC guidance recommends that when developing complex interventions, researchers should have a comprehensive theoretical understanding of how the intervention works. Pawson and Tilley also advocated that this increases applicability and usefulness of the findings from intervention evaluation. Qualitative research methods can contribute to complex intervention development in a number of ways. Specifically, they can be used to inform intervention content and delivery, understand individual intervention components and their mechanisms, explore perceived value or benefit of interventions, explore real-world intervention feasibility and acceptability, identify and differentiate intervention outcomes and explore the validity of process and outcome measures.

In this research, qualitative methods will be used in the nominal group (phase 2) and feasibility studies of the programme of work. The nominal group study will use qualitative methods to prioritise intervention aims/goals, inform selection of intervention content/components and approaches to delivery and implementation. This will be achieved with the use of nominal group technique, a form of structured group interview. Further details are provided in Chapter 3, where findings of the study are reported. In phase 4, the feasibility study will use qualitative methods to understand individual intervention components and the causal chains leading to their effects, explore feasibility and acceptability of the intervention to NCPs, explore the fidelity and processes of the intervention, explore perceived value or benefit of intervention components, identify outcomes and differentiate unintended or unexpected intervention outcomes, understand inconsistencies of effects and inform the use and development of outcomes measures. This will be achieved with the use of individual semi-structured
interviews. Further details are provided in chapter 5, where findings of the feasibility study are reported.

### 1.4 Philosophical underpinnings of the research approach

This section provides the philosophical approach to this research by setting out the ontological and epistemological stances adopted. The philosophical approach defines how a researcher views the way in which knowledge is acquired (epistemology), and their beliefs about the social world (ontology).\(^{53}\) The philosophical approach is important because it ultimately determines the decisions the researcher makes about the research methods they use.\(^ {54}\)

#### 1.4.1 Influences on the research approach

Factors including the research question, the author’s background, the supervisory team, and the author’s philosophical perspective influenced the research approach. The nature of the research question further influenced the research approach to the study. The research study aimed to explore and understand the ‘how and why’ of a phenomenon, its relational processes and interactions. As such, data collection aimed to gain rich, in-depth, and complex data from unique cases, with limited emphasis on generalizability.\(^ {54}\) ‘Rich’ or ‘thick’ data would include consideration of context and allow transferability of some findings.\(^ {53, 55}\) The chosen methodology therefore had to be relevant to the research question and applicable to the study in a rigorous way.

The author and primary investigator is a practising pharmacist in community and primary care settings and an educator. In her fourteen years of practice she was a tutor for pharmacy staff undertaking vocational training and was a pre-registration tutor for three years. She has also been a pharmacy educator in a HEI for seven years teaching at undergraduate level.

Over this period she observed discrepancies in pre-registration training experiences and workplace placements and experienced first-hand the problems of workplace pressure and professional isolation. Her move to a HEI highlighted the disparities in developmental support between community pharmacy and professions such as nursing or medicine. Several pharmacist colleagues and associates including some that had left the profession re-iterated this feeling. Interestingly, early career pharmacists usually attended face-to-face learning workshops offered by organisations such as the Centre for Pharmacy Postgraduate Education (CPPE), only when they were mandatory. Furthermore, anecdotal reports suggested that previous attempts by CPPE to engage early career pharmacists had had little success and consequently been abandoned.
Leading up to this project, the author worked as a research associate on a qualitative study which explored how early career community pharmacists learn to develop safe practice. Participants from that study reported ‘muddling through’ or feeling they were unsupported and ‘thrown in at the deep end’. This suggested that professional isolation and a lack of support were inherent in community pharmacy culture. The author felt that while this mirrored aspects of her own experience of transition, changes in the community pharmacy landscape appeared to be increasing the trauma of early practice. A deep personal and professional motivation therefore drove the author’s wish to address this research question.

The author’s background is likely to have influenced her choice of research methods, her analysis, and interpretation and reporting of research findings. It also meant that assuming a position of complete objectivity and independence from the research was not possible. For these reasons, a reflective account about the research process is written in chapter 6 to ensure transparency and acknowledge the existence of personal assumptions, biases, and beliefs.

The supervisory team, [made up of a pharmacist as main supervisor; ES and a social scientist as a secondary supervisor; SW] and their experiences of practice and research were also likely to influence the research approach. Both supervisors have a background in pharmacy practice research (pharmacy education and training, workforce research) and are highly experienced in the use of qualitative research methods. The author’s main supervisor has expertise in pharmacy law, professionalism, and policy, and has extensive experience of using research to influence policy development. Crucially, as this research study began she was just completing supervision of a PhD which explored how professionalism was developed in the pharmacist pre-registration period and the four months after registration. She therefore brought valuable insight about early transition for NCPs and some associated challenges, from previous PhD supervision.

The secondary supervisor is a social scientist with research experience in the role of pharmacy education and training to develop the workforce. Prior to her research in pharmacy education and workforce, her research interests were in medical education, where she explored the pre- and post-graduation period and Foundation training in medicine. Her role as a postgraduate pharmacy educator was useful in helping to understand the role of adult education and learning theories and how it could be applied to this research study.

An advisor (SP) with a background in psychology and current research in medical education was brought to the project because of her expertise in complex intervention design. She had recently supervised a PhD project that used complex intervention design for medical
education/training: she was able to bring her expertise of applying social research methods to complex intervention design to inform implementation, design, and evaluation of this intervention.

1.4.2 Ontological stance of the research
The ontological stance refers to ‘what is considered real’ or the ‘nature of reality’ of a phenomenon. In reference to this study, the phenomenon under consideration is transition. Meleis’ middle-range emerging theory of transition was identified in the literature review, but was used to loosely guide understanding of the research area, rather than to drive the research.

Our knowledge of transition from the literature surmises that it is a complex phenomenon based on multiple interpretations of one reality. Hence reality is derived from uncovering, explaining, and understanding causal mechanisms or causal links, and not derived entirely through discourse. This view is consistent with the critical realist approach (founded by the work of Roy Bhaskar) which includes the notion that understanding of underlying ‘causal properties’ is needed to define reality. Critical realism suggests that reality may be viewed at three ‘levels’: empirical [where events are observed and understood through interpretation], actual [where events occur, regardless whether or not they are seen] and real [where events occur due to causal mechanisms].

Morley showed that critical realism could be successfully used as a research approach to develop and evaluate a transition support intervention for novice occupational therapists. This was because with critical realism, knowledge is acquired through an inductive process. Through a series of papers documenting the complex intervention design, Morley demonstrated that evidence was collected and analysed before conclusions/hypotheses about the phenomenon of transition can be stated. This fed into the development of an intervention that successfully ameliorated the challenges experienced during transition. Critical realism does not aim to test theory or hypotheses but draws conclusions driven from the data. This relies also on accepting the role of interpretation in seeking to derive meaning out of experiences. These attributes of critical realism make it particularly suitable in the development of complex interventions using MRC guidance, where gaining understanding of mechanisms, contexts, and outcomes is essential to rigorous intervention development. Indeed Fletcher et al. suggest that adopting a realist approach in complex intervention design is helpful for considering issues of feasibility and the likely effects of an intervention for particular contexts.
Critical realism offers an alternative view to the more traditional positivist and constructivist approaches. Since transition cannot be predicted or explained purely by observable results or only through social construction, the positivist approach is rejected. The constructivist approach proposes that transition is only ever a socially constructed entity: one that is based on discourse from those who experience it. As a result, the constructivist approach would suggest that multiple realities of transition exist with none of these realities existing independently of their identification through discourse. As the constructivist approach rejects the notion of causality, it was rejected.

Pragmatism seeks to generate practical consequences for society and has been widely used in pedagogical and educational systems, and organisational research. The philosophical perspective was used to guide the approach to research methods however it was important that suitable methods were selected for the research question. This included flexibility in the selection and use of methods to best fit the particular research question, even if they were not considered as epistemologically or ontologically fitting. Given the ‘problem-solving nature’ of the research question, the consideration of existing conditions/settings for the intervention, and the constraints of time/resources, pragmatism was needed to guide research methods.

Using MRC guidance to develop this complex intervention also required a pragmatic approach. While MRC guidance recommends using theory in intervention design, a known weakness of the guidance is that it provides no instruction on how this should be done. Furthermore, while literature documents the theory, evaluation, and outcomes of complex intervention, the practical elements of development and feasibility are seldom reported. More recently reporting on the process of developing interventions is becoming more comprehensive as shown by Krieger et al.’s complex intervention: despite this MRC guidance is not always used. This limited the researcher’s practical knowledge of intervention development, and a pragmatic approach to the practicalities of complex intervention design had to be used in this research.

### 1.5 Chapter summary

This chapter began by defining transition for novice practitioners and provided an overview of the community pharmacy setting into which NCPs transition. Given this setting, it concluded that NCPs may benefit from a supportive intervention to ease their transitions to independent practitioners. The multifactorial nature of transition meant an intervention to ease the transitions of NCPs was complex; the author therefore proposed using the MRC model and guidance for complex intervention development. MRC guidance recommended consideration
and understanding of the intervention’s mechanisms of change (so that components could be designed to produce these mechanisms), processes/functions, outcomes and context or setting. This understanding facilitated a rigorous and transparent design process, which in turn improves the effectiveness of interventions. MRC guidance was used to consider the (philosophical and methodological) research approach for this research study. The MRC guidance was also used to frame this research study’s overall proposed programme of work, presented in Table 1.1. The first stage of the model highlighted the need for and role of developing a good evidence base when starting complex intervention design. The next chapter therefore develops this evidence base through phase 1 of the programme of work; a review of the literature on transition.
2. Chapter 2. Literature review

This chapter reports phase 1 of the programme of work, where the literature on the transitions of novice practitioners is reviewed. As stipulated by the Medical Research Council (MRC) guidance, reviewing the literature was necessary to understand the challenges that NCPs faced during their transitions to independent practitioners. It was also important to understand the causes of the challenges, the perceived effects of the challenges and the strategies used by NCPs to manage challenging transitions. Understanding transitions of NCPs would inform recommendations for developing and implementing a supportive intervention, and provide insight as to the role of the context or setting in the experiences of NCPs’ transitions.

A scoping review conducted to direct the search revealed a paucity of research focussed on the transition experiences of NCPs. Pharmacy practice workforce research involving recently qualified pharmacists did however report that community pharmacists were professionally isolated.\textsuperscript{24} The studies deemed as having most relevance to the research question focussed on early career pharmacy workforce issues. In addition a few opinion/conversation pieces and anecdotal reports about transition for recently qualified pharmacists reported problematic transitions for NCPs.\textsuperscript{69-72}

The first study explored how early career pharmacists learned to develop safe practice.\textsuperscript{33} The second longitudinal study explored the development of professionalism during the pre-registration year and followed hospital and community trainee pharmacists until four months into practice.\textsuperscript{24} The third study explored workload pressure amongst recently-qualified pharmacists.\textsuperscript{73} These studies concluded that early in their career pharmacists felt undervalued and underutilized, unsupported, isolated, and experienced low job satisfaction. While these studies provided some insight into the challenges faced in early practice, none of these studies specifically linked these problems to the transitions of NCPs to independent practitioners.

Since there were no peer-reviewed studies that specifically explored the transitions of NCPs, the review explored the transition experiences of generalist practitioners: novice nurses and junior doctors. Though differences exist in the roles and settings of novice nurses and junior doctors, their transition experiences were still likely to be of value and relevance for NCPs. This chapter therefore explores and describes the key challenges and concepts of transition and concludes by considering the challenges identified, in the context of the community pharmacy setting. This was published in the International Journal of Pharmacy Practice. The published


<table>
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<th>Journal:</th>
<th>International Journal of Pharmacy Practice</th>
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**Note.** The formatting and layout of the review is in keeping with the IJPP’s guidelines. References for this study however will be placed at the end of the entire thesis.
2.1 What can community pharmacy learn from the experiences of transition to practice for novice doctors and nurses? A narrative review

2.2 Abstract

2.2.1 Objectives
In the absence of literature reporting the transition experiences of novice community pharmacists, peer-reviewed evidence on the transition experiences of novice doctors and nurses was identified and reviewed. Specific objectives included identifying the challenges to transition and their perceived impact, before considering the implications for novice community pharmacists.

2.2.2 Methods
The electronic databases MEDLINE, EMBASE, CINAHL, PsycINFO and ScienceDirect were searched for full peer-reviewed original research papers published 1990-March 2015, reporting the transition experiences of novice doctors and nurses. A narrative review following coding of themes was undertaken to synthesize findings with transferability.

2.2.3 Key findings
Twenty-five papers using qualitative and quantitative methods were retrieved from nursing (18) and medicine (6). Challenges were categorised into three themes; personal experiences (where acquiring professional accountability, failing to meet expectations, and emotional, cognitive and physical demands of the job heightened stress), social experiences (where support and acceptance at work were hindered by organisational culture, hierarchy or interpersonal conflict) and challenges from job-related experiences (high workloads, task complexity, staffing, rotations and shift patterns). Challenging transitions were perceived by novice practitioners and their peers as impeding learning, impairing performance and having negative implications for patient care.

2.2.4 Conclusions
While some of these findings may be transferable to community pharmacy settings, contextual differences exist; relative isolation from professional peers, commercially-driven private sector settings, full, immediate acquisition of professional accountability and the lack of clinical career pathways or formalised support. Given these differences, is it appropriate that ‘day-one’ community pharmacists are fully and immediately accountable? Empirical research exploring transition to practice in the community pharmacy setting is needed.
2.3 Introduction

Every year, newly registered (novice) healthcare professionals including the ‘generalist’ practitioners (pharmacists, doctors and nurses), begin independent practice. This marks the start of transition to expert practice, which brings with it an incongruence or disconnect between old and new social support structures, support needs and expectations. Transition is a complex and dynamic process triggering a period of intense learning and change for novice practitioners as they are ‘socialized’ into their new workplace environment. They must repeatedly learn, adapt and apply learning, increasing in proficiency to reach the level of ‘competent’ as outlined in the Dreyfus Model, which describes progressive levels of skill acquisition. For the purpose of this review, transition is defined as the period from which novice practitioners first experience autonomous decision-making and acquire professional accountability for patient care.

Evidence from medical and nursing literature depicts transition as a period that is challenging, lengthy [up to three years], and has implications for staff retention, professional development and patient care. Despite this, it remains an under researched area in pharmacy.

Professional regulators for nursing and medicine acknowledge that novice practitioners, whilst competent at a foundation level, commonly lack the experience, confidence and ability to apply their knowledge beyond the lowest level of proficiency: that of ‘novice’. In order to ease transition to practice for junior doctors and novice nurses in Great Britain, informal peer support frameworks and formal, regulator-endorsed support programmes are implemented. Since these support frameworks are lacking in pharmacy, it is likely that transition presents challenges for novice community pharmacists which may have implications for the way in which they practise.

All novice pharmacists graduating from universities in Great Britain will have completed a 4-year Master of Pharmacy (MPharm) degree, 52 weeks of practice-based training and passed the GPhC-set registration assessment. The majority of pharmacists (72%) immediately go on to work in community pharmacies, whether or not their pre-registration training included experience in the community pharmacy sector. These novice community pharmacists work in private, for-profit organisations which range from independent contractors to large, corporate multiples. Here, pharmacists form part of the primary care team, working alongside

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8 A pharmacy company made of more than one community pharmacy premises, which may further be described as a small multiple (2-4 stores), medium multiple (5-25 stores) or large multiple (over 25 stores).
general practitioners (GPs) and practice nurses. Besides their traditional medicines supply function, community pharmacists provide increasing levels of clinical patient-centred services such as medicines optimisation, the management of long term conditions and public health services. As the pharmacy profession evolves, it is important to ensure that novice practitioners experience a seamless transition to practice which enables them to ‘hit the ground running’ and facilitates the development of proficiency to full competence.

Anecdotal reports and some research evidence exist of the challenges experienced by pre-registration and recently registered community pharmacists. In particular, high workloads, commercial targets, work-related stress and a lack of peer support have been reported however, no studies explore transition to practice or specifically link these problems to the transition period.\textsuperscript{24,29,33,80,81} Like novice community pharmacists, novice nurses and junior doctors are ‘generalist’ practitioners. Their undergraduate training includes proportionately greater periods of supervised practice-based learning than pharmacists receive and they transition to practice within public sector settings. It is generally later in their careers (after further training and experience), that doctors and nurses go on to practise in the community or primary care team as private sector partners. Nevertheless, evidence reporting the experiences of novice nurses and junior doctors, is likely to be of value and relevance for community pharmacy.

2.4 Aims and objectives
The overall aim of this review was to explore the transition experience of novice practitioners in nursing and medicine and consider the implications for novice community pharmacists. The three main objectives were to;

- Identify the challenges experienced by novice nurses and junior doctors in the transition to practice
- Identify the perceived effect of transition on practitioner performance
- Consider the implications of these findings for novice community pharmacists

To achieve this, the narrative review approach was utilised in order to summarise available evidence and increase its applicability. Thematic analysis allowed the main themes to be identified from the literature whilst incorporating qualitative and quantitative research evidence.
2.5 Methods

The guidelines used to report the findings of this structured review are from the PRISMA 2009 (Preferred Reporting Items for Systematic Reviews and Meta-analyses) 27-item checklist. As the guidelines were not fully relevant to the research question and the findings, parts 11, 13, 16, 20, 21, 23 of the checklist were completely excluded. Headings from the PRISMA checklist are used to structure the methods section.

2.5.1 Search terms

An initial scoping review was conducted to establish the nature and distribution of studies that were relevant to the research question. This review allowed the identification of four domains of search areas, as well as their most commonly used synonyms; ‘transition’ (entry-to-practice, orientation), newly qualified (newly registered, new graduate, novice, junior), performance (competence), and doctor, physician or nurse. The full list of search terms is listed in Table 2.1.

Table 2.1 Key search terms

<table>
<thead>
<tr>
<th>Transition</th>
<th>Newly-qualified</th>
<th>Healthcare professional</th>
<th>Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transition</td>
<td>Newly qualified</td>
<td>Physician</td>
<td>Performance or Competence</td>
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<tr>
<td>Entry to practice</td>
<td>Newly registered</td>
<td>Doctor</td>
<td></td>
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<tr>
<td>Orientation</td>
<td>New graduate</td>
<td>Nurse</td>
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<td></td>
<td>Novice</td>
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<td></td>
<td>Junior</td>
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combined with ‘AND’ or ‘OR’

Each term in the first, second and third columns (transition, newly-qualified, healthcare professional) was combined with the word AND and searched. This provided a total of 45 search combinations. In the next part of the search, each term in the first, second and fourth columns (transition, newly-qualified and performance or competence) was combined with the word AND and searched. This provided a total of 15 search combinations. In summary, 60 combinations were searched in each database.

2.5.2 Eligibility criteria

Studies were required to meet the inclusion criteria set out in Table 2.2 As defined in the introduction, novice practitioners were those with up to three years of post-registration experience.
Table 2.2 Inclusion/exclusion criteria

<table>
<thead>
<tr>
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<th>Included</th>
<th>Excluded</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Country of origin</strong></td>
<td>UK, USA, Canada, Australia, Western Europe, New Zealand</td>
<td>Elsewhere</td>
</tr>
<tr>
<td><strong>Dates for inclusion</strong></td>
<td>1990 - March 2015</td>
<td></td>
</tr>
<tr>
<td><strong>Papers for inclusion</strong></td>
<td>Peer-reviewed empirical study</td>
<td>Non-peer reviewed, literature reviews, commentary, editorial, conference abstracts</td>
</tr>
<tr>
<td><strong>Setting</strong></td>
<td>Primary or secondary care, public or private</td>
<td>Rural or military</td>
</tr>
<tr>
<td><strong>Eligible participants</strong></td>
<td>Practising, registered nurses (a 3 or 4 year degree) or doctors with up to 3 years experience</td>
<td>Undergraduate students, nurses/doctors with over 3 years’ experience</td>
</tr>
<tr>
<td><strong>Focus of study</strong></td>
<td>General experiences of transition to registered practice</td>
<td>Evaluation of undergraduate education/curricula or retention strategies No reports of challenges or perceived effects on the novice practitioner</td>
</tr>
</tbody>
</table>

2.5.3 Information sources

The electronic databases MEDLINE, EMBASE, CINAHL, PsycINFO, and Science Direct were searched for original peer-reviewed English language papers published from January 1990 - March 2015. The search period was chosen to include the period during which changes were made to modernise nursing, medical and pharmacy education within Great Britain.83

2.5.4 Study selection

An initial database search generated papers which were subjected to a three stage screening process. In the first stage, ineligible or duplicate titles were excluded during title screening, leaving titles for abstract screening. The content of the abstracts was then screened in the second stage to assess their applicability to inclusion criteria. Where it was not possible to determine this from the level of detail in the abstract, the full paper was read and subjected to inclusion/exclusion criteria. In the third stage, the full papers were downloaded to a reference manager system, EndNote for full screening. Two papers that required contact with authors in order to determine suitability for inclusion were both excluded. Where uncertainty arose regarding the eligibility of a paper evaluated by the lead author EM, consensus was reached after discussion with two experienced researchers SW, ES. The reference lists of the studies
included were hand-searched for additional papers, which resulted in no further additions to the final number of papers determined relevant to the review.

To assess the risk of bias, domains from the CASP appraisal tool for qualitative research and Cochrane collaboration tool were used. These were domains 4, 6 and 8 of the CASP checklist, and domains 1 and 4 of the Cochrane collaboration relating to selection and attrition. In summary the domains for selection, attrition, researcher position, and reporting bias were applied to the studies.

2.5.5 Narrative analysis
This review focused on the reported challenges during transition and their effects on the novice practitioner. The initial analysis of transition experiences was found to describe two main concepts; the challenges experienced by the novice practitioner during transition, and the perceived effects they had on the novice practitioners. These two concepts were examined in further detail in the next stage.

Thematic synthesis began with a data-driven stage, where descriptions of challenges experienced by novices, and the perceived effect they had were noted. In this stage, each paper was read, descriptions of challenges and their impact were identified and a list of these descriptors was made in Microsoft Excel. The process was systematically repeated for each paper to derive a list. The next stage was theory driven and descriptors were organised into common areas/themes by identifying similarities or differences. The themes were reviewed by the lead researcher, and then discussed with ES and SW to agree on the more abstract themes, to ensure these themes provided a sufficient description of all initial descriptors.

2.6 Results
The database search retrieved 6846 titles for screening. The titles were then screened to remove duplicates and exclusions, after which 780 abstracts were reviewed. A total of 637 abstracts were deemed ineligible and excluded before 143 full-text papers underwent a final screening process. This provided a total 25 full-text papers for review in the qualitative synthesis (see Figure 2.1). The 25 papers reporting 24 studies (2 papers from medicine reported findings from the same study) then underwent data extraction. Findings from the data extraction process are reported in Tables 2.3 (nursing) and 2.4 (medicine) (Appendices 1 and 2).
2.6.1 Characteristics of included studies
A total of 19 studies from nursing and 5 from medicine were included in the review. One study has findings reported in two papers which are therefore combined in Table 2.4. The studies were based in eight countries, across single or multiple, public or private hospital sites located in towns or cities. A qualitative approach was used in 20 (4 medical and 16 nursing) of the 24 studies, and three used mixed methods designs (2 nursing, one medicine). Data collection occurred through observations, group or individual interviews, reflective journals,
documentary analysis and survey questionnaires. Longitudinal data collection was used in 10 of the 24 studies; one of these used quantitative methods however, attrition may have affected the reliability of the findings (n=154 at t1, n=110 at t2).90

2.6.2 Study quality
Study quality was assessed using the CASP tool for appraising qualitative studies which is a 10-item checklist.84 The main methodological limitations identified in the studies related to data collection strategies such as small sample sizes, sampling strategies, researcher bias, retrospective reporting, the use of self-reported measures, the inability to achieve data saturation and attrition. These limitations were partially addressed by the inclusion of measures such as data triangulation, purposive sampling, in-depth interviews and mixed methods approaches. In assessing quality, the lack of an empirically tested method for excluding qualitative studies based on quality supported the need to include all eligible studies.91,92 As such, the decision was made not to exclude any papers on the basis of quality, but to acknowledge the limitations of individual studies as part of the analysis.

The qualitative nature of study design meant many of the studies were small scale, including three studies with 5 participants which made transferability of the findings problematic.93-95 Five studies (four from nursing and one from medicine) were classed as large scale by qualitative criteria (n>50); two of which were longitudinal and used interview data collected at two points for iterative consensus building. The 10 longitudinal studies (7 from nursing, three from medicine)85,86,90,93-97 provided richer data, however this was compromised by participant attrition, or the fact that attrition was not addressed as a limitation of the study.

Most studies used purposive sampling to increase participant variation and coverage, and only two studies stated that data saturation was achieved. The potential for researcher bias was acknowledged in six of the studies, where some participants were previously known to researchers.93,95,98-100 All studies used self-report measures that were primarily completed retrospectively within 12-18 months post registration, which may have introduced recall bias. Only one study by Chang and Hancock used defined transition measures and with the exception of one private sector setting and one community setting, all studies included public sector hospital settings.94,101

Thematic analysis revealed three themes within the concept of challenges; those caused by ‘personal experiences’, ‘social experiences’ or ‘job-related experiences’. While they are categorised as such, an important finding was that these three elements are not mutually exclusive. Rather these challenges described an interdependent relationship whereby any one
challenge can incorporate or be influenced by aspects of personal, social and workplace experiences. For example, ‘fear’ (a personal challenge) may result from workplace bullying/intimidation (a social challenge) and may then be further worsened by working on a busy ward with time constraints (job-related challenge).

Thematic analysis also revealed three themes within the concept of effects; the effects on ‘learning’, the effects on ‘practitioner performance’ and the ‘implications for patient care’. This is summarised in Figure 2.2, which illustrates the concepts within the framework used to organise and present the findings.

![Figure 2.2 The challenges to transition and their effects on novice practitioners](image)

**2.6.3 Challenges - the personal experience**

This theme describes how the personal, individual experience of transition presented emotional and cognitive challenges. These challenges were interdependent and varied
according to personality, education history and work circumstances. They included fear and anxiety, stress and emotional labour and resilience.

Fear and anxiety expressed by both professions was attributed to acquiring professional responsibilities, accountability for patient care and meeting expectations. This highlighted the potential risk of inadvertently harming patients, failing to meet expectations at work and led novices to doubt their technical and clinical expertise. Uncertainty was compounded by a sense of ‘grief’ at having lost the ‘safety net’ of supervised student status.

Feeling stressed during transition was not unexpected, however novices described feeling surprised and unprepared for the level and continuousness of stress. They often felt shocked and overwhelmed by the emotional, cognitive and physical demands of their job and were perceived by peers as lacking in professional confidence.

Emotional labour and developing resilience through caring for critically unwell or dying patients was a challenge reported by both professions. While novice nurses were more adept at coping with these traumatic events, junior doctors resented the practice of ‘affective blunting’; the expectation to switch emotions ‘on and off’ at will, in order to perform more effectively and objectively in critical situations. They expressed needing time to process their emotions and prevent burnout.

2.6.4 Challenges - the social experience
This theme describes how the social experience of the workplace during transition presented challenges arising from novices’ experiences of fitting into the organisation and its culture. All novices relied on more experienced peers to fit in, so a successful transition [and ultimately, good career progression] was generally synonymous with positive workplace interactions.

When novices did not fit into the workplace, the social experience presented three main challenges: workplace conflicts (intra- or inter-professional), lack of acceptance by colleagues (personal or professional) and inadequate support during transition.

2.6.4.1 Workplace conflicts - Intra- and inter-professional conflict
The transition to independent practitioner provided novices with an understanding of the workplace hierarchy, and their place in that hierarchy. Novice nurses, who perceived themselves to be at the bottom of the hierarchy ladder, frequently reported verbal abuse from doctors. They were more shocked however to experience first-hand ‘horizontal violence’ from more experienced nurses, a phenomenon where negative verbal or non-verbal attitudes or behaviours are directed between professional peers. Workplace conflict with colleagues
often resulted in novices feeling humiliated or vulnerable, undervalued and isolated in the workplace. Negative incidents between novices and their colleagues therefore impeded professional socialization and increased marginalisation, resulting in novices reporting disillusionment with the realities of professional practice.

Junior doctors similarly expressed awareness and acceptance of a professional hierarchy, even describing it using military analogies but unlike novice nurses, they perceived themselves as higher up the hierarchy ladder. This perception made some junior doctors uncomfortable when they worked with knowledgeable experienced nurses, because this displaced the normal power balance of the doctor-nurse relationship. The attitude to this imbalance was supported by the admission from junior doctors in one study to verbally abusing nurses in order to displace anger or frustration with the job.

2.6.4.2 A lack of acceptance - personal or professional

Gaining personal and professional acceptance from their community of practice was a crucial and overwhelming need for most novices. To achieve this, novices had to understand organisational culture, and meet colleague expectations and gain recognition in their workplace.

For novices to fit in and be socially accepted, it was important to avoid close scrutiny from experienced peers by not ‘rocking the boat’. Fitting in was made problematic by inconsistencies in organisational culture, unclear expectations from colleagues and working on unfamiliar wards. Consequently, many novices only learned of the ‘hidden/implied rules’ after they had inadvertently broken them. Understanding the ‘hidden’ or ‘implied’ rules in organisational culture often preceded the novice getting professional acceptance by colleagues and exercising autonomy. Novice nurses focussed on meeting expectations and completing high workloads to gain peer respect. Moreover, junior doctors reported the need to exceed expectations, and demonstrate competence to senior nurses and doctors in order to gain professional credibility.

2.6.4.3 Inadequate support

Despite both professions having formal support frameworks in place [such as the Foundation Programme for junior doctors and the nursing preceptorship programmes], the support that novices received from experienced peers and other colleagues was often described as variable and inconsistent.

Novice nurses reported that supervision ranged from having no preceptor, to having one who excessively micro-managed them. Where preceptorship was perceived to provide no
lasting benefit to a ward, nursing managers showed reluctance to support it, and supervisors and preceptors often felt overstretched by the demands of supporting novice practitioners alongside students. Consequently, some novices were actively discouraged from learning and reminded that ‘they were there to work, not think’ by experienced peers.  

Poor nursing role models who were territorial, overly-critical and unapproachable discouraged novices from seeking help. Other difficulties highlighted by nurse preceptorship and supervision of junior doctors were inconsistent expectations and assessment methods or negative, unconstructive feedback.

2.6.5 Challenges - the job-related experience

This theme describes how the job-related experience presented challenges encountered by the novice. These challenges included particular job requirements and challenges from the workplace setting, during transition.

2.6.5.1 Job requirements

Novices in both professions were surprised by the volume of work and struggled to work within expected time constraints. The complexity of individual tasks or patient conditions, and unfamiliarity with specific cases, procedures or patient groups further challenged the novice’s ability to transition successfully.

2.6.5.2 Workplace setting

Effective organisation and management of work was hindered by working rotations or working shift patterns (night-time, holidays) when staffing was lower and responsibility was greater. Though rotations provided opportunities for learning and development, they prolonged transition for novices by introducing new ward cultures/colleague expectations, making it harder for novices to efficiently locate notes or equipment and operate/gain access to systems.

2.6.6 The perceived effects on learning, performance and implications for patient care

The challenges experienced during transition were perceived to affect three areas of the novices practice; learning and reflection, practitioner performance and implications for patient care.

2.6.6.1 Learning and reflection

This theme describes how learning and reflection was impaired by a challenging transition. Though it was a period of intensive learning, time and workload pressures made learning
incidental, unintended and secondary to ‘fitting in’ to the workplace. Learning opportunities were missed or triggered only by the need to complete a task, so learning often occurred through imitation and without reflection on practice. Furthermore, novice practitioners had little time and energy to consolidate their learning through discussion with experienced peers, with the result that meaningful learning was limited.

### 2.6.6.2 Performance
This theme describes how the novice’s performance was impaired by a challenging transition. Despite having good levels of theoretical knowledge both novice doctors and nurses were unable to integrate and apply knowledge to a particular patient context. They demonstrated a rigid, prescriptive way of working which impaired their ability to perform skilled tasks, make decisions, problem-solve and think critically. Novices also found skills such as completing and understanding paperwork, assertiveness, organisation, delegation, prioritising and leadership were difficult during transition. Particular skills including structuring patient assessments, interpreting diagnostic data, diagnosing and prescribing were reported specifically by junior doctors as challenging.

### 2.6.6.3 Implications for patient care
This theme describes how experiencing a challenging transition affected the way in which the novices’ practice was affected and had implications for patient care.

In order to meet expectations and be perceived as competent, novices admitted to feigning knowledge of jargon or skills and knowingly performing tasks they lacked competence in. Tallentire et al. (2011) also reported on junior doctors’ beliefs that patient harm resulting from inaction was more acceptable than harm resulting from any direct action they took. The use of avoidance as a coping strategy was similarly reported in other studies when novices avoided interaction with difficult colleagues or demanding patients, complex tasks and in more extreme cases, avoided the work entirely.

In the interest of fitting in with organisational culture and being accepted by colleagues, novices compromised their standards of care, acted against their values and did not challenge decisions they perceived to be poor. They reported that the quality of care they delivered sometimes failed to meet the idealised standards they were taught as students because of time constraints, workload and a rigid, fragmented, non-holistic approach to practice. When reporting errors, the fear of upsetting senior colleagues was perceived as more important than the impact of the error on the patient, which promoted a reluctance to report errors. Occasionally too, organisational obstacles in the workplace led to intentional
violations of the rules (such as sharing confidential passwords, or deviating from standard procedures) in order to be able to care for patients.86,106

Challenging experiences were reported as influencing the learning, practice and behaviours of novice practitioners which was perceived by senior clinicians, educators and professional bodies to have a negative impact on patient safety. Studies, particularly in the field of medicine have identified phenomena known as the ‘August’ or ‘July’ effect, [where the annual changeover and introduction of junior doctors is attributed to a 6-8% increase in hospital mortality] which report the negative impact of transition on patient safety.6,113

2.7 Discussion
In this review, three themes emerged about the sources of challenges during transition, however none were specific to either profession, and all themes were reported in all of the studies, regardless of study methods, setting and reporting. Similarly, the effects of challenging experiences at transition were not specific to either profession, however, they were reported more frequently and in greater details in the medical literature. This suggests that some of these findings have transfer ability to novice community pharmacists, despite the fact they are private sector, and not public sector employees. This discussion will highlight the themes that were strongly supported, and consider those that are of greatest relevance to the community pharmacy setting.

2.7.1 Limitations
The findings must be considered in the context of some limitations. The data selection was carried out by a single researcher (EM) who is a practising community pharmacist, and the author’s practice experience may have influenced interpretation of the findings. Though the search was thorough and systematic, most of the studies identified were qualitative and the remainder of varying design, which did not allow formal scoring of studies. All papers were consequently included, and the review is narrative rather than systematic in nature. No research was identified which specifically reports on the transition experiences of novice community pharmacists and medical and nursing studies were instead used. The way in which contextual differences in the community pharmacy setting may influence transition therefore remains unknown and further research is required.

2.7.2 Personal experiences - professional accountability
The personal challenges caused by negative workplace interactions and job demands varied between individual settings for both doctors and nurses. In contrast, acquiring professional accountability and responsibility for patient care was repeatedly attributed to stress at
transition by fifteen of the studies, regardless of the profession, setting or study design. Unlike novice doctors and nurses, pharmacists in the UK acquire full and immediate professional responsibility for patient care at the start of transition; indeed, a ‘day-one’ novice community pharmacist is expected to assume the same level of responsibility as a more experienced pharmacist. Given that acquiring professional responsibility is so challenging, is it appropriate that ‘day-one’ community pharmacists are fully and immediately accountable practitioners?

2.7.3 Social experiences
Current literature across the healthcare professions supports the view that positive social experiences and well-implemented peer support structures ease transition, a finding supported by the majority of the studies. Most community pharmacists in Great Britain however, practice in isolation as the only pharmacist on site and have no formal peer support structures. Moreover, many novice pharmacists are line-managed by non-pharmacist managers, who cannot offer the professional/practitioner feedback that could be provided by a pharmacist manager. The professional isolation faced by novice community pharmacists reduces opportunities to learn from a community of professional peers and novices report relying heavily on their pharmacy team for support. It is unclear though, whether the pharmacy team is best equipped to effectively support a ‘day one’ community pharmacist and socialise them to the profession.

As novice community pharmacists are isolated from professional peers and the multidisciplinary team, they may not experience the challenges of traditional hierarchy as existent in hospitals, a concern explicitly reported in eight of the studies. Instead, the commercial primary care setting in which they operate presents multiple hierarchies; ‘inter-professional hierarchies’ between GPs and community pharmacists, ‘organisational hierarchies’ of employers’ management structures and finally the ‘inverse hierarchy’. A novel and under-researched phenomenon ‘inverse hierarchy’ refers to novice community pharmacists’ senior and central position to the pharmacy team. Despite being the least experienced members of those established teams they are faced with the pressure of leading and managing them.

2.7.4 Job-related experiences
In comparison to junior doctors and novice nurses, novice community pharmacists complete proportionately less work-based learning before registration, with relatively few placements during their undergraduate education. Consideration must be given as to whether workload
and working patterns for novice community pharmacists present job-related challenges at transition.

Findings in the review demonstrate that practising in an unfamiliar workplace or being on rotation hindered socialization and increased uncertainty for novice practitioners. Locumiii or reliefiv community pharmacists who work in different workplaces have reported experiences of isolation or marginalization.118 Novice community pharmacists who enter the workforce as locum or relief pharmacists may therefore encounter challenges that may prolong successful transition and impede the development of proficiency.

In recent years an ageing population, increasing prescription volumes, extended opening hours where pharmacies may be open 100 hour/week and internet pharmacies, have contributed to a rise in community pharmacy workload. Pharmacists are reporting burnout, professional isolation, reduced job satisfaction and compromised well-being some of which has been linked to risky behaviour.119,120 In addition to rising clinical workloads, novice pharmacists are increasingly expected to perform management duties as part of their role: an expectation that has led to ‘clinical-commercial’ dichotomies and conflict.29,32 It is therefore important to understand the possible impact of the private sector environment and its associated ‘target-culture’ on the transition of novice community pharmacists.

2.7.5 Learning, performance and implications for practice
This review showed that learning and reflection in the workplace are central to a successful transition, and challenges encountered often prevented novice practitioners from learning effectively. Moreover, the lack of accessible experienced peers in community pharmacy may limit opportunities for reflection and consolidation of learning, self-assessment and feedback.23,33 With the expectation to assume full accountability, leadership or management duties from the outset, it is unclear whether novice community pharmacists are also given formal recognition as learners and importantly, whether the practice environment allows them to feel safe to learn. In place of the clinical structured career pathway/curricular continuum available to novices in hospital pharmacy, nursing and medicine, community pharmacists have a managerial career path. This provides the basis for their performance management and focusses feedback on commercial targets and outcomes making it harder for novice community pharmacists to self-assess proficiency.32,121 Schafheutle et al. 2013, argue that

iii Working for an organisation across their stores as a self-employed pharmacist
iv An employee pharmacist, working across different stores and not based in one store
without addressing clinical or professional competence these systems are inadequate for assessing a practitioner’s fitness to practise.\textsuperscript{122}

This review provides evidence that transitions perceived as challenging may negatively influence practitioner behaviour, the quality of the care they provide and have implications for patient safety. Many of the findings discussed have similarly been reported in studies on early career pharmacists and include difficulties thinking critically or applying knowledge to practice, lacking clinical knowledge, leadership, organisation and communication skills, having inadequate self-assessment, professional judgement and assertiveness skills.\textsuperscript{18,22,33,123-125} Pharmacy practice research has provided evidence that shows under some circumstances pharmacists demonstrate reluctance to report errors and struggle to recognise the limitations of their practice.\textsuperscript{18,33}

Recently qualified pharmacists admitted to concealing gaps in their knowledge, task avoidance and held idealistic views of practice.\textsuperscript{24,33} The existing evidence from pharmacy implies that novice community pharmacists may encounter similar challenges to novice doctors and nurses at transition; however none of that evidence explicitly attributes these issues to the transition period for novice community pharmacists. Findings from this review may be used with caution, to raise the issues surrounding transition in community pharmacy. Empirical research exploring novice community pharmacists’ transition would provide more definitive insight into the challenges they encounter, the perceived impact on the practitioner and the effect on patient care.

2.8 Conclusion
This thematic review provides insights into the way that challenges caused by transition may influence the development, performance and practice of generalist novice healthcare practitioners. Though some of these findings may not be directly transferable to community pharmacy, consideration of these issues does support the argument for research on transition in this context. Future work should focus on exploring transition to independent practice for novice community pharmacists, both to understand their support needs and inform the development of supportive interventions.

2.9 Declarations

2.9.1 Conflict of Interest
The author(s) declare(s) that they have no conflicts of interest to disclose.

2.9.2 Source of Funding
This work was supported by the 2014 Galen Award from Pharmacy Research United Kingdom (PRUK). PRUK provided financial support for conducting the research but had no involvement in the study design, data collection, analysis or interpretation, writing of the report or in the decision to submit the paper for publication. The findings and views stated in this paper are those of the authors, and not those of PRUK.
2.2 Chapter 2 summary

This review aimed to identify the challenges faced by novice practitioners during transition, explore their perceived effect and consider the implications of these findings for NCPs. Though extensive, the literature identified here relates the transitions only of novice nurses and doctors; it must be noted that transition research exists in other healthcare (such as occupational therapists or radiographers) and non-healthcare professions (notably teaching). Findings from this review suggest that the transitions of novice practitioners remains a concern for public sector educators, employers and policymakers.

Like other reviews of transition in nursing and medicine, findings support the view that transition is a challenging and stressful period for novice practitioners. Novice practitioners experience numerous challenges that arise from personal, social and job-related experiences during transition. It is likely that NCPs may experience similar challenges since they too have to manage professional accountability for the first time, manage colleague expectations and may be faced with new/unfamiliar tasks for the first time since qualification. The review indicates that challenges were perceived to affect individual, organisational and patient outcomes which consequently had implications for novices’ learning, development, and practice. Many of the consequences of challenging transitions were not specific to just doctors or nurses: they may also therefore be present for NCPs.

Finally, findings also suggest that the nature of the environment and the demands of novices’ professional roles greatly influenced their transition experiences. Contextual differences unique to the community pharmacy setting are known to exist, which could similarly influence the transition experiences of NCPs. In particular, further understanding is needed of how characteristics of the community pharmacy workplace [such as full, immediate professional accountability, professional isolation, or having to balance inverse hierarchy and leadership with clinical and commercial job demands] influence the transitions of NCPs. Once increased, our understanding of NCPs transition will inform the overarching aim of this thesis: developing an intervention to support the transitions of NCPs. Given that such a paucity of evidence exists to document the transition experiences of NCPs, empirical work to explore this is needed to address this gap and increase our understanding of transition in community pharmacy. This led to the exploratory work in phase 2 of the research - the nominal group study, which is reported in the next chapter.
3. Chapter 3. Exploring transition to identify the challenges faced by novice community pharmacists and the coping strategies used during transition to independent practitioner: a nominal group study

3.1 Introduction
This chapter reports findings of phase 2 of the programme of work (see Table 1.1, chapter 1), the nominal group study which explored the transitions of novice community pharmacists (NCPs). In the previous chapter (the literature review phase), findings indicated that there is a paucity of evidence documenting the transition experiences of NCPs. Since so little is known about the transition experiences of NCPs, pharmacists and their non-pharmacist colleagues (referred to as ‘staff’ by study participants) were interviewed using nominal group technique. The views of recently-qualified or early career community pharmacists (ECPs), pre-registration tutors (PRTs) and pharmacy colleagues (PCs) who support NCPs were valuable for gaining insight into transition. Whilst peer-reviewed literature from nursing and medicine was helpful for considering the types of challenges novice practitioners face and the impact they have, the author needed further insight to understand how contextual characteristics of the community pharmacy setting influenced transition. The current chapter therefore address the paucity of evidence for NCPs’ transition, and builds on the evidence base, to inform intervention development.

3.2 Aims and objectives
In phase 2, an exploratory study using nominal group technique (hereafter referred to as the nominal group study) aimed to identify and rank the challenges faced by NCPs during transition, explore their perceived impact and the coping strategies used to address them.

The study objectives were to:

1. Identify and discuss the challenges faced by NCPs during transition
2. Rank the identified challenges in order of perceived relative importance
3. Explore the perceived impact and consequences of these challenges
4. Identify and discuss the coping/support strategies used or needed by NCPs to address transition-related challenges
3.3 Methods
An exploratory study is often undertaken when there is ‘little or no knowledge about the group, process, activity or situation under examination’.\textsuperscript{126,127} The main outcomes of this approach provide inductively derived findings about the social phenomenon being studied, in this case the transitions of NCPs. The exploratory approach leads to numerous varied findings which include descriptions, concepts, social processes and structures and the beliefs therein.\textsuperscript{127}

The exploratory approach was used to understand role transition from student to registered nurse in Ireland by Deasy et al.\textsuperscript{128} In the case of this research, the study aimed to explore, identify, and prioritise the challenges during transition, and identify the coping and support strategies of NCPs during transition. Transition was conceptualised as a complex, dynamic process where change is experienced over time. Understanding the experiences and responses felt during transition by individuals and groups within a socio-cultural context is best explored using qualitative methods.\textsuperscript{2,129}

A review of the literature on transition reported in chapter 2 suggested that nursing and medical studies often used qualitative methods to explore transition. The studies reported in the review used individual or group interviews, questionnaires with open-ended questions, documentary analysis, surveys and observations.\textsuperscript{130} Both cross-sectional and longitudinal designs were used.\textsuperscript{1} Though individual interviews have been found to be useful for understanding the ‘lived experience’ of transition, they were less suitable for achieving the consensus needed to direct the intervention and do not allow for the benefits of social dynamics from group interviews. Similarly, traditional focus groups were deemed less suitable as they may prevent equal participation, were better suited to broad discussion of topics and did not provide consensus.\textsuperscript{54} Addressing the research question effectively required a method of data collection well-suited to identifying problems, but also the benefits of individual contribution and group dynamics.

Three options for consensus group methods were considered: Delphi technique, Nominal Group Technique (NGT) and RAND-UCLA Appropriateness Method (RAND technique). The Delphi technique uses a questionnaire to collect ranked responses from study participants. An iterative process of feedback and questionnaires then begins until consensus is reached.\textsuperscript{133,134} NGT uses a face-to-face group meeting to collect individually-generated responses to a question. Once collected, responses are discussed by the group before individual ranking occurs at the end to build consensus.\textsuperscript{131} NGT therefore includes some quantitative data collection generated by the ranking exercise. The RAND technique is a hybrid of Delphi and NGT, using questionnaires at the start, followed by a face-to-face meeting to build
consensus. All these methods can indicate the extent to which group members are in agreement with each other and allow both individual and group contribution.

While the Delphi technique allows equal contribution from a larger number of participants, participants do not meet and data collection happens remotely via questionnaires. This removes the benefits of collecting rich data arising out of the social dynamics generated during NGT and RAND techniques. Delphi and RAND techniques require multiple rounds of responses to achieve consensus and are more time-consuming. Consequently, participant attrition is higher and findings may be biased. RAND is also better suited to achieve consensus based on scientific or clinical evidence rather than to address a psychosocial research question. On this basis, the RAND and Delphi techniques appeared less suitable for data collection than NGT.

The approach to data collection needed to elicit responses to the specific research question. To fulfil MRC guidance and inform implementation of the intervention, the impact of contextual variation had to be considered. In addition, rich, detailed descriptions were needed to provide in-depth understanding of transition experiences and the relationships between transition challenges, their causes and effects [causal links described in MRC guidance], because they would be used to inform development of a support intervention.\textsuperscript{133} To prioritise the intervention’s specific aims and objectives, the methods also needed to achieve some consensus regarding the challenges perceived as most important. Increasing specificity of the intervention aims also simplified the process of linking intervention components to causal mechanisms. NGT combined the advantages of individual and group interviews and offered fewest disadvantages, therefore it was chosen for the study.\textsuperscript{132}

### 3.3.1 Nominal group technique

Developed by Delbecq, the nominal group technique (NGT) uses structured group discussion to generate qualitative data.\textsuperscript{134} A group of participants considered knowledgeable on the discussion topic generate, discuss and rank ideas they have raised in response to a specific research question.\textsuperscript{131} A detailed explanation of why this approach was considered most appropriate is outlined below, followed by a description of the NGT process used in this research. The remainder of the methods section then provides details of the sampling, recruitment, and ethical considerations.

Unlike a traditional focus group, the NGT is a form of structured group discussion which has the benefit of group participation and interaction, without the problem of dominant personalities who may influence the entire group. Group members are asked to contribute one idea each in turn, delaying the discussion until all ideas are displayed and ensuring all
contributions are equal.\textsuperscript{135} This removes the risk of undue influence from a dominant group member, group-conformity or ‘group-think’ phenomenon.\textsuperscript{136}

NGT also has the potential to generate a lot of ideas because participants are encouraged to ‘coat-tail’ on each other’s contributions in brainstorming. No contributions are removed or vetoed by a group member, and new ideas can be contributed at any time before ranking. The ranking is done individually and anonymously. NGT also yields quantitative as well as qualitative data during the ranking exercise to prioritise findings. Anonymous ranking encourages authenticity in the results because judgements are individual and used even where disagreement between group members exists.\textsuperscript{135} Preliminary discussion is needed and the results are gained immediately with limited interference or influence from the researcher. NGT allows some preliminary analysis of initial findings which then undergoes participant verification. The transparency in collection of data and the use of flip charts provides an audit of the process that is clear and visible to participants. NGT was therefore felt to be more suitable as it has more advantages and fewer disadvantages than other forms of group interview.

\subsection*{3.3.2 Sampling}

\subsubsection*{3.3.2.1 Inclusion criteria for participants}

Given the qualitative approach adopted, the sampling framework aimed to achieve rich, detailed data rather than generalisations.\textsuperscript{137} Section 1.3.1.2 in chapter 1 reported that the small sample sizes in qualitative studies increase the risk of bias. Ideally, randomly sampling of participants from the general population would be used, nevertheless, sample sizes of qualitative research prevents this. Characteristics of a sample population may be unknown or evenly distributed within the group causing participants to hold different views/perceptions, and influencing the richness of data.

Since the sample size was small, participants comprising the most productive sample to answer the research question were needed. This sample does not aim to represent views of the general population, and is termed a purposive sample. Purposive sampling uses researcher judgement to focus on specific characteristics of a population of interest thought best suited to answering the research question.\textsuperscript{137} The specific type of purposive sampling used was homogenous sampling. Homogenous sampling is used to encourage good social group dynamics and achieve equity amongst participants.\textsuperscript{138} It also allows freer expression of views and perceptions from group members because shared experiences and commonalities work as a form of ‘social glue’ to enhance group dynamics.\textsuperscript{139} Four participant groups were identified as
appropriate because they had experienced transition, or had a role (formal or informal) in the professional development of NCPs during transition.

The first participant group comprised novice community pharmacists. As this group had been qualified up to 12 months, their experiences of transition were recent and/or continuing, which would provide detailed accurate insights of ‘lived experiences’. Early career pharmacists (ECPs) who were qualified two or three years, comprised the second participant group. This participant group were felt to have an enriched knowledge and understanding of the entire transition period (which can last up to three years). The third participant group comprised pre-registration tutors (PRTs). Though supervision ends after the pre-registration training year, some pre-registration tutors continue to informally advise former trainees following registration.24,33,140 As such tutors gain some insight into the challenges and support of NCPs during transition. To be eligible, PRTs were expected to have a current trainee.

The fourth participant group comprised (non-pharmacist) pharmacy colleagues (PCs): dispensers, pharmacy technicians, accuracy checking technicians (ACTs)\(^\text{v}\), and pharmacy managers who commonly offer informal support to NCPs in the workplace.141,142 Dispensers and pharmacy technicians\(^\text{vi}\) are a vital part of the pharmacy team and work under the supervision of the pharmacist, preparing and supplying medications/products to patients and advising patients on how to use their medicines. Unlike pharmacists however, they earn qualifications through work-based vocational training. Non-pharmacist managers begin their careers as healthcare, dispensing or retail staff and their responsibilities typically include overseeing the day-to-day retail operation of the pharmacy. PCs who had worked with NCPs or ECPs within the last 12 months, were eligible. In this study, pharmacy technician referred to staff with NVQ level 3 qualification who register with the GPhC and dispenser referred to those with up to NVQ level 2 qualifications.143

For maximum variability, participants working in different community pharmacy settings (supermarket pharmacies, independent pharmacies, small multiples, medium multiples, and large multiples) in North West England were targeted for inclusion in the study.21 This mix of community pharmacy settings in an area local to the author allowed for purposive sampling and theoretical saturation.144

\(^\text{v}\) Registered technicians who complete further training to complete the final accuracy check of dispensed prescriptions that have been clinically screened by the pharmacist

\(^\text{vi}\) Pharmacy technicians have additional training at NVQ level 2 or 3 and manage the supply of medicines in a community pharmacy and assist pharmacists with advisory services
3.2.2.2 Recruitment

A flyer advertising the study was sent via email and fax to training leads and superintendents\textsuperscript{vii} for 14 pharmacy organisations. These organisations were selected for their geographical location and type of community pharmacy setting (three large multiples, two supermarkets, four independents, two small multiples and three medium multiples). As the setting a community pharmacist works in may influence their transition experiences, it important to include different contexts of the research population (NCPs) in the study.\textsuperscript{138} By recruiting a range of purposively sampled participants, the author aimed to capture maximum variation in the views.

Two of the organisations asked for the recruitment flyers to be emailed to a central office, so that they could conduct internal distribution. Their employees were not contacted directly by the research team. The remaining organisations gave permission for the author to contact employees directly. Invitations were then distributed via email, fax or in person by the author to pharmacies in North West England from those twelve organisations. The advertisement was also placed on social media (WhatsApp\textsuperscript{®}, Twitter\textsuperscript{®} and Facebook\textsuperscript{®}), and shared through personal contacts to ensure that the study sample included locum pharmacists. Additional participants were recruited through snowball sampling, where individuals participating in the study are asked to recommend additional potential candidates.\textsuperscript{145}

Pharmacy colleagues and pharmacists interested in taking part were asked to contact the author to find out more about the study and what participation involved. Those expressing an interest were given a participant information sheet (Appendix 3) containing details of the study’s background, aim, inclusion criteria, data collection methods and protocol for data management and analysis. A consent form (Appendix 4) was included with the participant information sheet. Participants were asked to read and review the information sheet and to contact the author about taking part in the study. Those who did so were then asked to bring the signed consent form to the face-to-face group interview. Participants were offered a £20 gift voucher for taking part.

\textsuperscript{vii} The superintendent pharmacist has legal obligations under the Medicines Act 1968, and carries overall responsibility for setting out the standards and policies for the provision of pharmacy services by their organisations.
3.3.3 Nominal group technique process

Nominal group discussions, led by the author and co-facilitated by one of the supervisors were designed to last up to 150 minutes each. The five-step NGT process detailed below was used. 

After group introductions, participants were reminded that they were free to withdraw from the discussion at any time and any outstanding consent forms were completed and collected. Each discussion began with an introduction to the discussion topic where terminology was defined and an outline of the NGT process was read out. The outline introduced the stages of the nominal group process and a printed copy of this outline was placed on a board visible to participants for the remainder of the discussion. Next, the group was presented with a set of ‘ground rules’ (Appendix 5). The ground rules aimed to establish expectations, maintain structure and focus of the discussion and ensure that participants had equal input into discussions.

**Step 1: Presentation of the question and individual generation of ideas in silence**

First, participants were presented with the question, which was split into two parts:

**Part one ‘What are the challenges faced by NCPs during transition to practice?’**

**Part two ‘What coping strategies/support are used/needed to address the challenges?’**

The author and co-facilitator distributed sticky notes for participants to note down responses. Participants were given 10-15 minutes to list one idea per sticky note for challenges and support strategies. One colour of sticky notes was used to list challenges and another colour for support/coping strategies.

**Step 2: Round robin ‘call out’**

Once all participants finished, they were invited by the author to call out their ideas (written on sticky notes) in a round-robin fashion. During this time they were asked to call out one idea at a time, without discussion. Corresponding sticky notes were collected by the co-facilitator and stuck onto two flip charts; one for challenges, and one for support strategies. Similar ideas were grouped together as they were collected. Participants were encouraged to note down any additional ideas during this time and add to the sticky notes until no new ideas remained.

**Step 3: Discussion**

Once all the sticky notes had been collected and stuck onto the flip charts, the author guided group discussion by picking out individual ideas. The author invited participants to clarify and discuss their ideas: similar ideas were combined to form themes. The author used prompts to
encourage discussion or explore concepts arising from each theme until all themes on both flip charts had in turn been discussed.

**Step 4: Verification**

After the discussion participants had a five minute break. During this break, the author and co-facilitator reviewed the themes generated from participants’ ideas. The themes were then presented to participants for verification. If participants disagreed with these themes or felt their ideas had been misinterpreted, further discussion continued until consensus of the final themes was reached by the group.

**Step 5: Individual ranking of the five most important challenges [themes] and the support strategies**

Using the list of themes agreed in step 4, participants individually selected the five themes they considered as most important and completed a ranking form (Appendix 6). They used a number five to indicate the most important theme and the number one for the least important. The three remaining themes were allocated numbers four, three, and two accordingly. This final step was done without conferring. The author then collected the completed forms and later calculated total scores for each theme, based on their ranking by group members.

The nominal group discussions were digitally audio-recorded, with consent, transcribed verbatim and all flip charts and sticky notes kept to support analysis. In addition, a reflective account was written after each group discussion to consider methodological issues and record ideas to revisit or pursue during analysis.

### 3.3.4 Data analysis

It was important that methods for data analysis achieved the objectives of the exploratory study outlined in Section 3.3.4.1 of this chapter. As described in section 1.7.2 of this thesis, a critical realist approach to data collection and analysis was adopted to allow some understanding of relationships (or causal links) between mechanisms, contexts and outcomes or effects of transition experiences to be explained and understood. This is useful for the development of a complex intervention containing human behaviours because it provides understanding of the barriers and facilitators of transition. Once the facilitators and barriers to easing transition are identified, they can inform the design of an intervention to ease transition for NCPs. The resulting intervention then has a higher chance of success because of deeper understanding of the relationships between context, mechanism, and outcomes. Because NGT
enabled ranking of challenges through quantitative data collection, thus providing insight into the most important challenges, it is useful for directing the focus of an intervention.

### 3.3.4.1 Analysis of qualitative data

Analysis of qualitative data began during the nominal group discussions through theming of the sticky notes, and was later supported by sticky notes analysis and reflective accounts written after group discussions. NVivo 10 was used to support coding and thematic analysis of anonymised transcripts. The author verified transcripts against recordings and read each transcript to gain a sense of the discussion: Moen describes this as developing an ‘intimate’ relationship with the data. This was facilitated by the author’s background and insight into the research area. Any statement that was striking or notable because it presented an unexpected/new idea or an idea or concept that had been introduced in the literature review was highlighted. Trigger et al. reported that ‘revelatory moments have been strikingly instructive for understanding the settings in which we have worked’. Given the exploratory nature of the research and paucity of data in this field, concepts identified through serendipitous or revelatory moments were considered valuable. In addition, reflective accounts made after each group discussion included any ideas or concepts of interest to follow up on, during data analysis.

No theory or pre-selection of themes was used to guide analysis; instead the author took a data-driven approach to coding. After the first read, the transcript was then re-read and colour coding was used to organise and group similar concepts together and produce themes. Categorising similar statements and organising them into early themes, allowed for an initial description of challenges. When each successive transcript was analysed, comparisons were made of categories and coding, a process of constant comparative analysis. Transcripts were compared to each other, and also compared to the initial list of challenges produced during step 4 (participant verification) of the NGT process. Consensus of the final coding was reached through discussion within the supervisory team. Analysis stopped when no new themes emerged from the data.

### 3.3.4.2 Analysis of quantitative data (ranking exercise)

Quantitative ranking data (step 5) were analysed next. The top ranked (most important) challenge was allocated a weighting of five, followed by four for the second most important challenge and so on. Ranking forms of the top five perceived challenges from each group participant were reviewed and the weightings of each challenge added to produce a total weighting score. For example in the first pharmacy colleague nominal group discussion (NGD), participants 1 and 2 ranked managing relationships as most important (weighting 5) and
participant 3 ranked this 2nd most important (weighting 4) giving that challenge a total weighting of 14. Weighting scores (from group participants) for each challenge were totalled, enabling them to be ranked from highest (most important) to lowest (least important). This process was repeated for each of the five nominal groups. After this the rank orders (based on total weighting scores) for all five groups were reviewed and compared to produce an overall rank which incorporated views of all groups. This stage achieved group consensus by incorporating all participants’ views in the ranking.

Though each group had a final list of themes, the terminology used in these final lists to describe themes was inconsistent across groups. To allow direct comparison of themes across groups, consistent terminology describing the themes was needed. Where themes were described differently, the author returned to the sticky notes and discussion transcripts to understand what a specific theme represented for each group, and how similar or different it was to the themes of other groups. Based on this understanding, similar themes from all groups were brought together and incorporated to produce the overall list of nine challenges reported in the results. A table is presented in Appendix 7, showing the initial themes generated on sticky notes during the NGT, and the final challenges they represented at the end of the analysis.

### 3.3.5 Ethical considerations

Several ethical considerations arose in the process of conducting this research. The ethical issues considered were obtaining informed consent, maintaining confidentiality and anonymity of study participants, and storage of research data. In addition, some ethical risks were identified: issues of disclosure, coercion and management of distressed participants. These issues were addressed in an ethics application submitted to the University of Manchester Research Ethics Committee 3 who granted ethics approval ref 230915 (Appendix 8).

#### 3.3.5.1 Ethical issues

A process was put in place to obtain informed consent. Participants were given at least 48 hours to read and understand the information about the study before signing a consent form. Any concerns/questions could then be addressed prior to giving informed consent. At the start of every discussion, participants were asked to confirm that they had read and received the information sheet, reminded that they were free to withdraw from the study at any time (except after data were transcribed and anonymised) without having to give a reason.

The discussion of confidential information from participants about any aspect of their work was addressed using the following protocol; all recorded data containing identifying
information was anonymised during the transcription process. A participant information sheet (PIS) provided to all participants before consenting to the study explained that immediately after transcription, all identifying information would be removed from transcripts. This PIS also informed participants that anonymised study data would be stored on a secure networked University computer (paper data would be stored in a locked office) and shared only within the research team. The PIS provided additional details stating that the collected data may be used in future (only for studies conducted in the school that also related to transitions of novice pharmacists).

3.3.5.2 Ethical risks
A process was put in place to manage participant distress. Discussing challenges may cause upset or distress or lead to the disclosure of confidential or sensitive information. A formal distress protocol (Appendix 9) was developed which gave the participant the option to end their participation in the discussion, not discuss a specific issue, consider an alternative issue, or take a short break before returning to that issue. If participants got very upset they could also be signposted to the charity Pharmacist Support\textsuperscript{viii}. To avoid participants feeling intimidated by other group members or unable to voice their views, particularly if another group member criticised their opinion/view, a set of ground rules for the group discussion were established (Appendix 5).

The disclosure of any information reported by participants placing them or their patients at risk of harm was noted by the author. The author (a practising community pharmacist) had a duty of care to act on that information and report it through the appropriate channels. Participants were informed of this through the PIS to ensure that they were fully aware of this before consenting to the study.

Participants were compensated for their time in the form of shopping vouchers (£20 per participant) and their travel expenses were reimbursed. Though participants were compensated for their time, the monetary value/amounts were not deemed sufficient to coerce participants into taking part in the study, but were given in appreciation of participants giving up their time.

\textsuperscript{viii} Pharmacist Support is an independent charity for pharmacists and their families, former pharmacists and pharmacy students, providing financial, well-being, counselling and legal support.
3.4 Results: study participants

3.4.1 Identifier codes for participants
A list of identifying codes was formulated to describe the NGD participants’ demographics (Table 3.2) and assign demographic detail to quotes presented in the findings. The first part of the code describes the participant’s role: NCP (novice community pharmacist), ECP (early career pharmacist), PRT (pre-registration tutor), and PC (pharmacy colleague). This is followed by the letter R for respondent. The third part of the code refers to the participant number within the nominal group (1-7). Where more than one nominal group discussion was completed with the same participant role (two pharmacy colleague NGDs were conducted) a number (1-2) was placed between the first and second parts of the code. To illustrate, the code PC2R4 referred to a pharmacy colleague – (PC), from discussion group 2 (2) who was fourth respondent (R4) in that nominal group discussion. While data about their employee status (employed vs. locum) and workplace setting (large multiple vs. supermarket) was collected, it was not included in the identifier coding because the effect of these differences were not explored as part of the research question.

3.4.2 Study participant demographics
Invitations to take part in the nominal group discussions (NGD) were sent to thirty-five community pharmacy stores within a 10-mile radius of the author’s institution. Twenty-five participants (16 pharmacists and nine pharmacy colleagues) working in a range of settings took part. Their details are summarised in Tables 3.1 and 3.2. Fifty percent of the pharmacist participants (n=8) were female, five pharmacists worked as locums (self-employed) and eleven were employees. Two worked mainly in supermarkets, two in independent pharmacies, five in small multiples, one in a medium multiple, and the remaining six in large multiples. Within each group discussion, at least three settings were represented. Participants had been registered/practising between 3 months (months = M in the tables 3.1/3.2) to 18 years (Years = Y in tables 3.1/3.2). The sixteen pharmacists received their pharmacy degrees from seven different universities.
### Table 3.1 Pharmacist participants recruited for the nominal group discussions

<table>
<thead>
<tr>
<th>Group 1 NGD Novice community pharmacists n=7</th>
<th>ID</th>
<th>Ethnicity</th>
<th>Gender</th>
<th>School of Pharmacy</th>
<th>Time in practice</th>
<th>Workplace setting</th>
<th>Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>NCPR1 Bangladeshi M Bradford</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3M</td>
<td>Supermarket</td>
<td>Locum</td>
</tr>
<tr>
<td>NCPR2 Pakistani M Bradford (Sandwich)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3M</td>
<td>Large multiple</td>
<td>Locum</td>
</tr>
<tr>
<td>NCPR3 Bangladeshi M Bradford (Sandwich)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3M</td>
<td>Large multiple</td>
<td>Locum</td>
</tr>
<tr>
<td>NCPR4 Indian F Keele</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>11M</td>
<td>Large multiple</td>
<td>Employee</td>
</tr>
<tr>
<td>NCPR5 White British M Manchester</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3M</td>
<td>Independent</td>
<td>Locum</td>
</tr>
<tr>
<td>NCPR6 White British M UCLAN</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3M</td>
<td>Small multiple</td>
<td>Employee</td>
</tr>
<tr>
<td>NCPR7 White British F UCLAN</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3M</td>
<td>Small multiple</td>
<td>Employee</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Group 2 NGD Pre-registration tutors n=5</th>
<th>ID</th>
<th>Ethnicity</th>
<th>Gender</th>
<th>School of Pharmacy</th>
<th>Time in practice</th>
<th>Workplace setting</th>
<th>Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRTR1 White British M Manchester</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>8 Y</td>
<td>Small multiple</td>
<td>Employee</td>
</tr>
<tr>
<td>PRTR2 Pakistani M Liverpool John Moores</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4Y</td>
<td>Large multiple</td>
<td>Employee</td>
</tr>
<tr>
<td>PRTR3 Pakistani F Manchester</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>18Y</td>
<td>Supermarket</td>
<td>Employee</td>
</tr>
<tr>
<td>PRTR4 Bangladeshi F Liverpool John Moores</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4Y</td>
<td>Small multiple</td>
<td>Employee</td>
</tr>
<tr>
<td>PRTR5 Indian F De Montfort</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>18Y</td>
<td>Independent</td>
<td>Locum</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Group 3 NGD Early career pharmacists n=4</th>
<th>ID</th>
<th>Ethnicity</th>
<th>Gender</th>
<th>School of Pharmacy</th>
<th>Time in practice</th>
<th>Workplace setting</th>
<th>Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECPR1 African F Manchester</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2Y</td>
<td>Med multiple</td>
<td>Employee</td>
</tr>
<tr>
<td>ECPR2 Iranian F Bradford</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2Y</td>
<td>Large multiple</td>
<td>Employee</td>
</tr>
<tr>
<td>ECPR3 Mixed M Bradford (Sandwich)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3Y</td>
<td>Small multiple</td>
<td>Employee</td>
</tr>
<tr>
<td>ECPR4 White British F Cardiff</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2Y</td>
<td>Large multiple</td>
<td>Employee</td>
</tr>
</tbody>
</table>
Table 3.2 Pharmacy colleague participants recruited for the nominal group discussions

<table>
<thead>
<tr>
<th>ID</th>
<th>Ethnicity</th>
<th>Gender</th>
<th>Time in practice</th>
<th>Workplace setting</th>
<th>Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>PC1R1</td>
<td>White British</td>
<td>F</td>
<td>14 Y</td>
<td>Large multiple</td>
<td>Employee – Pharmacy technician and non-pharmacist manager for 4 years</td>
</tr>
<tr>
<td>PC1R2</td>
<td>White British</td>
<td>F</td>
<td>8 Y</td>
<td>Large multiple</td>
<td>Employee - ACT for 4 years (trainee manager)</td>
</tr>
<tr>
<td>PC1R3</td>
<td>White British</td>
<td>F</td>
<td>3 Y</td>
<td>Large multiple</td>
<td>Employee - Dispenser</td>
</tr>
<tr>
<td>PC2R1</td>
<td>White British</td>
<td>F</td>
<td>9 Y</td>
<td>Independent</td>
<td>Employee - Dispenser</td>
</tr>
<tr>
<td>PC2R2</td>
<td>White British</td>
<td>F</td>
<td>18 Y</td>
<td>Independent</td>
<td>Employee – Pharmacy technician</td>
</tr>
<tr>
<td>PC2R3</td>
<td>White British</td>
<td>F</td>
<td>13 Y</td>
<td>Independent</td>
<td>Employee – Pharmacy technician</td>
</tr>
<tr>
<td>PC2R4</td>
<td>White British</td>
<td>F</td>
<td>9 Y</td>
<td>Independent</td>
<td>Employee – Pharmacy technician</td>
</tr>
<tr>
<td>PC2R5</td>
<td>Other Asian</td>
<td>F</td>
<td>7 Y</td>
<td>Large multiple</td>
<td>Employee - Dispenser</td>
</tr>
<tr>
<td>PC2R6</td>
<td>White British</td>
<td>F</td>
<td>18 Y</td>
<td>Large multiple</td>
<td>Employee - ACT for 6 years</td>
</tr>
</tbody>
</table>
All the pharmacy colleague participants were female (Table 3.2). There were three dispensers and six pharmacy technicians. Two technicians were qualified NVQ Level 2, four technicians were qualified to NVQ level 3 and two were qualified as ACTs. Their community pharmacy experience ranged from three to eighteen years. One dispenser worked as a store manager and one ACT was a trainee store manager.

3.5 Results: Presentation of thematic findings
Findings are presented in three main sections: the challenges faced by NCPs, the effects and consequences of experiencing transition challenges and the coping and support strategies used to manage transition challenges.

3.6 Results: Section 1. The challenges faced by NCPs at transition to independent practitioner
NCPs experienced a number of challenges during transition as changes occurred in their roles, responsibilities, and social structures. When they entered their workplace environment NCPs experienced demands from their role (such as being professionally accountable for patient care) and from their workplace environment (such as managing workload pressure or meeting colleagues expectations). These are the ‘conditions’ Meleis describes in his transition theory which can influence the pattern of response. These conditions/demands often caused NCPs to respond or react in a negative way, leading to the development of further challenges (for example, stress, or frustration caused by a novice’s negative interaction with a colleague). An important finding was that a lack of social support, and specifically peer support hindered transition and negatively influenced the novice’s pattern of response.

Presentation of the findings begins with the challenges NGD participants identified as most important, according to quantitative analysis. These were (in order of importance): relationship management; lack of confidence; decision-making; being in charge and accountable; and adapting to the workplace. After these top five challenges, the additional challenges are presented and discussed. Perceptions of the most important challenges varied between the groups; most notably, differences between pharmacist and pharmacy colleagues related to perceptions of the pharmacist’s role in the team were found.
3.6.1 Top five challenges

3.6.1.1 Relationship management

Once they became registered practitioners, the professional responsibilities of NCPs changed the power dynamics between them and their pharmacy colleagues. Findings suggest managing the changes in power relationships was challenging for novices. Professional (or managerial) hierarchy meant that whether or not they were managers according to their job description, NCPs had to show leadership.

“You have to lead the pharmacy team as the pharmacist, and you don’t do that when you’re in the pre-reg [training year], and that’s what I found quite difficult. The dispensers should know what their daily tasks are and the order in which to do them in, but you’re still meant to make sure that they’re doing it plus do your own jobs...... all of a sudden you’re in that position. It’s quite a learning curve.” NCP R4

The lack of leadership experience was a source of pressure when NCPs encountered resistance from some pharmacy colleagues. Confident, experienced colleagues sometimes struggled to accept the leadership of inexperienced, unsure novices, a finding reiterated by the pre-registration tutors, who talked about how challenging it was for NCPs to exercise their authority with colleagues and understand the nuances of relational power.

“I put that as one of my [challenges]... dealing with challenging behaviour, but not from patients or customers but from staff basically. So sometimes people will not respond to people who they think aren’t superior to them....” PRT R2

“A lot of the time...I think when you first qualify, you’re clinically sound, but you have very little experience of managing staff and overseeing different staff and handling different types of people.” PRT R1

These challenges with pharmacy colleagues implied an apparent lack of skills in NCPs to manage their relationships with others. Novices reported incidents when they felt disrespected or disempowered because their colleagues questioned their professional judgement.

“On some shifts I’ve done, I’ve found a significant number of [dispensing] errors ...so one example was ranitidine for a 10-week old baby, it was 15 times the amount you’d normally have. The dispenser had dispensed it. I found it and said ‘this is wrong’, but then she questioned me for ages and wouldn’t believe me when I said it was wrong.” NCP R5
Lack of influence was attributed to novices’ inexperience, with some novices even recalling being taken advantage of or being coerced into making decisions. On these occasions, the novice’s inability to influence others or to resist the undue influence of others contributed to stressful and challenging transitions.

“In some stores where the dispensers know you’re newly qualified, sometimes they take advantage of that and ...I mean you should be in charge of the pharmacy, but they kind of think they’ve got an upper hand over you.” NCP R4

Findings therefore suggest that novices were surprised by and unprepared for pharmacy colleagues’ attitudes towards them during transition. This made it stressful for novices who may have expected that their registered status alone would command respect and facilitate acceptance from colleagues. Instead NCPs found themselves having to work harder to gain the trust and respect of colleagues. This was made worse still by being at the top of an ‘inverse hierarchy’, where despite being the least experienced [and often youngest], NCPs were expected to lead a team of experienced colleagues.

“...new kid on the block, isn’t it, basically? ‘I’ve been here 25 years, and you’ve just come out of university’.” ECP R4

This strained relationship was acknowledged too by support colleagues, who reported that novices often failed to appropriately acknowledge and recognise their expertise particularly that of accuracy checking technicians, ACTs. The fact that ACTs had the experience and training to perform traditional ‘pharmacist-only’ roles (such as accuracy checking of prescriptions) was a source of tension and conflict. Discussions from one support colleagues group (which included an ACT) suggested a lack of understanding between ACTs and novices about each others’ roles, responsibilities and professional boundaries contributed to this. The difficult relationship between NCPs and pharmacy colleagues was discussed at length by the first nominal group discussion for pharmacy colleagues:

“I think there’s a bit of a power struggle going on between those pharmacists and ACTs in some dispensaries.” PC1 R2

“Especially if you get an ACT that’s confident then it might be seen to be undermining the pharmacist.” PC 1 R3

“.... [NCPs] struggle to embrace an ACT and see them as a help, not a threat.” PC 1 R1
Pharmacy colleagues and pre-registration tutors described a ‘hidden wall’ or ‘divide’ which existed between pharmacy support colleagues and pharmacists. The cause for the divide was again attributed to perceived power differences and levels of social influence.

“I think there is always that wall…it’s a hidden wall, but there is that thing of when they can get one over you; if you’re weak and look weak, they will, they’ll overpower you. The second you show them any weakness, they will pounce on it. It’s just unfortunate some staff members are like that, because again it’s that pharmacist/dispenser, sort of, divide…” PRT R5

Difficulty in managing power differences extended to relationships with non-pharmacist managers. Unclear professional boundaries/responsibilities, perceptions of hierarchy and very commonly differences in expectations/priorities led to friction with non-pharmacist managers. Pharmacists attributed some of this conflict to a lack of understanding by non-pharmacist managers about professional liabilities and this led to a power struggle.

“It’s a power struggle when you’ve got a manager that is a non-pharmacist that doesn’t understand your professional liabilities…” PRT R5

“Assistant managers, as well….they might be dispensary trained but because they are assistant managers, they think they are higher than you, and they try and sort of ….question your judgement and your way of doing things….” NCP R4

Differences also existed between non-pharmacist managers and pharmacists in expectations and priorities at work, which often led to conflict.

“….. I was just doing prescriptions, dispensing, labelling and then she [the pharmacy manager] expected me to check about 10 or 15 dossettes and then on top of that all the walk-ins. It got a bit unrealistic after a bit so I did speak to the manager, I did say to her ‘Look, I’ll do whatever I can’ but she said to me ‘You better do it!’” NCP R2

While delegating work to colleagues could have eased the burden for novices, delegation can only take place when a relationship of trust has been established. For NCPs, this presented another challenge which highlighted the tension and lack of trust between ACTs and some NCPs.

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* Non-pharmacist managers are commonly dispensers or complete dispenser training to be able to support the dispensing team
* A plastic disposal system for arranging weekly medication
* Referring to a prescription that has been brought in by a customer, rather than one pre-ordered by the patient or pharmacy through the pharmacy’s repeat ordering service
“I think there’s an underlying kind of fear sometimes in newly-qualifieds in like, ‘I’m responsible for everything, as soon as I put my name in that frame it’s all me.’” PC 1 R3

As the preceding quote from a pharmacy colleague demonstrated, it was challenging for novices to delegate responsibility, when they were not yet accustomed to managing that responsibility.

3.6.1.2 Lack of confidence

NCPs recalled incidents where they lacked the personal/professional confidence to stand their ground. Primarily, the reasons for low confidence were inexperience, a fear of making mistakes and the weight of their professional responsibilities. As novices already struggled to influence colleagues, the lack of confidence made it harder to exercise autonomy, make decisions with authority and challenge colleagues when needed.

“When it comes to the awkward power struggle... when the manager says, ‘Do this and do that’. And the newly qualified, under pressure, then [says], ‘Oh right, maybe I should do that, because that’s what the manager’s telling me’. But then they have to realise that it’s them that’s the healthcare professional. They’re the ones that have got the training. And at the end of the day, it’s their decision. And...it’s got to be their confidence really that’s got to be right, to stand up to that and say, ‘I’m going to be the one to make the decision with this situation.’” PRT R5

Pharmacy colleagues also noted that in comparison with more experienced pharmacists, NCPs were less decisive and struggled to make decisions in a timely way. They needed more time to consider options, and were inclined to self-doubt. Importantly, pharmacy colleagues also observed that when making decision NCPs also emphasised the consequences of that decision to themselves, and not just the patient.

“They can be faced with a problem and they will go through absolutely every single option and really deliberate over it, whereas I find maybe more experienced pharmacists will be like ‘Well, what does the patient need and how can I do that for them?’ Whereas newly qualifieds will weigh - ‘What does this mean for the patient? What does this mean for me?’ for every option and it can take a while sometimes.” PC 1 R3
“Well, quite often if they’re [NCPs] out front\textsuperscript{ix} maybe and they’re talking to somebody and they’ll come in and they’ll say ‘Oh this patient has got this and is it all right for them to take some medicine off the counter?’, and then they’re looking it up in the book, and really they probably know the answer but they’re just not confident enough to actually say, ‘Yes, it is all right’ without checking in the BNF\textsuperscript{xii}…” PC 2 R5

When dealing with complex problems, NCPs struggled to apply the law and manage risks effectively because they lacked confidence. During the first nominal group discussion with NCPs, all participants were asked what they considered as most important when making decisions – the patients’ needs or the standard operating procedure (SOPs)/regulations. All seven participants reported without hesitation that they prioritised SOPs/protocols over patients’ needs when making decisions. When explored further, NCPs attributed this to avoiding the risk of litigation. This was repeated by pharmacy colleagues who felt NCPs were overcautious, prescriptive, and rigid in their reasoning.

“So I think being overcautious is something that I’ve seen of the newly qualifieds that I worked with. They’re very rigid. ‘This is what I do, I can’t do that because it will affect my registration’ or ‘It’s against the law’, and then you’ve got a patient there…” PC 1 R3

Pharmacy colleagues further reported that NCPs were typically identifiable by their lack of confidence, the fact that they didn’t know what to do and their inability to seek help appropriately. Indeed tutors reported telling trainees and NCPs to conceal their novice status and advocated wearing of a ‘mask of confidence’ or putting on a ‘pharmacist face’. While tutors gave this advice to help NCPs build resilience and avoid being undermined by challenging colleagues, it prevented novices from seeking help appropriately.

“I think in a lot of places …it’s the image you’ve put across. So if you put yourself across as confident… you don’t say, ‘I’m newly qualified….could you please go gentle on me’. If you just come in as a pharmacist, act normal and portray that image that you are ready to go, then that’s the way they’ll think of you.” PRT R4

Sometimes, when novices put on their ‘pharmacist face’ it further alienated them from pharmacy colleagues, who perceived their [NCPs] attempts to appear confident as

\textsuperscript{xii} Working in at the counter where customers are served
\textsuperscript{xii} British National Formulary
‘arrogance or over-confidence’. As a result, pharmacy colleagues felt less inclined to offer support.

“[NCPs] can be too confident as well...and you kind of stand back from then. I think they need to be in the middle for confidence. Where they can be a little bit too confident, you don’t seem to want to help them as much. They seem like they know everything so why should you help?” PC 2 R4

3.6.1.3 Decision-making

Decision-making is a complex skill which required NCPs to apply knowledge, experience, critical thinking, and reflective practice skills to resolve clinical, legal, or ethical issues appropriately. Decision-making was especially challenging, in the context of being inexperienced, newly-accountable professionals with limited access to support.

One tutor described how trainees applied their knowledge ‘in parrot fashion’ and struggled to apply it to real patients. This was re-iterated by an ECP, who felt that although her clinical knowledge was comprehensive, the pressure to apply it to an unfamiliar situation, in isolation, as the responsible pharmacist, was challenging.

“I wasn't actually so nervous about my clinical knowledge. I thought that I was probably at the top of my game, because I'd just passed the exam, you know. I was also very much involved with all the professional decision making with my pre-reg tutor and the other pharmacists, but yet, when I was on my own, I felt pressured by that....it's not so much the general knowledge, it's about applying it to that situation.” ECP R4

Participants were quick to point out that once registered, novices had to make professional decisions under time constraints, without the opportunity to reflect or consult other professionals.

“It’s the fact that you have to make a decision within that split second. During pre-reg, you can go away and have half an hour, writing everything down, the pros the cons...” NCP R1

Pharmacy colleagues also reported that NCPs were much more likely to be ‘thinking all the time’ or repeatedly checking the BNF. The burden of decision-making further increased when NCPs were faced with a clinical issue that required weighing up a number of options.

“I found it difficult to balance when to let something go or not, and as a rule of thumb, I didn't let anything go....And the prescribing doctors were crazy,
they were prescribing off-licence\textsuperscript{xiv}, and out-of-dose ranges.....And it doesn’t matter that you know that such and such [drugs] interact. But if they’ve been on it, especially for ten years, then you’ve established it’s probably safer to keep them on it, than to take them off it. But no one could tell me that, until I’d learned it myself.” ECP R4

Pharmacy colleagues reported that NCPs often waited for another pharmacist’s answer, particularly where there was no clear solution to a problem. Here, the increased uncertainty, and inability to ‘sense-check’ decisions with others increased the pressure of decision-making.

“I had a situation where an MDS\textsuperscript{xv} patient missed their morning dose of medicines. They were on phenytoin. They also had a teatime dose of phenytoin, also it was getting to 2 o’clock, near the teatime dose. It’s about coming to the conclusion. After ringing Medicines Information\textsuperscript{xvi} and finding out how long the dosing interval should be, do you say ‘Omit your morning dose’, then you’re more at risk of having a seizure or do you say ‘Have both your doses’, but then be at risk of toxicity! It’s a lose-lose situation really, but it’s about deciding which one is best for the patient. And after considering both the outcomes, explaining the situation to the patient that ‘you are more at risk of toxicity’. You know you’re unsure in that situation. There’s no right answer to it, either way there’s still a problem... but I just wanted to get reassurance really...of my decision.” NCP R7

Other occasions when NCPs faced challenges were professional judgements involving specialist/unlicensed drugs, drug interactions and over the counter (OTC) drugs sales. However, issues involving controlled drugs were cited as most challenging. This was attributed to the extensive legislation, rigorous record-keeping, safe-custody requirements, and patient safety issues relating to controlled drugs\textsuperscript{xvii} (CDs). Even tutors referred to the perceived ‘aura’ associated with CDs, and ‘overwhelming accountability’ was a term used by an ECP, indicating the apprehension they [CDs] caused.

“There’s an aura around CDs and methadone and...whether it’s to do with the legal stuff or type of patients that you see.” PRT R3

“But since the legalities have changed...it’s become frightening and I think...there’s such an aura around it....it’s a nightmare thing CDs”...PRT R4

\textsuperscript{xiv} Prescribing outside of the product licence
\textsuperscript{xv} Monitored dosage systems – a medication storage system used to simplify drug administration
\textsuperscript{xvi} Local and regional medicines information centres (usually hospital-based) provide and enquiry provide an enquiry answering service on all aspects of drug therapy
\textsuperscript{xvii} Prescription medicines controlled under the Misuse of Drugs legislation
The increased fear associated with CDs meant the pressure to make the right decision and dispense safely was even greater when controlled drugs were involved. The ultimate worry, then, was a dispensing error involving a controlled drug.

“...you go from being a non-decision-maker to a decision-maker, overnight I guess. It’s quite a change in responsibility...the first few months are really hard.” NCP R6

As novice pharmacists, they lacked experience in being fully accountable because they could not be accountable prior to registration. As pre-registration trainee pharmacists who could not be legally accountable, their actions and decisions were made under the supervision or ‘safety net’ of a tutor. So when transition began the pressure from accountability was exacerbated by the loss of tutor support and isolation from peers.

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patient comes back to you for your decision and you realise that I need to choose. So it’s after that moment when I realised it’s all down to me. I need to make the final decision.” NCP R1

Nominal group discussions showed that a fear of making errors and the threat of litigation was a constant strain for NCPs, and that ‘being in charge’ of the pharmacy heightened the burden of responsibility. Novices lacked the situational awareness needed to effectively delegate, manage their time and the workload which added to the strain of being in charge.

“When you’re the final check, and you’re trying to do all these services too, you really have got to have lots of eyes. And even if you have got adequate support staff, that’s good, but then that’s another member of staff that you need to remember what they’re actually doing. And sometimes you just forget that someone’s waiting.” ECP R3

“When you’re that one person that everything has to go through, it’s actually almost an awareness of knowing everything that’s going on. When you’re a pre-reg, you’re not sort of totally aware of everything else that’s going on.” ECP R4

Despite lacking the experience of professional accountability or ‘being in charge’ it appears NCPs were expected to manage in the same way as more experienced pharmacists. The reported isolation, lack of confidence and lack of support all represented barriers to NCPs’ successful transition to independent practitioner.

“And the expectation to be an experienced pharmacist on day one: like I say, I’m not even talking about the clinical checking, we could clinically check a prescription, that’s fine. It’s about…. running the whole show, and hang on a minute, I haven’t done this before, don’t expect me to be able to do it to the same level as someone who’s been doing it for ten years.” ECP R4

3.6.1.5 Adapting to the workplace

For novices, adapting to the workplace meant being accepted by the team personally and professionally; ‘finding where they fit in’. For the team, it meant having a NCP who was able to fit in with and commit to the team and the team’s priorities; ‘understanding how we do things here’. These different ways in which challenges in this theme were described

Essential, advanced or enhanced services (such as medicines use reviews or flu vaccination) commissioned by the NHS
by participants demonstrated that novices and colleagues saw each other’s roles very differently.

“Some people come in and they are the pharmacist, and they think they’re the captain of the ship. The ACT or the [pharmacy] technician is the captain of the ship they [the NCP] just work alongside the captain. But they [the NCP] don’t want to work alongside, they want to actually steer the ship.” PC 1 R1

Most of community pharmacy teams where the NCPs worked, had well-established routines, relationships and organisational culture. As such, they expressed a strong sense of ownership about their pharmacy environment, the team, and the rules and practices which governed it. The team therefore expected the NCP to fit in with store culture.

“I always say to my girls if ever I’m not there, ‘This is your store. You should never feel like that with anybody, you should always be able to say, no, this is my store, this is how we work here’. Because these people will move on to another store and you will be left to pick the pieces up from a complaint. So that’s what I always say to the girls, ‘This is your store, you own everything’.” PC 1 R1

Another area reported as challenging for novices was teamwork. Pharmacy colleagues reported that NCPs focussed on their position in the team and lacked the awareness of the wider team as a unit. It was interesting, therefore, that although NCPS and ECPs did not report teamwork as a challenge, pharmacy colleagues and tutors repeatedly did.

“They need to work as a team, as opposed to ‘I’m a pharmacist, I don’t do that’ – it doesn’t work that way!” PC 1 R2

“[It] should be the team, all together, because they’re working as a team. Some of them [novice pharmacists] don’t know they’re working as a team. Some of them don’t.” PC 2 R6

Participants from both pharmacy colleague groups also felt that being a good team member included having the willingness to do all tasks (rather than picking and choosing what to do). They also felt that novices, given their inexperience, should be able to take directions from colleagues for the benefit of the team.

“Because [teamwork] to me is just as important as having the ability and the knowledge to check prescriptions, because if you can’t work as part of a team, if you can’t take directions from a manager or an ACT then you as an individual what can you put into a store?” PC 1 R1
Another facet of organisational culture that novices had to adapt to was the target culture. Pressure to meet performance and service targets created additional anxiety for novices, who for the first time had to balance the clinical and commercial priorities of community pharmacy practice.

“...it's that balance between the profitability and being a pharmacist, really, that's one of the big issues for me...” ECP R2

“In community [pharmacy], you have to accept that there's going to be a big commercial aspect to it.” ECP R3

In contrast, both pharmacy colleague groups discussed the ‘target culture’ at length but identified that the challenge for NCPs lay in being aware of and meeting those targets.

“When a pharmacist comes into my store the first thing that he knows is how many items we’re expected to do, how many MURs, how many flu jabs, what percentage targets we are on growth. So he knows exactly what is expected of him. I think that’s important, we all know then there’s something to work to.” PC 1 R1

3.6.1.6 Summary of the most important challenges
This concludes reporting of the five most important challenges as perceived by study participants; relationship management, confidence, decision-making, being in charge and accountable and adapting to the workplace. In addition to the five challenges perceived as most important, thematic analysis of discussions and the sticky notes identified additional challenges.

3.6.2 Other challenges identified
Additional challenges were identified by study participants and are presented next; the lack of access to peers and other support, workload pressure, delivering pharmacy services and providing customer service/patient care.

3.6.2.1 Lack of access to peers and other support
Most NCPs started work in pharmacies where they were the only pharmacist on site. Professional isolation limited opportunities that novices had to share learning, or to seek and receive feedback about experiences that were new or unfamiliar. Importantly, it also increased the burden on the novice to make the right decisions, despite their relative inexperience and lack of confidence with their newly-acquired responsibilities.

“.....so for example the doctor’s writing on a hand-written prescription, you can’t read it, that’s the last thing you need. So it’s quite difficult if you haven’t got
someone else to sort of ask for their opinion, ‘what do you think that says?’ … but just having that other person to help check with might be of benefit...” NCP R5

Furthermore, NCPs had to learn how to manage these emotional responses (i.e. to manage ‘self’ or having emotional intelligence). Despite this, there was lack of contact with experienced peers for shared discussion, guidance/role-modelling and feedback. Novices wanted to know if their practice mirrored that of more experienced pharmacists - essentially what they lacked was ‘reassurance’ or ‘sense-checking’. Since this was lacking, NCPs experienced uncertainty and self-doubt about their practice.

“…. if you made a decision, ...I wouldn’t know if you’d make the same decision as me. That’s never discussed, is it really? When I’m like, ‘I don’t know whether to let this go or not?’ You’ve got no idea whether other pharmacists would let it go...” ECP R4

Being isolated from their peers made it difficult for novices to feel part of a ‘learning community’. NCPs and ECPs both reported ‘having no-one to ask’; ‘not knowing where to ask’, ‘not knowing who to ask’ and ‘not knowing when to ask’ for support.

“…there was no clinical support in branch, so if you need to call someone when you have a patient in front of you, then you’ve got a dilemma, who do you call?” ECP R3

Furthermore, NCPs were hindered by not being aware of available sources of support.

“There are things available, but you just don’t know as a newly-qualified. Even Medicines Information.....until I worked in a hospital, I had no idea that anyone could just ring Medicines Information with a query.” ECP R4

Asking pharmacy colleagues, senior managers or professional support organisations was often not particularly helpful because novices were not able to receive the ‘reassurance’ or ‘sense-checking’ function they needed. Pharmacy colleagues too were sometimes not supportive of novices, particularly when novices’ behaviours or practices differed from those of the regular pharmacist.

“That was one of the things ...answers to difficult or unusual queries quickly. Because, yes, you have the NPA\textsuperscript{xvi}, the RPS\textsuperscript{xvii}, your company and whatever helpline

\textsuperscript{xvi} National Pharmacy Association – a trade association for independent community pharmacy professionals in the UK that offers professional support
\textsuperscript{xvii} Royal Pharmaceutical Society - the professional membership body for pharmacists and pharmacy in Great Britain
... but they won’t give it to you quickly...you won’t be able to get them quickly on the phone.” PRT R2

“I had lots of requests for OTC medicines that were for animals.... But ....the staff in the pharmacy, dispensers, and assistants would be kind of the mind that ‘the normal pharmacist does it, why don’t you do it?’... so it would be nice in terms of support, more support from the staff, and for them not to question what you do I guess....but if they see one pharmacist doing something which another doesn’t, they’re going to question it....” NCP R7

Inadequate support from senior management was also identified as a challenge, particularly for management and staff-related queries. One ECP recalled a distressing incident, when, at ten months qualified and a newly-appointed manager, she was asked to terminate the contract of a staff member.

“Head office were saying, ‘You’re going to have to deal with it’. And I’m like, ‘I’ve only worked with this lady six months, I shouldn’t be the one telling her to leave the job!’ Someone in the head office could have called her, you know, and told her, ‘This is what we expect you to do, or we’re going to let you go’, but no, they expected me to do it.” ECP R1

NCPs or ECPs in management roles also recalled a lack of support from management to set up new services or to complete audits.

“I was on relief for three months, and then I said, ‘Can I go into a branch?’ Went in there, and you were in control then, but clinical governance wasn’t touched and I was expected to have sorted it all out and make sure it’s all in place; SOPs, audits, questionnaires, near miss logs. And as a newly qualified you’re thinking, “Oh God!” There wasn’t an SOP really in place that explained what an SOP clinical governance was .... So I had to just go away and do it myself.... after three years, I finally understood it, and mastered it.” ECP R3

In addition to delivering services, some NCPs were also tasked with setting services up, and again reported receiving little support to do this effectively.

“I spoke to my area manager, but it would have been nice for him to come over and say, ‘This is how we do it, this is what this service is there, what you have to do every year’, auditing and so on. But no, I didn’t get that sort of level of support.

xxi Organisational systems for demonstrating accountability for continuous improvement in service quality
xxii Standard operating procedure
xxiii A paper log to record medication dispensing errors made and rectified before they reach the patient
There’s a lot of contractual stuff you have to sort out as well, through the NHS, signing up to certain procedures, training events ...” ECP R3

Findings suggest that the workplace environment lacked the characteristics of a supportive learning environment, and that a culture existed where NCPs were expected to ‘hit the ground running’.

3.6.2.2 Workload pressure
Workload pressure and staff shortages are well-documented issues in community pharmacy workforce research.29 The challenge for NCPs was that they lacked the skill set and experience to manage and cope with the pressure and responsibility of their workload.

“...understaffing at times made working life more stressful. And when you’re newly qualified, and having to deal with the pressures of work, being in a busy pharmacy, it’s stressful.” NCP R7

Understaffing and working alone were regarded as a threat to patient safety because NCPs couldn’t have breaks, and had no additional member of staff to second check their work.

“...in the first or second week of being qualified I had to work alone for all those shifts but I had no idea about that before I went; it’s only as the shift wore on the dispensers said ‘Yeah you’re going to be on your own in an hour!’ It’s quite a busy place and I was fully unprepared and it was a late night!” NCP R1

High workloads caused anxiety for some novices who wanted to perform the job to ideal standards. Novices also reported that workload pressure and the feeling that ‘everything had to go through me’ increased job strain and the psychosocial stress of the workplace.

“So, managing workload was a big challenge for me. And that’s kind of linked to pressure, and the fact that everything had to go through you......” ECP R4

Novices reported that expectations to complete full workloads and meet targets increased mental workload and contributed to workload pressure.

3.6.2.3 Delivering pharmacy services
All NCPs were aware of the expectation to deliver NHS advanced and enhanced services, however they could only legally provide services as a registered pharmacist. Though training for services was readily available, NCPs did not know about the services provided in specific areas and they lacked experience to deliver or set up services.

“... when you start off really you’re a bit overwhelmed by all the services that you’ve got to be qualified for straight away and it’s kind of getting ideas for
what’s needed .... it’s a bit daunting when you’re trying to read loads of PGDs. xxiv

NCP R7

Even when NCPs were aware of which services to provide, they found it stressful to deliver the service for the first time. Sometimes they did not feel competent to deliver the services, while also meeting patients’ expectations, achieving targets and managing the workload. They frequently had queries about clinical issues, consultation skills and completing the paperwork.

“There is a flu jab where you have to join the two [parts] together and the other day was the first time I was faced with it and I was so scared of jabbing myself with the needle it was that long. I managed to do it but it would have helped if I had another pharmacist who had already used it before, it was the first time I had used that. I wouldn’t have panicked as much. It was quite embarrassing actually because I was doing it in front of them [the patient] and they made me feel like I’m incompetent because they were surprised I didn’t know what to do.” NCP R4

Newer patient-facing services such as the flu service generated much discussion from novices as they felt poorly prepared to provide the services.

“... I was sent on a training course by the company in order to be able to administer the flu jab myself. However I wasn't given any further information on all the logistics and the paperwork. We were taught how to actually give the flu jab but we weren't told who was eligible, who wasn’t... and what forms needed to be filled in, when the GP needed to know, when they didn’t....I think it would have been a bit more helpful if we had been given a run-through of all the information that we would need, rather than having to keep ringing up somebody at head office with a query every day, which is what it was initially” NCP R6

3.6.2.4 Providing customer service and patient care

Interacting with community pharmacy customers and patients is part of a trainee pharmacist’s role and therefore not new. What was different, and therefore challenging for NCPs, was that the level of responsibility to the customer and a change in the type of relationship. As trainees they had been able to focus on ‘patient care’ in consultations and refer to an experienced pharmacist at any point. As NCPs with ultimate accountability in a retail setting, they were responsible for ‘patient care’ and ‘customer service’. Novices therefore needed social skills that encompassed these different types of relationships, and could accommodate a wide variety of patients.

xxiv A Patient Group Direction, which allows a specified health care professional to sell, supply or administer medication to treat specified conditions, without the need for a prescription.
“As a pharmacist you’ve got to have social skills because you’re dealing with patients, basically. If you’re abrupt it’s not a very good bedside manner, like for a doctor, but it’s the same sort of thing. You’ve got to empathise with your patients and be able to communicate with them.” PC 1 R2

This placed a new pressure on novices because they needed to be able to modify their verbal and non-verbal language to suit different patient groups or levels of understanding. Occasionally, novices were described as dismissive or condescending to patients. Support colleagues reported that NCPs who lacked the developed social skills of experienced pharmacists, had embarrassed, or upset patients through poor communication skills.

“They [NCPs] need to know when to be a bit more discrete and to know the audience basically; because you’re going to have all different types of patients coming in.” PC 1 R3

Observations by tutors and pharmacy support colleagues suggested that NCPs struggled to build rapport with patients and show a genuine interest in them. By contrast, NCP and ECP groups did not report lacking communication skills. Rather they reported the stress and distress that was caused by dealing with some patient-related challenges; meeting patient expectations, helping patients with language barriers or communicating with ‘difficult’ patients, who were described as angry, intimidating, or abusive. One particular patient demographic felt to be challenging for NCPs was methadone patients.

“So dealing with abusive patients actually [is a challenge]...especially methadone ones...it’s quite rough in the city centre.” NCP R5

“As long as everything’s going okay, there’s no harsh words, then they [NCPs] are all right. But if anything goes a little bit wrong they find it a bit hard, bit intimidating. Because you’re [pharmacy colleagues] used to the [methadone] patient and you know the patient; it’s a bit easier for you, but maybe not for them.” PC 2 R5

There was consensus, however, amongst pharmacy colleagues that NCPs lacked skills in consulting with methadone patients and some customers. Challenging customer service scenarios were demanding because NCPs were expected to manage them, despite lacking the training or psychological resources to manage conflict resolution.

“I had another case – the guy had got some Daktacort HC® and he had been using it on his genitals but he’d had it on prescription, which is fine, the doctor can prescribe it for you [for genital use]. But he said ‘I want to buy it over the counter’. The counter assistant asked where he was using it and he wouldn’t tell her. I took him into the consultation room, tried to speak to him, but he said ‘I’m not telling
You said ‘Well, I can’t sell it to you if you can’t tell me where you’re going to use it.’ You’re trying to calm down the situation, I’m explaining to him, ‘We’ve got to follow a protocol’... and ‘I’m just trying to see if it’s appropriate for you.’ You’re in that bad situation, but then they’re still mad at you.....” NCP R7

“If we’ve made a mistake obviously the patient is going to get irate....so they [NCPs] need to know how to deal [with it] and how to rectify that problem. It’s that fear of... It’s sort of new to them, and then you’re suddenly confronted with somebody who’s got a really big complaint and they’re shouting at you, swearing at you sometimes. I think they [NCPs] can be a bit intimidated by that and it can be a bit of a shock to the system.” PRT R2

3.6.3 The ranking exercise
Findings reported in the preceding sections reported that overall, nine challenges were identified in the NGDs and ranked in order of perceived importance. Ranking of the challenges was important because it was useful in understanding how to prioritise the challenges the intervention needed to address. The ranking exercise also provided some valuable insight into differences in the perspectives of NGD participants with different roles.

NGD participants individually selected and ranked their top five challenges at the end of each discussion. Within each group, scores were calculated to identify the top five challenges for each NGD, as shown in Figure 3.1:

NGD 1 (NCPs) ranked their top five challenges (in order of importance) as decision-making, being in charge and accountable, lack of support, relationship management and adapting to the workplace.

NGD 2 (PRTs) ranked their top five challenges (in order of importance) as relationship management lack of confidence, being in charge and accountable, decision-making, and workplace pressure.

NGD 3 (ECPs) ranked their top five challenges (in order of importance) as decision-making, lack of confidence, being in charge and accountable, relationship management and customer service and patient care.

NGD 4 (PCs) ranked their top five challenges (in order of importance) as relationship management, adapting to the workplace, lack of confidence, customer service and patient care and workplace pressure.
NGD 5 (PCs) ranked their top five challenges (in order of importance) as relationship management, adapting to the workplace, customer service and patient care, lack of confidence and workplace pressure.

After this, the rank orders (based on total weighting scores) for all five groups were reviewed and compared to produce an overall rank which incorporated ranks from all groups (Figure 3.1).
Figure 3.1 A comparison of ranked challenges between the five nominal group discussions
Therefore overall, the top five challenges were: relationship management; lack of confidence; decision-making; being in charge and accountable; and adapting to the workplace. These indicate that developing professional behaviours was perceived as most challenging. The only challenge identified by all five groups as important was relationship management. As expected, being in charge and accountable, was not a challenge identified by the PCs group. Interestingly, the only group not to identify the ‘lack of confidence’ as a challenge, was the NCP group. The NCP group was also the only group to identify ‘lack of support’ as a top five challenge. The rankings of the two PC groups were most similar. Most dissonance was noted between the rankings of NCPs and the PC groups, where just two challenges were common (relationship management, and adapting to the workplace) between the groups.

3.7 Results: Section 2. The effects and consequences of transition challenges
As well as challenges faced during transition, study participants also discussed the effects and consequences of transition challenges. Effects and consequences on the NCPs well-being, learning and development and professional practice, were reported. Though some additional effects were reported, findings in this section focus on how the NCP was affected, as this is the research question being investigated in this thesis.

3.7.1 The effects on wellbeing (psychological capacity and mental workload)
Throughout all the discussions, it was clear that the challenges experienced by NCPs induced stress and had a detrimental effect on their well-being. Stress was the consequence of the work conditions in which transition happened and role/job-related challenges that novices faced. The ongoing stress, professional isolation, expectations, and the inability of the novice to control those things led to job strain. While some level of stress is beneficial for prompting development (eustress or ‘good’ stress), it has to be balanced with the right conditions, such as available support. Since little was done to recognise and mitigate the stress these challenges caused, wellbeing was impaired.

“A lot of it, when you’re newly qualified, is about you’ve got all these feelings, and nobody’s listening to your feelings at all, they’re just looking at your output. And you just feel, like, totally exposed, but nobody cares....” ECP R4
Some novices described feeling ‘daunted’ or ‘overwhelmed’ by job demands. As one tutor explained, ongoing stress led novices to suffer anxiety and confidence crises, so that even simple tasks appeared complex.

“...the other day I got a call off one my [former] pre-reg s [about] emergency supplies”. I said, ‘Don’t tell me you’re at work and you’re asking me this simple question?’ [He said] ‘[It’s] because I’m really stressed, I’ve got so many items [to check]!” PRT R5

Job demands were also discussed by the novice group who reported the effects of working in stores that were so busy they struggled to get breaks. Worse still, when they took breaks NCPs felt guilty and even more pressured to keep up with workloads.

“...you try your best but I have to tell the staff, ‘I’m going outside to my car just to sit down or even to close my eyes’ because your brain can't handle it. You are checking so many things, they are rattling through your brain ... After a bit you will break down if you don’t have a break...” NCP R2

The fear of appearing incompetent to patients or colleagues made NCPs less inclined to seek help or pretend to know things, in turn adding to anxiety.

“When you’re newly qualified, you do feel stupid, even though you’re not. And it’s very common...Sometimes it is scary when you’re going out there and, the buck stops with you...a staff member asks you something, you can’t tell them. I mean, you’d look stupid if you go to the counter assistant, [and ask] ‘What do I do?’” PRT R5

Professional liability was a particular worry when novices made dispensing errors that went on to reach patients. The effects of this undermined the novice’s confidence, causing worry/anxiety that continued after working hours.

“That [the worry] was because of how seriously I’d take it....because I always worry about the patient. It's not for me, the fact I've made a mistake, it's, ‘Is the patient okay?’ But when I've made other errors, I've felt sick, like, all night, all weekend, really worried, you know, awful.” ECP R4

xxv The supply of prescription only medications at the request of a patient or prescriber without a prescription
“I had to call [company] the next day, and then I had to call PDA\textsuperscript{xxvi}, and do all of this. But anyway, in the end it was alright, but I was...I didn’t even sleep, you know.” ECP R1

### 3.7.2 The effects and consequences on learning and development

Transition is known to be a time of intense learning and development. To facilitate this, novices should work in a supportive environment that recognises and addresses their learning needs. NCPs reported finding it difficult to achieve any meaningful learning for a number of reasons; workload pressure, not knowing about learning resources and time constraints. Not getting time to reflect meant that novices had little meaningful learning to support developing clinical reasoning or problem solving from real-world experience.

“... it’s not something they teach you so much at university, you know. The BNF teaches you this, and that, but in real life, you get these situations, dilemmas, these ethical dilemmas, ... interactions, for example. So, yeah, definitely, three years now I’ve qualified, I think I’m finally confident in, letting that go, [knowing] that, actually that patient will be fine.” ECP R3

“As I’ve got more experienced, I will accept things more; when I’ve spoken to the patient and I’ve worked out that that’s best for them. But that takes time, and I don’t think that can be taught, I think you need to be allowed some time....... I think the point is, nobody gives you that time nobody says, ‘Well for a month you’ll be with [another] pharmacist’.” ECP R4

A pharmacist in the NCP group reported that this lack of time resulted in having to ‘learn things on the fly’, suggesting that most learning as a novice was unplanned, rather than for development. Many novices reported expecting support during transition by working as a second pharmacist when newly qualified. Despite being viewed as beneficial in practice, this expectation rarely materialised.

“... when I first qualified, I was told I would be second pharmacist for two weeks, just to get used to things. I was second pharmacist for one day and then I was on my own after...When I got there, it was just crazy. It was just horrendous. I don’t think I’ll ever forget that day. It was just... my second day in and I got home and I thought, I don’t think I can do this again.” PRT R4

These quotes highlight that lacking access to experienced peers reduced opportunities for learning and reflection meaning novices had very limited formative feedback.

\textsuperscript{xxvi} Pharmacists Defence Association – a not-for profit organisation providing legal and professional support to individual pharmacists
“... if they’re on their own, nobody’s really seeing how they’re approaching things and nobody’s there to give them the information or the guidance and say, ‘You might want to approach that differently’, or, ‘You did really well on that’. You can give them some constructive feedback which they can then progress with...” PRT R4

“[There is] less time for positive feedback from someone, there’s no one to...you know when you’re putting a lot of effort in, and there’s no one to say, ‘Well you’re doing really well...’” ECP R2

So, in addition to limiting learning, challenges also affected how novices learned. It made them less inclined to seek help when needed from those best equipped to support them; experienced peers. Irregular and limited contact with peers also hindered professional identity development for novices, particularly because of conflict with non-pharmacist managers and pharmacy colleagues. Role boundaries and responsibilities were often unclear to NCPs and this caused ambiguity. Another form of internal conflict was the result of NCPs trying to balance clinical and commercial priorities, and marry those with employer priorities.

“I think, maybe about ten years ago, when it wasn’t so commercially driven, you could be a clinical pharmacist. And you could still satisfy your organisation as well, because you’re bringing in prescription volume. But now, you can’t..... So I just focus on the service side.” ECP R3

3.7.3 The effects and consequences on professional practice
Participants reported that work pressures and lack of support for decision-making impaired clinical reasoning and accuracy checking abilities of NCPs. Consequently the process of checking that medications were clinically appropriate was sometimes reported as incorrect, incomplete or absent.

“...there is so many [to check], a big queue, it’s really hard. You’re just, like, go, go, go! But, if something happened, if I’ve given Daktarin® cream to someone who’s on warfarin, that’s it! You’re so busy that you’re only checking if you’re giving out the right thing, so I don’t know. [You’re] not really clinically checking.” ECP R1

At other times, pharmacists were unable to check a patient’s medication record, and had to rely on dispensers pointing out new medications or drug interactions which had been flagged by patient medication record (PMR) system.

“I still find it difficult to manage drug interactions. I mean, if staff say, this is a new medicine, then I’m more aware of the interaction than basically, if they don’t say
anything. If it’s just amoxicillin, I’ll probably just check without wondering, ‘Were they on any other medication?’” ECP R1

This increased the risk of NCPs not identifying potentially dangerous drug-drug interactions. These concerns were amplified during late nights or weekends, when novices were more likely to be lone-workers. Lone-working was thought to contribute to an increased risk of errors, and deemed a patient safety risk by colleagues and novices alike.

“Because if you’re dispensing you’re not too sure what you’re doing, and then you’re self-checking...Because obviously you’ve got no dispenser, plus you’ve not had ACT training either, you’re more likely to make a mistake.” PC 1 R1

“It’s a safety issue....the whole point of you dispensing, checking, sending it out, in that process, if you’ve got quite a few prescriptions to do, you will hurry up, and try doing it as quick as possible to get them out...that’s the way it is, people just tend to do that. It’s just better to have another person, even to just do a second check on it, .....it’s just someone there to reassure you that yeah, you’ve labelled it right, you’ve got the right....” NCP R2

The speed at which pharmacists worked was used by colleagues as an indicator of their [NCPs] competence. Novices struggled to balance high workloads with the need to work safely and the expectations [from colleagues] to work quickly.

“I was just like, I’m clinically checking the prescription, and I’m basically screening them if I wanted to, and that really slows me down. And then I just get it in the neck for being too slow.” ECP R4

This made NCPs appear less productive than more experienced peers but may also have posed a risk to patient safety.

“I had a distinct situation [in] a busy store and the pharmacist decided to go and do a care home visit at the same time as the ACT finished. So they were bringing the care home interims xxvi down to me. And I got to the point where I said, I can’t keep the pharmacy running safely if you keep bringing the interims, please do not bring any more.....” ECP R4

Job demands and workload pressure were also reported to prevent novices from being able to practise to ideal standards. This foregrounded a practice-theory divide, where rules learned in theory did not translate to practice. Novices expressed frustration and

xxvi Medication prescribed part-way through the month for a care home patient, not at the time monthly medication is supplied
disillusionment at not being able to practise to ideal professional standards because the realities of practice did not allow this.

“I suppose it is about the balance. I would make sure I did it [the service] properly, to the expense of having, literally, having 20 people waiting. But you can’t win….because you want to do everything properly, and safely. You’re not being allowed to do the job you want to do, to the standard that you want to do it.” ECP R4

One way in which NCPs felt they failed to meet ideal standards was by intentionally or unintentionally providing services they knew to be of poor quality, because of workload pressure and the target culture.

“So, if there’s a lot of people, you have to do an MURxxviii, you can’t refuse to do it, because you need to reach your target. And sometimes there’s 20 items, and you have to sit down and talk to them. But you’re just going ask them, ‘Are you okay with your medication?’ ‘Can you sign this for me?’ - and that’s the end. And that’s not right. The quality of the MUR is very poor, it’s very poor. But then, what’s the solution?” ECP R1

Making sure their practice was as safe as possible was a priority for novices which contributed to their prescriptive and cautious way of working. For NCPs managing risk meant staying away from the risk of prosecution. To do this they had to apply and adhere to rules, regulations and standard operating procedures but this consequently made them feel very risk averse and prompted the need to protect themselves.

“The focus [in community pharmacy] has shifted from patient care to managing systems and protecting your own back. Protect yourself. You get into situations where you just have to [protect yourself].” NCP R5

“It’s because you’re getting into the era of people who sue easily, because medical negligence is a massive thing that’s on the rise. So if there’s a problem with someone’s medication or it has caused somebody harm…even it is hasn’t caused harm or it’s a dispensing issue people can still sue you for it. So as long as you know you can cover your back and you have the necessary insurance in place, you know that you’re safe.” NCP R2

“…because [of] people nowadays…they’re more risk averse, not because of SOPs, they’re more risk averse because of the health and insurance attitude that people

xxviii Medicines use review – an advanced service which consists of accredited pharmacists undertaking structured adherence-centred reviews with patients on multiple medicines http://psnc.org.uk/services-commissioning/advanced-services/murs/
have on them now. I think they’re more risk averse because of that situation.” PRT R5

Unfortunately, NCPs felt that the need for self-protection impinged on the ability to prioritise the patient and deliver patient-centred care.

“We’re always told if this goes to higher authorities, if you didn’t follow the SOPs, you’ve not got a leg to stand on. So I think when you’re newly qualified, …to say you’ll do the best for the patient, which is the right thing to do, I’m not sure newly qualifieds will be confident to just rely on their gut instinct and what’s best for the patient.” PRT R1

“I used to live in a seaside town where there was a lot of people on holiday. If someone comes in, and [says] ‘Oh, I forgot my inhaler’ …[the novice pharmacist would say] ‘No emergency supply when the doctor’s open!’ This patient’s sat there crying, he’s like ‘No, sorry, I don’t do that’….no empathy…and then you’re [pharmacy colleague] left feeling quite powerless because you can’t do anything as a dispenser, you can’t make that supply. You would then send that patient to the Walk In [centre] or to A&Exxix knowing that the pharmacist actually could have done more.” PC 1 R3

A perceived lack of empathy and patient-centred care left colleagues feeling frustrated by the novices’ actions, particularly when patients or customers were well-known. and felt powerless to help. This hindered good relationships and team working, obstructing professional socialisation and fitting in with the team.

**Summary of the section**

Challenging transitions appear to negatively affect the well-being, learning and development and professional practice of NCPs. As stated earlier, the overall aim of the thesis was to develop an evidence-based support intervention to address challenges faced by NCPs during transition. These findings suggest that the consequences of stressful transitions have implications for patient safety.

xxix Accident and Emergency
3.8 Results: Section 3. Coping and support strategies used by novice community pharmacists during transition

Findings reported in this chapter have so far focused on the challenges faced by NCPs and their perceived impact, addressing the first part of the two-part question explored during nominal group discussions (NGDs); ‘What are the challenges faced by NCPs during transition to practice?’ The remainder of findings for this chapter deals with responses to the second part of the question “What coping strategies/support were used/needed to address them?” Responses to the second part of the question were provided on sticky notes and captured during subsequent discussion. No voting or ranking exercise was performed in response to this question. Analysis followed the same inductive process reported in the methods section (3.3) of this chapter.

Novices experienced a range of challenges during transition and used a number of measures to address these challenges. As reported earlier in the chapter, challenges faced by novices caused high levels of stress. So, in addition to measures used to address a challenge, discussions revealed that NCPs used a number of coping mechanisms to try and minimize the stress they experienced during transition. Findings, therefore, first present measures used to address challenges and then describe the psychological coping mechanisms used by NCPs.

3.8.1 Measures to address challenges

To address the challenges experienced, NCPs used (singly or in combination) a number of resources: written text, former pre-registration tutors, pharmacists they knew, (non-pharmacist) pharmacy colleagues within the workplace and professional support organisations.

3.8.1.1 Written text

Written text or references included hard copy and online clinical texts, legal references, standard operating procedures and written protocols and guidelines in the workplace.

“When it comes to standing in front of the patient and they’re asking ‘What should I do?’ You have to weigh up everything they’ve just told you in a minute, two minutes and maybe go back and say ‘I need to check some literature, the BNF.’ Sometimes, you look through the BNF in front of them, and you say to them ‘I’m just going to look through the books I’ve got to see the best choice or option that I can make for you.’” NCP R2
Novices reported using hard copy or electronic references during work to confirm or double-check decisions and increase certainty in decision-making. Both NCPs and ECPs reported that to cope with challenges, they were still likely to be seeking further reassurance from other people, even when they consulted written references.

### 3.8.1.2 Former pre-registration tutors

While the official tutor-trainee relationship ended on the first day of registration, all participating tutors recognised that NCPs needed continuing support, and that as tutors, they could provide that support. Central to this continued support, was a good tutor-trainee relationship.

“A lot of pre-regs are glad to get rid of their tutor because it was a nightmare of a year but, then they’re on their own and they’ve got no one to turn to. It’s people like that, that find it difficult. If you’ve given your pre-reg a really good year, you know if they’re struggling, they can pick up the phone and they know you’re there.” PRT R4

If a good tutor-trainee relationship had been established during the pre-registration year, novices sought advice from tutors because they valued their experience and trusted them.

“...I used to refer back to [my tutor] all the time who was a lot more experienced and I’d ring him up with the most stupid questions, but in my head, I couldn’t solve them and I didn’t want to make a mistake. And that was a massive, massive support.” PRT R1

Both NCPs and ECPs expressed the importance of having a person to provide ‘reassurance’ early on in practice when uncertainty was high, and confidence low. Reassurance was especially valuable during clinical, legal and ethical decision-making or when performing pharmacy services

“I think pre-reg tutors are really good, my pre-reg tutors, I use them both, because I did two six-month placements so I still ring them if I have a dosage query...because they’ve been in the game for so long they have come across everything. And they’ll reassure me.” NCP R2

“So I spoke to my tutor about my reasoning and decision... it’s somebody to understand the situation you’re in, to say, ‘You’re making the right decision, you checked everything correctly.’ You know, to check reassurance of the decision.” NCP R7

These interactions increased their self-confidence, knowledge and provided informal feedback from a trusted source. Trust was identified as an important determinant of seeking help. The likelihood of contacting another individual for help was associated with
the level of trust the novice had in that person. When asked who they contact for help the ECPs group all highlighted trust as a factor.

“I wouldn’t go to my friends actually… I’d go to my colleagues that I’d worked with, like my pre-reg tutor… the ones that I trust.” ECP R4

Trust allowed novices to feel comfortable seeking help from tutors and increased the likelihood of receiving timely support. Importantly, it meant novices could have open, shared discussions with experienced peers.

3.8.1.3 Peers (other pharmacists)
In addition to seeking help from former tutors both NCPs and ECPS also sought help from other pharmacists. They are defined as near-peer (other pharmacists who qualified together with the NCPs) or peers (more experienced peers who qualified before the NCPs, but were not former tutors). A distinction was made between experienced pharmacists who were former tutors and those who were not, because not all participants had good relationships with former tutors. Whether they were peer or near peer, an established relationship and trust were important.

“I’d go to more experienced people still, because there’s probably one person who is in my cohort that I’d probably trust, because he’s done extra courses and he’s got the experience.” ECP R2

ECPs discussed how they modelled their behaviour on those more experienced pharmacists they identified as good role models, particularly for managing others. This helped novices to benchmark whether their practice was good.

“I think my solution was drawing in on people who I’d worked with who were very good at [managing people], and extracting how they did it, and ignoring the people who I knew rubbed the technicians the wrong way.” ECP R4

As a result, ECPs placed greater importance on having a more experienced and knowledgeable person as their preferred source of support, while novices seemed equally happy to consult near-peers or peers for support, provided they were approachable and accessible. Findings suggest NCPs gained value from having a community of other NCPs also going through the transition to independent practitioner. One participant described his social media group, which provided a support network, and also allowed members to benchmark their experiences/development against each other.
“So we made a little WhatsApp® group so any problems that we have, if we have anything that we need clarifying, because there’s always going to be one of us that’s seen it before, so we can give each other our little judgements saying ‘Yes, I’ve seen that before… but make sure you check this… check that’… so we’re a kind of support network… so friends who are newly-qualified and pharmacists… you kind of go through that experience together. Someone’s always been through it before so you help each other out.” NCP R2

Opportunities to work alongside other pharmacists were useful for development but were irregular and ad hoc. In addition, novices who worked as locums reported they were less likely to work as a second pharmacist. Working with other pharmacists helped novices develop skills and behaviours, particularly those needed to deliver specific services.

“I think I ended up being a second pharmacist one day and the [other pharmacist] was really helpful [saying]…. ‘This is how I go through mine’. He just showed me how he sets it up. It made it easier having a format to go through instead of [feeling like] a bumbling buffoon.” NCP R6

3.8.1.4 Pharmacy colleagues (non-pharmacist)

Being the most available and accessible source of help, pharmacy colleagues were able to provide novices with practical help in many areas. When NCPs needed support with the pharmacy layout, processes and protocols, all study participants agreed that their pharmacy colleagues were best placed to support the novice with this.

“Yes and they [dispensers] know the systems, the functioning of the pharmacy... they’re crucial. They’re key with that because I’m not familiar with any of the systems at all.” NCP R5

More importantly however, experienced or more qualified colleagues were able to help NCPs develop new skills. Examples included an incident where a novice had to check medication dispensed into a compliance aid for the first time.

“In the first week or two of being qualified, I was sent to a unit which exclusively deals with Venalinkxxx and dosette boxes, but [I] had no previous experience of checking one. So obviously you’re faced with a little pocket with loads of white round tablets which all look the same as each other and I wasn’t sure how best to approach checking it. I spoke to one of the technicians who gave me some advice on how to go through methodically, both checking whether it’s the correct tablet and checking if it’s clinically suitable as well.” NGT1 R6

xxx A type of monitored dosage system
“Well sometimes dispensers or technicians that have been there for a very long time…they know what patients like or usually have, they know the systems. Sometimes you get branded products which are not made anymore…Well the dispensers will know that a patient is alright with a generic and they’ve been given a generic [product] regularly.” NCP R3

Experienced colleagues were also valuable because they had good relationships with regular patients and understood or knew their needs better than novices did. This was an asset when novices had to deal with challenging patients or customers; colleagues helped to relieve workplace pressure for NCPs by managing customers’ expectations or telling novices about patients’ preferences.

“Giving information on local surgeries to let them know the way of working in your pharmacy…. explaining how the regular pharmacist would work, just give them an idea of what they could do.” PC 2 R5

Novices learned to adapt to local store culture, organisational culture or processes for local surgeries through working with pharmacy colleagues. This was important to NCPs who reported that inconsistencies in local store practices and cultures hindered novice transition. They relied on experienced colleagues to learn about local and organisational systems. Pharmacy colleagues were also well-placed to observe the workplace pressures and able to recognise when NCPs felt overwhelmed. At these times the experience and knowledge of pharmacy colleagues had a steadying/calming effect on novices.

“...it was my first day and I was quite nervous. So at the shop which I was working at, the staff helped reassure me, if there was anything I wasn’t sure of I could go to them....at each shop which I went to I found that the other members of the pharmacy staff were very helpful, in helping you remain composed. And also they were able to deal with the specific stuff regarding that pharmacy, so ....it just made it easier for me to just concentrate on being a pharmacist.” NCP R6

“I think as a manager, I think if the team is calm then that sort of exudes onto the pharmacist.” PC1 R1

Pharmacy colleagues also helped novices by informing them on SOPs, or of specific qualifications and training that would ease workload pressure. One example was the ACT who informed novices that she was able to complete some of the checking.

[xxx] A non-proprietary or non-branded product
“Just in the role that I do checking, I just like to let the pharmacist know that I’m the ACT, I’m going to be checking, and that I will be there sort of to help.” PC 2 R5

3.8.1.5 Professional support services
Some participants recalled the benefits of contacting employer professional support offices or using professional bodies such as the NPA or RPS to support decision-making. While all the ECPs indicated having used a professional support service, none of the pharmacists in the NCP group had done so.

“I was introduced to the NPA by the company, and they’ve got a good hotline that you can ring but if I’d have known that from the beginning, I would probably have utilised it a lot more, and felt a little more confident coming into being the clinical person on the day, and the responsible pharmacist on the day. If I’d been newly qualified, and introduced to these kinds of systems in practice, it would have been a lot more helpful, and more reassuring.” ECP R3

Despite finding these bodies valuable, they were rarely the preferred support option for novices. At times, participants could not get through to advisors and when they did, advisors re-iterated information from resources, when what novices felt they needed was reassurance.

“Yes, you have the NPA, the RPS, your company …but you won’t be able to get them quickly on the phone. Generally they just say, ‘This is the information available on the PIL’xxvii.’ They won’t give you a decision….and is that decision something you might need support with? Just a quick reassuring answer, that’s what somebody sometimes needs….just somebody to bounce ideas off.” PRT R2

Participants stressed that the support they needed was reassurance rather than seeking to be given information from resources.

3.8.2 Psychological coping mechanisms
To cope with challenges and the stress caused by challenges, novices talked or ‘vented’ as an outlet for their emotions. This tended to occur with friends or family, and outside of the workplace. NCPs also used more dysfunctional forms of coping: displacement/dissociation and avoidance coping. Dysfunctional coping refers to unhealthy or negative coping methods, which over time, may worsen stress. They are the opposite of positive or ‘functional’ coping, which reduces and/or prevents stress over time.

xxvii Patient information leaflet
3.8.2.1 Talking as a coping mechanism
NCPs/ECPs reported how talking to family about anxiety, fear and work-related stress was better than talking to colleagues or other pharmacists, particularly early on during transition. One ECP recalled how she found it valuable to talk with a family member, especially since she was a nurse and could therefore understand the ECP’s challenges with professional accountability.

“I also used my mum – she’s a nurse – so she understood the professional responsibility that I’ve got. So, just sort of, if I had to sound off to someone, it would be my mum that I would choose.” ECP R4

Even where family members were not healthcare professionals, NCPs talked to them about work. This was an effective coping mechanism because it provided an emotional outlet or ‘safe place’ in which NCPs could freely express their fears. Furthermore, the bond with a family member was a guarantee for support.

“Before I went home, in the evening, [I] just sat down with my grandparents and just moaned at them for a while. It was great! So it’s about support outside of the workplace. It’s often better if it’s someone who’s outside of that situation, outside of the subject, career in some ways as well.” NCP R5

3.8.2.2 Displacement or dissociation mechanisms
More often however, NCPs were forced to deal with their emotions without an outlet. Where novices had poor relationships with former tutors or felt ‘unheard’ by managers when reaching out for support, they felt they had to rely on themselves.

“I’d sent some antibiotic out on the wrong name to a care home….it had been on the Thursday, and I’d been off on the Friday….When I went back in on the Saturday, what I did was, I did my first flu jab and I gave it to him. Because I knew that it [error] was going to affect me really badly, so I had to do something else, because I knew that I had to get up and get on with it. And I thought, when you’re the responsible pharmacist, you have to get on with it. So that’s how I tried to get on with it, just by giving him his flu jab…” ECP R4

As shown by the example above ‘getting on with it’ was also reported as a necessary strategy when dealing with feelings resulting from having made and reported a dispensing error. This was a negative form of coping, where the novice simply ignored the difficult emotions they experienced. Though this allowed them to continue working, it also highlights that the stress caused by a dispensing error was not being adequately addressed. This coping mechanism was similar to one recommended by tutors, who told their trainees that the appearance of control, was more important than having control. They suggested
that ignoring challenging attitudes from colleagues were best managed through ignoring them. In this way, novices could develop resilience.

“...on the outside you have to look like you know exactly what you’re doing. And it’s just a case of you get through those first few weeks. You will get better. You will improve your pace. You know, you’ll learn more. You’ll have more experience. So the comments will die down as well. Just ignore it. You learn to ignore it as well......And appear in control. That’s the important thing. Don’t sit in the middle of the dispensary and cry.” PRT R4

3.8.2.3 Avoidance mechanisms

A final coping mechanism used by novices was avoidance. When NCPs could not manage emotional stress during transition they avoided tasks/responsibilities perceived as stress-inducing. Pharmacy colleagues noticed that when NCPs wanted to avoid the stress arising from speaking with customers/patients, they instead focussed on checking prescriptions in the back of the dispensary.

“Some don’t like being on the front of reception. They tend to veer towards the back...It’s that fear of...it’s sort of new to them. I think it’s that fear and it’s like ‘Oh, I’m better in the back!’” PC 1 R2

This was also reported when novices perceived to avoid interacting with methadone patients, who were perceived as ‘difficult’. A form of avoidance was also used by ECPs who felt disillusioned with the realities of practice. In their two to three years of practice experience, the ECPs reported feeling disappointment and resigned to an isolated, unsupportive workplace. It was during this discussion that one participant reported how she decided to be a ‘yes person’. In her view, the impact of challenging transitions was changing her view of and enjoyment of the profession. To stop the cycle of disillusionment that resulted she decided to become a ‘yes person’.

“I did a lot of self-reflection – and this sounds ridiculous, but I decided, consciously, to become a yes person; because I was getting a bit dragged down, and it made me feel a lot better.” ECP R4

While it made her feel better, it represented a form of avoidance: avoiding the inability to change, influence or assert herself as an independent practitioner. In doing so she felt this was the only way she could continue to be able to function as a pharmacist.

3.8.3 Section summary

From the findings, a number of conclusions may be drawn. First, NCPs needed support to address specific problems/tasks arising from work. Second, they also needed support to
manage/mitigate the emotional stress and psychological impact of the challenges they face during transition. The preferred source of support for novices was an accessible, approachable, and trusted source of peer or near-peer support. Peer or near peer support provides both the psychosocial support that reduces workplace stress and prevents the development of job strain, and the guidance/reassurance needed to support independent practice. It is also a positive coping strategy, and reduces the use of dysfunctional forms of coping. Finally, developers of transition support interventions to ease the transitions of NCPs should acknowledge that it is not possible to address every potential challenge caused by role transition and the workplace environment. Instead, interventions should aim to be support-focussed (rather than education or career -focussed) enabling novices to manage and cope with the challenges and impact of challenges, during transition. A brief discussion of the findings from the nominal group study in this chapter now follows, with a more detailed discussion in chapter 6.
3.9 Discussion
Nine specific challenges were identified by the nominal group study. Of these, the five challenges ranked by all groups as most important were (in order of importance) managing relationships, lacking confidence, decision-making, being in charge and accountable; and adapting to the workplace. These challenges suggest NCPs required further support to develop professional behaviours. Like novice nurses and junior doctors, NCPs experienced affective/emotional, social and job-related challenges, which had consequences for their learning and performance. Figure 3.2 compares a summary of the challenges faced by novice practitioners (reported in the literature) and those faced by NCPs (identified in this study). Challenges identified in the NGT study experienced by all novices (nurses, doctors and pharmacists), are highlighted in blue. Challenges experienced only by novice nurses and doctors (not reported by NCPs) are highlighted in orange. Challenges identified in the nominal group study which are experienced only by NCPs (not reported by novice nurses and doctors) are highlighted in green. A key finding therefore is that while NCPs face many of the challenges experienced by novice nurses and doctors, they have additional (context-specific) challenges; power struggles (with managers or pharmacy colleagues), inverse hierarchy, inaccessible peers, professional isolation, locum or relief working, target culture and full immediate accountability.
Figure 3.2 A comparison of challenges faced by novice community pharmacists, and novice nurses and doctors.
The nominal group study highlighted that NCPs experienced challenging transitions, causing them to experience high levels of psychosocial stress. This is consistent with findings reporting high levels of stress and burnout in novice nurses and junior doctors.\textsuperscript{89,152} While a healthy level of psychosocial stress may be beneficial and motivating, (eustress), findings suggest that NCPs largely reported high ongoing levels of negative stress or distress. In accordance with Meleis’ theory of transition, it was the ‘nature of transition’ that led to the stress-related ‘pattern of response’.\textsuperscript{129}

Stress has been reported as an outcome of challenging transitions in other healthcare professions.\textsuperscript{153,154} Unlike community pharmacy however, these other healthcare professions appear more likely to have a mitigating factor for stress: social support in the workplace.\textsuperscript{9,155} It is possible therefore, that NCPs may potentially experience disproportionate levels of stress during transition to independent practitioner, when compared with other novice practitioners.

The finding that the most important challenge for NCPs was managing relationships is also consistent with nursing and medical literature, where interpersonal and social structures during the transition period were reported as highly influential.\textsuperscript{7,156} The social structures in community pharmacy highlighted differences in the social challenges experienced by novice practitioners and NCPs. Instead of horizontal bullying, traditional hierarchy and unsupportive peers, NCPs faced power struggles, inverse hierarchy and inaccessible peers. NCPs reported a lack of support, and were more professionally isolated than other novice practitioners; as such NCPs do not benefit from the effects of positive role modelling from experienced peers. Research in Canada and New Zealand suggested that professional isolation is a predictor for poor performance in a healthcare professional.\textsuperscript{157} While in other professions professional isolation is a feature of older or rural practitioners, NCPs are commonly isolated regardless of age or geographical location. Formal transition support interventions facilitate shared learning, provide reassurance/feedback and social support which help prevent novices from becoming professionally isolated. Park’s study on work stress and job performance suggested that the prevalence of work stress factors was significantly association with impaired job performance.\textsuperscript{158} This study further concluded that social support and positive coping mechanisms were protective factors for workers. NCPs may therefore benefit from formalised social support and positive coping mechanisms to manage the stress they experience.
With the exception of the target culture, NCPs faced the same job-related challenges as other novice practitioners, including delivering pharmacy services and workload pressure. Interestingly, though extensive pharmacy workforce research cites workload pressure as a leading cause of stress in community pharmacy, this was not considered a top five challenge for NCPs. The impact of a stressful and challenging transition for NCPs was the negative effect on wellbeing, learning and development and professional practice. Interventions developed to ease the transitions of NCPs could incorporate social support structures to alleviate or help manage stress, and support learning and development.

3.10 Chapter summary
This chapter aimed to identify and rank the challenges faced by NCPs during transition, explore their perceived impact and the coping strategies used to address them. This study has shown that context-specific elements of the ‘nature of transition’, cause transition challenges for NCPs that novice nurses and doctors do not experience: power struggles, ‘inverse hierarchy’, clinical-commercial dichotomy (and target culture), full, immediate professional accountability and high levels of professional isolation.

Overall, this nominal group study suggests NCPs experience highly stressful transitions. It also provided empirical evidence for the specific challenges faced by NCPs during transition. In particular, the relative importance of these challenges, their perceived impact and how NCPs coped were all considered. Overall, a number of key findings have been highlighted in this study which must be considered when developing an intervention to ease NCPs’ transitions:

- while NCPs appear to experience many of the same challenges reported by novices in nursing and medicine, a number of key differences were highlighted by this study (see Figure 3.2), such as inverse hierarchy and professional isolation
- the challenges faced by NCPs that are different to those reported in the nursing and medicine literature may be attributed to role and contextual differences
- the challenges perceived as most important during transition were (in order of importance): relationship management; confidence; decision-making; being in charge and accountable; and adapting to the workplace
- interventions to ease transition should include measures such as bespoke peer support and social support structures to help NCPs manage stress and to support their development
Using findings from the literature review and the nominal group study, much evidence has been gleaned about the challenges faced by NCPs during transition and what their support needs are. The MRC guidance for complex intervention development recommends using literature and empirical evidence to develop an evidence base. This has proved valuable in directing the focus, content and objectives of the complex intervention that this research study aims to develop. The next stage progresses development of the intervention further, to a modelling or design phase, which aims to produce a draft of the intervention structure and the components it contains. This is the intervention design phase (phase 3 of the programme of work) which is reported in the next chapter.
4. Chapter 4. Intervention development

4.1 Introduction

Stage 1, development, of the Medical Research Council (MRC) guidance, recommends that evidence and theory be used to develop complex interventions. Phase 1 of this research (chapter 2) provided some theoretical evidence, while the previous chapter (3) added empirical evidence from the nominal group study. The final part of the development stage is modelling or design, which produces a draft intervention ready for feasibility testing. Modelling describes how intervention components are decided, using evidence to explain how that component should produce change, thereby justifying its inclusion in the intervention. The current chapter therefore describes how evidence from research activities was combined to design the intervention.

The intervention design process described in this chapter is split over four sections. Section 1 describes how findings from the literature and nominal group study led to key initial decisions. To progress from evidence to draft intervention, evidence from the literature review and the nominal group study was used to inform general intervention content and objectives. Incorporating theory into intervention design is recommended by the MRC guidance, however the methods for doing this are not stipulated. At this stage of the research study, knowledge of intervention components for transition support interventions (TSIs) was limited. This limited the authors’ ability to make decisions, such as selecting the number and type of components for the intervention. To address this, the literature on TSIs was reviewed. The review aimed to increase the authors’ understanding of components commonly used in TSIs, their perceived effectiveness and outcomes, and the methods used to evaluate TSIs. Once completed, findings from this review were combined with findings from the previous two chapters, to make some key initial decisions about the intervention. Where this did not provide enough information (such as how to structure, implement and organise the intervention components), additional activities were carried out to inform this. These additional activities are described in section 2. Following completion of additional activities, a first draft intervention was produced: this is presented in section 3. The chapter ends with details of intervention implementation and monitoring which are summarised in section 4.
4.2 Section 1. Formulating the key initial decisions

Section 1 reports findings from a rapid scoping review of transition support interventions (TSIs) and how this evidence was combined with findings from the previous two chapters (literature review and nominal group study) to propose some key initial decision about the intervention.

4.2.1 Scoping review. ‘What is known about the components and outcomes of transition support interventions in nursing?’

4.2.1.1 Introduction

Given that transition is acknowledged as the most stressful period of a practitioner’s career, much research exists to evaluate transition support interventions (TSIs) for novice practitioners in nursing and other professions. Reviews exploring the effectiveness and outcomes of TSIs indicate that TSIs are successful in easing transition and demonstrate beneficial outcomes at individual (i.e. competency), organisation (increased staff retention) and patient levels (improved quality of care).

TSIs in the nursing profession are described as residency programmes, preceptorship, graduate year programmes or transition support programmes. Most research reporting the evaluations of TSIs is to be found in the nursing literature. While TSIs are recommended by the Department of Health (DoH), and the Nursing and Midwifery Council (NMC), they are not mandatory. This is contrary to medical training where transition support constitutes part of a highly structured mandatory curriculum to provide ongoing training and assessment. Additional measures to support junior doctors therefore are typically short term interventions such as shadowing, day-long or short courses or using learning technologies and specialty-specific. Since novice doctors follow a highly structured transition programme as part of the formal training continuum from undergraduate education to full registration, interventions for doctors were excluded from this review. This review therefore focuses on TSIs developed for nurses, since these interventions, (like those for NCPs), are independent from formal undergraduate education and training.

This review aimed to address the research question ‘What is known from the literature about the structures (components, length), reported outcomes or effects and evaluation methods of transition support interventions in nursing?’ A scoping review was conducted to fulfil this aim as it was considered the most appropriate method for addressing the research question.
4.2.1.2 Methods
Scoping reviews aim to rapidly map the key concepts underpinning a research area, rather than systematically assess the quality of the evidence. Arksey and O’Malley developed a 5-step model for completing rigorous scoping reviews, which is used here to increase reliability in the findings and add methodological rigour.¹⁶⁸

Step 1: identify a research question and define parameters.
- TSIs were defined as any intervention to ease the transitions of novice practitioners.
- Components were defined as activities, processes or parts of an intervention.
- Evaluation was defined as the process of making an assessment about the value of an intervention.
- Outcomes were defined as effects or consequences resulting from TSIs.

Step 2: identify relevant studies. The following electronic databases were searched for qualitative primary studies reported between 2000 and 2015 in English language peer-reviewed journals: MEDLINE, EMBASE, CINAHL, PsycINFO and Science Direct. The key word ‘nurse’ was searched in combination with the phrase ‘transition support program*’.
Reference lists of selected articles were also searched for relevant articles.

Step 3: select the studies. Inclusion and exclusion criteria were drawn up to remove irrelevant studies. These criteria referred to study type (primary studies evaluating TSIs in adult or paediatric settings), intervention length (only interventions lasting more than 12 weeks). Twelve weeks has been deemed insufficient to develop the type of supportive relationship required in a TSI. Furthermore, many TSIs in nursing are based on Merton’s three stage model of professional socialisation which describes the progression from knowing (academia), becoming (initial 3 months of transitioning into practice) and integrating into the professional role (beyond 3-4 months to one year).¹⁶⁹ Studies lacking descriptive detail about the intervention components were also excluded.

Step 4: chart the data. The information included in the data extraction process was author, year, origin, evaluation methods used, intervention component description, intervention outcomes or strengths and outcome measures.

Step 5: collate, summarize, and report findings. In the final step, the collated information was briefly discussed to give an overview of findings.

4.2.1.3 Results
Twenty-three studies from North America, the UK and Australia were identified as relevant. Findings presented in this section report in turn, the structural components,
outcomes/effects of TSIs, their outcomes measures and methods of evaluation. The mean number of components in a TSI was four and the average length/duration was 10 months. Components included didactic elements, experiential ward/unit-based learning, formative discourse forums, simulated learning and social events. The most commonly used individual outcomes included competence or confidence/self-efficacy.\(^8,170\) The most commonly used organisational outcome reported was retention. An overview of the findings is summarised in Table 4.1. Evaluation data were gathered using qualitative, quantitative and mixed methods, although overall, mixed methods were most common. When extrapolating findings, it was difficult to map outcomes to specific components. This limited the usefulness of the review findings.

**Evaluations of TSIs**

Intervention evaluation used qualitative (four studies), quantitative (fourteen studies) and mixed methods (five studies) to collect data from novice nurses, preceptors, mentors and managers or co-ordinators of TSIs. Of the studies that used questionnaires, six included open-ended surveys and therefore captured some qualitative data. Qualitative data were also collected using focus groups, semi-structured individual interviews (telephone or face-to-face), narrative reflective journaling, reflective journals/reflective recordings and responses to open-ended survey questions.

**Outcomes & Outcome measures**

Intervention outcomes were commonly reported at the individual level or the organisational level. The most commonly used individual outcomes included competence or confidence.\(^8,170\) Other reported individual level outcomes included job satisfaction, independence of practice, autonomy, skill acquisition (communication, delegation, leadership for example), engagement, clinical decision-making, stress, job demand and sense of belonging.\(^171-173174,175\) The most commonly used organisational outcome reported was retention. In addition to this, other organisational outcomes included recruitment rates, staff turnover and the quality of a novice’s learning environment or learning culture. The most commonly used survey instruments across the studies were the Casey-Fink Graduate Nurse experience tool (used in five studies) and the Anticipated Turnover scale (ATS), which was used in four studies (Appendix 10). Studies reporting the outcomes of quantitative survey data used a total of 19 survey tools, to measure the reported outcomes. Overall, the most commonly reported strengths of TSIs reported were feeling supported/supportive relationships, opportunities for debriefing, discourse and narratives, and the fact they promoted reflective practice and critical thinking.\(^176-182\)
<table>
<thead>
<tr>
<th>Study</th>
<th>Duration</th>
<th>Component* (number &amp; type)</th>
<th>Evaluation</th>
<th>Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Altier and Kresk, 2006, USA</td>
<td>12 months</td>
<td>4 PS, DS</td>
<td>Questionnaires (longitudinal) n = 111 (35%) Analysis by SPSS</td>
<td>Improved Job satisfaction*</td>
</tr>
<tr>
<td>Beecroft et al. 2001, USA</td>
<td>12 months</td>
<td>6 PS, DS</td>
<td>Survey (descriptive longitudinal) n = 50 experimental n = 28 (62%) control Analysis by SPSS</td>
<td>Improved self-confidence* Reduced turnover at 6 months</td>
</tr>
<tr>
<td>Cubit and Ryan, 2011, Australia</td>
<td>12 months</td>
<td>5 PS, DS</td>
<td>Mixed methods (On-line longitudinal survey), analysis by SPSS Two 1-hour focus groups (n=6), Thematic analysis</td>
<td>Feeling supported, accepted and encouraged Improved retention</td>
</tr>
<tr>
<td>Dyess and Parker, 2012, USA</td>
<td>10 months</td>
<td>5 PS, DS</td>
<td>Descriptive longitudinal survey completed at 0 &amp; week 19 (n = 109: 4 cohorts), Statistical analysis</td>
<td>Improved retention*</td>
</tr>
<tr>
<td>Evans et al. 2008, Australia</td>
<td>12 months</td>
<td>4 PS, DS, IPD</td>
<td>Qualitative face-to-face interviews lasting approximately an hour n=9 (novices), n=13 (experienced nurses), Thematic analysis</td>
<td>Improved confidence</td>
</tr>
<tr>
<td>Forneris &amp; Peden-McAlpine, 2007, USA</td>
<td>6 months</td>
<td>3 PS, DS, IPD</td>
<td>Qualitative longitudinal case study design using individual interviews, discussion groups and narrative reflective journaling, n=6 (novices), n=6 (preceptors)</td>
<td>Improved critical thinking skills</td>
</tr>
<tr>
<td>Goode et al. 2009, USA</td>
<td>12 months</td>
<td>7 PS, DS</td>
<td>Longitudinal survey, n=655 Statistical analysis</td>
<td>Improved ability to organise &amp; prioritize, communication skills, competency &amp; critical thinking Reduced turnover &amp; stress*</td>
</tr>
<tr>
<td>Henderson et al. 2015, Australia</td>
<td>12 months</td>
<td>6 PS, DS</td>
<td>Mixed methods descriptive survey (n=78) Analysed using (STATA 11) Focus group (n=10) analysed thematically</td>
<td>Improved confidence*</td>
</tr>
<tr>
<td>Hillman and Foster, 2011, USA</td>
<td>16 weeks</td>
<td>2 PS, DS</td>
<td>Mixed methods 1-year post survey evaluation (Statistical analysis) and focus groups, n=251</td>
<td>Improved retention, improved understanding of patients conditions/needs, More prepared to meet daily challenges*</td>
</tr>
<tr>
<td>Hunsberger et al. 2013, Canada</td>
<td>3-6 months</td>
<td>2 PS, IPD</td>
<td>Mixed methods Online surveys (n=4392), analysis by SPSS semi-structured individual interviews (n=68) and 21 focus groups - Thematic analysis with NVivo</td>
<td>Better prepared Improved productivity, organisational skills, control of work demands</td>
</tr>
<tr>
<td>Kowalski 2010, USA</td>
<td>12 months</td>
<td>5 PS, DS</td>
<td>Mixed methods Descriptive longitudinal survey n=55, Analysis by SPSS</td>
<td>Improved competency, communication and leadership skills, Reduced sense of threat*</td>
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<tr>
<td>Study</td>
<td>Duration</td>
<td>Sample Size</td>
<td>Methodology</td>
<td>Findings</td>
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<tr>
<td>Krugman et al. 2006, USA</td>
<td>12 months</td>
<td>5 PS, DS</td>
<td>Descriptive comparative online survey n=? Statistical analysis</td>
<td>Improved job satisfaction</td>
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<td>Reduced stress*</td>
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<tr>
<td>Leigh et al. 2005, UK</td>
<td>6 months</td>
<td>5 PS, DS, IPD</td>
<td>Descriptive case study, Pre- &amp; post- intervention questionnaires, n=34 Statistical analysis</td>
<td>Improved confidence, competence, reduced turnover *</td>
</tr>
<tr>
<td>Marks-Maran et al. 2013, UK</td>
<td>12 months</td>
<td>2 PS, DS</td>
<td>Mixed-methods. Questionnaires -Analysis by SPSS Reflective journals and reflective audio recordings. Qualitative data analysed by framework analysis</td>
<td>Improved confidence/competence in communication with colleagues, patients, relatives and managers, Improved coping with stress, feeling supported at work</td>
</tr>
<tr>
<td>Newhouse et al. 2007, USA</td>
<td>12 months</td>
<td>5 PS, DS, IPD</td>
<td>Quasi-experimental survey at 0, 6 and 12 months. Statistical analysis n = 237 (at 6 months) n = 212 70% (at 12 months)</td>
<td>Improved retention and sense of belonging *</td>
</tr>
<tr>
<td>O'Malley Floyd et al. 2005, USA</td>
<td>4 months</td>
<td>4 PS, DS, IPD</td>
<td>Descriptive case study, evaluation survey with standardized and open-ended questions, n=31 Quantitative data analysis by SPSS</td>
<td>Improved knowledge and confidence</td>
</tr>
<tr>
<td>Ostini F and Bonner, 2012, Australia</td>
<td>12 months</td>
<td>3 PS, DS</td>
<td>Qualitative semi structured individual interviews, n=5 Qualitative data analysed by content analysis.</td>
<td>Improved time management, prioritising and medication administration skills</td>
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<tr>
<td>Parker et al. 2014, UK</td>
<td>12 months</td>
<td>2 PS, DS</td>
<td>Questionnaires for session evaluation including an open-ended question n=13</td>
<td>Feeling supported, becoming more clinically confident</td>
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<tr>
<td>Roxburgh et al. 2010, UK</td>
<td>12 months</td>
<td>3 PS, DS</td>
<td>Descriptive cross-sectional survey (on-line), n=97 Data analysis by SPSS</td>
<td>Improved competency, skill discretion and self-efficacy*</td>
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<tr>
<td>Scott and Smith 2008, USA</td>
<td>12 months</td>
<td>5 PS, DS, IPD</td>
<td>Mixed methods Open-ended survey and focus group, n=20</td>
<td>Improved competence and confidence, reduced stress, sense of belonging, ‘feeling cared for’ and secure, “Circle of Trust” established</td>
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<tr>
<td>Spiva et al. 2013, USA</td>
<td>12 months</td>
<td>2 PS, DS</td>
<td>Qualitative, unstructured, one-to-one interviews, n=21 constant-comparative method to analyse transcripts</td>
<td>Improved confidence, feeling nurtured and supported</td>
</tr>
<tr>
<td>Varner and Leeds 2012, USA</td>
<td>12 months</td>
<td>9 PS, DS, IPD</td>
<td>Online surveys (open-ended) n=17 Written manually reviewed by the intervention lead</td>
<td>Improved retention and engagement Program success was predominantly gauged by retention and stakeholder satisfaction</td>
</tr>
<tr>
<td>Williams et al. 2007, USA</td>
<td>12 months</td>
<td>2 PS, DS</td>
<td>Longitudinal survey, n=679 Data analysis by statistical methods</td>
<td>Improved professional satisfaction, reduced stress*</td>
</tr>
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</table>

*a validated outcome measure or tool was used in evaluation  "Psychosocial support (PS), developmental support (DS), individual professional development (IPD)"
**Intervention structure and components**

To review intervention structure, the intervention’s length, quantity and type of component was explored. Table 4.1 shows that intervention length ranged from 3-12 months. The mean length for interventions was 10 months. The 23 TSIs contained a total of 22 different components, and ranged from two to nine components per TSI. The component common to all interventions was that of designated support (mentor or preceptor).

During the review, components were grouped together into the three categories; psychosocial support (PS, green) developmental support (DS, peach) and individual professional development (IPD, blue). Each category illustrated the general function those components performed within the intervention and is depicted in Table 4.2. Every TSI had components from at least two categories, and eight TSIs had components from all three categories. The four psychosocial components were preceptors or mentors, debriefing sessions, self-care discussions social events (pizza parties and or soccer matches).  

Eleven developmental support activities were described: discussion boards, clinical rotations, classroom learning, clinical coursework, skills training laboratories, simulation, on-line learning, study days, group meetings, seminars/workshops, and interactive case studies. Individual professional development components included multi-source feedback, appraisals, reflective entries, critical thinking tasks, development plans, continuing education and continuing professional development (CPD) portfolios. Table 4.2 further highlights (where reported) the components perceived by participants as most valuable, using the symbol ◆.
Table 4.2 Overview of intervention components

<table>
<thead>
<tr>
<th></th>
<th>Preceptor or mentor</th>
<th>Debriefing</th>
<th>Self-care discussions</th>
<th>Social events</th>
<th>Discussion board</th>
<th>Clinical education</th>
<th>Classroom learning</th>
<th>Skills training</th>
<th>Simulations</th>
<th>Online learning</th>
<th>Study days</th>
<th>Group meetings</th>
<th>Group sessions</th>
<th>Seminars or workshops</th>
<th>Interactive case</th>
<th>Case study</th>
<th>AP PATSL</th>
<th>Reflective entry</th>
<th>Critical thinking task</th>
<th>Critical appraisal</th>
<th>Continuing education</th>
<th>Development plans</th>
<th>CPD portfolio</th>
<th>Number of components</th>
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<td>Aitier &amp; Kresk</td>
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<td>Beecroft et al.</td>
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<td>Cubit and Ryan</td>
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* Components perceived by novice practitioners as most valuable
4.2.1.4 Discussion
Considerable variation was observed in research design, data collection tools, and sample sizes (ranging from \( n=5-4392 \) participants) and response rates. This supports findings from systematic reviews of TSIs by Edwards, Santucci and Park and others, who all commented on the lack of robust quasi-experimental methods and control groups in research design.\(^{185-187}\)

Broadly speaking, the components of all the TSIs had two essential functions: to provide (psychosocial/interpersonal) support to novices and to foster their professional development. Support from designated experienced peers was common to all programs, and identified in eight of the interventions as the most valued component. Peer support has been shown as crucial to easing transition experiences through socialisation, enculturation and as a means to promote discourse and reflection.\(^{188}\)

Effectiveness was reported with all TSIs, regardless of duration and component type, which supports findings in a systematic review of TSIs by Rush.\(^{156}\) Findings further suggest that the multi-component approach works better than using single components, which may benefit the complex and evolving nature of transition as well as cater to the individual needs and individual learning styles of NCPs. While the scoping review was useful for gaining a broad overview of the range and types of components, usefulness of the findings was limited. This was because the review provided little detail about the effectiveness of components relative to one another. Consequently, it remains unclear which components contributed to the intervention’s overall success, specific outcomes, how that occurred and to what extent.

Though these issues are problematic, there they may be a number of explanations for them. Limited understanding of mechanisms for these components may encourage the use of multiple components in TSIs. Until understanding of supportive mechanisms for NCPs grows, early models of TSIs may benefit from including multiple components. Inconsistencies in the way that intervention structures and components were described, may have limited direct comparisons of effectiveness between interventions and the usefulness of the findings. Evans et al. for example provided little detail about the number and length of study days, whereas Beecroft and Dyess specified the number of intervention hours, and Varner and Leeds detailed all activities for the four phases of their intervention.\(^{172,176,189,190}\) The consequence of this, is the lack of evidence about the hierarchy of components, optimal structures for TSIs and no consensus about which approaches work.
best. Since effectiveness was not quantifiable or easily attributable to specific intervention components, the review was not particularly helpful for informing component selection for the NCP intervention.

The combined use of quantitative and qualitative measures to evaluate the effectiveness of TSI appears to be the preferred approach, however this is possible only where outcomes are known, and validated survey tools exist to measure them. To the author’s knowledge, no validated tools specific to the transition experiences of NCPs exist. In future, tools from nursing or other professions may be adapted for use in community pharmacy transition research.

4.2.1.5 Conclusion
Overall, findings suggest a TSI developed for NCPs should contain multiple components that to provide psychosocial support (ideally as designated peer support) and foster professional development through discourse. Early findings from the nominal group study, also suggested NCPs would benefit from increased discourse with peers, for developmental and psychosocial support. Since, professional isolation is common in community pharmacy settings careful consideration about how to provide accessible peer support structures is needed. This review informs key initial decisions for an intervention to ease transition for NCPs.

4.2.2 The key initial decisions
Findings from the literature review phase and nominal group study supported a number of key initial decisions about the intervention. These decisions were that:

- the primary aim of the intervention is to ease the transitions of NCPs
- NCPs should have regular interaction/contact with other NCPs
- NCPs should have one-to-one coaching support from an experienced peer
- multiple components would be used
- the TSI would be support-focussed, rather than education-focussed
- the TSI would last a period of at least three months

A discussion follows which explains the rationale for these decisions.

4.2.2.1 The primary aim of the intervention was to ease transition
At this stage of development, specific intervention outcomes remained theoretical; however the primary aim of the intervention was to ease transition for NCPs. An important finding of the nominal group study was that NCPs generally felt unsupported and isolated,
which increased their levels of stress. Given the lack of regulator-recommended TSIs for NCPs, introducing a TSI may redress the lack of support and ease transition. Evidence from nursing and medicine suggests that TSIs can successfully ease transition for novice practitioners.\textsuperscript{9,156,185}

Despite clarification of a primary intervention aim, further work was required to explore and clarify secondary outcomes. MRC guidance states that complex interventions commonly have multiple outcomes and TSI evaluations by Kowalski and Berridge for example also reported multiple outcomes.\textsuperscript{8,9} They included increased clinical competency, confidence, a reduction in fears/anxiety, and improved communication. Outcomes of TSIs in nursing are based on previously demonstrated evidence from existing TSIs and validated survey tools to measure them.

In the absence of evidence-based TSIs for NCPs, findings from the nominal group study may inform likely secondary outcomes. Given that the challenges perceived as most important were relationship management, lack of confidence, difficulties associated with decision-making/being in charge/and adapting to the workplace a number of outcomes were alluded to: reduced stress, increased confidence, autonomy, self-efficacy and leadership skills. In addition, findings for the coping strategies used by NCPs suggested that speaking to former pre-registration tutors or other pharmacists for reassurance helped to minimise stress and increase confidence and certainty in NCPs’ practice. Ultimately, feasibility testing of the intervention was required to clarify secondary/specific outcomes, but increased confidence and reduced stress were two expected outcomes.

4.2.2.2  \textbf{Regular interaction between NCPs}

The nominal group discussions (NGDs) strongly suggest that professional isolation made NCPs feel that no-one else experienced the same problems or understood how they felt. Professional isolation also prevented shared learning, discourse and the opportunity to benchmark their own performance against other NCPs. Scott identified that novice nurses valued sharing experiences, because this enabled them to ‘be vulnerable and reveal fears’, thereby acknowledging their weaknesses and exploring ways to address them.\textsuperscript{183} In contrast, discussions in the early career pharmacist group revealed that despite three years of practice, participants remained unaware of how others managed workplace scenarios, and were consequently always unsure whether what they did was ‘right’. Interacting specifically with other novice practitioners, therefore facilitates feeling safe to ‘open up’, seek support and share experiences more freely. Studies with group mentoring structures
for novice practitioners used strategies like training or social events to encourage informal sharing of experiences. Novice-to-novice support was helpful also if novices were reluctant or unable to seek help from experienced peers. Reluctance to seek help from peers was widely documented in nursing and medicine as a result of ‘horizontal violence or workplace conflict/hierarchy’. Since NCPs are usually isolated from other novices, experienced professional peers and other healthcare-professionals, access to peer support is severely limited. Further consideration of strategies to overcome this is required.

4.2.2.3 One-to-one designated support through coaching
NGD findings suggest that while interaction with other novices helped alleviate concerns, NCPs preferred source of support was from ‘experienced peers’ who could support their development by providing reassurance, guidance and feedback. This distinguishes the function of the relationships novices had with each other, and with experienced peers. The ‘experienced peer’ was typically described in NGDs as an experienced, approachable pharmacist that was previously known to the NCP. Examples included former pre-registration tutors, or experienced pharmacist colleagues or pharmacist managers. The review on TSIs suggested that preceptors, mentors and other experienced nursing staff were commonly identified as the most valuable components of TSIs. Where novice nurses received support from an experienced peer, this was perceived to ease transition to independent practice.

It must be noted however, that difficult preceptorship relationships were associated with challenging transitions, and have been known to adversely affect transition. It is therefore crucial that the approach to the peer support relationship matches the needs of NCPs. Having just completed a supervised pre-registration training year, NCPs were working independently as sole practitioners and did not appear to want supervisory support. Instead, NCPs reported needing ‘reassuring or sense-checking’ support from an experienced, accessible peer who could provide a ‘sounding board’ or ‘feedback’ function. In their research, Van Patten reports that ‘debriefing’ with an experienced mentor, preceptor or resource person was linked to novices developing stronger skills and higher confidence. In contrast to pharmacists in this research study who felt there was ‘nobody there to ask’, novice nurses commonly reported why they valued ‘having someone there’.

When the literature was consulted to consider different forms and approaches to peer support, most TSIs approaches used mentoring, preceptorship, buddying, and coaching. These terms are often used interchangeably; however differences in how these roles are
enacted affects the suitability of the approach and the specific problem it aims to address. While Eby suggests mentoring applies to the long term provision of support for career/educational/personal advancement from a position of benevolent authority, Ortega and Honney define buddying as a less formal mutually beneficial shared experience. Armitage argues that nurse preceptors perform a more ‘clinically-active’ or role-model function than mentors do, who primarily ‘look after’ and guide the novice. An important distinction highlighted by Armitage is that mentoring relationships appear to be contradictory to adult learning theories, because they suppress autonomous learning and lead to a dependent relationship.

The coaching approach was therefore considered more appropriate for this intervention than mentoring, preceptorship or buddying because it has confirmed links with adult learning theory and promotes autonomous learning. Cox’s definition of coaching depicts a more collaborative, flexible and equal relationship between an experienced individual and a willing mature participant with ‘self-determined objectives’. For this research, coaching was defined as ‘a confidential collaborative relationship between an experienced peer and a novice’. Findings from the nominal group discussions suggested the coach would need to be:

- approachable
- able to foster an open/trusting relationship with novices
- respect the NCP as an independent practitioner and would
- guide, rather than supervise the novice.

4.2.2.4 A multiple-component intervention

Even though findings from the nominal group study indicated that experienced peers were the preferred support source, participants reported other strategies they used, or would have liked to use, including psychological coping, using written information or professional support services. The choice of strategy varied according to the NCP’s context, challenge or the novice’s personality. A systematic review by Edwards, found that that regardless of variations in content, components, structure and duration, TSIs led to successful outcomes. This use of multiple components could perhaps signal that there is no clear evidence of what works and why. It may also as suggested by Anderson, point to a lack of theory in TSI design. Edwards suggested instead that when novice practitioners felt supported and important in their new role, successful outcomes followed, regardless of intervention content. Kramer’s research also highlighted that one component may be
linked to several outcomes and vice versa, making it difficult to clearly assign causal links to outcomes.\textsuperscript{169}

**4.2.2.5 A support-focussed, rather than education-focussed intervention**

The multiple components identified in the TSIs suggest that components should offer the NCP both psychosocial support and support for professional development (see table 4.2). Given that most respondents in the NGDs felt adequately prepared by their level of education, the focus of the intervention became support. NCPs were challenged by lacking the professional behaviours/social skills and competencies (such as managing relationships, being in charge and autonomy) and the lack of support or role models to help them develop those skills. TSI that included educational components were still valued by novices. The reason for this was that educational components increased access to experienced peers, suggesting that peer support enriched learning experiences.\textsuperscript{206} Other research also shows that learning is less meaningful when context is lacking indicating that supporting the learning of NCPs during transition leads to more meaningful learning.

**4.2.2.6 An intervention lasting at least three months**

The review on TSIs identified the importance of transition support lasting beyond a period of three months. This recommendation by Kramer is based on Merton’s theory of professional socialisation in medical education.\textsuperscript{169,207} In order for the ‘process of acquiring and internalizing knowledge, skills, values, roles, attitudes and norms’ of a profession, a novice must move beyond the stages of knowing and becoming, to integrating.\textsuperscript{208} More than three months is needed to reach this ‘integration’ phase however findings from nominal groups discussion suggested a period of between 3-12 months of structured support may be valuable for NCPs. The proposed intervention length will be explored as part of this overall research.

**4.2.3 Section summary**

In summary, the literature and nominal group study were useful for informing a number of key initial decisions about the intervention: the overall intervention aim, the role of support relationships within the intervention (NCPs supporting each other, and between NCPs and an experienced pharmacist coach), the inclusion of components for a support-focussed rather than education focussed intervention and the intervention length. In addition to what needed to be included in the intervention, the review informed one
crucial area that could not be addressed by the intervention, and warrants further research which is outside the scope of this overall study.

Nominal group study findings suggest that working environments influenced physical, emotional and adaptive responses during transition, which affected novice’s ability to cope with challenging transitions. ‘Healthy work environments’ and good organisational culture have been shown to ease transition.209 As a result, TSI in nursing have evolved to advocate having healthy work environments, to aid novice transition to professional practice.210

NCPs commonly work as sole practitioners, locum or relief pharmacists and therefore do not have a regular work environment. Moreover, significant variability in community pharmacy settings and organisational culture would require further research and exploration of support interventions in the long term. These issues made it challenging to develop an intervention that influenced the work environment of the novice, therefore this intervention focussed on supporting novices to manage the stress caused by ‘unhealthy’ or challenging workplace environments.
4.3 Section 2. Additional activities to inform intervention development

The work completed so far in this research study provided evidence to make key initial decisions about the intervention. Despite this, a number of questions remained that had to be considered before the draft intervention could be finalised. First, the author needed to consider how to manage practical or logistical problems associated with implementing and delivering a TSI. This included gaining insight into how much time was needed to give novices professional and pastoral support, a consideration that could not be gleaned from the literature. The literature review of TSIs concluded that competency and professional development frameworks commonly influenced intervention goals. The author therefore needed to understand how this was done in other professions, and consider how pharmacy-specific competency frameworks could be incorporated into intervention design.

The specifics of intervention structures and timeline were not particularly well-documented in the literature. So while the author could use findings of the nominal group discussions to determine intervention content, decisions about the choice of components and overall intervention structure still had to be made. The decision to include a coach as one intervention component had been made, however the coaching model and coaching tools, also had to be determined. A final question for the author was whether the commercial workplace setting would have any impact on the kind of support a coach would be required to give novices. This and other questions not addressed by the literature review or nominal group study were addressed by three additional activities the author conducted. Those additional activities were:

- An informal interview with a GP mentor
- Informal interviews with two nurse preceptors
- Documentary analysis

To expedite the intervention development process, these activities were used to gain expert opinion to inform intervention development. They were not considered part of the data collection process for this research study. The methods used are described next but their findings are discussed in section 3, as part of the description for the final draft intervention. Applications for University ethics and Health Research Authority were submitted for approval prior to recruitment of one GP mentor and two nurse preceptors, through professional and personal networks.
4.3.1 Informal GP mentor interview
The literature reviewed in chapter 2 for this thesis, mostly reported the experiences of novice practitioners transitioning into the public sector, not the private sector. Further work was required to increase understanding of whether the commercial workplace setting would have any impact on the kind of support a coach would be required to give novices. GP mentors aim to develop mutually beneficial relationships and support their mentees’ personal and professional development by using reflective and challenging questioning. This mirrors the coaching approach of the intervention being developed. Novice GPs, like community pharmacists, work as private contractors to the NHS and their GP mentors may have insight into the challenges of supporting a novice practitioner in a commercial setting. A GP mentor was therefore interviewed to gain insight around these issues.

4.3.1.1 Methods
A recently-qualified GP mentor identified through work contacts was interviewed by the author using a semi-structured interview guide (Appendix 11). The interview guide asked the GP mentor about his own experiences of transitioning into a commercial setting and of mentoring novice GPs. Specifically; the interview explored how the GP mentor supported novice GPs with business or retail-focussed challenges. The GP (based at a small suburban practice) had been a mentor for five months and had experience of being mentored as a novice GP. The interview took place over the telephone and lasted approximately 26 minutes. The author took notes during the interview. A conversational style with prompts was used in the interview to place the GP at ease and gain rich in-depth descriptions.

4.3.2 Informal nurse preceptor interviews
Little was known from the literature reviewed so far, about the barriers to implementing and delivering preceptorship in the workplace. Moreover, the level of pastoral or psychosocial support that preceptors provided was not well documented in the literature. Two nurse preceptors were interviewed to gain insight into the practicalities of running an intervention for novice practitioners. They were identified specifically because of their experience with delivering a preceptorship programme, and experience of being a nurse preceptor with a counselling qualification.

4.3.2.1 Methods
Two nurse preceptors from a large university teaching hospital were interviewed face-to-face for 38 and 53 minutes respectively by the author using a semi-structured interview guide (Appendix 11). The first respondent had over 25 years’ experience as a preceptor and
was currently lead preceptor for the hospital’s multidisciplinary preceptorship course. The second respondent was a nurse (with counselling qualifications) and six months into his first year of being a preceptor. The preceptors were asked to talk about their experiences of being preceptors, and in particular their motivation for becoming preceptors, and the barriers and drivers experienced when being a preceptor. Interviews were audio-recorded with consent, and notes made from analysis.

4.3.3 Documentary analysis
Documentary analysis is a research approach from the naturalistic inquiry paradigm, where information is gathered from studying/reviewing the content and structure of documents.\textsuperscript{211} It is commonly used in healthcare educational research, policy analysis and intervention design as a cost-effective tool to aid decision-making.\textsuperscript{212,213} It was also considered an effective and pragmatic way for the author to incorporate competency frameworks into intervention design, finalise decisions about the intervention (its structure, timetable, components) and decide on a coaching model for the intervention. Documents (listed in Table 4.1) from nursing, medicine, and pharmacy were selected for analysis.
<table>
<thead>
<tr>
<th>Field</th>
<th>Document title</th>
<th>How it influenced intervention design</th>
</tr>
</thead>
</table>
| Nursing | Newly Registered nurses: Starting your career (handbook)  
Royal College of Nursing, Second Edition July 2015  
Informed development of intervention structure, timeline and handbook format  
Informed mapping process in which professional competencies/standards were mapped to intervention goals |
| Medicine | Outcomes for provisionally registered doctors with a licence to practise (The Trainee Doctor). General Medical Council (GMC)  
(Replaced in January 2016 by - Promoting excellence: standards for medical education and training  
http://www.gmc-uk.org/education/standards.asp ) | Informed mapping process in which professional competencies/standards were mapped to intervention goals |
| Pharmacy | Royal Pharmaceutical Society (RPS) Foundation Pharmacy Framework, 2014 [RPS FPF]  
GPhC Standards of Conduct Ethics and performance, updated in 2017 to the Standards for pharmacy professionals  
https://www.pharmacyregulation.org/spp  
Informed selection and wording of intervention goals  
Informed the role of coach(coaching vs evaluating and preceptor vs coach) and inclusion of conflict management tools, consideration of ‘customer service vs patient’ of commercial setting |
Coaching Psychology. GROW model and Universal Integrative Framework Ho Law | Informed choice of the coaching model and questions used for coaching conversations |
4.3.3.1 Methods
Consideration was first given to the documents available specific to the education, training, coaching, mentoring and supervision of pharmacists in Great Britain. Three regulatory documents were identified from the GPhC as relevant:

- Standards of Conduct, Ethics and Performance updated in 2017 to the Standards for pharmacy professionals\(^{214}\) https://www.pharmacyregulation.org/spp

While all documents were specific to pharmacy the Guidance on tutoring for pharmacists and pharmacy technicians and the Future pharmacists: Standards for the initial education and training of pharmacists, were both geared towards the supervision and assessment (rather than coaching) of trainee pharmacists or pharmacy technicians in the workplace. In addition, they did not offer any insight into the needs of NCPs and how best to support them at this time. Therefore the only document included in the final analysis was the Standards of Conduct, Ethics and Performance, where specific standards provided useful guidance about areas such as professional judgement (which was highlighted in the nominal group study as challenging for NCPs). In addition, the Foundation Pharmacy Framework was identified, which lists the expected competencies of all novice pharmacists.\(^{216}\) This framework was used to consider how the intervention may support novices to achieve those competencies.


A further seven documents were identified, through educators from nursing, pharmacy and medicine at the author’s HEI. All nine documents are listed in Table 4.1 and were reviewed in the order listed. The content pages of each document and introductory pages of each chapter were reviewed to identify the sections most relevant to inform the intervention.
Following this, the author read and made notes from all chapters/sections relevant to the intervention development process.

The author met with a researcher practitioner with over 30 years’ experience in nursing to inform handbook selection. As a known expert in the fields of mentorship, preceptorship and educational research, she provided a handbook published by the Royal College of Nursing (RCN) and her insight into the role of the handbook within a TSI. The author also consulted a handbook produced for the preceptorship in the local teaching hospital which employed the preceptor and lead preceptor who were interviewed informally.

Documents for competency frameworks in nursing and medicine were also consulted. Comparisons were made to identify similarities between the competency framework documents and the goals/outcomes of TSIs in a mapping exercise. The author then reviewed the Foundation Pharmacy Framework and the GPhC Standards of Conduct Ethics and performance, to gain insight into the expected competencies for NCPs. These competencies were then compared with findings from the nominal group study and also reviewed alongside the draft intervention aims.

Next, the author identified a relevant text through professional contacts at the University. This text was a guide written by a Canadian researcher and expert on pharmacy education and preceptorship for mentors and preceptors of international pharmacy graduates in Canada. Summary notes were made from chapters 1, 2, 4 and 5 of the guide.

The final document reviewed was a textbook on coaching psychology (Coaching Psychology. GROW model and Universal Integrative Framework, by Ho Law) which was reviewed for coaching theories and practical exercises to use in coaching conversations. Chapters 5 and 6 provided particularly useful insights into the different coaching models and personal and organisational perspective on coaching. In addition, it was particularly useful for practical advice on coaching strategies and conversations. A list of coaching prompts and questions for use in the intervention were devised from reviewing this textbook.

4.3.4 Section summary

Having provided an overview of the processes/activities used to inform intervention development, the next section describes the intervention aims, structure, its components, and content.
4.4 Section 3. The draft intervention

4.4.1 Introduction
A transition support intervention (TSI) developed and described here was an intervention was named the Novice Community Pharmacist Peer Coaching (NCPPC) programme. This wording aimed to immediately convey the key intervention components of coaching and peer support. In addition, there were no known interventions for pharmacists that used the word novice, which was chosen to indicate a person who was ‘new to and inexperienced in a job’ and on a developmental journey.

The intervention comprised a 17-week structured intervention for NCPs followed by ongoing informal support through social media.

4.4.2 NCPPC intervention aim and objectives
The overarching aim of the intervention was to ease the transitions of NCPs to independent practitioners. Transition was eased by providing psychosocial support to novices and facilitating their professional development. The intervention had a number of objectives and intended outcomes.

The specific objectives include:
1. Provide one-to one coaching support
2. Provide access to a peer support discussion group of NCPs
3. Provide signposting and information for work-related resources

The specific intended outcomes include:
1. Improve perceived self-efficacy and confidence of NCPs
2. Develop improved skills of reflection, self-awareness, action planning, application, critical-thinking, decision-making and problem-solving skills
3. Reduce stress and improve well-being for NCPs at work

4.4.3 Intervention structure
The intervention structure and the eight components making up its structure are depicted in Figure 4.1. This is followed by a detailed description of the intervention components, rationale and purpose.
The intervention aimed to ease the transitions of NCPs by providing support and by facilitating professional development of the NCP. It contained a total of eight components.

Two components provided psychosocial support: a coach and a near-peer group. Six components providing developmental support were learning activities aimed to facilitate professional development. Three of these were group activities; one face-to-face workshop, two webinars and weekly discussion topics. The remaining three were individual activities; reflective logs, developments plans and the handbook. A welcome pack for NCPs, containing a welcome letter, Day-one checklist (found on page 33 of the intervention handbook, Appendix 12), intervention structure and intervention timetable was prepared, so it could be sent out to NCPs three days before to the intervention launch date.

### 4.4.4 Components to provide psychosocial support

The coach formed the social media peer WhatsApp® group so that it could go live on the first day of the intervention being launched.

#### 4.4.4.1 Coach

A key initial decision in the development process reported in Section 2, was the recommendation for an experienced peer coach to guide NCPs, however an appropriate model of coaching had to be implemented. The intervention required a coaching model
that could be tailored to the learning needs, settings and experiences of individual novices. The performance improvement methodology of coaching has been used extensively in business, teaching and nursing, making it suitable to the commercial setting of community pharmacy.\textsuperscript{217,218} Given the potential distances between the coach and NCP, the model had to cater for one-to-one (coach to novice) communication through virtual or telephone contact rather than face-to-face contact. Furthermore, the coaching model had to facilitate some developmental progression or change that was led by the novice, rather than by the coach. Novice-led, rather than coach-led development was important for promoting autonomous learning, and preventing novices from engaging in a dependent relationship.

Of the available coaching models, the 3-D technique, the Practice Spiral Model and the Goal, Reality, Options and Will to finish (GROW) model are best known.\textsuperscript{219} The 3-D technique was rejected because it works best as a problem-solving tool, but time constraints in the workplace limit its feasibility. The Practice Spiral model was rejected because it requires that the coach physically be with the novice to demonstrate a particular skill. Given the community pharmacy practice context, and the need to provide remote support in this intervention, the PS model was deemed unsuitable. The GROW model was selected because it could be used with the guidance of an experienced coach, and allowed the novice to devise a plan for follow up later.

Developed in the 1980’s by Sir John Whitmore, the GROW model uses sequential coaching conversations to improve performance and productivity. As a model that has been used flexibly and successfully for problem-solving, it was considered useful to help novices develop their skills of critically analysing problems and decision-making.\textsuperscript{219} It improves self-awareness through understanding of the novice’s current situation and uses goal-setting to develop confidence and self-motivation.\textsuperscript{218} The coach aimed to guide, motivate, provide debriefs, prompt and challenge the novices.

The coach role was operationalised by the author, who took on the role of experienced pharmacist coach for this intervention. This was considered the most appropriate way to deliver the role consistently to participants in the way it was intended. Interviews with the GP mentor and nurse preceptors had highlighted that the relationship between the coach and NCPs required accessibility, good communication and interpersonal skills, as well as flexibility. The nurses also provided insight about the pastoral element of supporting novice practitioners, the role of debriefing, encouragement and role-modelling in the workplace. They stressed the importance of maintaining open, accessible lines of communication, to
facilitate conversations with novices. The GP mentor by contrast expressed the need for practical advice and training, particularly to meet the requirements for delivering commissioned NHS services. He was also helpful in explaining how to facilitate the development of leadership skills and negotiate working relationships. Given these perspectives, the author felt that by being coach, she could consistently meet these requirements. In addition, this decision also allowed the feasibility study to explore desirable coach attributes, training and support needs for the coach, expected time commitment and the flexibility to adapt the intervention if needed. The nurse interviews had indicated that often, training and support for mentors/coaches is inadequate. Since the author took on this role, data collection to evaluate the intervention was carried out by a researcher independent of the study (see section 5.4.2.1).

An agreement or ‘contract’ between the coach and individual NCPs was drawn up to be exchanged at the start of the intervention and to set expectations. Communication with the coach was possible via email, social media (WhatsApp®), or by mobile phone. Initial contact with the coach was planned at the start of the intervention and to be maintained through scheduled one-to-one conversations. In addition to one-to-one conversations for developmental tasks, unscheduled one-to-one conversations could be prompted by the NCP or coach (in response to challenges experienced by the NCPs) and occur as needed. The evidence from the literature, informal interviews with nurse preceptors, a coaching psychology text and a list of coaching questions for the GROW model were used to inform coach training/preparation.

### 4.4.4.2 Peer group

A key initial decision in the development process reported in Section 2 of this chapter was the recommendation for regular near-peer interactions. Novices in all healthcare professions were reassured by hearing about the experiences of peers they could identify with, and knowing that others experienced similar challenges. Interactions with near-peers were perceived as less ‘threatening’ and participants in nominal group discussions reported that support from peers groups was more forthcoming. Nominal group discussions also identified that social media platforms provided an accessible but informal method of contact and support between NCPs, who are commonly professionally isolated. Crucially, they facilitated ‘real-time’ conversations of practice issues, which helps achieve Schon’s principles of ‘reflection-in-action’. In medical education, social media has been shown to facilitate engagement in learning, self-reflection and shared learning. Unlike the nursing/medical professions, ‘peer mentoring’ culture is less well-established in
community pharmacy and findings from nominal group discussions confirmed that novices desired more interaction with peers to support their development. There is evidence in pharmacy that social media use increases student engagement and provides networking opportunities. Given that most NCPs practising in community pharmacy have few (if any) opportunities for face-to-face interaction with peers, creating a virtual community of practice through a social media peer group, seemed fitting for the intervention.

A closed social media group was set up in readiness for the intervention start date. The purpose of a social peer group was to facilitate open but confidential communication between NCPs and the coach. It also served as a forum for intervention discourse, peer support and provided opportunities for shared learning, reflection and feedback, which were all identified as lacking for NCPs. Crucially, it aimed to represent a ‘safe’ space for learning, professional identity development and group coaching. Research suggests that making time for shared reflection builds on new knowledge and integrates new understanding into practice. Providing a safe learning environment for NCPs was important because research has shown that a predictor of success to preceptorship, is the ability to cultivate a ‘safe’ learning space. A set of ‘NCPCC ground rules’ (Appendix 13) was developed for the group to facilitate confidentiality, support and clarify expectations.

The social media platform WhatsApp® was selected because it represented a ‘live’ instant messaging platform for exchanging text, image, video and audio messages. It was also selected because it is a free, widely-used application and NCPs were already likely to have it, provided users have the necessary internet or wi-fi access. Once registered to receive the intervention, the coach added NCPs to the social media group, for the duration of the NCPPC intervention. Research has also shown that the nature of WhatsApp® supports ‘social, informal and conversational communications’ meaning users are more inclined to take part in discourse.

### 4.4.5 Components to facilitate professional development

Intervention components to facilitate professional development began in the second week of the intervention, with bi-weekly scheduled topics posted from weeks 2 - 17. Groups tasks were scheduled for weeks 2 (face-to-face workshop), 8 (online webinar) and 14 (online webinar) of the intervention. Individual tasks for the novices included 3 reflective logs scheduled for weeks 4, 8, 12 and development plans scheduled for weeks 6, 10, and 14. Within the first week, the coach arranged to post the handbook to all NCPs receiving the intervention.
4.4.5.1 **Workshop**

Findings from the nominal group discussions suggested that, once qualified, contact with other novice community pharmacists or more experienced pharmacists was limited.\(^{115}\) This was felt to hinder development of supportive networks and contribute to professional isolation, particularly where workplace settings and employers differed. Research shows that professional isolation may increase with time spent in practice, and is associated with risky practices or poor quality care.\(^{32,157}\) NGDs findings also identified that novices lacked experience and skills in areas such as conflict resolution and delegation.\(^{34}\) NGDs participants also reported they would have liked opportunities to discuss issues with other pharmacists and compare outcomes of decision-making or problem-solving. Research has shown that novice workshops have improved sense of preparedness and improved practitioners’ understanding of patients’ conditions and needs.\(^{182}\) As confirmed by Hillman, including workshops in TSIs allows practical skills to be developed in an environment where novices can connect with their peers.\(^{156}\) Given the relatively high level of isolation and general lack of developmental support prevalent in community pharmacy, the opportunity for a face-to-face meeting was felt to be beneficial for building relationships and professional skills.\(^{229}\)

A 4-hour face-to-face workshop scheduled to occur early in the intervention (Week 2, subject to participants’ availability) at the University, was developed for novices registered on the intervention. The 4-hour time-frame was selected because it allowed time for novices who were based in the South of England to travel to the workshop. The workshop aimed firstly to improve rapport and trust among participants and create a sense of belonging to the NCPPC community. Second, the workshop aimed to improve knowledge and problem-solving skills through individual and group work. A series of job-related scenarios were developed alongside tools/strategies for delegation, clinical decision-making, time-management, problem-solving, team-building, managing people, effective communication and conflict resolution. Alongside this, were practical, hands-on exercises to increase understanding of asthma and insulin devices, needle exchange services and medication compliance aids.

4.4.5.2 **Weekly topics**

Findings from the nominal group discussions highlighted practice and clinical topics reported to be particularly challenging for NCPs. These topics covered the challenges reported in chapter 3 and practice or clinical scenarios. Examples include consultations for advanced services, over-the-counter medication requests and professional judgements.
involving controlled drugs [the full list of topics is in Table 4.4]. These topics have furthermore been reported in studies involving early career pharmacists as challenging to practice.\textsuperscript{24} Whilst the knowledge around these areas may have been familiar and easily accessible, confidently adapting and applying this knowledge to new contexts where NCPs were professionally accountable, was demanding. On occasion, novices felt anxious when faced with new/unfamiliar services, a finding reported in nursing and medical literature.\textsuperscript{93} Professional isolation further limited opportunities for shared learning and feedback from peers. Given the value that novices in nursing and medicine placed on shared learning, debriefing and discourse, the evidence suggests NCPs would greatly benefit from this component.\textsuperscript{180}

In order to promote independent learners, educators must provide informal, supportive structures for discourse. These structures encourage and stimulate informal peer discussion [which is distinct from trouble-shooting or giving/seeking real-time support for problem-solving], shared reflection and approaches to problem-solving. They remind novices that ‘someone is there’ for support, and serve as ‘scaffolding’ for learning.\textsuperscript{230} As learners grow and develop, they rely less on the scaffolding, and become increasingly autonomous in their learning. A ‘case-based’ or ‘scenario’ approach was used because this is considered beneficial for understanding the processes involved in problem-solving and decision-making.\textsuperscript{231} When later faced with these topics in practice, it was hoped/ intended that novices would approach them with greater confidence. NGD findings suggested that in the first few months of practice, support was required around practical issues such as completing paperwork for services. Since workplaces varied so much, and novices encountered challenges at different times, no specific order was assigned to topics. The exception to this was the influenza vaccination, which was scheduled first in Week 2 to coincide with the start of the national flu season campaign.

Sixteen clinical and practice related case studies were developed from topics identified in NGDs as problematic for NCPs. Examples of topics included delivering a influenza vaccination service, methotrexate prescriptions, supervised consumption of methadone. One clinical or practice topic and a handbook module topic were scheduled for a weekly post on the social media group for comment/discussion.
<table>
<thead>
<tr>
<th>Week</th>
<th>Handbook module (Mondays)</th>
<th>Practice Scenario topics (Wednesdays)</th>
<th>Clinical Scenario topics (Wednesdays)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td></td>
<td>Influenza Vaccination service</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>MODULE 1 Professional Accountability</td>
<td></td>
<td>NOACs (new oral anti-coagulants)</td>
</tr>
<tr>
<td>4</td>
<td>MODULE 1 Professional Accountability</td>
<td>Standard Operating Procedures</td>
<td>Complementary and alternative medicines in pregnancy</td>
</tr>
<tr>
<td>5</td>
<td>MODULE 2 Decision-making</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>MODULE 2 Decision-making</td>
<td>Assessing patient competence</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>MODULE 3 Workplace relationships</td>
<td></td>
<td>OTC drugs that are commonly abused</td>
</tr>
<tr>
<td>8</td>
<td>MODULE 3 Workplace relationships</td>
<td>Palliative care</td>
<td>Skin care &amp; Eye conditions/care</td>
</tr>
<tr>
<td>9</td>
<td>MODULE 3 Workplace relationships</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>MODULE 3 Workplace relationships</td>
<td>Drug and Alcohol service Supervision</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>MODULE 4 Emotional well-being and stress</td>
<td>Urinary incontinence</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>MODULE 4 Managing self</td>
<td>Incontinence products, hosiery, trusses stoma, mobility aids devices. Medication compliance aids</td>
<td></td>
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<tr>
<td>13</td>
<td>MODULE 4 Leadership and assertiveness</td>
<td></td>
<td>Mental health</td>
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<tr>
<td>14</td>
<td>MODULE 5 Workload and staff shortages</td>
<td>Generically written prescriptions (inhalers contraception, hormone replacement therapy and insulin)</td>
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<tr>
<td>15</td>
<td>MODULE 5 Balancing clinical and commercial priorities</td>
<td></td>
<td>Dementia</td>
</tr>
<tr>
<td>16</td>
<td>MODULE 5 New and unfamiliar situations</td>
<td>Electronic Prescribing Service prescription endorsements, and month end procedures</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>MODULE 5 Managing risk</td>
<td></td>
<td>Inflammatory Bowel Disease, colon cancer and digestive conditions</td>
</tr>
</tbody>
</table>
4.4.5.3 **Handbook**

The additional activities detailed in Section 2, which informed intervention development led the author to develop a handbook (Appendix 12) in the intervention. Handbook content was extracted from findings from the NGDs. The handbook supported novices by informing them of transition challenges/strategies to manage transition challenges, prompting reflection on practice and offering practical information.

During NGDs, many NCPs reported feeling well-prepared in terms of the clinical knowledge but lacking in experience and behaviours including accountability, people management and autonomy. This mirrors findings reported extensively in nursing and medicine.\textsuperscript{159,232} Novices lacked the confidence to exercise professional judgement and felt unprepared for the stress and anxiety that resulted and uninformed of transition challenges. Furthermore, NCPs did not have the strategies to manage these challenges. The pressurized nature of many community pharmacy workplace environments is well-documented.\textsuperscript{73} NGDs also indicated that pressured/isolated workplace environments reduced opportunities to reflect on shared practice experiences. This limited meaningful, context-driven learning. NGDs suggested that NCPs did not expect these challenges, and found little opportunity to reflect on them in the workplace, making it harder to cope or learn from experiences.

NCPs experienced first-hand during transition the numerous and varied pharmacy services, systems and workplace cultures. Findings suggest there was no central system in place to inform novices of service reimbursement schemes [to claim payments for commissioned services], required training [to provide essential/advance services] and service level agreements [the protocols for services and the associated paperwork]. Nominal group discussions also showed NCPs did not know where to seek help for specific problems and that many novices were unaware of what help/support was available to them. This was particularly true for locum pharmacists, who regularly worked in different locations.\textsuperscript{118} Lacking practical information was reported in the GP mentor interview and has in itself, been cited as a prompt for intervention development.\textsuperscript{233} In nursing, handbooks have been reported to formalise orientation to the practice setting and been beneficial to novice outcomes.\textsuperscript{234}

A 28-page, A5 handbook (Appendix 12) developed for NCPs was organised into five modules, covering the top five challenges faced by NCPs during transition; relationship management; lack of confidence; decision-making; being in charge and accountable; and adapting to the workplace. To increase utility of the handbook, each week a scenario based
on modules 1-5, was posted to the social media group. Questions were interspersed throughout the handbook text to prompt the reader to reflect on the issues presented and note down their views. The handbook also included a copy of the coaching contract between the coach and NCP, a ‘Day One’ checklist (a checklist of to-do activities in preparation for the first day as a registered community pharmacist) and blank templates for the reflective log and development plan. The tone, language, layout, format and A5 size were informed by reviewing the Royal College of Nursing handbook “Newly Registered Nurses: Starting your career”. The organisation of content and number of pages were informed by the NGDs documentary analysis of the CMFT Preceptorship Development programme Preceptee Handbook.

4.4.5.4 Webinars
Findings from the nominal group discussions suggested that NCPs would value opportunities for shared learning and reflection amongst their professional peers. As they commonly worked in isolation from other pharmacists, opportunities to give/receive feedback and learn about problem-solving strategies from their peers were limited. This was felt to increase uncertainty in decision-making and increase the burden of professional responsibility in the early weeks of practice. As mentioned above in the description of the workshop, face-to-face contact was preferable for group meetings. Despite this, discussions highlighted how the nature of the community pharmacist sole practitioner status, physical and professional isolation from peers limits face-to-face interaction. The use therefore of virtual technologies for online meetings offered a practicable solution for live/real-time group interaction that overcomes the barriers of geographical distance. Time, logistical and financial constraints limited the number of face-to-face group workshop to one. Despite this, group interactions were perceived as valuable for maintaining engagement in the intervention and trust within the group. Technologies have been successfully used in the practice setting to overcome limitations such as remote locations. Provided that the face-to-face meeting had occurred, webinar technology was felt appropriate to facilitate live group interaction.

All NCPs registered on the intervention were expected to attend two 1-hour webinars during the intervention, scheduled in weeks 8 and 14. In preparation for each webinar participants would be allocated to groups of two or three and assigned a problem-based scenario. The group would then be asked to prepare a presentation in response to the scenario ahead of the expected webinar to present their answers to the rest of the group.
Meetings were facilitated by the coach. The webinars aimed to facilitate small group work with peers, develop problem-solving skills and clinical decision-making.

The GoToMeeting® software application was selected because it offered a cost-effective (charged at a total cost of £120 for 4 months for over 10 participants) accessible, real-time solution for running online webinars. The application can be quickly downloaded and used from a smartphone, tablet or PC for recurring meetings. It also offered screen-sharing technology so that slides, presentations could be shared within a group, which was conducive to working through problem-based scenarios.

4.4.5.5 Reflective logs
Analysis of the nominal group discussions revealed that workload pressures and time constraints prevented NCPs from reflecting on their practice. This reduced the opportunity for meaningful learning or effectively identifying opportunities for learning. Support staff and tutors also identified that NCPs were at times lacking in self-awareness, critical thinking and reflective skills during the stressful transition period. This is worrying because Austin’s study with international pharmacy graduates suggested that impaired self-assessment skills may be greatest among those with the weakest skills. Furthermore, NCPs appeared to lack the impetus/motivation to actively reflect on their practice. Using structured facilitation has been reported to increase insight and lead to behavioural change for practitioners. The depth of reflection is enhanced by receiving feedback on reflection from an experienced peer because this makes the novice more aware and more informed of how to modify resulting behaviours.

Reflective log templates were developed for the intervention. All NCPs registered on the intervention were expected to complete three reflective logs based on their personal practice. Given that pharmacists are currently required to complete nine pieces of CPD annually and that the structured intervention lasted 17 weeks, completion of three logs was felt to be sufficient. Guidance for completion of the logs and reminders for completion dates were provided to NCPs by the coach, via the WhatsApp® group. Blank electronical templates were saved for circulation and paper copies of the reflective log were printed for distribution. In addition to the template provided for the reflection, a document was drafted to guide novices about length (up to 500 words) and time spent (up to 30 minutes per log) to limit the burden of work on novices. Completed reflective logs would then be submitted to the coach for telephone feedback/discussion arranged at a mutually agreeable time for the coach and the NCP. The purpose of the reflective log was to prompt
the NCP to reflect on their experiences and better understand how they can learn from and enhance their practice. Discussing the logs with the coach was designed to improve/enhance the novice’s skills of self-assessment and self-awareness.

4.4.5.6 **Development plans**

Despite transition being identified as a critical learning period, challenging transitions prevented novices from appropriately recognising and addressing learning needs. To start, novices often lacked the self-awareness to appropriately identify learning needs and were less able to plan independent learning. Even where learning needs were identified, NGDs indicated that novices did not know what resources were available to support their learning or how to effectively access them. Most commonly, learning/developmental needs were dictated by an employer’s need to provide services. It was therefore unsurprising that early career pharmacists felt they used little of their clinical knowledge and instead acquired business knowledge. This managerial rather than structured clinical career pathway of community pharmacists differs from the early career experiences of novice nurses, junior doctors and even hospital pharmacists. Development plans aimed to provide some structure to support NCPs’ self-directed learning.

Simple, brief templates for the development plans (Appendix 12, page 25 of the handbook) based on the GROW coaching model was prepared in electronic and paper form for novices. NCPs would identify an area for personal/professional development, complete the G (goal), R (reality of their situation) and O (options) of the GROW template and submit this to the coach. Emphasis was placed on identifying an achievable measurable need that could then be later discussed in a (novice-led) coaching conversation. The outcome of the conversation would be feedback from the coach, completion of the rest of the template and arrangements for follow-up. A space on the template for later follow-up on a mutually agreed date was designed to motivate the novice to action the plan they had agreed. Coaching questions (Appendix 14) were prepared from Law’s book during documentary analysis, to be used to formulate an action plan with the novice.

NCPs were expected to complete three development action plans (IPDAP), during the NCPPC intervention. A document for distribution via the WhatsApp® group was drafted to guide novices about length (up to 200 words) and time spent (up to 30 minutes per plan) to limit the burden of work on novices. Follow-up would consist of assessing progress against a plan and resetting goals if needed.
4.4.6 Stakeholder meeting
Following completion of the draft intervention, a stakeholder meeting was held to obtain views of professional, regulatory and education experts. Given that pharmacy regulators do not yet recommend TSIs, little was known about how such an intervention would be received by professional stakeholders, whether they would agree with the need for such an intervention and their perceptions of this particular TSI. Invitations were sent to individuals in the regulatory, professional and continuing education bodies for UK pharmacy to take part in a meeting. A SWOT analysis (where the strengths, weakness, opportunities and threats are explored)\(^\text{242}\) of the intervention was completed. Although used often in business settings, SWOT analyses have been successfully applied to educational/healthcare contexts.\(^\text{243}\)

Individuals identified by the research team as experts in the areas of peer support, foundation (novice) pharmacy practice and coaching attended the meeting. This expert group comprised five members: two from the General Pharmaceutical Council’s revalidation/continuing education department, two from the Royal Pharmaceutical Society Foundation Pharmacy Programme and one from the coaching department of the Centre for Pharmacy Postgraduate Education. One of the PhD supervisors (SW) also attended the meeting as an observer.

The meeting began with introduction of group members (and their respective roles) to each other. Following this, the author presented findings from chapters 2 [literature review] and 3 [nominal group discussions], and then details of the draft intervention. Group members were then asked to consider the information provided and complete a SWOT analysis form, without conferring. They individually noted perceived strengths, weakness, opportunities and threats. A group discussion facilitated by the author then followed, where points raised were in turn discussed and ideas exchanged about how strengths may be built upon, weaknesses or threats may be eliminated or converted to opportunities. Notes made during the discussion by group members and the author, were collected for analysis after the meeting.

Analysis was conducted after the meeting by the author. Forms completed by group members were analysed by grouping together similar points and compiling a final list of intervention strengths, weaknesses, opportunities and threats. This list was discussed with the supervisory team.
4.4.6.1 Key findings from the stakeholder meeting

Strengths:
The intervention was perceived as valuable particularly because it addressed behavioural and psychosocial challenges associated with transition. In addition, the ability to tailor support through one-to-one coaching was reported as valuable. Using peer support as an approach was perceived as most appropriate to professional development, and more appropriate than mentoring. The combination of peer group support and coach support were highlighted as particular strengths of the intervention.

Weaknesses:
The group recommended implementing a more robust system to support training and development for the coach. Recommendations were also made to amend the timing of intervention activities for NCPs in order to improve feasibility and novice engagement with the intervention. A further recommendation included devising a plan to manage selection of applications for the intervention, as the group felt it may be oversubscribed.

Opportunities:
The potential usefulness of the intervention for fitness to practise (as consultations regarding revalidation and continuing fitness to practise were ongoing by the GPhC) and competency for new pharmacist roles (such as GP practice/primary care pharmacist roles) was discussed.

Threats:
The main threats identified by the stakeholder group were the potentially high workload of the peer coach and the risk of attrition during the intervention.

In summary, findings from the meeting informed the development of a risk assessment plan for the intervention, and consideration of the intervention’s application to areas of policy development.

4.4.7 Section summary
The previous section provided a full description of the intervention and its various components, a summary of which pieces of evidence fed into the decision on each element of the intervention, as well as the overall approach of peer coaching. A rationale for having these different components in the intervention was provided. While an evidence-based rationale helps to understand the intervention aims and mechanisms, more work was
needed to implement, run and evaluate the intervention is a feasibility study. The next step therefore aimed to plan processes for the feasibility study.

4.5 Section 4. Preparations for implementing and running the intervention

This intervention development chapter has so far reported the steps involved in combining the evidence which led to the production of a tangible draft intervention for NCPs. With the draft intervention finalised, preparations to implement and run the intervention in a feasibility study could begin. This section describes the steps used to plan for implementing, running and evaluating the intervention. The author needed a thorough understanding of the processes, resources and timeline for the intervention as part of evaluating feasibility. Knowing whether or not the intervention processes were run as intended [evaluating intervention fidelity] is an important aspect of assessing feasibility. While the structure depicted in Figure 4.1 was useful for explaining the intervention components, a model that could link all the intervention’s activities and processes to inputs, outputs and outcomes was needed.

A tool such as a logic model that can map what the intervention aims to achieve and how, is particularly useful for understanding causal chains or links. It clarifies change by explaining the relationships between individual components, and the relationships between components and the intervention as a whole. This research study uses MRC guidance which states that understanding how change unfolds is essential to complex intervention design: developing a logic model was therefore considered appropriate. Research in healthcare showed that logic models have been used in healthcare, business and education to assess fidelity, identify outcomes and develop interventions and pharmacy services.

4.5.1 The logic model for the NCPPC intervention

The purpose of this model is to provide a systematic and visual way to map the activities of the intervention to the theory of change. It therefore incorporates all the phases of development (situation and inputs), delivery (outputs) and evaluation of the intervention (outcomes, processes and acceptability) to make planning for the intervention easier. More specifically, the model allows for more detailed considerations; it facilitates creating an inventory for the resources, participants and activities needed to operate/deliver the intervention; it promotes consideration of potential shorter and longer term outcomes; it demonstrates the relationships between the intervention inputs and proposed outcomes.
Importantly, the logic model provides an overview of the whole intervention as well as details about the intervention goals. Nonetheless, it was also important to remember that this logic model does not represent a fully developed plan for developing and managing the intervention (as development is ongoing) and it does not provide any form of evaluation. A brief explanation of the logic model depicted in Figure 4.2 follows.
<table>
<thead>
<tr>
<th>Situation</th>
<th>Priorities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional isolation</td>
<td>Lack of peer support</td>
</tr>
<tr>
<td>Lack of feedback</td>
<td>High stress levels</td>
</tr>
<tr>
<td>Low confidence</td>
<td>Weight of full immediate accountability &amp; responsibility</td>
</tr>
<tr>
<td>Commercial pressures</td>
<td>Inverse hierarchy</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Inputs</th>
<th>Outputs and processes</th>
<th>Potential outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>What we invest</td>
<td>Participants Who we reach</td>
<td>Activities What we do</td>
</tr>
<tr>
<td>Time</td>
<td>Coach</td>
<td>Handbook</td>
</tr>
<tr>
<td>Funding</td>
<td>Workshop</td>
<td>Day One checklist</td>
</tr>
<tr>
<td>Knowledge base</td>
<td>Webinars</td>
<td>WhatsApp® group</td>
</tr>
<tr>
<td>Expertise</td>
<td>Peer group discussions</td>
<td>16 Weekly topics</td>
</tr>
<tr>
<td>Materials</td>
<td>One-to-one coaching conversations</td>
<td>Virtual learning/ community of practice</td>
</tr>
<tr>
<td>Equipment</td>
<td>Review development plans</td>
<td>36 Action plans</td>
</tr>
<tr>
<td>Space</td>
<td>Review reflective logs</td>
<td>36 CPD entries</td>
</tr>
<tr>
<td>Novice community pharmacists</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**EVALUATION**

Intervention impact
Intervention outcomes and strengths
Implementation acceptability and feasibility

**Figure 4.2 The draft intervention logic model**
**Situation and inputs**
While the logic model is concerned mainly with the inputs, outputs and outcomes of the intervention, it also allowed the planning/development stages to be included, under the situation, priorities and inputs. The situation considers the problem and its context, where needs are assessed, problems outlined and some stakeholder engagement occurs. This is then refined further through a process where the problems are prioritised, and the focus of the program becomes more defined [the ranking process of the nominal group discussions and then the summary of issues which may be addressed through a group coaching intervention, chapter 3].

**Outputs**
Outputs are concerned mainly with the processes that occur during the intervention in terms of the proposed activities, participants and products. In this section consideration is given to who the expected intervention participants are (both coach and NCPs), the activities/tasks that they will each complete or take part in during the intervention and the products made/design for them to use in order to fulfil intervention requirements.

**Outcomes**
While outcomes were used in forming this logic model, these are considered potential outcomes. Given that no peer reviewed research exists which evaluates any existing transition support interventions for NCPs and the fact that context influences transition, outcomes remain theoretical and need clarification. As such, specific outcomes may only be proposed at this stage. They also cannot be measured at this evaluation stage for effectiveness so proposing outcomes at this point was consequently only for clarification. The phase 4 feasibility study (reported in chapter 5) will clarify the short-term, longer-term, variable and context-driven outcomes of the intervention.

**Summary**
The logic model helps to define and map the intervention processes to the theory of change by illustrating how the proposed change will occur, and for this particular intervention, how intervention goals translate into activities and how those activities ease the transitions of NCPs to independent practitioners. It also informs the implementation, management/monitoring and evaluation strategies of the intervention, which are described in the sections that follow.
4.5.2 Implementation strategy
The intervention has now been described in full and depicted in a logic model developed, therefore the next section outlines the strategy for implementation. The purpose of the implementation strategy was to ensure all resources were in place and available so the intervention could be launched. The main outcome of successful implementation was to ensure that the intervention was launched on the intended date [15th August 2016], within two weeks of the first day possible date for 2016 registrants of 1st August 2016. In order to fulfil this purpose and outcome, two documents were developed; a resource planning list and an intervention timeline. In addition, a plan was developed for the intervention’s launch.

4.5.2.1 Resource planning
The logic model detailed earlier in this chapter was used as a starting point to generate a list of resources that needed to be in place for the intervention. These resources were developed both before and during the intervention. The complete list of resources is shown in Table 4.5.

<table>
<thead>
<tr>
<th>Table 4.5 Resource planning table for the intervention</th>
</tr>
</thead>
<tbody>
<tr>
<td>General intervention information</td>
</tr>
<tr>
<td>NCP registration form</td>
</tr>
<tr>
<td>Intervention learning contract</td>
</tr>
<tr>
<td>Intervention structure</td>
</tr>
<tr>
<td>Weekly timeline chart</td>
</tr>
<tr>
<td>Information sheet</td>
</tr>
<tr>
<td>Day One checklist</td>
</tr>
<tr>
<td>Envelopes</td>
</tr>
<tr>
<td>Encrypted USB storage</td>
</tr>
<tr>
<td>Mobile smartphone</td>
</tr>
<tr>
<td>Mobile smartphone</td>
</tr>
<tr>
<td>Reimbursement vouchers</td>
</tr>
<tr>
<td>Funding for travel, catering, evaluation interviews and handbooks</td>
</tr>
<tr>
<td>Postage costs</td>
</tr>
<tr>
<td>Telephone costs</td>
</tr>
<tr>
<td>Social media group</td>
</tr>
<tr>
<td>Participant contact numbers</td>
</tr>
<tr>
<td>Handbook</td>
</tr>
<tr>
<td>Day One checklist</td>
</tr>
<tr>
<td>Weekly topics (practice or clinical)</td>
</tr>
<tr>
<td>Professional development tools or resources</td>
</tr>
<tr>
<td>Workshop</td>
</tr>
<tr>
<td>Workshop slides (case studies and toolkits)</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Virtual meetings</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Development plans and reflective logs</td>
</tr>
<tr>
<td>Blank IPDAP template</td>
</tr>
<tr>
<td>Meeting log template</td>
</tr>
<tr>
<td>Coaching questions template</td>
</tr>
</tbody>
</table>
4.5.2.1 Timeline
A week-by-week timeline [Figure 4.3] was developed for running and monitoring the intervention as well as assessing fidelity in the evaluation. It was also used to inform NCPs of the timeline of events/activities during the intervention. The purpose of developing the timeline was to ensure that activities from the intervention could be placed in sequential order, that a chronological relationship between intervention components existed and that this timeline remained consistent with intervention goals and the implementation strategy.

For the coach, this timelines aids in the organisation/development of intervention materials, monitor changes and facilitates monitoring/evaluation of the intervention. A post-launch section of the timeline was prepared for NCPs on the intervention. It informed them of intervention activities, dates of intervention events and deadlines and the subject of weekly topics. This helped them to plan how they will fit in intervention activities with work/home life and provides some structure/scaffolding for learning, which was reported in group discussions as lacking after the pre-registration year.
Figure 4.3 The draft intervention timeline
4.5.2.3 Intervention launch
A plan was made to facilitate launching and implementation of the intervention. This plan included producing recruitment material, defining a marketing strategy and conducting a risk analysis for the intervention.

Marketing strategy
The first part of the marketing strategy was to develop a key message to attract NCPs to enquire and register with the intervention. In this message, emphasis was placed on the intervention’s focus of providing support during the transition period, rather than education.

To support the recruitment strategy, the author drew up a list of ‘influentials’ through professional networks. Influentials were identified as active pharmacist contacts with wide reach, established reputations, and having large networks on social media. They would be asked to support the author by publicising or disseminating recruitment flyers.

Recruitment strategy
A flyer was developed specifically for promotion on social media sites (Facebook and Twitter WhatsApp®), to potential intervention participants. An email for recruitment was sent for circulation to former University of Manchester MPharm graduates through an alumni group. A further recruitment email to be sent to the Professional Development leads of eight community pharmacy organisations was also prepared in case intervention uptake was slow and behind target.

Risk analysis
A risk analysis was conducted to identify potential problems and consider strategies to mitigate their impact. By conducting this process, the risks to delivering/running the intervention objectives were minimised. Table 4.5 details the proposed risks to the intervention and proposed measures to minimise/address those risks. Whilst the author hoped no obstacles would impede the intervention, completing a risk analysis allowed planning for all unexpected or unwanted eventualities.
Table 4.6 Draft intervention risk analysis

<table>
<thead>
<tr>
<th>Identified risk</th>
<th>Probability of occurring (P)</th>
<th>Severity ranking (S)</th>
<th>Score (PS)</th>
<th>Action to minimise/manage risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recruitment difficulties</td>
<td>3</td>
<td>3</td>
<td>9</td>
<td>Recruit through local professional networks, alumni, Local Pharmaceutical Committees, social media, employers and snowballing if response to email invitations is low</td>
</tr>
<tr>
<td>Participant attrition</td>
<td>3</td>
<td>2</td>
<td>6</td>
<td>Include detailed discussion of expectations and commitment with potential participants. Prepare summary sheet of expected activities to provide for signing consent</td>
</tr>
<tr>
<td>Technological failure</td>
<td>2</td>
<td>2</td>
<td>4</td>
<td>For webinars – rearrange using face-to-face (Skype) or telephone conferencing For on-line templates of logs and development plans (IPDAP); ensure paper templates are made available in handbooks and posted to participants</td>
</tr>
<tr>
<td>Insufficient funding</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>Additional funding was sought from an alternative funding stream</td>
</tr>
<tr>
<td>Delays to the timeline</td>
<td>2</td>
<td>2</td>
<td>4</td>
<td>Delays may result from NCPs, difficulties making arrangements that suit everyone</td>
</tr>
</tbody>
</table>

Launch date

The final part of the preparation process was to set a launch date for the intervention to begin. This date had to be after trainee pharmacists had received their GPhC registration exam results, but also cater for a two-week period for recruitment. It was also set as the point when all participants were expected to have received their Day One checklist and be added to the social media peer support group.
4.6 Chapter summary
This chapter aimed to describe the process for how findings from previous chapters were combined and incorporated to design a draft intervention. Direct links were made between intervention components, theory, and the evidence, which facilitates understanding of the change processes. Where evidence was lacking to inform design process, appropriate additional activities were completed to address this, ultimately producing an evidence-based draft intervention aimed to ease the transitions of NCPs. Producing a draft intervention facilitated progression to the next phase of intervention development, as stipulated by the MRC model; piloting or feasibility. To support the feasibility stage, a plan for implementing and running this intervention was also described in this chapter. The work completed in this chapter therefore allows feasibility and acceptability of the intervention to be tested. Findings are reported in the following chapter.
5. Chapter 5. Evaluating the feasibility of the intervention: NCPPC programme

5.1 Introduction
The findings reported in preceding chapters detail the development of a draft intervention to ease the transitions of NCPs. In the current chapter, a feasibility study is conducted to evaluate the intervention’s feasibility, acceptability and perceived impact. This complex intervention was iteratively designed using the stages of the MRC model for developing complex interventions (development, feasibility/piloting, evaluation and implementation), which was described in chapter 1 (Figure 1.1).42

The development process for the intervention began with a literature review (phase 1 of the programme of work) to identify an evidence base and relevant theory. This was followed by gathering of empirical data in the nominal group study (phase 2 of the programme of work). The next stage of development was modelling of the process and outcomes, described in the previous chapter, intervention design (phase 3). Having developed the draft intervention the fourth and final step in the programme of work was to run and evaluate it in a feasibility study. Findings from this chapter will be used to finalise a pilot-ready intervention.

The most recent MRC guidance recommends conducting feasibility or pilot studies as part of the intervention development process to determine if a full scale trial can be done.43 The guidance suggests areas for investigation such as acceptability, recruitment, and calculation of sample sizes; however it fails to explicitly define what feasibility or pilot studies are. This may be due to the fact that the terms are often used interchangeably in the literature and clarification was therefore needed about the purpose of this study. Research by Eldridge that aimed to define a feasibility study stated that a feasibility study aims to answer questions about ‘whether something can be done, should we proceed with it and if so how?’ 248 Whitehead further goes on to say that feasibility testing should be used as an overarching term for preliminary studies and uses methodology less strict than pilot studies.249

5.2 Aims and objectives
This study aimed to explore whether the intervention was feasible and to evaluate its processes, acceptability, and perceived impact.
The objectives were to

- Explore the feasibility of implementing and running the intervention
- Explore the acceptability of the intervention components to participants
- Explore and clarify intervention outcomes
- Explore the perceived impact of the intervention on participants’ ease of transition
- Make design recommendations for an intervention which could be tested on a larger scale

The intervention consisted of a 17-week intervention, the Novice Community Pharmacist Peer Coaching (NCPPC) programme. It aimed to ease the transitions of novice community pharmacists (NCPs) to independent practitioners using psychosocial support (one-to-one coaching and peer interaction) and some developmental tasks. Though similar interventions in medicine and nursing have been evaluated and shown to be effective (see literature presented in chapter 4, during intervention design), there has been no such evaluation of interventions targeted to NCPs.

5.3 Presentation of the chapter

The chapter begins by describing the methods used to conduct the feasibility study. After this, the findings are reported in detail before the chapter concludes with a brief discussion of those findings. Participants who participated in the intervention referred to it in findings as ‘the programme’. Therefore in the section reporting qualitative findings, the terms ‘intervention’ [used by the author] and ‘programme’ [used by participants] both describe the intervention.

5.4 Methods

The NIHR Evaluation Trials and Studies Coordinating Centre (NETSCC) guidance defines feasibility studies as those used to produce results that determine whether or not an intervention may proceed for large scale trial or testing for effectiveness.\(^{250}\) They focus on aspects such as acceptability, demand for the intervention, implementation, practicality/logistics, and adaptation of the intervention to different settings.\(^{251}\) For this research, the feasibility study aimed to explore the intervention’s practicality, implementation, and acceptability to participants. In addition, the feasibility study provided the author an opportunity to inform development by evaluating usefulness/value of intervention components and clarifying outcomes. True, realist, theory-driven process
evaluation of the intervention was **not** conducted as part of this feasibility-testing phase, and could instead form part of post-evaluation scale-up.\(^4\)

Transition support interventions for novice nurses and doctors have been evaluated using both qualitative and quantitative study designs and often in longitudinal studies.\(^4,156,192,254,255,256,257\) Given this study’s developmental [and exploratory] function, qualitative data collection was considered most appropriate to achieve the study purpose. Furthermore, there is a lack of peer-reviewed research exploring transition support interventions for NCPS; collecting richer, more detailed data using qualitative methods would therefore provide detailed understanding of the transition support intervention and link perceived effects to intervention components.

As participants were likely to develop relationships with their peers by being on the interventions together, it was important that this did not influence their perceptions about the intervention. Gathering open and honest views about the intervention was important because MRC guidance stipulates that differences in contexts, personalities and experiences may lead to differences in outcomes or lead to unexpected outcomes.\(^5\)

The methods section describes how data to evaluate the intervention was collected. It begins with a brief description explaining how participants were recruited for the intervention participation and evaluation. This is followed by an explanation of the data collection and data analysis methods as well as the ethical considerations for this study.

### 5.4.1 Recruitment strategy
To facilitate the recruitment process, a list of eligibility criteria was drawn up for potential intervention participants. All participants were required to have a UK MPharm degree and due to register and commence work as an employee/self-employed community pharmacist between 1\(^{st}\) August 2016 and 1\(^{st}\) September 2016. NCPs had to be working at least 24 hours per week, in any community pharmacy setting (independent, small multiple, large multiple or supermarket pharmacies) in any area of England. To participate in all elements of the intervention, participants had to own a smartphone, to access the social media group (WhatsApp\(^\circledR\)) and webinar software app (GoToMeeting\(^\circledR\)).

A recruitment email was sent to former University of Manchester MPharm graduates through a university alumni group. A flyer, developed specifically for social media sites (WhatsApp\(^\circledR\), Twitter\(^\circledR\) and Facebook\(^\circledR\)), was placed for circulation to potential intervention participants.
participants. This strategy was used to recruit employee and locum NCPs from a range of settings. Recruitment ran for a period of two weeks, from 29th July to 13th August 2016.

Recruitment for the intervention and evaluation study was carried out as a single process. Conducting the feasibility study was part of an intervention development process because findings from the study informed intervention development. Given this, all potential participants were informed that completing evaluation was part of participating in the intervention. Materials developed to advertise the intervention (flyers and emails Appendix 15) informed potential participants that registration applied to both participating in and evaluating the intervention. Any NCPs interested in joining the intervention were asked to register their interest by contacting the author, using the details at the bottom of the recruitment document (Appendix 15).

Potential participants were then simultaneously given two sets of documents. One set was information about being an intervention participant (an information sheet about intervention components, structure and requirements). The other document set was information about being a research participant (participant information sheet, Appendix 16, and consent form Appendix 17, to complete two separate individual telephone interviews for course evaluation). Participants were offered a £25 gift voucher per interview for taking part. After 48 hours, potential participants were asked to consider whether they were still interested in taking part and if they were committed to completing all the intervention activities (including evaluation). At this point they were asked to submit the registration form before the 13th of August 2016, to be considered for a place on the intervention.

5.4.2 Data collection
The main source of data to evaluate the intervention impact and acceptability were two rounds of semi-structured interviews conducted during and after the intervention. In addition to this, an intervention log (comprising a coach reflective diary, an implementation log and an engagement log) were used to evaluate the feasibility and fidelity of intervention delivery.

5.4.2.1 Semi-structured interviews
To explore perceptions of the intervention structure, strengths, weaknesses and outcomes, in-depth detailed descriptions from participants receiving the intervention were needed. Interviews also aimed to understand the mechanisms through which these change processes occurred, to fulfil MRC guidance. Reflective diaries, logs or journals from
participants have been successfully used to collect rich real-time detailed data and are commonly used in medical and nursing education.\textsuperscript{252,253} While they provide rich detailed experiences, they were felt to be too onerous on participants. This was especially pertinent given that participants were already expected to complete regular developmental tasks as part of the intervention.

It was important that participants felt able to share their views openly and it was thought that group interviews may adversely influence data collection. Group dynamics have been known to cause ‘Groupthink’, where an individual’s thoughts are influenced by the group and are determined by their desire to agree with the general group consensus.\textsuperscript{136} Focus group discussions may also lead to the loss of detailed individual experiences if an individual feels unable to openly express their opinions because of a dominant group member.\textsuperscript{254} Since this group of people had interacted with each other through the intervention for a prolonged period of time, the risk of bias or dominance from group participants seemed higher. In addition, with participants being located in different parts of England, semi-structured interviews conducted over the telephone were a less labour-intensive and pragmatic choice of data collection method. An advantage of using semi-structured interviews was that they allowed unexpected or new concepts to be explored in greater depth when identified.\textsuperscript{55}

Where participants are able to give their views of the intervention in an open, objective and unbiased manner, transparency, disclosure and authenticity in the research process are increased.\textsuperscript{255} Social science research explores human interactions and relationships and personal experiences are central in qualitative research. A researcher typically has power over their participants because enquiry is based on relationships and issues of power are inevitable.\textsuperscript{255} It is important to acknowledge the power issues and the biases they present, and where possible minimise their impact. In this research study, the intervention was delivered by the author, who was the intervention coach and data collection interviews began before the intervention ended. This ongoing ‘coach-novice relationship’ between the author (EM) and study participants caused inherent power differences. This may have influenced participants’ responses to interview questions, and participants’ relationships with the coach, after the interviews. To avoid bias from the power relationship, an experienced qualitative researcher (JF) independent of the research team was recruited to conduct the telephone interviews.\textsuperscript{261,262} In addition, interview transcripts from the
interviews were not made available to the author until the 17-week intervention period had ended. Participants were informed of this in participant information sheets.

The independent researcher who conducted the interviews (JF) is an experienced researcher with a background in psychology. She has extensive experience in qualitative interviewing and her previous research interests included exploring the job satisfaction of community pharmacists. Currently, her work in a Health Service Research Centre at the University explores the organisation, management and delivery of social care.

*Development of the interview guides*

Two rounds of semi-structured telephone interviews were conducted. The first interviews were conducted during the intervention (between weeks 13-17 of the intervention), and the second round of interviews completed 10-12 months after the start of the intervention. While the first interviews aimed to explore views on specific components and short term impact, the second interviews were a retrospective holistic exploration of the intervention and its longer term impact. Interviews also aimed to explore whether the intervention length was appropriate. These aims facilitated linking outcomes to intervention components and the retrospective data collection allowed change and causal links to be considered in the context of time.

The iterative process of developing the interview guides began with the literature reviewed about transition support interventions (TSI) [chapter 2]. This review provided some insight about qualitative methods used to evaluate TSIs, the theories of perceived outcomes based on the experiences of those receiving and delivering TSIs. Next, the intervention’s aims and objectives, and logic model [as reported in chapter 4] were consulted to inform the interview guide content and organisation of broad areas for exploration. Each interview guide was organised so that it contained an introductory section with a general or factual warm-up question before the open questions. This was to help participants feel more comfortable.

The two interview guides were discussed with the supervisory team and the author then met with the independent interviewer, JF, before each round of interviews. Documents including the intervention handbook, timeline and structure were given to JF, and the structure and aims of the intervention discussed. The language and questions were also reviewed to ensure clarity in the language and style of the questions. Questions in the bulk of the interview guides were open rather than closed, and probes/prompts were used to elicit lengthy descriptive responses.
**Interview guide 1**
Telephone interviews lasting up to one hour were conducted by JF. The opening question explored participants’ reasons/motivation for joining the intervention and prompted the participant to think back to their earliest experiences of the intervention. The guide (Appendix 18) then moved on chronologically to explore more recent experiences by asking questions about the different components of the intervention. This technique has been shown to be helpful for participants to link intervention outcomes to processes. In turn questions explored the social media group, the workshop, the reflective logs and development plans, the handbook, the webinars, the weekly topics and the role of the coach. Questions explored how acceptability, feasibility, what if any value/benefit was derived from them and the perceived impact of these components on the participant. After all the components had been discussed, participants were asked to summarise what they felt had been the most important/beneficial elements when taking part in the intervention and add any further points they wished to include.

**Interview guide 2**
Telephone interviews lasting up to 45 minutes were conducted by JF. The opening question explored whether the close/end of the intervention had been executed clearly/appropriately and whether participants perceived the length of the intervention to be appropriate. The guide (Appendix 19) then moved on to explore the social media group. In particular the interviewer explored what impact the intervention ending had had on engagement and communication within the group, and the difference between this social media group (which continued to run beyond week 17) and others that participants may have been a part of. Finally, the interview explored the general ways in which participants had found the intervention useful in easing their transitions to practice and whether participating would influence them to consider coaching/mentoring others NCPs in future.

**5.4.2.2 Intervention logs**
An intervention log (comprising coach reflective diary, an implementation log and an engagement log) maintained by the coach aimed to inform findings for intervention feasibility (recruitment, engagement and acceptability, attrition, implementation monitoring and fidelity) and perceived impact. Entries began during the recruitment phase prior to the intervention starting, and continued until the week after the intervention ended. This log informed feasibility by providing a record of intervention
delivery/progression, intervention events and practical or logistical issues that caused delays or changes of any kind, participant attendance for the workshop and webinars, patterns of communication within the social media group, one-to-one communication between the coach and participants, and submission of individual developmental tasks by participants. This data informed engagement with the intervention by participants. As part of this log, a coach reflective diary with once-weekly entries recorded coach reflections of memorable communications and events, time spent on activities, as well as to reflexively question observations, experiences, and interpretations. An excerpt from the intervention log is presented in Appendix 20.

5.4.3 Sampling

Since members of the intervention were also research participants for intervention evaluation, purposive sampling was used to select potential participants from all applicants. This was done to ensure that they represented various community pharmacy settings and included employee and self-employed (locum) pharmacists. The need to achieve maximum variation in the sample also had to be balanced with achieving a suitable sample size for the group coaching element of the intervention. To the author’s knowledge, group coaching to ease the transitions of NCPs has not been researched.

Group mentoring or coaching has been reported as an effective alternative to one-to-one mentoring, when sustainability and practical issues have hindered one-to-one support. A recent study by Stoeger further suggests that in some educational contexts, group mentoring was more effective than one-to-one mentoring. Since Pickersgill’s article quoted that “a group process involving between six and eight people is as effective as the conventional one-to-one approach,” a sample size of six participants was determined. A review of the literature supported this, with studies showing between 5-22 people assigned per mentor. It must be noted however, that amongst these groups sizes there was a wide range of variation in the roles mentors were expected to fulfil, and therefore the time commitments needed to fulfil them.

Fifty percent of participants in this study were recruited from North West England to account for budgetary constraints due to travel. (Participants received reimbursement for intervention evaluation and travel expenses to attend a face-to-face workshop in Manchester were also paid). While practicable and easier for one coach to manage, the low number of six did raise concerns: any attrition would greatly impact on the sample size and limit transferability of findings. In addition, a smaller sample size may potentially have
reduced the range and number of thematic findings. Since these factors limited transferability and external validity of the research, the sample size was increased to allow recruitment of up to twelve participants.

5.4.5 Methods of data analysis

Analysis was conducted of interview transcripts, and supported by a review of the intervention logs (comprising coach reflective diary, an implementation log and an engagement log).

Interviews were transcribed by a University-approved transcribing service and anonymised by JF, before being downloaded onto NVivo 10 software for thematic analysis. A five-step process of data analysis developed by McCracken in 1988 was used to guide the analytic process. Throughout the iterative analytical process, the author referred to the interview guide and study aims.

The first step in analysis involved reading each transcript to gain an overall sense of ideas and themes from an individual participant. A second more thorough read of each transcript was then conducted and notes made in the margins. Notes were made of any striking quotes from participants, concepts resulting from the author’s reflections, and comments about the perceptions of specific intervention components. A table was drawn up containing potential codes, quotes and research notes about the different intervention components, to allow for comparison across interview transcripts.

Next, preliminary codes were developed by the author in the second step, using descriptive and interpretive categories. To help with this, the author used an identified quote from the transcript, which clearly demonstrated this code. At the end of coding each transcript, the author made summary notes about that interview to help in understanding the issues being discussed by participants.

In step three of McCracken’s process, all transcripts were examined for codes and patterns of the codes across transcripts were noted. In step four, further review of the patterns of codes allowed the author to determine a number of basic themes. A theme is defined by Ely et al. as ‘a statement of meaning that runs through all or most of the pertinent data, or one in the minority that carries heavy emotional or factual impact’. During this stage, similarities and differences in the coding were noted and codes that did not fit any longer were removed. Coded sections of transcripts which were common across the different interviews were then grouped together to form more themes. In the fifth and final step,
predominant themes across the interviews were isolated, and used to begin writing up the findings. These predominant themes led the author to identify a number of key intervention outcomes and strengths. In addition to predominant themes, unexpected or unusual themes emerging from transcripts were identified and explored further in the analysis.

Review and analysis of the intervention logs (comprising an implementation log, an engagement log and coach reflective diary) were completed to inform feasibility and to support analysis of interview transcripts. The implementation log was examined to explore how well the intended timeline for implementation and delivery was adhered to. Where changes were made to the intended timeline, reasons for the changes were noted in the implementation log. The engagement log was reviewed to identify how many tasks each participant submitted, and how often they communicated on the WhatsApp® group or directly with the coach. Tallies were then made for each participants showing the information recorded; the number of reflective logs submitted, the number of development plans submitted, the number of WhatsApp® messages posted and the number of times the participants contact the coach directly (via WhatsApp®, telephone call or email). The coach reflective diary was examined to understand how long the coach spent planning and delivering intervention tasks. The diary also explored entries of observations, interpretations and coach-novice conversations to inform qualitative analysis of the interviews.

5.4.6 Ethics
Advice was sought from a University Research Practice Governance Co-ordinator (from the Research Governance, Ethics and Integrity office), in order to clarify which of the proposed activities in the feasibility study were classed as research, and would therefore require ethical approval. Participating in the intervention (as novice or coach) was considered ‘training or education’, not research and did not require ethical approval. Evaluation of the intervention however was considered research. It required ethical approval because there was a risk that during interviews, disclosures of a sensitive nature could be made or that participants may report psychological stress or distress. Information would therefore also need to be kept confidential, and informed consent received before any data collection could occur.

An application for ethics approval was made for intervention evaluation after a number of ethical issues were identified for consideration. They were gaining informed consent,
ensuring anonymity and confidentiality, security for data storage and access, the ethical accountability of the main applicant and the issue of power relations.

To ensure informed consent was given, all participants had time to read and understand the information about the study before they could give fully informed consent to take part. Participant information sheets and consent forms were issued to participants at least 48 hours before a signed consent form was requested. This allowed participants to read the sheets and ask any questions prior to giving consent.

To ensure that participants felt comfortable to discuss any issues during interviews and have confidence that their anonymity and confidentiality would be maintained, all interviews were anonymised following transcription by the interviewer (JF), not the coach. A distress protocol (Appendix 9) was put into place in case any participants were upset by talking about their experiences. Throughout the study, participants were aware of their right to withdraw from the study without giving any reason why.

To ensure safe handling, transportation and storage of research data, encrypted University devices accessible only to the interviewer, author and research team were used. A data management plan was drawn up and data stored in accordance with the University of Manchester policy. The author kept a diary for the research study for the purposes of critical self-reflection, and to ensure that ethical accountability and a professional code of conduct was maintained throughout the feasibility study. As discussed briefly earlier, an independent researcher was recruited to conduct the interviews with participants, because it was considered inappropriate for the author, EM, to conduct them.

Participants were compensated for their time in the form of shopping vouchers (£25 per telephone interview, on completion of interview). Though participants were compensated for their time, the monetary value was not felt sufficient to coerce participants into taking part in the study, rather to acknowledge appreciation of participants giving up their time.

All the information relating to the ethical issues considered was written in participant information sheets so that all participants were aware of it at all times. An ethics application was submitted in July 2016 and approval was granted from the University of Manchester Research Ethics Committee 1 Ref 16308 (Appendix 21).
5.5 Results: presentation of findings

Findings begin with a description of the study participants recruited to the intervention and study. This is followed by an overview of findings for intervention feasibility. Qualitative findings for the intervention are reported next before the chapter concludes with a brief discussion of the feasibility study.

5.6 Results: demographics and characteristics of the sample

Forty-five (33 female, 12 male) enquiries from potential participants were received in response to the advert; 23 via email, 9 via telephone and 13 via social media. The author sent information sheets, consent forms and registration forms to these individuals via email asking that interested candidates return completed registration forms by 13/08/16. Thirty-three completed registration forms were received, of which 24 were eligible. Nine candidates were ineligible because they registered with the GPhC after 01/09/2016, they were not yet working in the community pharmacy sector (but planned to) or they had received their degree from a non-UK University.

Of 24 eligible applicants (twenty female, four male), eight were employees and 16 were locums. This may be due to the fact that locums are more isolated practitioners with less continuity in the workplace and may therefore want more support. Also, larger organisations in particular, sometimes have support structures (such as trainee management interventions) in place. Twelve applicants were selected from those who were eligible so that five participants were former University of Manchester graduates, and the other seven were from other UK Schools of Pharmacy.

Twelve applicants (ten female, two male) were not selected for the intervention. Two applications were received late (after selection was completed) and could not be considered. Ten further applicants were all former graduates of the University of Manchester and large multiple employees, a demographic already represented by two of the final cohort (shown in Table 5.1). Letters were sent to these twelve applicants thanking them for their interest, and informing them that they had not been selected.
### Table 5.1 Demographic characteristics of study participants

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<thead>
<tr>
<th>Identifying code</th>
<th>Gender</th>
<th>Date of registration</th>
<th>Employment status</th>
<th>Workplace setting (main)</th>
<th>Geographical setting</th>
<th>University</th>
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</thead>
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<tr>
<td>R1</td>
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<td>01/08/2016</td>
<td>Locum</td>
<td>Independent</td>
<td>London</td>
<td>Medway</td>
</tr>
<tr>
<td>R2</td>
<td>F</td>
<td>01/09/2016</td>
<td>Locum</td>
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<td>Manchester</td>
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<td>R3</td>
<td>F</td>
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<td>Locum</td>
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<td>Kings College London</td>
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<td>R4</td>
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<td>Employee</td>
<td>Large multiple</td>
<td>Manchester</td>
<td>Manchester</td>
</tr>
<tr>
<td>R5</td>
<td>F</td>
<td>01/09/2016</td>
<td>Locum</td>
<td>Medium multiple</td>
<td>London</td>
<td>Brighton</td>
</tr>
<tr>
<td>R6</td>
<td>F</td>
<td>01/09/2016</td>
<td>Employee</td>
<td>Large multiple</td>
<td>Manchester</td>
<td>Manchester</td>
</tr>
<tr>
<td>R7</td>
<td>F</td>
<td>01/09/2016</td>
<td>Employee</td>
<td>Independent</td>
<td>Huddersfield</td>
<td>Kingston</td>
</tr>
<tr>
<td>R8</td>
<td>F</td>
<td>15/08/2016</td>
<td>Locum</td>
<td>Variable</td>
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<tr>
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<td>Manchester</td>
</tr>
</tbody>
</table>

**Key**

<table>
<thead>
<tr>
<th>L</th>
<th>Locum</th>
</tr>
</thead>
<tbody>
<tr>
<td>E</td>
<td>Employee</td>
</tr>
<tr>
<td>I</td>
<td>Independent (1 store)</td>
</tr>
<tr>
<td>SM</td>
<td>Small multiple (2-4 stores)</td>
</tr>
<tr>
<td>MM</td>
<td>Medium multiple (5-25 stores)</td>
</tr>
<tr>
<td>LM</td>
<td>Large multiple (&gt;25 stores)</td>
</tr>
<tr>
<td>S</td>
<td>Supermarket pharmacy</td>
</tr>
</tbody>
</table>

Just two of the twelve participants were male (17%) which is not representative of the community pharmacy population (40.6% male)\(^{262}\). The reasons for this were unclear. All participants registered with the GPhC within 32 days of each other [six on 1\(^{st}\) August, two on 15\(^{th}\) August and four on 1\(^{st}\) September]. At the start of the intervention, one third of participants (n=4) were employee pharmacists, with that number rising to seven employees
by the intervention end date. The reasons for this were that some participants preferred locum work to gain breadth of experience, and some participants were unable to find permanent work as employees. Three of the participants who were locums at the start of the intervention became employees however no employee participants changed to work as locums. Full-time employment was not a requirement for intervention eligibility.

5.7 Results: findings for intervention feasibility
As stated in the methods section, findings for feasibility were gained from intervention logs. Given that a feasibility study primarily aims to inform decisions about whether a full scale trial can be done, a number of factors needed to be evaluated: recruitment, attrition, engagement and acceptability, implementation fidelity and intervention acceptability.251

5.7.1 Recruitment
Within the context of this intervention, it was important to ensure that NCPs could be made aware of the intervention so that sufficient numbers for a trial sample could be achieved. Twelve participants needed to be recruited for the intervention to reduce the risk to sufficient data collection from attrition. This figure of twelve was realised by the time the intervention started and achieved within the relatively short timescale of two weeks. Of the 45 enquiries received from potential applicants 31 (69%) of them heard of the intervention through social media, (for the remainder it was word of mouth, email or unknown). As 24 applications were received, the recruitment strategy used was considered to be effective, and social media was perceived as the most successful recruitment method.

5.7.2 Attrition
As interviews occurred over two time points, it was important to avoid attrition to prevent distorting and undermining validity of the results.264 As stated in the methods, participants were informed during application to the intervention, that two evaluation interviews were required. All participants completed the intervention and no attrition was observed. In fact, at 12 months after the start of the intervention, the social media group for the intervention was still live, and all twelve participants were continuing to use it.

5.7.3 Implementation and fidelity
To increase validity, the confidence in the results of feasibility studies or trials, it is important to assess fidelity of the intervention implementation process. Fidelity explores whether the intervention was implemented in accordance with what was originally planned.44 MRC guidance for process evaluation of complex intervention recommends that key areas for consideration include the implementation process, implementation fidelity
Implementation of the intervention was evaluated using the intervention logic model (see chapter 4, Figure 4.2), resources planning table (chapter 4 Table 4.4) and the intervention timeline (chapter 4 Figure 4.4). The author reviewed each intervention component to assess whether expected intervention activities were implemented as designed (intervention fidelity) and in accordance with the proposed timeline. Notes were also made of any adaptations made to the original design and why they were needed.

5.7.3.1 Pre-launch activities
Pre-launch activities included production of intervention materials, intervention advertising, recruitment, and selection of the cohort. The resource planning list was reviewed to assess whether the intervention materials were produced on time. Delays in developing the handbook occurred and distribution of the handbook was delayed for ten days. Advertising, recruitment, and selection of the target number of participants, were achieved as intended.

5.7.3.2 Workshop
The 4-hour workshop was delivered as intended, although the timing of the workshop was delayed from week 2 to week 5. This occurred because of logistical difficulties of finding a time suitable for all participants to attend.

5.7.3.3 Webinars
Two 1-hour webinars were delivered as intended using GoToMeeting® software. Participants experienced no problems downloading the application to their smartphones, tablets, or PCs. During the first webinar however, technical difficulties [intermittent sound and log-in failures] made group communication problematic. Webinar 1 was brought forward from week 10 to week 8 of the intervention, to accommodate the rearranged slot for round 1 evaluation interviews, which were delayed from week 6 to week 10.

5.7.3.4 Weekly topics
Sixteen sets of topics (practice or clinical focus) were delivered of weekly from week 2 as designed via the social media group every Wednesday. Weekly handbook module scenarios were posted from week 3 as intended via the social media group every Monday. The time that the topics were posted onto the social media group was amended in week 4 from morning to evening. This adaptation occurred because intervention participants were more active on the social media group in the evening and had time to discuss the content.
5.7.3.5  **WhatsApp® group**
The social media group was launched on the morning of Day 1 of the intervention as intended. With the exception of one participant (who had omitted to write her mobile number on the registration form), all intervention participants were welcomed to the group on the morning of Day 1. The remaining participant was added to the group within 48 hours of Day 1. One of the ground rules developed for the social media group limited the times in which participants could post. This was not adhered to by participants because of variations in working hours and the fact that the most suitable time for group discussion was in the evening. Participants therefore requested that greater flexibility and a new daily window of 7:30am-22:00 was decided. If participants wished to not take part in group discussions, they were given the option to ‘mute’ the group.

An entry in the coach reflective log from week 5 noted that when posted, weekly topics were sometimes overshadowed by the numerous messages requesting support throughout the day. This was noted when trying to arrange a meeting date for the workshop. Intervention communications for deadlines were from that point also sent directly to individuals, as well as the group. An entry from week 6 also noted that one participant in particular did not post on the group. During a one-to-one conversation with that participant, the coach was informed that he worked in a place with poor mobile phone reception, and typically worked until 10pm most nights, making it hard to post to the group.

5.7.3.6  **Handbook**
While the content of the handbook was delivered as intended, there was a 10-day delay in sending out the handbook to participants. Modification of the handbook to include more space for notes and prompts for reflection caused the delay.

5.7.3.7  **One-to-one coaching conversations**
Coaching conversations occurred when participants directly contacted the coach because of an urgent problem, or when planned feedback for development plans and reflective logs was being given. Review of the coach log (Appendix 20) showed the coaching questions/prompts were used as intended, however, the length of coaching conversations was longer than planned (15 minutes planned per conversation). Coaching conversations lasted between 10 minutes and 68 minutes. The longer conversations occurred when participants had personally encountered distressing situations (such as making a dispensing error, workplace conflict with colleagues, experiencing angry customers/patients) and
participants used the opportunity to receive a debrief with the coach. In addition to the planned conversations, eight *ad hoc* coaching conversations took place over the course of the intervention. Of these conversations, four were initiated by participants (during highly stressful events at work such as workplace conflict), and four initiated by the coach, after participants posted messages on the group indicating they had had a difficult day (three related to first dispensing error, and one to a difficult day at work). Given that the coach spent much longer than planned/anticipated on coaching conversations it appeared a group of this size was too large. This was further supported by qualitative findings which indicated that at least three participants felt they needed more regular coaching conversations. While coaching was feasible and acceptable to participants, findings suggested feasibility could be improved with a smaller number of participants.

### 5.7.3.8 Review of development plans

Participants were asked to submit 3 development plans each over the 17-week intervention period (weeks 6, 10 and 14). Reminders and instructions for completion were posted on the social media group as intended although the deadlines for development plans 1 and 2 were delayed until weeks 8 and 12 respectively because of delays with the workshop.

### 5.7.3.9 Review of reflective logs

Participants were asked to submit 3 reflective logs each over the 17-week intervention period (weeks 4, 8 and 13). Reminders and instructions for completion were posted on the social media group as designed however the deadline for reflective logs 1 and was delayed until weeks 6 and 10 into the intervention because of delays with the workshop.

### 5.7.5 Engagement

A general observation noted in an entry for the coach reflective diary for week 16 was that engagement with reflective logs and development plans was particularly low in the final weeks of the intervention. Three participants contacted the coach to apologise for late submissions but they were told submissions were expected not compulsory. This was done to encourage self-motivated learning.

### 5.7.5.1 Social media messages

A total of 8259 messages were placed on the social media group by participants (n=6276) and the coach (n=1983). Among intervention participants there was a wide variation in the number of messages posted. The lowest-posting participant posted 16 messages and the highest posting participant posted 1965 messages.
Qualitative findings (reported after feasibility) suggest that the number of messages did not always correlate to levels of engagement. Some participants had no access to mobile phones/social media during the day, which limited their engagement in discussions. Some participants also expressed that though they did not contribute to some discussions, they valued reading them. As an illustration, the participant who posted just 16 messages, still reported that the social media group as the most valuable intervention component. Some variation was noticed too in the number of messages posted weekly, with Week 5 of the intervention being the busiest (1105 messages) and Week 1 being the quietest (171 messages). Communication did not particularly slow down at Week 17 (257 messages), as the social media group continued beyond 17 weeks.

5.7.5.2 Attendance rates
The workshop achieved an attendance rate of 92%, with 11/12 of intervention participants attending. One participant was unable to attend as she was out of the country at the time. Attendance for webinar 1 was (92%) with 11/12 participants attending the webinar. Attendance for webinar 2 was (83%) with 10/12 participants attending the webinar.

Qualitative findings suggested that attendance reduced because of technological difficulties and that the virtual environment was not conducive to group discussion. An entry in the coach diary from Week 16 stated that whilst the second webinar went well, it was challenging to generate the rapport and enthusiasm of the face-to-face meeting.

5.7.5.3 Submission of developmental tasks
Thirty-six development plan submissions were expected (three per participant). An overall submission rate of 75% (27/36) (75%) was achieved (100% submission for development plan 1, 83% submission for development plan 1 and 42% submission for development plan 3). Thirty-six reflective log submissions were expected (three per participant). An overall submission rate of 67% (24/36) was achieved 100% (12/12) submission for log 1, 92% (11/12) submission for log 1 and 8% (1/12) submission for log 3.

Qualitative findings suggested finding time to complete the logs was challenging for participants particularly as the early Christmas period coincided with the end of the structured intervention. This was considered a very busy time of year for their private sector employers. Entries in the coach reflective log between Weeks 8-17 showed that the large majority of task submissions happened late on Sunday evenings, within an hour or two of the deadline.
5.7.6 Acceptability
Qualitative findings (reported fully in the following section of this chapter), suggest that all the intervention components were used by participants [though to differing degrees] and therefore viable. Two intervention components though, were perceived to be of least value, and hence were least acceptable to participants: webinars and the handbook. The handbook was regarded as more useful and acceptable than the webinars, and five participants stated they would have preferred an electronic handbook. All other components, particularly the social media group were highly acceptable.

5.7.8 Summary of intervention feasibility
Findings for feasibility show that the intervention is viable. It can therefore be feasibly delivered and implemented as intended for a purposively sampled group of NCPs. No attrition was observed and a submission rate for developmental tasks of 75% was reported. A number of challenges were observed; completing all intervention tasks within the timeframes shown on the timeline, changes to the timing for reflective logs and development plans. Qualitative findings also revealed that the timing for some of these tasks did not suit all participants, with some requesting them earlier, and some later. This was attributed to variability in workplace settings which may greatly influence developmental needs and incidents for reflection. Consideration should therefore be given to whether greater flexibility in completing these tasks may benefit future participants.

5.8 Results: findings from qualitative interviews
While analysis of the two rounds of interviews was conducted separately, findings are reported together. The two rounds of interviews focussed on slightly different aspects of the intervention (rather than explore changes over time), and are therefore presented together. Where issues had been covered before, participants gave newer insights about why particular components of the intervention were valuable (i.e. reflective logs), their perceived impact in the long term or how perceptions of component value had changed.

Overwhelmingly, the components of the intervention perceived by participants as most valuable in easing their transitions to independent practice were the facilitated social media group, followed very closely by the coach. These views remained consistent throughout the first and second interviews. For participants, this social media group provided an accessible, responsive and trusted support network. Importantly, it provided a forum that guaranteed support, both from others on their level and from an experienced coach to guide and steer the group. Another important finding was that both the group and
coach functioned as a source of reassurance and feedback, which prompted more meaningful reflection by participants.

The two webinars in the intervention were reported as the least valuable component for two reasons: the software malfunctioned during webinar one, making it difficult for participants to communicate, and NCPs felt they gained little from taking part in them. While the handbook was not perceived as the least valuable component, it was perceived as the weakest component. While much of the content was considered valuable and relevant, the format of the handbook was perceived as problematic. Participants all reported that the handbook should be kept in the intervention but utilised differently. Two participants however felt the webinars could be removed altogether.

Thematic analysis suggests that four key intervention outcomes were reported by NCPs: firstly, participants felt more prepared for practice and reported increased coping skills, secondly they reported increased confidence/self-efficacy, thirdly they also reported increased learning and reflection and finally, feeling part of a support network. The intervention was consistently well received, the activities/components were acceptable and participants engaged with the intervention throughout the duration of the study.

Challenges that participants encountered with the intervention were the lack of time to complete all developmental tasks, keeping up with group communications (due to volume of communication) and technical problems with the webinar software. While the intervention was viable, feasible and very well received, there was some feedback suggesting some weaknesses (such as the handbook not being utilised well enough, despite being a useful resource) and challenges (technical issues with webinar software).

The qualitative findings for perceived impact will now be explored in greater detail, under the following headings: the key intervention strengths, the key intervention outcomes and overall perceptions of the intervention components.

5.8.1 The key intervention strengths

The characteristics of the intervention considered the greatest strengths were, the focus on support (not teaching), being able to have discussions and the value of ‘knowing someone was there’/feeling part of a support network.
5.8.1.1 Focussed on support

All participants reported in the first round of interviews that the need or desire for support initially motivated them to participate in the intervention. A key strength reported by all participants was that this intervention focussed on providing support rather than delivering education. Since they had recently completed their pre-registration training and passed the registration exam, participants did not wish to feel over-burdened by participating in the intervention.

“But the other programmes, you have to pay, and it’s a lot more intense, and it’s for a longer period. And I didn’t want to feel like I’m back at uni again, so…” Int1 R7

“Well obviously I thought it would be good to have some sort of support. I’ve never actually known that there was anything like this previously. I’d never heard about anything like this from friends from previous years or anything like that. I thought this is probably going to be quite good just for a bit of a help. Not necessarily I thought that I needed it, I thought I maybe could have managed without it as well. It probably would have taken me longer, probably would have been harder.” Int2 R1

Participants identified individual intervention components that were particularly good sources of support, such as having an experienced coach. In the second interview round, all participants reported the support-focus in a holistic way, and identified it as a key output of the intervention. Six participants also felt that this pharmacist group worked better and was more valued than other social media support groups they had encountered because of the motivations of its members; to provide or seek support from a network. Other social media pharmacist groups focussed on pay rates, sourcing locum shifts or providing quick responses rather than support. Crucially, they were not designed to develop a network of people.

“…they (queries to other social media pharmacist groups) were more like quick queries or ‘Can you do this in the private sector?’ or ‘Can you do this in community [pharmacy]?’, or ‘Have you guys ever seen this drug?’ – that kind of thing. It’s not more of a network basis. It’s more of a quick answer” Int1 R5

“I think it’s just the honesty, nobody’s in there to say, ‘Well I’ve done this and I’ve got that’. We’re all quite friendly and I’m sure there’s other friendly people in other groups but because we all came into this with one mind set, that it’s not about the job you’re doing, it’s not about the money you’re earning, it’s just about time to kind of find your feet……” Int2 R8
A number of participants even went on to explain in the second interview round that sometimes, joining other social media pharmacist groups in order to get support was actually damaging, because it exposed NCPs to a new kind of pressure.

“I find that sometimes when you’re [in] those kind of groups they put you down even more, because people are boasting about another job that they’re doing or that they’re getting a clinical diploma funded or, you know, their hourly rate is more, or you know like…and I find that it becomes a bit more like a competition as opposed to people helping each other. I didn’t feel that pressure in this group” Int2 R8

“… some of them can be quite… some of the behaviour on those groups can be quite nasty, some of the locums who post on those groups, so I don’t really engage too much with them to be honest.” Int2 R3

Participants also noted that this intervention provided a ‘reassuring or sense-checking’ function by facilitating learning and meaningful interaction through discussion. This function was not offered by professional support services (such as the RPS or PDA) who NCPs felt were at times to be overly formal and lacking the ‘sounding board’ function. This was in contrast to friends from university and family, who were sometimes described by NCPs as inappropriate support, because they lacked the experience, professionalism, or gravitas required to offer support.

“I think with the one (social media group) that we had with the coach, struck me as more professional, very, very little, banter …. So you know there’s someone a bit more qualified than you overlooking it, so you have a bit of a reassurance, as opposed to if it’s newly qualified or friends, [where] pretty much everyone is on the same level.” Int2 R5

In the second round of interviews, participants acknowledged too that it was difficult to have open, honest discussions in employer-run social media groups, a barrier this intervention overcame.

“I’ve got WhatsApp® groups where it’s the newly qualified pre-reg cohort of the year [for a particular employer] that I qualified with, but they’re only good for the [employer] stuff. They’re not good for anything asides from [employer-related issues] because [employers] are very ‘by the book’. I’ve got groups where … you’ve got area managers in there and you have to really watch what you say. Whereas in this [intervention group] you’re kind of in the same level playing field and there’s no-one out there that’s going to be watching what you’re saying. You can…you’re free to say what you want. Like you don’t have to be cautious of what might be said and what it might be interpreted as.” Int2 R4
This suggests that providing the right balance of formality, structure and relationships in the NCPs’ learning environment was crucial at this stage. Overall, the intervention was able to provide a support-led function with the appropriate combination of cognitive, psychosocial, clinical, professional and practical support.

5.8.1.2 Being able to have discussions

Another key strength reported by all participants was that the intervention provided adequate opportunities for formative discussion and meaningful interaction. It was clear from participants that an accessible group discussion involving multiple perspectives helped them build critical thinking skills so they could reflect and react to events in the workplace as they happened (‘reflection-on-action’).

“Because there were a lot of people from different backgrounds we had different perspectives, different solutions to tackling problems, which you wouldn’t think of but obviously when you hear all the other people’s views, and [...] it’s good to have another opinion, but because we were in a group it was nice to have all different opinions because you’d go back and you’d think ‘Oh yeah, well, maybe I should do it like this instead’, which was good.” Int1 R6

While discussions with other NCPs may have been made possible through former university contacts, participants in the intervention valued that conversation was facilitated by an experienced pharmacist. Group discussions offered participants the benefit and insight of multiple perspectives, given under the monitoring of an experienced pharmacist coach who served as the NCPs’ safety net.

“And also the fact that what really attracted me to it was the fact that there was going to be loads of other newly qualified as well, so it meant that I’d be able to share my experiences with them and vice versa, so we could learn from each other in that way. And having access to someone who’s been qualified for many years means you’ve got a whole load of knowledge that I don’t have yet, so that’s something I could draw off as well.” Int1 R10

Participants gained confidence and validation from shared discussions with a trusted group of professional peers, a feature that many NCPs may not have accessed in their workplace settings. By having awareness of how others practised, they received feedback about their own practice and became increasingly self-aware. In addition to acting as a safety net, the facilitation (rather than instructional) approach by the coach was beneficial for participants’ development. Findings suggest that discussing a query rather than simply being offered a quick solution offered a type of formative learning for NCPs because it helped them
understand the process of decision-making, professional judgement and clinical reasoning. At this stage in their careers, these discussions were crucial for developing participants’ critical thinking, problem-solving and reasoning skills.

“What tended to happen was from my experience was that the other newly qualifieds we’d chat about it for a bit and then [the coach] would come and say what she would do.... it meant that we all got to figure it out together. I think if I put the question in and [the coach] had just come immediately and answered it then... what would be the point in that?” Int1 R10

Individualised feedback and supported reflection through coach discussions was repeatedly remarked upon by participants as valuable. For three participants the benefit derived from one-to-one conversations with a designated, experienced coach was valuable, however it was a strength of the programme that was unexpected.

“It [the most valued part of the intervention] definitely was overall the WhatsApp® group, but I think the reflective logs probably helped the more I think about it. I didn’t think they would initially, but it kind of just makes you think about what you’ve done, ’cause I think generally you don’t really think about what you’ve done unless you’re asked to. But then, the other one, the thing that I do like is, you make your point, and then you have a conversation with [the coach]. Having that discussion is quite nice. It helps to break down, and actually figure out what the issue is exactly..... when you’re doing your CPDs online, you just write whatever you think, or what you’ve learned, or what you’re gonna develop on. But you’ve got no feedback. So, speaking to someone and discussing it all, and then sharing the experience, is really good.” Int1 R7

In the second round of interviews participants cited the availability and accessibility of meaningful conversations with peers as a significant advantage of this intervention in comparison to other interventions.

“I’m glad that it’s (intervention) there because I don’t think that other programmes are there for foundation pharmacists...newly qualified pharmacists. I think it’s all a bit too much paperwork, some of the other stuff, where this was like, there was a bit of paperwork but it wasn’t like loads. And it allows... It was more about us being able to talk to each other, which if you’re an isolated pharmacist on your own in a branch, you don’t really have anyone you can talk to potentially.” Int2 R3

5.8.1.3 ‘I liked knowing someone was there, that I had a support network’
The third key strength of the intervention was the social media group and the accessible, available support network it represented. The value of the social media group value lay in
the responsive, confidential and accessible nature of support offered amongst NCPs and an experienced coach.

“What I really just wanted was that support network and I do feel that I’ve got that because of the WhatsApp® group, because every time any of us have got a query we’ve got about ten other people who we can ask. And that…I think that was probably the main thing that I wanted out of it and that is the thing that I’ve got.” Int1 R10

“I’d definitely recommend it [the intervention]. And I’ve definitely grown in confidence. And that’s what you need, when you’re starting off, you just need that little boost, and knowing that someone’s there. And not feel alone. Because, I don’t know how I would have felt without the group. I think it’s kind of kept me going. So, despite everything else, I still feel that it’s helped, and it’s helped my confidence. And it’s just helped with little situations. And knowing how other people deal with things has also helped. So I’d definitely recommend it, otherwise, like I say, I don’t know how I’d feel. I think I would probably feel alone.” Int1 R7

Five participants stated explicitly that without the intervention, they would have experienced isolation and not known where to get support.

“….if it wasn’t for the programme, I think there’s been times where I would have felt very, very isolated and I wouldn’t have come across the opportunities that I do. I probably wouldn’t have stuck at the job that I did if I hadn’t have spoken to [the coach] very, very early on when we did.” Int2 R8

“I think the main thing that was most useful was that it created a network for you. So, you’ve got someone that’s really experienced kind of like leading it and then you’ve got people with various levels of ability and experience that can give you an input. So, it’s just…it creates a network. Sometimes you’ve got a pre-reg tutor but they’re not always available. Sometimes you can’t ask people within your company because of whatever, you might think there’s some stigma attached. They won’t think you’re confident enough to do a job, so. Whereas if you have a network of newly qualifieds everyone’s in the same boat… kind of. So, it’s good that it created a network for us.” Int2 R4

The intervention became a source of moral and emotional support during transition, particularly for participants who did not have trusted, supportive colleagues. These NCPs therefore felt reluctant to admit to their inexperience, for fear they would be undermined by colleagues. Despite being inexperienced, NCPs reported feeling pressured by the need ‘to know’ what to do, so participating in the intervention reduced the burden of these pressures.
“Like I said, as newly qualified it was nice to be able to go watch the group and ask ‘How would I do this?’ or ‘Has anybody seen this dose?’ or I’m in this situation, can anybody help me?’ In that way, it probably gave me a bit more self-confidence and I knew that there was someone to turn to, I knew that there was someone to ask, where I wasn’t going to be looked down on. I wasn’t going to be marked for not knowing. In that sense it did help my self-confidence, it did help me think. You know, you always go into something thinking I have to know everything, but being part of the group, it kind of teaches you that you don’t need to know everything, you just need to know where to go, where to look or where to ask. It helped from that sense, yes.” Int2 R8

This sense of belonging to a community was particularly important for those participants that did not have established, trusting relationships with colleagues. Participants were also drawn together by the shared experience of transition, the common aim of the intervention and participation in the intervention. This created a connection and shared identity for NCPs, helping to foster the sense of belonging.

“Knowing that obviously there was somebody who’s a little bit senior keeping their eye on it, so there’s somebody who’s more experienced who you could kind of turn to ……there might be a query that comes up on it and we might resolve it between us and then at some point [the coach] would always kind of feed back and say, ‘Yeah that was really good, I’ve had this experience and I’ve done this instead’. It’s just nice to have everybody who’s got the same mind set, everyone who was just trying to find their way and there’s nothing else to it apart from just literally helping each other out.” Int2 R8

Though the group remained live group after the structured intervention ended (at 17 weeks), group communication slowed considerably. During interviews three participants expressed that they felt reluctant to seek support via the WhatsApp® group after week 17 because they were uncertain of receiving support (though the group was live). Since posts for weekly topics had stopped, this removed the continuing and visible presence of the coach. The centrality of the coach’s role in creating and fostering the sense of community became increasingly apparent. In addition, the coach’s experience also added to the sense of security participants associated with the social media group and the importance of feeling safe within the group.

“Yes, definitely, even if the other group members would answer my query, I would still want her [the coach] just to confirm it all. Just …to see what she would think.” Int1 R11

“Well you sort of usually know who’s in this group, whereas you don’t really know in other groups. You know, you’ve met them face-to-face or at least you know
who they are. You know sort of the background, like you know you’re all newly qualified. Whereas I guess some other groups you don’t know who you’re talking to. Would you feel safe if you’ve got to give out information? So I think meeting everyone definitely helps.” Int2 R3

Overall, each of the twelve participants reported that ‘knowing that someone was there’ in a designated safe ‘space’ to offer support, increased confidence, reduced stress and made them feel part of a community of practice.

5.8.2 The key intervention outcomes
The next section now reports qualitative findings of the key intervention outcomes. They were identified as:

- Increased feelings of preparedness and ability to cope
- Increased feelings of confidence and self-efficacy
- Increased meaningful learning
- Increased critical reflection skills

Secondary outcomes are discussed later in the chapter within the final section of chapter findings, where findings of individual intervention components are reported.

5.8.2.1 Increased sense of preparedness and ability to cope
Findings from chapter 3 (nominal group study) of this thesis highlighted that while many NCPs felt they had the appropriate level of clinical knowledge during transition to practice, they often felt unprepared for the demands of their job. This impaired the ability to apply knowledge to practice, increased the stress they experienced, and made the transition to independent practitioner more challenging. This feasibility study’s findings suggest that a number of intervention components increased NCPs’ sense of preparedness for independent practice.

Participants reported that the intervention made them feel increasingly prepared to manage clinical queries for complex drugs (drugs with narrow therapeutic indices or complex regimens) or complex medical conditions. Uncertainty about dealing with situations surrounding controlled drugs was also reported to reduce, and participants felt better able to resolve issues. Other areas in which participants reported feeling more prepared were related to delivering services for patients and managing difficult interactions with patients and pharmacy colleagues.

“So, I didn’t really know what to do about this person that came in about...this male came in for thrush cream, and it was due to diabetes, so I obviously thought I
can’t do that because you have to, refer to the doctor for it, and so I refused the sale- but I thought ‘Oh well I don’t know if I’m doing the right thing!’, because he was really sort of annoyed that I didn’t sell it to him....[...]...he was like ‘Oh another pharmacy sells it to me, why aren’t you doing it?’ And he was making me feel sort of incompetent, but I stuck to my guns, and then I asked the group later, and I said ‘What would you guys do?’ And they all said ‘Oh yeah we would refer, because it’s not in the licensing’. So then that made me feel better about what I did, and if it was to happen again, you know, I would stick to my guns again because I know it was the right thing.” Int1 R11

Sharing observations and experiences via the social media group, attending the workshop, discussions with the coach and discussions of weekly handbook, clinical or practice topics, all gave participants an increased sense of preparedness. Hence, even when NCPs had no prior personal experience of particular scenarios, shared discussions increased familiarity with the topics and novices felt better prepared to manage them. One participant recalled a social media group discussion about the drug methotrexate, which occurred the day before her first day of independent practice. When she was then presented with a prescription for methotrexate the following day (on her first day), she felt better prepared and was able to reflect and apply her knowledge to practice accordingly.

“When I first started, my first prescription was methotrexate, and we’d had this conversation the day before [on the WhatsApp® group] saying that ‘That’s like the worst thing to get is the methotrexate. You’re bound to get one.’ And it happened. And then instead of a one weekly dosage it was one daily...funny enough we had had this conversation the day before I started and then going into the pharmacy I had the same prescription and I was like, ‘Oh my God!’” Int1 R5

The feeling of preparedness was also increased because participants explored and shared experiences within a safe space in an informal, non-pressurised way. Back in their practice settings, NCPs could then use their own and others’ perspectives to construct new meaning, contextualise their learning and transfer it to practice.

“Yeah, I just think people speaking about things, and then other people would be like ‘Oh well this happened to me, and that happened to me’, and then it’s like ‘Oh well that happened to me too!’ So it just makes you think that you’re doing the right thing if somebody else had done the right thing as well. It just confirms that...what you’re doing in your practice is what somebody else would do, and then it kind of just makes you think ‘Oh well I’m probably doing the right thing then’, and then you kind of feel a bit more confident in what you’re doing.” Int1 R11
NCPs reported that when they felt more prepared to manage practice scenarios, they developed the skills to cope with job demands and the associated anxiety and stress they caused. Participants reported they could cope better with complex clinical problems, and that they felt less pressured to ‘always know the answer.’

“It has helped because being able to talk to the other pharmacists who are on and also I feel like there’s also a bit of moral support as well, because sometimes there’s like ‘Don’t let the patient make you feel like you don’t know anything just because you don’t know everything’….. just because you don’t know the answer to their question it doesn’t mean that you don’t know anything at all. So I think you have your little team rallying you on. I feel like it’s also given me the confidence to say to the patient ‘Come in and ask your question’…sometimes I just don’t know. And before I used to think that they would look at you like...but they’re just like, ‘Okay, if you don’t know, you don’t know!’’’ Int1 R10

Activities such as shared discussions, reflective logs and workshop tasks helped participants to develop the skills to prioritise/manage high workloads and provided tools to support delegation. Several participants also reported that they felt better able to cope with the mental and emotional demands of their role through gaining moral support from the group, but also crucially through sharing discussions with their peers about how they managed/could manage challenging workplace experiences. These included managing their expectations of the workplace, coping with difficult staff relationships and managing the consequences of making dispensing errors.

“I just found it really difficult to adapt to the line of work, the sector that I was in. And when it came to the reflective logs I was able to put my concerns down on paper, and then [the coach] would kind of go through it with you. And so I liked that, if I had a problem, or I had something that was worrying me, I could base my log on it, and it almost gave me a venting system.” Int1 R8

“But obviously as time goes along, maybe we’ve answered those questions as you’re going along, ... But it’s still nonetheless good to hear their experiences. Like someone got put into work and they had to literally check blister packs that were going out the same day and obviously they had said, ‘I’ll never work in that branch again’, so it’s something good to know as to what you’re expecting to work and what you have to do for the day.” Int1 R5

Coping skills for these challenging experiences were developed through not only sharing and discussing the problems, but also developing resilience, and learning to reflect on demanding events in a more productive and constructive way. The intervention helped participants build on these skills through reflective logs and development plans that were
discussed with the coach. As three participants reported, without having the intervention, they would still have eventually developed all the skills they aspired to; albeit in a longer, more challenging way.

Overall, participants generally experienced very similar challenges and support needs during the intervention. Contextual differences however meant they experienced them at different times and to different degrees, so the intensity of support did not show a significant reduction during the intervention period. The number of ad hoc coaching conversations reduced in weeks 13-17 of the intervention, which may suggest participants’ coping skills were improving. Of the eight additional ad hoc phone calls, only one occurred in the 13-17 week period.

5.8.2.2 Increase in self-reported confidence and self-efficacy
Increased confidence was the most commonly identified outcome of the second interviews; and it was regularly mentioned as the outcome of specific intervention components in the first interviews. Having guaranteed support from day one, group discussion, ongoing feedback and reassurance within a safe space, helped NCPs feel safe to acknowledge their limitations. By recognizing the limitations of their competence, and improved skills of self-evaluation and self-awareness, NCPs were conscious of growth in self-confidence and self-efficacy.

“….Just generally talking about different scenarios and things. I think when you talk about it, it’s easier to go through it in reality. So yeah, it definitely helped me out. I think I’ve been more confident quicker than I probably would have been without it” Int1 R11

“I can’t think of any [other] programme that treats newly-qualifieds differently…..they just chuck you in and expect you to be as good as a pharmacist that’s been qualified twenty years… It gave me that boost, because no-one’s got that autonomy straight away. It’s not about the clinical knowledge…it’s about how to handle awkward situations.” Int1 R4

Participants also reported that the support gained from the intervention reduced the uncertainty that came with being new and inexperienced, and stopped them frequently ‘second-guessing’ themselves. Participants therefore reported they developed a sense of being ‘safe’ in their practice, from shared experiences, which contributed to their confidence.

“I think it (the intervention) kind of just gave me that reassurance about what I’m [doing]…’cause there were a few times where I thought maybe I’d done
something wrong, but I think the whole kind of ‘ask and just make sure’ things within the group, ...made me a bit more confident in what I’m doing, just like keep making sure that what you did was fine.... I think that would have made me more confident in my way and the things I was doing, so if I hadn’t consulted anybody, maybe I might have been a bit more like nervous about what I’m doing, and whether I should keep doing it or not.” Int2 R6

“I think support on just small sort of queries on prescriptions which sometimes you have to... double think about, because you’re newly qualified, you’re just second guessing everything, so even little queries on CD requirements.... Yeah, just things like that [having support and reassurance] make your confidence grow a little bit.” Int1 R12

Demonstrating assertiveness and authority in the workplace was challenging for NCPs, especially when patients or staff challenged their decisions. At these times novices turned to the group for insight into managing difficult situations. Participating in the intervention however meant NCPs had awareness of tools (such as conflict management tools) and the backing (psychological support/encouragement) of the social media group.

“I think because sometimes you talk about things that you haven’t probably been through, and somebody else has, and then when it’s your time to sort of...to handle the situation that’s similar, you kind of have a backbone to stand on. You kind of know where to start with it, and...rather than if you hadn’t had any idea about it before, it kind of...you might crumble a little bit. So I think it was good to have sort of a leg to stand on” Int1 R11

“I think it [intervention] definitely helped because you knew that these are the kind of things [challenges associated with transition] that you should kind of expect and that if you did come across something unusual or you did have a certain situation when you didn’t know what to do, you knew that you could always refer, where there was something that was going to come up in the workshops for stuff like that where you know that it’ll be covered, so you weren’t worried about trying to find out what you should do and how you should do it. You knew that it has been covered or it will be covered or you can ask somebody else in the group and between the lot of us, somebody must have experienced it already or somebody must have seen that dose or that medicine or encountered that situation.” Int2 R8

Participants reporting an increased self-efficacy and sense of control in the workplace attributed this to increasing confidence and familiarity with practice, meaningful dialogue and psychological encouragement from the group. Control was also attributed to the social support gained from the intervention. Having this greater sense of job control was an
important element in their ability to tolerate or minimise the stress caused by the demands of their job and improved psychological well-being.

“Compared to where I was at the start, I definitely feel a difference, and I think obviously part of it is due to the programme, definitely. I can definitely feel a growth, and I feel that I can tackle things a lot better, and I just feel more in control of the shop, and in terms of management I feel a bit more in control, rather than before I was bit new to it all, and I didn’t really know what to do. But yeah, I feel a lot better now.” Int1 R11

Confidence in early practice was gained from support in the intervention, however in the second round of interviews, a few participants spoke about gaining confidence from supporting others within the group. The intervention therefore facilitated the ability to reassure others and the opportunity to provide positive feedback.

“I think it definitely gives you a boost of confidence and then if you’re able to help others, again that’s kind of another bit of a confidence boost in you can say that, ‘I can help this person, maybe I’m doing something right’, then they can help me and then I can take that in. So, it’s a good confidence boost there and as you put all your skills into use and then you’re also able to help mentor other people if they’re not as comfortable and confident as you, so. .....So, it’s nice to just being able to give someone some reassurance. So, you don’t always do that with everyone else, whereas when you’re in the group that’s your sole purpose, to help others and help yourself.” Int2 R4

An unexpected finding in the second round of interviews was that one participant reported decreases in self-reported confidence and job satisfaction. This also suggested, however that in developing overall confidence, incidents often occurred which forced NCPs to recognise their limitations. Coaching conversations proved valuable for NCPs on these occasions, as they were helpful for (re)building self-esteem and professional confidence.

“I think you sort of think your confidence is going to grow over the year, but actually I felt like...sometimes I felt like I was more confident at the start. It might have been false confidence. And then like as sort of the year was progressing I’d sort of have these like confidence knocks. I sort of maybe had seen it a bit more. Do you know what I mean?” Int2 R3

### 5.8.2.3 Increase in meaningful learning

Transition is a time of intense learning and the intervention provided opportunities to learn about new knowledge for clinical, practice issues, as well as develop professional attributes and skills. Participants reported finding the weekly (scenario) topics, work-related queries, reflective logs and the workshop highly beneficial for learning. Shared discussion was also
useful for learning and understanding how to use local and national resources, expectations of workloads/workplace settings/employers, delivering enhanced pharmacy services and registering for training or procedures [such as safeguarding training, self-assessment tax registration]. This varied and multi-faceted learning reflected how the intervention was able to respond to individual learning needs that were relevant to practice. As such, learning was guided but not dictated by the coach, and increasingly driven by participants.

“But I do listen and read what everyone else is saying. And that helps as well, even though you’re not asking the questions, you’re learning from other people, their questions and experiences, and how they deal with things.” Int1 R7

Participants learned both actively and passively from reading about the experiences of others and especially valued the relevance of this learning to their own practice. The perspectives of others provided access to new knowledge and ways of doing thing things, which triggered reflection and identification of unmet learning needs.

“I think it just helps you to realise where your weaknesses are and then... I need to identify them (weaknesses)... maybe you need a bit more time to complete them. But I think I’ve given myself like a month’s time in between my first development plan and my second one, so it’s just trying to get into that timeframe and actually use the slot and see if it’s actually achievable within that time or not.” Int1 R5

Participants reported that in the absence of formal learning structures, the development plans were beneficial for systematically planning specific and achievable learning needs. Furthermore, NCPs were motivated to fully engage with the learning and take greater ownership in their own professional development because development plans were later reviewed at deadlines agreed by the NCP and coach.

“Yes, I think it was good because although I probably would have done those things eventually, it kind of pushed me along to do it quicker and ’cause I’ve made a plan and I’ve got a date to do it by, it just pushed me to do it rather than just be lazy and do it later.” Int1 R11

It is important to acknowledge however, that a number of key features facilitated meaningful learning. First, the coach-facilitated social media group allowed NCPs to build the relationships and feel the sense of belonging needed for a good learning environment. Added to this, the intervention continuously provided opportunities for dialogue in a ‘safe’ pressure-free environment. Trust between participants and the coach and the continuous assurances by the coach to the group that ‘there is no such thing as a stupid question’
helped foster a safe and supportive learning environment. Feeling ‘safe’ to learn was crucial for participants because they didn’t want to appear too dependent on pharmacy colleagues, yet needed reassurance/guidance from an experienced pharmacist.

“If I had any sort of what I would think were quite stupid questions, or something that was something that pharmacists should know, and I thought that it might be easier to say it in something like this, because everyone knows that we’re all new, and you know, people might have similar sort of questions. So I thought it would be good to sort of get out there and ask anything I want, and without being, you know, judged, because we’re all in the same boat.” Int1 R11

Knowing they (participants) were all new to independent practice made the group a safer place for asking questions without fear of judgement. Participants also gained confidence from knowing they were able to contribute to each other’s learning.

“…..if someone has a problem with a prescription …we just all kind of get involved and give our opinions. I mean ultimately it’s still down to the responsible pharmacist but it’s just nice to know to what people will think of because…like you say, someone will say other resources are better from their experiences so it’s just… it’s nice to all come together and say, ‘Well actually you could have done this and it was part of this, but you did that’… but if you had that idea you could have done something else, so it just gives you a different insight over what actually people think”. Int1 R5

Participants reported that the social and collaborative learning environment enabled them to gain a better understanding of the decision-making or problem-solving process. The intervention gave NCPs access to a learning community and culture, where they could consider different approaches to problem-solving and improve their critical thinking skills. Developing these skills within the social, cultural and physical context of this intervention helped novices develop situation cognition, where they could bring together their revised knowledge (knowing how) and individually apply it to their practice (doing). Whilst it was clear to participants in the group that they were all responsible pharmacists in their own right and professionally accountable for decisions they made, consulting the social media group for advice was very valuable.

**5.8.2.4 Increased critical reflection skills**

All participants further pointed out that while completing reflective logs was not a new experience, one-to-one supported reflection with the coach made the exercise more valuable. Shared reflection during *ad hoc* coaching conversations usually occurred when individual novices reported challenging experiences or contacted the coach directly when
experiencing difficulties in the workplace. In addition planned review and feedback of personal development plans and reflective logs helped participants think critically about their practice.

“... one of them (reflective logs) I do remember. I was talking about assigning tasks to people, you know, delegating tasks to different members of the pharmacy. When I got the feedback from the coach, she did advise me to contact the pharmacy beforehand and introduce myself and find out about different staff members who would be working on the day, to find out what they can do to help me. That has helped as well. Once I know...what staff members are capable of doing for me, then I feel at ease and I know who to set tasks to. Otherwise, people don’t really come forward to help that often.” Int2 R7

“For example, I did one (reflective log) on...when I had like a really busy day, and had short staffing issues and things like that, and I was really quite, taken aback by it all, ’cause I’d never done it before. I’d never been to a busy shop and the short staffed [situation]. I was talking about what I did and what I could have done better, I think it made me realise, if I was to be put into that situation again I would do things better, and I would probably think about certain things more than I would have done, and not letting my emotions sort of...cloud my views on things, ’cause I was really quite...I don’t know, you know when things are so busy and you kind of want to do things, but there’s loads of other things to do, so it kind of made me prioritise things a bit better I think”. Int1 R11

These conversations used coaching questions to prompt NCPs to engage in deeper critical reflection. As they became increasingly conscious and self-aware, NCPs felt comfortable identifying and discussing their limitations, and willing to explore, consider and adapt alternative ideas. Participants also reported how these conversations gave them the skills to clarify or deconstruct development plans and help novices identify specific actions for how to achieve their plans.

“But the reflective logs, I think I prefer over the other one [development plans]. But then, the thing that I do like is, you make your point, and then you have a conversation with [the coach]. And then, having that discussion is quite nice. It helps to break down, and actually figure out what it is exactly. Because I tend to put points that are quite broad. So after discussing it, I can break it down to something more relevant. I thought it was quite helpful because it made me think about the things that I needed to improve, the areas I needed to improve my knowledge and how I was going to do that.” Int1 R7

5.8.3 Intervention components
In this next section, an overview of the intervention components is provided, highlighting additional strengths of components not reported in previous sections, and areas that could
be improved. Findings for each component are presented in turn, before some overall intervention perceptions are described.

5.8.3.1 Coach

The coach’s role was to support NCPs through facilitating the social media group and during (planned or unplanned/ad hoc) one-to-one discussions (via social media or telephone). One-to-one coaching conversations for reflective logs or development plans made participants feel supported, challenged and motivated.

“I probably wouldn’t have stuck at the job that I did if I hadn’t have spoken to [the coach] …. I think it was a reflective log when I made the error and it was all a bit too much for me to be honest. Having someone who’s more experienced on board, it does help to broaden your mind and I think we all come out a bit naïve, a bit immature in some ways and we do think we know it, but experience is priceless I think. I can’t believe how much I’ve learnt in this last year. I can’t believe how different I am.” Int2 R8

While knowing this participant (R8) had found the reflection useful, it was concerning that without the coaching conversations with an experienced pharmacist, the NCP felt ready to leave her job. When NCPs experienced difficulties or challenges at work, the coach offered psychosocial support, using her own experiences of practice to guide supported reflection.

“And then, being able to relate back with [the coach] and just discuss it and pull out all of the good points and the bad points, and I think when you make your first error you’re really, really hard on yourself, ‘cause you just can’t believe, I basically made an error …and I felt really incompetent, I [thought] ‘How can I check people’s medicines, how can I check that they’re safe, if I can’t even read a label?’ And I think just being able to speak to somebody about it, and obviously she’s been working for a long time, so she’s got much more experience in how to handle these things, even mentally, even emotionally, because it does really put you down. You think, ‘Is this job really for me? I’ve just practically killed someone!’ So, I think it’s good to be able to take out ten or fifteen minutes, and as cheesy as it sounds, just reflect on your day, so you can take out the good, you can take out the bad, what you need to change, and maybe where you want to go” Int1 R8

The coach was also valued as ‘external to organisation’ support because for participants, this represented neutrality and objectivity, facilitating open communication. Participants also described attributes of the coach they found most valuable in fostering good relationships; being approachable, attentive, non-judgemental, open, experienced, easy to communicate with and having a calming influence.
“So be there whenever I needed sort of a query answered, so not judgemental. If I was to ask something that I would think was silly, you know, just terribly enforce that it was okay to ask things like that. To answer queries in as much depth as they could, or if they had come across anything in their experience to sort of explain that as well. But yeah, she’s been amazing, I think she’s done all of that.”

Int1 R11

“So yeah, she was...she wasn’t judgemental, ...and I think she relayed that information that she was always learning as well, and she obviously didn’t know everything, and she has learnt things from the group as well. So I think it’s been good for everyone.” Int1 R12

The coach’s approach to facilitating (rather than leading the group’s responses to queries) stimulated discussion and regularly posted messages to the group assured participants of her (coach) presence. Participants valued how the coach focussed attention fully on them, and they were never made to feel rushed during conversations. While most participants felt they had enough one-to-one conversations with the coach, three participants reported wanting regular scheduled debriefs.

“I would have liked a bit more one to one time but that’s not to say that I would have wanted less group time. Well I think there was one time, she [the coach] ... called ...and we had a bit of a chat ... kind of, ‘Are you alright, let’s just have a chat’ because it wasn’t the best of days or best of weeks. That was actually quite nice just to be able to talk about it. [So if we could do that]...maybe just every week or every fortnight or so ...just where maybe you just spend five minutes talking on the phone and just saying ‘This went well, that went well, that was relatively straightforward’. And if...the week hasn’t gone smoothly then maybe take a bit longer to just talk about it and how you’re going to de-stress.” Int1 R10

Three entries from the coach’s log reporting the excessive length of some coaching conversations appear to also support the finding that some participants wanted more one-to-one conversations.

5.8.3.2 The peer group (social media group)

The social media group provided a responsive, accessible forum for support, communication and engaging in formative discussion. Section 5.8.1.3 described how it was perceived as safe and fostered a sense of belonging, making it a strength of the intervention. In addition, it encouraged NCPs to engage with each other and the coach, and had overwhelmingly positive social dynamics.

“The WhatsApp® Group [was the best part of the programme] because it was just available all the time. It was available when I was at work, and there’s other
people at work at the same time, and you know, everyone was sort of on it all the time, and that was the most helpful because I knew I would get an answer, you know, I didn’t have to wait a long time, even if it was, you know, a minute or an hour, I knew I would get an answer. That was the most helpful part.” Int1 R11

“The dynamic on the group has been really nice as well. Because everyone’s been dead friendly and even though I might not be the most talkative...it’s not like you’ve not gelled with everyone, and you feel awkward in speaking to everyone, ‘cause you’ve got really bubbly personalities in the group as well.” Int1 R8

Guidelines and ground rules for the group were viewed by the group as helpful for ensuring the WhatsApp® group maintained its focus/purpose of transition support.

“... we had guidelines so you couldn’t just get up and post anything on there... so we were sort of guided and restricted in terms of how we were going to post and everything, and you knew how to answer because we could use all those emoji’s, like the ambulance light one if it’s an emergency; you know how you are going to post it, and the emoji to add so that people get back to you as quickly...” Int2 R2

Though social dynamics were good, the level of engagement varied considerably between participants, and was noted in the coach diary as a point of concern. One participant who voiced concern attributed this to the formation of ‘sub-groups’ based on former relationships.

“I think because some of the people knew each other. I think that shouldn’t happen, because then, they just formed their own sub-group, and it’s about them being a part of this group. Yeah, which I do agree, but it’s just a certain number of people. And they’re the ones that are not commenting in the group as much.” Int1 R7

An incident noted in the coach reflective diary described an occasion when tension developed within the group. A post by one participant about a difficult customer interaction (and the ensuing dissatisfaction/frustration about being a pharmacist) triggered a response from another pharmacist stating that negative posts were affecting group morale. Tensions were readily dissipated when the coach placed a message acknowledging the importance of discussing difficult/stressful events, but also the importance of using remedial strategies to manage stress. In this case, the coach asked every participant to post a ‘feel-good’ moment in the week, which participants engaged with well. Though it did not occur again, the incident highlighted to the coach, that there may be an increased need for one-to-one debriefing, and strategies to manage work-related stress. This record was made in the coach reflective diary.
Personal or off-topic messages were occasionally placed on the group. Despite this, analysis of the messages showed that about 3% (167) of the messages were related to personal rather than practice issues (these messages included pharmacy ‘memes’ and queries about self-assessment of tax). It was also noted however that due to the sheer volume of group communication, important messages/reminders/weekly posts from the coach to the group would ‘become lost’ within conversations. Analysis of the social media messages indeed showed high volumes of messages (peaking in Week 5 when 1105 messages were posted), with daily totals ranging from 7 to 539 messages.

“It was just because there were so many messages it’s hard to catch up, hard to keep up with everything at the same time. And sometimes people would go off on a bit of a tangent” Int1 R6

5.8.3.3 Workshop
In the 4-hour face-to-face workshop, groups of two or three participants completed eight (practice and clinical) exercises, which were then discussed by the whole group. Exercises aimed to develop time-management, delegation, and conflict resolution skills. In addition, the workshop contained problem-solving skills, such as prioritising a busy workload and resolving a controlled drugs discrepancy.

“Yes, definitely [the workshop was useful], because we were given some resources and paperwork as well that would help us in our practice. For example, like we were given the, you know, the CD discrepancies sort of questions that we should go through to find out, you know, where the discrepancy lies. That was quite good. I’ve used that a couple of times.” Int1 R11

Participants also felt the exercises were very relevant to their practice and for some participants, this addressed skills they lacked. An added benefit therefore was being able to use those tools (such as a toolkit to resolve controlled drug discrepancies) in the supported learning setting of the workshop and then later apply them to practice.

“As I was saying to you that she [coach] did the methadone register and CDs and CD discrepancies. Because I didn’t really come across any discrepancies when I was doing my pre-reg, so she kind of went through how if you did identify something how you’d go about it and ... got us to work together as a group to figure something out. It wasn’t as easy as just oh yeah, as a group figure it out because people wouldn’t agree. So there were different opinions, different views that people had on how to approach things, which was interesting.” Int1 R8
In the workshop, face-to-face contact and group work increased group rapport and trust. In addition, it allowed participants to compare experiences and understand they shared common problems, which reduced professional isolation.

“Well we did scenarios during the workshop which were good. And it was good to see that, because there are challenges in community pharmacy, I thought that it might just have been the place I was working at, but once I went there, I realised that most of the community pharmacies are the same, and the pharmacist and the staff in pharmacies are all under a similar pressure, it was good to see that, because it gave me the reassurance that it’s not just where I was working.” Int1 R1

Since participants had different prior experiences (of training and education) the workshop introduced them to products, resources or pharmacy services (such as needle exchange or medication compliance systems) unfamiliar to some participants. The ‘hands-on’ approach of the workshop increased participants’ knowledge and sense of competence in those areas, and made it feel less like a didactic ‘teaching’ session.

“But the thing that I found most useful was towards the end of it [workshop] she [coach] had all of these different, I don’t know what you’d call them, for example if there was something about substance misuse, going back to that, then there was like a little fake version of the needle exchange pots you give to patients who are part of the needle exchange service, so you know how it works, you know all the different paraphernalia. There were sheets about insulin devices all that are compatible with different cartridges and all that kind of stuff. So that was really practical. I think all of those little components and being able to say, ‘If there was something about Canestest, the test that you do, if you’re not sure if a woman’s got thrush or bacterial vaginosis … this is how you’d use it’. So that was really practical because those are the kind of things where someone could come in and say, ‘Okay, how I use this?’ And if you don’t know how to use it then you feel a bit of a numpty….So that was really, really helpful.” Int1 R10

NCPs also received guidance and tools to help them recognise work-related stress and consider their work-life balance, which was particularly valuable for NCPs working in busy stores for the first time.

“There was a brain thing. It was a task, called, ‘What is on the Mind at Work’. So, you’ve got a [picture of a] brain, which is split into loads of little sections. And she [the coach] just made us think about what we think on a daily basis, and what’s on your mind, and just jot it down. So rather than over thinking things, you actually write down what’s on your mind, and then you can tackle it that way. That was quite handy, just to get it off your mind. So, I liked that.” Int1 R7
“Yeah, that [workshop] was helpful...at that point I was working quite a lot and we had a thing [exercise] of like ‘how do you manage work and manage your life?’ Because at that point a work/life balance didn’t exist. So it was [recognising] ‘Okay I do actually need to take time to do other stuff other than work’.” Int1 R10

Indeed, during the second round of interviews, participants continued to identify the workshop as a highlight of the intervention. Eleven of the twelve participants reported that one 4-hour workshop was too short, three suggested multiple workshops and one participant recommended holding a second workshop to end the intervention.

5.8.3.4 Reflective logs
Intervention participants completed reflective logs based on their personal experiences of practice and then received feedback from the coach during a telephone conversation. Reflective logs were considered a valuable component of the overall intervention, as described earlier in Section 5.8.2.4. Participants reported that reflective logs helped develop deeper self-awareness, prompted changes in practice and contributed to CPD. Though workplace demands limited time for reflection and completing the logs, all participants felt they were very useful. At least half of the participants reported the reflective log and development plan influenced or directly changed their practice.

“…. for me one of the problems I had was when I’m faced with a challenge or a problem, a response sort of comes right at me without me having to worry or think through, and then afterwards I tend to forget about what happened...I don’t have to really think through them or ask myself questions, because at that instant that was the right thing to do. But going through the reflective log made me sort of consider things differently in terms of why I did stuff and how I would change it in future” Int1 R2

5.8.3.5 IPDAPS
NCPs completed individualised personal development action plans (IPDAPs) to develop self-awareness skills and improve self-directed learning. Many benefits were reported by participants about the development plans among them, their individualised nature, their relevance to CPD and relevance to practice.

“So, those developmental plans were good for me to put down, set myself a target and how I was going to achieve that target, as opposed to just thinking, ’Do you know what, when I get to that branch, I will wing it and I will see how I get on?’ Which obviously isn’t very safe and it’s not best practice at all. ... It sets you good targets, where you think, ‘Okay, have I done that to achieve what I wanted to do? No, I haven’t. So, maybe now I should try that avenue.’ Or, ‘I tried point number
two and it didn’t work, so I’ll move onto that one.’ So, it gives you a plan, like a
tick list of how you’re going to achieve something” Int1 R8

Development plans helped participants systematically implement and structure their own
learning. Moreover, plans developed through coaching made participants feel accountable
to themselves and the coach for their learning. When participants did not submit plans or
logs on time, the coach noted (in the coach diary) that some participants were apologetic.
The coach used these occasions to stress the fact that plans were not designed to be
compulsory, but to support the NCP in their personal and professional development, by
challenging and motivating the NCPs to achieve agreed targets.

“Yes, and also I think it helped me to make a plan as to how I was going to meet
those needs because I felt sometimes it’s easier just to say, ‘Okay, I’m just going to
read about this area’. But also the smart thing as well it has to be specific, it has
to be achievable because otherwise I think I’d be setting myself a goal that just
wasn’t achievable and then I’d have felt like, ‘Oh my gosh, I can’t even do this!’”
Int1 R10

Though IPDAPs were perceived as beneficial, time constraints were reported as the biggest
barrier to completing them.

5.8.3.6 Weekly topics
Each week on Monday and Wednesday, the coach posted scenarios relating to clinical,
practice and handbook topics onto the social media group. The weekly topics were
generally regarded by participants as useful and helpful for preparing participants for
practice.

“I did read them, I didn’t always get through them, but I always tried to read
everybody else’s responses, because even if I hadn’t covered something, I know
obviously somebody else would have done, and I’d get some feedback on it. …. But they were helpful, because it’s almost like we hit every aspect and it was good
to have, I think, all I keep referring to in this programme was, everything gave me
focus. It’s like, if somebody is forcing you, almost, to do something in a set time,
like it’s not just something that, oh I’ll get around to it. ….. But, it was nice to learn
set things every week. And because other people may have shared their
experiences about that clinical aspect, it might not have been something that I
always run into.” Int1 R8

The regularity of the topics provided structure and prompted discourse, which may have
been useful particularly since participants lacked other support structures. Crucially, they
gave participants an assurance of the coach’s continuing presence and commitment.
Participants did report however that while content was useful, the delivery of weekly topics
could be improved. NCPs struggled to keep up with topics because they sometimes got lost in the volume of messages (queries, comments and communications). In addition around half of participants struggled to find time to do the scenarios.

“...the only thing that I found about it was that she tended to...I think every week we had a topic that we’d go over and she’ll put it in the WhatsApp® group which is fine, it’s just that sometimes she’ll put that message in and then you get about 100 other messages afterwards because someone’s come up with a question. ....so that it (weekly topic) doesn’t end up getting swept up in a different discussion that we’re having, maybe have a time where we’re going to say, ‘Okay, in the evening we’re going to discuss this topic’. So that way it doesn’t end up getting side tracked.” Int1 R10

5.8.3.7 **Webinars**

Webinars using GoToMeeting® software were scheduled for group discussions of scenarios. The two webinars (scheduled after the face-to-face workshop) were generally perceived by participants as the least valuable component of the intervention. While the context was relevant (case-based scenarios completed in groups of 2-3), the technological issues negatively affected participants views.

“ Whereas when we were talking online people had voice problems, people had microphone problems, and some people couldn’t...you know, I think it was just the technology, you couldn’t hear everyone and not everyone was able to say a bit.” Int2 R9

In addition, participants seemed to engage less with the preparation work required for the webinar as an event and therefore felt they gained little from it. It is possible too, that the webinar format provided little benefit over discussing weekly scenarios more informally through the social media group.

“I can’t really pinpoint what’s not useful in it because we had scenarios that were very different to each other and it was going through how you would go about them, and I think if I read all the scenarios before I actually went into that webinar I think it would have been more beneficial.” Int1 R8

“Well, firstly, the software wasn’t great. And then, we were split into, like, two or threes, and we had to work through a module of the book, together, and write some key points, to put forward to the entire group. And the person who I was paired up with, I was trying to make an effort to discuss things, and discuss the points that we both came up with, because obviously, it's not an individualised task. And this person didn't have time, so we didn't really do much together.” Int1 R7
5.8.3.8 **The handbook**
A hardcopy handbook containing 5 modules (providing an overview of challenges faced by NCPS, developmental tools, reflective prompts, a Day One checklist and blank templates) was posted to all participants. Like the webinar, the handbook was perceived as one of the less useful components. Some participants preferred the paper copies, however four participants would also have liked to receive an electronic version. Time pressures also prevented participants from using the handbook, so it was mostly read when first received or if prompted by a weekly module handbook post.

“...it's not just the handbook wasn’t useful it’s just...well for me personally if you’re really, really busy you don’t really have either the time or the energy to sit down and go through the handbook. What I think with this if I were to say how she should do it next I’d say maybe instead of...every so many pages has a module where you’re focusing on one aspect or another and you’re meant to go over that I think every week or something. I think it would have been better or maybe instead of that maybe having a short PowerPoint or something like that and where it details, okay, this is the topic for this week rather than just having it all in the handbook. And plus sometimes if you want to write a lot of stuff there isn’t that much space in it. That’s the other thing that I would have changed about it.”

Int1 R10

Participants found the handbook useful when writing reflective logs or development plans because it prompted general self-reflection about learning needs or performance.

“I think it (the handbook) made me feel like actually I’m not that bad a pharmacist because while we were going through the handbook we were going over just some scenarios and situations and what would you do in this situation, what would you do in that situation? And it made me think that actually in that situation .... it’s not so much about what this person would do, it made me think about what I was doing.”

Int1 R10

5.8.3.9 **Recommendations from the group**
Suggestion for improvements focussed on changes to the timing or delivery of intervention components, such as when to submit development plans. This appeared to vary amongst individual participants and was attributed to personal preference, suggesting that a flexible approach to developmental tasks may be preferred by participants. Findings from the second round of interviews then suggested that without regular coach posts, participants felt less comfortable seeking help, and were less likely to place posts on the social media group. This emphasized the coach’s central role in maintaining the group momentum and fostering the environment of a safe learning space. When the regular posts from the coach stopped, participants felt she was not present or available for support.
“So, you’ve kind of lost that insurance policy that everyone really liked and you’re not always sure that…see, I did post on there today, I’m not sure that no one’s going to really reply on it, or not as many people would read it and see it because it’s a group that’s kind of died down now. Whereas previously if you had a message on there that’s the first…probably the first thing that someone would open up from every other conversation in the WhatsApp® and they’d probably respond. Whereas now I don’t think that’s going to be the same with it unless it’s resurrected.” Int2 R4

“…like I was saying before, I was reluctant to post on the group, because I wasn’t…you know, I didn’t really want to…probably didn’t want to disturb people too much, because the programme ended like six months ago.” Int2 R1

Some participants further identified that they would benefit from receiving increased support (via the intervention) to develop affective or interpersonal skills. This was particularly true once they had experienced the challenge of managing relationships at work.

“So, you’ve got the….. dispensary most of the time it’s…not to sound mean or anything, but it’s like middle-aged women that are in there and you come in as a fresh-faced young lad or a young woman it can have quite an opposite effect …..and then you’ve got [to have] soft skills like leadership, assertiveness, teamwork, different ways you can communicate, the way you can use other people’s leadership skills to your benefit. …because at university it’s always [about] communicating with patients and your actual clinical skills but I think those soft skills are not that focussed on, [the] fact that you’ve got a team of four or five different individuals…. I think that gets overlooked.” Int2 R4

Finally, four of the twelve participants felt the intervention should have lasted longer. Of the remaining eight, six of them felt that because the social media group continued, the length of the structured intervention felt appropriate. In addition, three participants reported they would have liked more than one face-to-face meeting as a way to end the course and reflect on the year.

“I would probably say extend it another few months and then at the end have another meeting in Manchester where you all meet face-to-face, on a weekend or Saturday or Sunday; again as like a sort of summary of everything that’s happened and what we’ve learned, and sort of like a conclusion really, a face-to-face conclusion I would say. I remember things that happened during the first meeting; I think the second meeting you’d also learn more; and also talking face-to-face more people can give their input and so you get more perspectives on what we learned.” Int2 R9
“.... we only had one face-to-face meeting. We had a few conversations with the coach but I just thought it was really short, the course. It was good. I thought it’d last longer because I thought it was...it was actually serving its purpose. Probably until about June-ish I’d say is a minimum I’d expect and a few more meetings in the pipeline.” Int2 R4

Analysis of group activity however, supports the notion that novices in general did need a form of continuing support. In week 15 for example, 685 messages were posted to the social media group, which is similar to the volume seen in early (week 2) and midway (week 9) through the intervention.
5.6 Discussion

Overall, the intervention was observed to be feasible in easing the transitions of NCPs to independent practitioners, a finding consistent with similar interventions in nursing and medicine. A number of key strengths and outcomes were identified, all of which contributed to the growth and professional development of NCPs.

Key findings from this study indicate that participants placed greatest value in a number of key functions of the intervention: discourse, reflection, structure, knowing that support was available and the ‘support focussed’ approach. In addition to these important functions, the key outcomes of the intervention were perceived by novices as increased confidence (which were linked to increases in autonomy, assertiveness, and self-efficacy), increased sense of preparedness and coping, increased reflective and self-awareness skills, increased sense of belonging and reduction in stress.

Participants reported that they gained much benefit from discourse with peers and the coach during the intervention. First, the social media platform through which peer discussion were shared, was accessible, responsive and considered a ‘safe’ place for discourse. In addition, one-to-one coaching conversations allowed more personal discussions to occur between novices and the coach and offered a form of debriefing. Structured debriefing was used in the intervention to facilitate reflection on development plans for novices. Overall, the effect of this level of regular discourse was that novices gained an increased awareness of themselves and each other and gained new knowledge.

By adding a social element to the learning of NCPs, NCPs engaged in mutually beneficial learning experiences where they gained from having multiple perspectives to draw on. Novices consequently reported how they implemented and modelled examples of good practice and felt motivated to learn, which is consistent with Bandura’s social learning theory.

A reported increase in meaningful reflection was reported by novices who received the intervention. Structured reflection through reflective logs and development plans facilitated personal growth and development in areas where NCPs identified deficits. When used in combination with development plans, novices were able to clearly ‘map’ their developmental journey and see how their opinions, views and (subsequent) practice changed. In addition to the structured reflection with the coach, novices also benefitted from sharing informal and ad hoc reflections on theirs’ and others’ experiences, through the social media group. Educational and professional development research reports that
novice practitioners commonly lack the time/skills for meaningful reflection. The combined approach to reflection used in the intervention suggests that participants in this research study overcame these obstacles and reflected regularly on practice. Findings from the study further suggest novices were able to both reflect-in-action (during collaborative discourse) and reflect-on-action (post discourse) which led to some participants reporting changes to their practice.268,269

Knowing that support was available influenced novices’ attitudes to how they dealt with challenges in the workplace and the type of coping skills that they used. The ‘live/responsive’ and accessible nature of the social media group was instrumental in instilling and fulfilling this sense of ‘guaranteed support’. In addition to that, regular posts by the coach provided novices a level of assurance or reminder that someone was indeed available and accessible for support. Crucially, the social media group provided a ‘safe confidential space’, where novices could learn. This study’s findings showed that social media may be used to effectively reduce professional isolation and the lack of peer support which are so prevalent in community pharmacy.224,235

While novices were aware that learning was an important aspect of transition and they expected to learn as part of the intervention, they valued the support focus of the intervention. This suggests that currently, no interventions exist which focus on supporting novices to manage stressful transitions. Instead, current interventions appear to focus on the educational needs of NCPs, and not acknowledge their psychosocial needs. It also suggests that a general lack of understanding about the needs of novice practitioners exists within the profession. Current interventions like so many in nursing therefore should consider the psychosocial and affective needs of NCPs, not just their educational ones.270

Novices reported that with each episode or cycle of learning (through reflection, discourse and reconstruction), changes occurred in their perceptions, which then translated to behavioural change in novices.239 This type of learning, commonly referred to as transformative learning may have changed novices’ attitudes, views and behaviours.271

Generally, all intervention components were acceptable however, the social media group was perceived as the most valuable intervention component. This was because it offered participants: a safe, ‘live’, facilitated and accessible space for support for psychosocial and developmental support. Components such as the webinars and the handbook were perceived as least valuable. Though findings suggested that the 17-week intervention
period was sufficient, consideration should be given to continuing support for NCPs beyond this.

In summary, interventions to ease transition for NCPs should incorporate activities that encourage developmental discourse and provide supported reflection in a structured way. The draft intervention offered this through components such as a face-to-face workshop, practice/clinical scenarios, an experienced pharmacist coach, development plans, reflective logs and most of all, a facilitated social media group. Singly and together, the components and the way in which they were delivered seemed to ease transition for all novices. This is consistent with the view that multiple-component TSIs may be more effective in easing transition. Findings from this feasibility study should be used to inform professional development policy and practice for novice and early career pharmacists.

5.7 Chapter summary
This chapter aimed to report findings from a study to explore the intervention’s feasibility, processes, acceptability, and perceived impact. Overall, findings suggest the intervention was feasible and highly acceptable to participants. Importantly, findings indicate the intervention performed a number of key functions which contributed to its success: it prompted and facilitated discourse and reflection, and provided NCPs with a structured support network. The key outcomes were perceived improvements in confidence, meaningful reflection and problem-solving. The most valuable components were reported as the social media group and coach, which were regarded as crucial in facilitating formative discourse and meaningful reflection. Study findings have also identified areas for improvement in the intervention, which will inform intervention development prior to large scale testing. A number of questions have also been raised by this feasibility study, which could be addressed through conducting future research. The findings and implications of the feasibility study need discussion in the context of the overall programme of work for this research study. This wider discussion is reported in the next and final chapter of this thesis.
6. Chapter 6. Discussion

6.1 Introduction
This research study’s overall aim was to explore the challenges faced by NCPs during transition to practice and to develop an intervention to address these challenges. To address these aims, MRC guidance on developing complex interventions was applied to the overall programme of work. As explained in Table 1.1 in chapter 1, the programme of work was conducted over four phases and included two empirical studies.

To begin, the literature review phase (phase 1, reported in chapter 2) identified a theoretical evidence base for transition challenges. Next, the nominal group study (phase 2, reported in chapter 3) generated qualitative empirical evidence of the challenges faced by NCPs during transition to practice, and quantitative data ranking those challenges. From these two phases, enough evidence had been generated to proceed with intervention design in phase 3. The activities contributing to the intervention design phase (phase 3) were then fully described in chapter 4, and a draft intervention was produced for feasibility testing. Finally, a feasibility study (phase 4) was completed to explore the feasibility, acceptability and perceived impact of the draft intervention. Findings from this study were reported in the previous chapter (chapter 5) and will be discussed further in the current chapter.

This chapter aims to discuss and triangulate the key findings from both studies with reference to current literature. It begins by providing a summary of key findings from each study. A discussion then follows to consider the problems faced by NCPs during transition to practice, the intervention proposed in this thesis to address those problems and consideration of how the intervention works to ease the transitions of NCPS. The research study’s strengths and limitations are considered next. This is followed by suggestions for future research, before the chapter concludes with recommendations for pharmacy education, practice, and policy.

6.2 Key findings from this research

Studies one and two
6.2.1 Study one: Exploring transition to identify the challenges faced by novice community pharmacists and the coping strategies used during transition to independent practitioner: a nominal group study

The main finding from the nominal group study was that NCPs experienced stressful transitions. The stress was caused by challenges from two sources: the nature of transition conditions and the novices’ response to that transition. A total of nine challenges emerged thematically from qualitative findings. The challenge ranked overall as most important by NCPs, early career pharmacists, pre-registration tutors and pharmacy colleagues was managing relationships. This was followed by (in order of importance) lacking confidence, decision-making in isolation, being in charge and accountable and adapting to the workplace. This list of the top five challenges suggested behavioural challenges were perceived as most problematic for NCPs during transition. Other challenges were related to processes or systems in the workplace. By contrast, the remaining four challenges reported by participants were (in no particular order) a lack of support in the workplace from peers or others, delivering pharmacy services, customer service/patient care and managing workload pressure.

A number of conditions or characteristics during transition limited NCPs’ ability to influence their colleagues and work environment. A significant feature of NCPs’ transitions was the full and immediate acquisition of professional accountability. In addition to this level of responsibility, novices were also expected to be in charge of the pharmacy and expected to lead experienced pharmacy colleagues. This phenomenon referred to as ‘inverse hierarchy’ in chapter 3 further contributed to tensions because NCPs lacked the experience and affective/interpersonal skills needed to appropriately lead established teams. Crucially, the lack of affective/interpersonal skills and the lack of leadership or managerial skills meant that novices failed to manage the nuances of power relationships with pharmacy colleagues. Further exploration of the challenges perceived as most important identified a pharmacist-pharmacy colleague ‘tension or divide’, which contributed to the difficulties NCPS faced in managing relationships. This tension was due in part to a mismatch in perceptions and differences in priorities, roles and responsibilities between NCPs and their colleagues. Often, the novices’ low confidence and lack of practice experience was apparent to colleagues. It limited the extent of their autonomy and reduced the ability of the novice to fit in and adapt to the workplace.
Given the lack of influence novices had in their workplaces, support from pharmacy colleagues was variable. Novices also reported frequently that they lacked the support of senior managerial pharmacists and managers, because they were unavailable. While not receiving support from these parties was detrimental to novices, it was the lack of peer support that novices found most problematic. The nature of the community pharmacy setting meant that most novices worked in isolation from peers. This lack of accessible peer support hindered the professional development of novices at a time when learning and development were intense and necessary. Because they were professionally isolated, the burden of decision-making, problem solving and making professional judgements increased for NCPs. This was worsened by the fact that novices had low confidence, feared making errors/causing patient harm and were newly-accountable practitioners.

It was therefore unsurprising that stress and anxiety were ongoing features of transition for NCPs. They struggled to fit in and adapt to teams, navigate workplace culture and manage the expectations of their colleagues. NCPs were further worried by their reduced abilities to complete workloads, meet targets, deliver the expected quality of patient care, learn/reflect with their peers, and receive formative feedback. Transition conditions provided little scope for regular, accessible interpersonal peer support. Instead findings showed that in the absence of continuing accessible peer support, NCPs actually reported using a number of dysfunctional coping strategies. Overall, the challenges had a negative impact on the wellbeing of novices and the psychosocial stress they experienced during transitions was identified as causing job strain.272

6.2.2 Study two: Feasibility study – evaluation of a group coaching intervention to ease the transitions of novice community pharmacists

The key findings of this study were that a group coaching intervention for NCPs (participants) was acceptable, and feasible to implement and deliver to NCPs. Findings for feasibility showed that recruitment targets were reached, a high variability (wide background) sample was achieved and no attrition occurred. All intervention components were implemented as designed, however the timing of intervention processes was delayed by various logistical factors. Participant acceptability and engagement were both high but key areas for further investigation include the optimal participant size, the optimal intervention length, and the modification of handbook/webinar components.
Furthermore, findings suggest the intervention eased NCPs’ transition to independent practitioners. A social media group for the intervention was viewed as the most valuable component because it provided NCPs an accessible and responsive source of peer support. This component was closely followed in value by the experienced pharmacist coach. Findings suggest the combination of a social media group facilitated by an experienced pharmacist coach effectively provided a safe, professional environment conducive to learning. While the handbook content was viewed as beneficial, participants felt that as a tool, it could have been better utilised within the intervention. The component of the intervention reported as least valuable were the webinars. This was attributed to technical difficulties which interrupted continuity and the sense that rapport was difficult to develop via a webinar.

Three key strengths of the intervention were identified: the value of a support (rather than ‘teaching’ or education) – focussed intervention, being able to have discussions and ‘knowing that someone was there’. Four key intervention outcomes were identified in analysis: the intervention increased participants’ sense of preparedness and ability to cope, it increased participants’ self-reported confidence and self-efficacy, it increased learning and reflection and finally, participants felt part of a support network.

Findings also reported the contributions made by individual intervention components to perceived outcomes. Described by one participant as the ‘glue’ of the intervention, the social media group contributed most to the intervention’s success because of the way it was constructed. First, the ready accessibility of the platform made it a preferred source of support. The visible and ongoing presence of the coach in the social media group (through regular messages/posts) provided NCPs with a sense of reassurance, and they knew ‘someone was always there’. In addition the ground rules made the group a ‘safe’, ‘live’ space for NCPs to confidentially give/receive reassurance/feedback, share experiences, and discuss practice. Overall, the group gave participants a ‘sense of belonging’ and a network they engaged with highly.

The face-to-face workshop was designed to introduce participants to the coach and each other, as well as for development. Its main contribution however was to crucially enhance group rapport, social dynamics, and trust. Planned one-to-one coaching conversations (about development plans or reflective logs) or ad hoc conversations contributed most to helping NCPs develop meaningful reflection, increased self-awareness, and motivation to learn. It also supported and prompted participants to become increasingly independent.
and self-directed in their learning. Findings showed the coaching was much valued because of the coach’s attributes: accessible, approachable, non-judgemental, empathetic and acting independently of the NCPs employing organisation. This fostered trust and an effective coach-novice relationship.

The various components used in the intervention challenged NCPs to critically reflect on their views/perspectives. This critical reflection combined with social discourse prompted novices to explore new options and new ways of doing things. They supported and shared learning with each other, acquiring new knowledge in the process. This new learning could then be implemented, tried, or tested to construct a revised meaning of their views/perspectives. This was then used to guide future action with an increased degree of confidence. This process of critical reflection, social discourse and reconstruction of meaning is known as transformative learning. As the intervention continued, novices were able to progressively build on their understanding, attitudes, skills, knowledge and behaviours and then begin to take ownership of independent learning from the coach. This progressive move to independent learning describes Vygotsky’s theory of instructional scaffolding. In its entirety, the intervention functioned as a form of instructional scaffolding (the structural elements used to guide learners).

### 6.3 Reflexive statement on research strengths and limitations

Throughout the study, a reflective diary was maintained by the author. Diary entries were made periodically to inform the direction of the research and document outcomes from progression meetings, research decisions, and reflections on study processes. The diary was also used to reflect upon the influence of the author on the research process, by providing transparency about how the researcher’s prior assumptions and experiences might have influenced the research.

#### 6.3.1 Strengths

Several key strengths of this research study allow findings to be transferred to other settings with some caution. The first obvious strength is the study’s novelty. This research was the first study to conduct in depth exploration of the transition period of community pharmacists with a view to identifying challenges and prioritising the support needs of NCPs. In addition, findings from this research informed the iterative design of a novel, evidence-based peer support intervention to ease the transitions of NCPs. These findings were reviewed in the context of existing transition studies in nursing, medicine and other
healthcare professions to highlight similarities and differences, and propose reasons for them. Rigorous intervention design allowed the contributions of individual intervention components to be identified so that intervention mechanisms could be understood.

Current research proposes that many interventions that are designed fail because of the lack of pre-implementation work conducted in the development phase of the study. The MRC guidance on developing complex interventions used in this study, facilitates iterative intervention design based on theoretical and empirical evidence and is considered best practice. On the whole, the development of the intervention was a longitudinal process with a series of sequential steps. Each phase of the project (as depicted in chapter 1) was used to increase understanding of the research area and this then informed subsequent stages of intervention design.

A further strength of this research is that the approach to data collection allowed in depth exploration of transition experiences, challenges and the intervention. This facilitated exploration of mechanisms and relationships. Understanding the mechanisms through which processes occurred (i.e. what challenges NCPs were faced with, why and how they occurred) was crucial to ensuring whether an intervention designed to address these challenges would be successful and could be evaluated successfully. Though individual involvement with the phases/studies varied, there was strong commitment in the collection, analysis and interpretation of the data from the author’s supervisory team. The author met frequently with the supervisory team to discuss progress of the research study and reflect on data collection, analysis and reporting. The frequency of the meetings varied from once-weekly to once-monthly, and was determined by the needs of the research.

A number of strengths were attributed to the nominal group study. This method combined the advantages of group dynamics with individual viewpoints to elicit a level of consensus that directed intervention design. Though the researcher lacked experience in using nominal group technique (NGT), facilitation of discussions and analysis were supported by a supervisory team with considerable expertise in nominal group technique. The author and supervisory team therefore discussed how to manage future discussions and devised strategies to ensure the steps of the NGT process were adhered to. In addition, upon completion of each nominal group discussion the author wrote a reflective diary account to inform facilitation of the next discussion. Face validity was achieved in group discussions by checking agreement of emergent themes with study participants at the end of each group interview. Empirical data collection was supported by findings from the literature review.
and additional research activity that included documentary analysis, informal interviews with a GP mentor and nurse preceptors and a stakeholder meeting. This additional research activity and the use of group discussions facilitated data triangulation.⁵⁰

A significant strength of the nominal group discussions was that they sought the views of homogenous groups: novice pharmacists, early career pharmacists, pre-registration tutors, and pharmacy colleagues (non-pharmacist managers, dispensers, technicians, and accuracy checking technicians). Homogeneity in the groups may have promoted more candid discussion because shared experience and commonality are a form of ‘social glue’ that enhances group dynamics.¹³⁹ Homogeneity was therefore felt to help identify the pharmacist-dispenser ‘divide or tension’, which may not have been identified in heterogeneous discussions. The inclusion of non-pharmacist colleagues and pre-registration tutors in the nominal group discussions also allowed the researcher/author to gain relevant insight and perspectives of stakeholders who may influence the transition experiences of NCPs.²⁷⁴ Including a wide range of perspectives acknowledges the notion that the viewpoint of one group is not designed to represent the sole truth about any situation: this is described by Dingwall as ‘fair dealing’, and helps to reduce bias by ensuring contributions from all participants are given the same level of legitimacy.²⁷⁵

The feasibility study (reported in chapter 5) purposively recruited and achieved a highly variable sample from across England (nationwide) within the required timescale. No attrition was observed and all participants completed the intervention, demonstrating high acceptability. Though the author was a researcher-participant who delivered the intervention, efforts were made to minimise the influence of power relationships and resulting bias. An experienced qualitative researcher (JF) was recruited to conduct interviews and ensure transparency in the process, reducing bias, and increasing reliability in the findings.²⁵⁵ Data collection occurred at two points (during months 3-4 of the intervention and at 10-12 months from its start) which was close enough in time to the intervention to prevent recall bias.

### 6.3.2 Limitations

A number of limitations were identified in conducting this research study which must be acknowledged. First, participants from both studies were self-selected and recruited with the incentive of gift vouchers of (£20 each for group discussions, and £25 each per individual semi-structured interview). Receiving compensation for study participation may have coerced participants to join. Furthermore, a number of participants were previously
known to the author: this introduces a degree of self-selection bias and may influence the data collected, how it was analysed, and the transferability of findings. In addition, self-selected participants may represent zealous and eager members of the population of interest. It was possible too, that participants who knew the author may have felt obligated to participate in the study due to their prior relationships. Transferability is further limited by the small sample sizes for both studies, the geographical restrictions (recruitment was mainly from North West England) and the low number of male participants.

Limitations specific to the nominal group study were also identified through reflective notes. The researcher’s inexperience in using NGT led to inconsistencies in how nominal group discussions were facilitated (for example in early discussions, the round-robin phase of the NGT was too long because discussion began before the round robin was completed). Though five group discussions were held (four of them on University premises), the ideal group size of 5-6 participants also wasn’t consistently achieved, and group sizes ranged from 3-7 participants. This was attributed to low recruitment and addressed by the author’s decision to hold the final (and second pharmacy colleague NGD) in a hired venue that was local to participants and easier for them to travel to. Holding the discussion at a non-University venue that was familiar to participants represented a social setting for this discussion that was different to the others. This may have introduced a measure of control over the discussion process that other participants may not have felt during discussions held on University premises. Some participants in the nominal groups also knew each other through work (or in the case where two ECP participants were a married couple), which may have influenced discussions.

As a researcher-participant in the feasibility study, the author (who developed and delivered the intervention) also analysed evaluation data. This may have unduly influenced participant responses. Recruitment for the feasibility study may have been affected by the timing of the exam result releases for the annual GPhC registration examxxxiii. There is a gap of just two days (a weekend) between exam results being released and the first day of practice. As potential intervention participants do not yet know if they have passed the registration exam, recruitment only picks up after this weekend. Recruitment was also restricted in this particular year by a change in the format of the assessment exam, and

xxxiii Typically exam results are released at the end of July each year, one month after the assessment is taken
new work visa regulations, both of which led to larger than normal sitting for the autumn paper. Finally, a number of areas which may inform intervention development (such as cost-effectiveness), could not be explored as part of the feasibility study due to time and financial constraints.

6.4 Presentation of the discussion
The entire programme of work is now presented in three parts: the problems associated with transition (6.5, Section 1), addressing the challenging transitions of NCPs (6.6, Section 2), and exploring how the group coaching intervention addressed transition challenges (6.7 Section 3).

6.5 Section 1. The problems associated with transition
Following findings for the challenges that showed NCPs experience psychosocial stress, Karasek’s job strain theory, the Job-Demand-Control-Support (JDCS) model, proved valuable. This part of the discussion uses the JCDS model to describe how the challenges NCPs faced during transition, led to job strain. To begin, the JDCS model is explained, before the key findings for the nominal group study (phase 2 of this research study) are described in the context of job strain.

As reported in the literature review (chapter 2) of this thesis, little is known about the transition experiences of NCPs. Findings from the nominal group study suggested NCPs experienced challenges during the transition period which made them feel unsupported, isolated, disempowered, and stressed. Given that psychosocial stress was the key outcome of challenging transitions, Karasek’s job-demand-control-support (JDCS) model was considered most appropriate to discuss findings. This model considers the influences of the workplace environment in determining levels of occupational stress and job strain. Job strain is a state of physical and psychological stress that results when working within a level of control that is inadequate for/exceeded by the demands of the job. Two particular aspects of the workplace are explored: job demand and job control. Job demands describe the challenges in a job that induce stress (stressors). In the context of this research study, job demands for NCPs included being professionally accountable and decision-making. Job control describes the extent to which NCPs could control aspects of their work and has two elements; ‘skill discretion’ (whether there are opportunities to learn and develop or variety within the job role) and ‘decision authority’ (whether the novice can make decisions or influence their colleagues or company policy). In the context of this research, job control
refers to how much autonomy NCPs had, and how much they could influence the workplace.

The challenges (job demands) that novices experienced during transition can be mitigated by having job control (or decision authority) and social support. Figure 6.1 illustrates the Karasek model, describing the level of job strain by considering the levels of job demands, job control, and social support. Jobs may be classed as high strain (where job demands are high and job control is low), low strain (where job demands are low and job control is high), passive (where job demands are low and job control is low) or active (where job demands are high and job control is high). The level of social support a person receives in the workplace mitigates against the development of stress: hence higher support is associated with reduced psychosocial stress and lower job strain.

![Figure 6.1 The Job-Demand-Control-Support model (Karasek, Theorell & Johnson)](image)

A high strain job increases the risk of psychological strain, physical illness, and burnout, which are more likely to occur when a lack of social support also exists. A novice practitioner in a high strain job who is both professionally isolated and unsupported in the workplace by colleagues, is defined as experiencing ‘iso-strain’. The iso-strain condition is considered a ‘noxious’ working environment with the highest stressors and negative work outcomes. Findings from the study suggest that iso-strain conditions most accurately describes the level of job strain for NCPs, which is concerning. Novice practitioners’ levels
of job strain should ideally be described as active, where the level of challenge (job demand) is balanced by adequate and appropriate support. Under these conditions, novice practitioners receive enough challenge to promote eustress (positive, beneficial stress), learning and foster productivity.

6.5.1 Feeling unsupported
Both the nominal group and feasibility studies in this research support the notion that during the transition period NCPs felt unsupported. This resulted from the actions, inaction, or indeed the inability of pharmacy colleagues, non-pharmacist managers, or professional support services to appropriately meet their [NCPs] specific support needs. In addition to that lack of adequate and appropriate support mechanisms, peer support also appeared to be lacking. Lacking adequate and appropriate support hindered NCPs in doing their jobs (impaired capability and productivity), learning and developing.

6.5.1.1 Lacking support to do the job
The novices’ ability to manage workflow/workload has been reported in literature from nursing and medicine as an important determinant of the novices’ confidence, stress and how they are perceived by colleagues and peers. Findings from the nominal group study similarly suggested that NCPs felt pressured to meet expectations for performance and targets. NCPs in this research study reported they would have liked to have more pharmacy colleagues to support them as they became accustomed to systems, developed routines, and gained confidence. In the nominal group study for example, participants reported working late nights without the support of pharmacy colleagues or appropriately-trained staff. Both locum and employee participants in the feasibility study reported similar experiences to the coach. Novices in nursing and medicine also report needing more staff on late-night shift working patterns. This was an issue touched on by study participants who had experience of working late nights in 100-hour pharmacies or at weekends, in both the nominal group and feasibility studies. Unlike studies in nursing and medicine, the nominal group study in particular showed that poor skill mix (of pharmacy colleagues) contributed to some of the workload pressure. Though much is known about the impact that improved skill mix in community pharmacy could have in alleviating workload pressures, study participants reported poor skill mix/staffing.

NCPs reported needing more time, training and on-the-job support to set up and deliver specific advanced/enhanced services for patients, particularly as they had no independent experience of delivering them. This is consistent with studies in nursing which report that
novices felt pressured to perform skilled tasks, whilst lacking experience of having previously completed them.\textsuperscript{108,110} Expectations to deliver/perform certain job-related tasks or skills resulted in novices reporting conducting services for patients even when they didn’t feel competent to do so. Unlike novice practitioners in the public sector, NCPs felt conflicted by commercial pressure to conduct and perform services, an aspect of role conflict that has not been reported by novice nurses and doctors. The expectation to provide services from commercial pressure and existing ‘target culture’ in community pharmacy contributed to tension between NCPs and non-pharmacist managers, exacerbating the notion of ‘feeling unsupported’.\textsuperscript{30,288}

\textbf{6.5.1.2 Lacking support to learn and develop}

The transition period symbolises a time of learning for novices; research in medicine has identified it as a ‘critical intensive learning period’ or CILP.\textsuperscript{85} Intensive learning requires novices to engage with the nuances of their particular workplace setting, understand workplace culture, and establish relationships that influence and support their learning.\textsuperscript{86}

Both the nominal group and feasibility studies suggest that even when NCPs identified learning opportunities barriers such as professional isolation, lacking awareness of learning resources and NCPs desire to meet expectations of competency, hindered learning. Where other professions have identified workload pressure as a barrier to learning, measures such as supernumerary time or shadowing have been introduced during transition.\textsuperscript{164} These measures acknowledge the novice’s learner status and promote a supportive learning environment.\textsuperscript{279} A supportive learning environment is one that supports shared learning to develop the required behaviours, attributes, and skills and is responsive to contextual demands.\textsuperscript{280} Since NCPs focussed on doing the job, potential opportunities for learning were missed and learning needs were identified only in response to immediate job demands. Nominal group discussions further identified that meaningful shared learning was hindered by the lack of access to peers. Since the TSIs reviewed in the intervention design phase of this research study identified that learning from peers eases the stress of transition, NCPs may receive little or no meaningful learning.

\textbf{6.5.1.3 Lacking support to develop professional identity}

Professional role identity refers to developing the attitudes, values, knowledge, beliefs, and skills common to a professional group.\textsuperscript{281} These attributes also determine how practitioners perceive themselves within the workplace and how this is communicated to others. While professional identity development begins during undergraduate education
and pre-registration training, novices are not able to fully encompass and enact the pharmacist role until they are registered as independent practitioners. NCPs experienced challenges such as role ambiguity, isolation from peers and power struggles with non-pharmacist managers which hindered professional identity development.

Ibarra (1999) proposed that professional identity development occurs through professional socialisation and observation of experienced peers. In the nominal group study however most NCPs reported that they rarely worked alongside experienced pharmacists and were typically ‘socialised’ into the workplace by non-pharmacist colleagues. One participant reported that though management had informed NCPs that they would be ‘eased’ into the role by working as a second pharmacist, in practice NCPs usually worked as sole practitioners. This sentiment was echoed by seven participants in the nominal group study and reiterated by most participants in the feasibility study.

Another way in which professional identity formation occurs is through having a shared sense of commonality. Participants in the nominal group study reported their efforts to interact with other novices; the interaction appeared to be driven by individual participants though and was unstructured and highly variable. Early career pharmacists and two NCPs in the nominal group study expressed that they never knew how other novices/pharmacists managed problems/challenges/queries commonly experienced in practice. Despite this, those participants felt they would have benefitted from discussing their experiences with other pharmacists. A lack of social support is known to contribute to workplace stress, job strain and the development of iso-strain. Not getting the support to learn, develop a sense of identity or to do their jobs was detrimental to NCPs’ well-being at work.

6.5.2 Feeling isolated
Professional isolation is defined as the ‘sense of isolation or estrangement’ from professional peers and has been associated with poor practice and low productivity. Though nurses or doctors are sometimes professionally isolated (most commonly by rural working), they are not expected to work as lone practitioners early in their careers. By contrast, the majority of pharmacists work as isolated practitioners because of the community pharmacy setting. During transition, participants in both nominal group and feasibility studies regularly worked without other pharmacists and as the most highly qualified professional in the team. They also held ultimate responsibility and accountability, which was especially problematic when they needed peer support or reassurance. Peer
support was needed when NCPs had to make complex professional judgements, and at these times, shared reflection would have proved valuable.

Findings from the nominal group study also indicated professional isolation prevented novices from receiving regular peer feedback on their practice which was perceived to negatively impact quality of care. When they received regular feedback from experienced peers, novices in nursing and medicine delivered improvements in quality and safety of patient care. Recommendations from the Francis and Berwick report therefore advocate regular clinical supervision for all practising doctors including junior doctors and all clinicians to reduce professional isolation.

Other research in medicine suggests there is an association between professionally isolated doctors and failing to share learning, job dissatisfaction, stress and burnout. A report issued by the Care Quality Commission (CQC) in 2015 identified that general practices rated as ‘inadequate’ and placed in special measures were most likely to have professionally isolated practitioners, posing a great risk to patient safety. Risk to patient safety was attributed to doctors lacking insight into their deficiencies because they were isolated from peers. Professional isolation has been identified as a contributor to stress that negatively influences pharmacist performance, which has implications for patient safety.

The National Clinical Assessment Service (NCAS), which manages performance concerns of doctors, dentists or pharmacists, has reported isolated working as a performance concern in doctors. NCAS therefore recommends that healthcare practitioners should engage regularly with peers, as part of remedial action.

A more recent study in community pharmacy exploring how early career pharmacists learned to develop safe practice, concluded that isolated and unsupported pharmacists were less aware of developmental needs and less inclined to seek support when needed. This is supported by findings from the nominal group study, which suggested that novices’ ability/wish to seek help appropriately, or recognise the limitations of their practice was impaired by professional isolation.

The nominal group and feasibility study findings also indicated that novices felt isolated and/or marginalised by particular conditions during transition: relational power, workplace conflict, unfamiliar workplace culture, the inverse hierarchy, the inability adapt or fit into the workplace. Marginalisation is a challenge reported by novice nurses, and was most often attributed to being the ‘new’ member of the team. NCPs, who are both the ‘new’
member and ‘in charge’ may potentially experience prolonged or increased marginalisation. In particular, NCPs lacked the skills required to manage inverse hierarchy and its relational power, which made exercising autonomy in the workplace a challenge. Without autonomous practice and the ability to influence others in their teams, NCPs struggled to be assertive and lacked decision authority. The sense of professional isolation they experienced was likely to be exacerbated by isolation and marginalisation from pharmacy colleagues. Feeling isolated from and marginalised by workplace colleagues has similarly been reported by other novice practitioners.290

6.5.3 Feeling disempowered

Feeling disempowered describes how novices felt when challenges or stressors in the workplace made them feel powerless, unheard, or lacking in authority. Feelings of disempowerment have been reported by junior doctors as a result of having to defer to more experienced peers that they disagreed with.154 Nurse disempowerment has also resulted from within their profession, through ‘horizontal bullying’ (described in chapter 2), and from outside their profession through traditional hospital hierarchy.291,292 Findings from this research study indicate that while NCPs [like other novice practitioners] felt disempowered in the workplace, this was commonly the consequence of inverse hierarchy, and not knowing how to appropriately respond to managing an experienced team.

Though new to the workplace and lacking in experience and confidence, NCPs had to lead established teams, placing them [the NCPs] in an inverse hierarchy. This appears to be a challenge unique to the context of NCPs, and not of other novice practitioners. NCPs lacked the skills and experience to show effective leadership, manage others, and be in charge. Unlike other professions though, NCPs reported having a disproportionate level of responsibility for workload management and accountability for everything happening in the pharmacy. Participants in the nominal group and feasibility studies reported occasions when NCPs felt coerced/manipulated by pharmacy colleagues to make decisions in a certain manner. While undue influence from senior colleagues has been briefly mentioned in medicine (junior doctors recalled experiences of feeling disempowered by experienced senior nurses) NCPs frequently experienced this influence from (non-pharmacist) pharmacy colleagues.154 As a consequence, NCPs encountered workplace conflict and power struggles with pharmacy colleagues that resulted in self-doubt, uncertainty, and a sense of powerlessness.
Studies in nursing have reported how a sense of disempowerment among nurses developed when they felt ‘unheard’ or ‘invisible’. When reported in the medical literature, feeling disempowered was attributed to hierarchical workplace culture. Findings from the nominal group study suggest that NCPs commonly felt ‘unheard’ by senior management and reported problematic communication with/access to management. Furthermore, the imposition of the ‘target culture’ on NCPs who are healthcare practitioners, led to role conflict and exacerbated powerlessness and frustration.

Feeling disempowered was further heightened during transition because many novices worked in changeable and dynamic workplace environments. Participants in the feasibility study specifically reported experiences of ‘not feeling in control’ in the workplace because of high workloads or unfamiliar job demands. Like novices nurses who have reported this challenge, NCPs also performed tasks that they did not feel competent to do and struggled to complete workloads, which made them feel pressured.

The disruptive/disorienting effects of shift working, variable workplace culture, rotations, complex patients, and unpredictable work patterns added to the sense that as novice practitioners, both doctors and nurses had limited control over their working lives. This research study also suggests that many NCPs (particularly those who worked as locum or relief pharmacists) had less stability in their workplaces and were increasingly likely to feel disempowered.

Finally, nursing and medical research has identified that a disparity exists between the ideal standards of practice that novices are taught and the realities of practice. One example reported in the nominal group study described performing services (such as MURs) to meet targets rather than benefit the patient. This led novices in both studies to report a sense of disillusionment and frustration with the reality of practice. Feeling disempowered reduced the ability of novices to make decisions about their jobs (decision latitude) and lessened the sense of job control they may have anticipated having as independent practitioners. Managing or responding appropriately to these feelings of disempowerment as a newly-registered professional, again was a skill that NCPs had yet to develop.

### 6.5.4 Feeling stressed

Transition-related stress has been reported to negatively influence nurse retention (with up to 60% of nurses reported to leave the profession within the first year of practice in some areas) and the quality of patient care during junior doctor transition (a reported annual
8% increase in hospital death rates, the ‘August’ effect). Whilst this research study did not aim to quantify the impact of transition challenges for NCPs, findings from the nominal group study suggest that the stress of transition caused low job satisfaction, influenced intent to leave the profession, impaired learning/development and impaired quality of patient care. The nominal group and feasibility studies also highlighted that the demands of the job and feeling unsupported, isolated and disempowered, caused NCPs to experience psychosocial stress or job strain. The implications of job strain for NCPs are discussed here.

There is some research in medicine which reports that job strain caused by poor shift patterns, negatively affects performance and professional development, leading to implications for practice, patient care and the welfare of doctors. Within both nursing and medicine, stress and job strain are associated with burnout and intention to leave the profession. Findings from this research study indicate that job strain, like workplace pressure may also be associated with the intention by NCPs to leave the profession.

Stress has been further explored by Seago et al. who concluded that the job strain experienced by nurses, could be mitigated through increased decision latitude (the ability to make decisions) in their work. Findings from the nominal group study suggested that low decision latitude led NCPs to use dysfunctional coping strategies, which negatively influenced their performance at work. This supports Wazqar’s study, which reported that job strain was significantly linked to coping strategies and negatively associated with work performance in nurses.

When professional isolation is a feature of a high strain job (such as late night shift work for nurses or doctors), iso-strain ensues, and leads to a higher incidence of burnout. Unlike novice nurses or doctors however, NCPs experience sustained and prolonged periods of iso-strain which has been associated with burnout, excessive turnover and poor quality care. Since iso-strain is considered a ‘noxious’ working environment (one with the highest stressors and negative work outcomes), interventions to ease transition should consider including measures that increase job control and decision authority and provide psychosocial support to mitigate job strain.

### 6.6 Section 2. Addressing the challenging transitions of novice community pharmacists

Now that the challenges are described in the context of job strain, the intervention and how its components aim to ease transition challenges and mitigate job strain, are
presented in this part of the discussion. As described in the previous section, the key challenges to address were that novices felt unsupported, isolated, stressed and disempowered during transition. Key findings from the nominal group and feasibility studies indicate that interventions to ease the transitions of NCPs should contain components that solely or in combination;

- provide affective, cognitive and behavioural support [psychosocial and developmental support] for novices in the workplace
- reduce professional isolation through regular meaningful contact with a network of professional peers
- include means/measures such as coaching to develop novices confidence and skills of autonomy, decision-making and self-efficacy
- focus on support for stress and wellbeing rather than just education to mitigate against the build-up/effects of stress: job strain

The intervention design phase described the development process for the intervention (the NCPPC programme), and in particular how evidence from nursing and medicine’s transitions (phase 1, the literature review) and community pharmacy transitions (phase 2, nominal group study) was used to inform the intervention content, structure, format and delivery. This section of the discussion chapter considers each individual intervention component and its function in the intervention. Components of the intervention will in turn be described to show how they addressed issues of lack of support, isolation, stress and disempowerment. In addition, the component is also considered in the context of the JDCS model that described the job strain (for example, the coach provides social support, which mitigates of job strain and iso-strain). In doing so the intervention aimed to ease transition and job strain, so that the conditions of transition for NCPs contained more elements of active jobs [as described by the JDCS model], rather than iso-strain conditions.

6.6.1 Support structures - Providing affective, cognitive and behavioural support for novices in the workplace through the intervention

During transition, NCPs lacked support to do their jobs, to learn and develop, and to develop professional identity. The intervention therefore included a number of support structures to prevent NCPs from feeling unsupported during transition; a pharmacist coach, access to other NCPs via a social media group and some developmental tools.
The primary role of the coach was to provide psychosocial, developmental, and learning support during the intervention. Coaching theory was considered more appropriate than mentoring or supervision, to provide this specific type of support relationship. With her years of practice experience, the coach represented a role model who was available and accessible to NCPs (via social media, email, and telephone contact) during working hours. Her primary role was to guide/reassure NCPs participating in the intervention and support their formal and informal learning. In addition the coach was responsible for facilitating group communication and creating conditions of a supportive learning environment that were conducive to shared learning.

The near-peer group of NCPs was the second source of structured, facilitated support. NCPs provided support to each other by sharing their experiences, taking part in group discussions and asking or answering questions. In addition, they had to complete group developmental tasks in a workshop, weekly topic discussion, or the webinars.

A social media group served as a communication platform for the intervention. Here, novices had a confidential, safe space where they could seek help or offer help to each other about challenges they faced during transition. In addition it was also a space used to reflect on and discuss developmental tasks (set through weekly topics). This space was facilitated by the coach and ground rules were used to keep interactions between intervention participants within agreed boundaries. The coach also used the social media group to point out and highlight opportunities for learning.

Support for learning and development was facilitated by the coach using group and individual developmental tasks (reflective logs and action plans) and by providing information through a handbook. After completing reflective logs and action plans NCPs also had one-to-one discussions with the coach and followed through on agreed action plans.

6.6.2 Professional isolation: Reducing professional isolation through regular meaningful contact with a network of professional peers through the intervention
During transition NCPs found the level of professional isolation challenging. To prevent NCPs from feeling isolated during transition, it was important that they felt secure in the knowledge that someone (either an experienced peer or another NCP) ‘was present/there’ to provide support and reassurance when needed. It was important that their source of
support was another pharmacist, who had first-hand experience/knowledge of their professional roles and responsibilities.

Furthermore, NCPs felt less isolated when they had somewhere they felt comfortable to share their concerns and seek help from peers in times of stress, conflict, or uncertainty. The main barrier to addressing the isolation experienced by NCPs was their lone practitioner status. The support tools of the social media group, coach, and near-peers described in the section above helped to prevent NCPs from feeling isolated.

6.6.3 Empowerment: Providing measures/means to develop novices’ confidence and skills of autonomy, decision-making and self-efficacy through the intervention

To feel empowered NCPs needed to experience challenges, interactions, and situations that helped develop/grow professional behaviours, in a supported way. In addition, NCPs needed to be exposed to tools/scenarios/experiences that helped them practise, discuss, and develop their affective, interpersonal, and cognitive skills.

Challenges experienced in the context of having adequate/appropriate support became opportunities that fostered the growth of professional behaviours. In particular, confidence–building activities to increase self-awareness, critical thinking, analytical thinking, knowledge acquisition, and application of that learning to their practice, all supported the development of competence, self-concept, and self-efficacy. This was achieved by putting into place tools such as reflective logs or development plans.

Having developmental support in place acknowledged the novice’s learner status, and helped manage feelings of uncertainty, self-doubt, and powerlessness. Support to manage emotions and develop affective or communication skills was particularly important for NCPs who commonly reported feeling disempowered through interactions with pharmacy colleagues or patients. Belonging to a learning community also provided a sense of encouragement and ‘back-up’ for NCPs, and crucially offered positive feedback by reinforcement/support of ideas or encouragement from group participants.

6.6.4 Stress: Incorporate support for stress reduction measures and wellbeing to support NCPs to mitigate the build-up/effects of stress

To reduce the potential for stress from NCPs’ experiences during transition, the social media group served a number of functions: a responsive support system/structure,
scaffolding, feedback, debriefing opportunities and professional socialisation with peers. In addition, it was important that NCPs developed affective skills to manage their response to challenges in the workplace. To provide these functions, situations that were perceived as stressful could be identified for discussion or for one-to-one debriefing with the coach. Debriefing provided an emotional outlet and an opportunity for meaningful reflection and tailored formative feedback. Crucially, it helped NCPs manage with stress experienced during transition, in a similar way to how performance-related feedback led to recovery from stress in junior doctors.

It is important to also acknowledge the finding that stress was associated with workload pressure, workplace culture and an unsupportive work environment. Given the professional isolation, variability in workplace cultures and geographical locations of intervention participants, the intervention focussed on the novice’s ability to manage stress, and the role of support from the intervention in mitigating that stress.

Interventions that succeed in facilitating these elements of support, lead to changes in the levels of job strain that novices experience. This appears to work by reducing the characteristics of the novices’ job that categorise it as iso-strain, and increasing those characteristics of the novice’s job that classify it as an active job. As mentioned previously, the active job classification of the JDCS model is considered to be ideal for novice practitioners. Study findings also suggest therefore that transition support interventions should have mechanisms which help transform the skills, attributes, and behaviours of NCPs. Through transformation, NCPs move from experiencing high strain or iso-strain towards active jobs. Achieving this requires that novices have the appropriate balance of support needed to manage the challenges, and that high levels of negative stress (distress) from challenges should be prevented. When the negative stress is replaced by eustress (good or beneficial stress) NCPs are motivated to learn, reflect, and develop desirable skills, behaviours, and attributes.

6.7 Section 3. How did the group coaching intervention address transition challenges?

Having discussed the transition challenges faced by NCPs and the intervention designed to ease transition; consideration is now given to how the intervention components worked. Since findings suggested some changes in participants’ beliefs, attitudes and behaviours Mezirow’s transformative learning theory, is the adult learning theory used to describe how this change occurred. Findings from the feasibility study indicated that the
intervention could feasibly be implemented and was acceptable to a group of twelve NCPs. It appears that it was primarily the support, reflection and discourse functions of the interventions which eased the transition challenges [unsupported, isolated, disempowered and stressed]. To understand how the intervention achieved this, adult learning theory will be used.

Adult learning theory, or andragogy, is regarded as distinct from pedagogy as it assumes a number of pre-existing characteristics. First, is the distinct notion that the best adult learning environments are collaborative, and use a problem-based approach to learning. In addition, it assumes that learning is self-directed and goal-orientated, is relevant to everyday practice and uses the learner’s prior knowledge and life experiences.

In considering how the intervention components worked to bring about the changes and perceptions reported by participants in this research study, a number of adult learning theories were considered. Conclusions drawn from the feasibility study (reported in the previous chapter) suggest that the functions of support, discourse and reflection were central to the intervention’s success. Given these findings, constructivist learning theories which propose that learning is an actively contextualised process of constructing (not acquiring) knowledge, were considered. Mezirow’s transformative learning theory was considered most appropriate to explain how the intervention worked.

To explain why transformative learning theory was considered most appropriate, it is important to understand how this theory works. Taylor and Hamdy, state that transformative learning theory ‘explores the way in which critical reflection can be used to challenge a learner’s beliefs and assumptions’. Essentially, transformative learning theory is an adult learning theory that changes a learner’s frame of reference (the existing beliefs/assumptions). These frames of reference contain cognitive (thought and mental processes), conative (attempted actions or impulses) and affective (relating to feelings and attitudes) elements. Therefore transformative learning occurs through changes in the learner’s cognitive, conative, and affective paradigms. The intervention in this research study did not aim to ease NCPs’ transition by changing their context or influencing their colleagues; rather it focussed on providing novice-centred support, so that NCPs could have their transitions eased, regardless of context. The fact that transformative learning theory also recognises social support as an important aspect of adult learning and continuing professional development added to its suitability. This novice-centred approach was therefore most suitably addressed through transformative learning theory.
Mezirow’s transformative learning theory proposes that in order for learning to occur through paradigm perspective changes, a 10 step process must occur. These steps are:

1. disorienting dilemmas
2. self-examination and reflection
3. sense of alienation
4. relating discontent to others (shared uncertainty)
5. exploring options for new behaviour (action planning)
6. acquiring new knowledge
7. formulating new meaning
8. experimenting with new roles
9. building confidence/competence
10. reintegration (with a reconstructed perspective)

The social learning environment is essential to facilitate critical reflection with transformative learning theory. Critical reflection should include reflection on content (exploring what the challenge is), process (exploring how the challenge happens) and premise (questioning beliefs about the challenge). A criticism of transformative learning theory is that while it contains many strengths, little information is available to support its implementation in practice because it is lacking in structure. Based on findings from the nominal group study, a coaching approach using the GROW model was determined to be the most appropriate way to operationalise transformative learning theory within the intervention. Transformative learning theory is widely recognised as a theory to inform coaching and consulting. The process of transformative learning through the intervention components and their collective functions [discourse, reflection and support] will now be discussed. Each of the functions will be linked to intervention components.

6.7.1 The transformative learning process in the context of the intervention

When NCPs encountered challenges from the conditions of transition or their response to it, they experienced disorienting dilemmas. Disorienting dilemmas usually occur when people experience an event that does not fit their expectations. For NCPs, this occurred when they noted dissonance between practice and theory, or when their lack of confidence or experience limited their capacity to manage a challenge. Examples in the nominal group and feasibility studies included instances of high workload and workplace conflict. Disorienting dilemmas were also made worse for NCPs by being a newly accountable
practitioner and led to self-examination. When that dilemma remained they felt a sense of alienation, which prompted them to seek support or coping strategies.

Discourse between novices and the coach was facilitated through intervention components such as the workshop, the social media group and offers of support. Discourse aimed to resolve queries, provide guidance, advice or reassurance, encourage reflection and learner-led problem-solving. Transformative learning theory emphasizes the importance of discourse in order to gain new knowledge and construct new meanings of beliefs. As well as gaining new knowledge, discourse allowed novices to challenge their affective beliefs and become more critical of their own judgements.

Social media has been used in organisational business/entrepreneurial coaching for participants who do not work/live in close proximity, but there are no studies which report its use in supporting novice healthcare practitioners. In this research social media proved a valuable strategy to overcome the barriers of professionally isolated and geographically-dispersed NCPs. Novice nurses and doctors by contrast transition into multi-disciplinary public sector settings, where professional isolation is rarely reported as a transition challenge. During the intervention, NCPs valued discussing their disorienting dilemmas with the peer group and coach because they knew that someone was always there on a ‘live’ social media group. When dilemmas such as difficult patient interactions or workplace conflict caused psychosocial stress, NCPs received affective support from the coach or group, which mitigated the impact of stress.

It also provided novices with new information, which could later be developed into new meanings. For transformative learning to occur however, transformative learning theory proposes that learners have the capacity to be critically self-reflective and exercise reflective judgement. Research by Austin et al. suggests novice pharmacists lack the skills to effectively self-assess therefore a crucial element of the intervention lay in developing those skills further. NCPs were able to gain multiple perspectives from peers about a dilemma shared within the confines of a trusted, confidential peer group. Through discourse with the group NCPs also came to realise any uncertainties they might have experienced from the challenges or dilemma were shared. This supports findings from nursing studies which state that shared ground/common experiences between novices facilitated learning relationships. Without this sense of shared uncertainty, NCPs voiced that they would have felt they were the only ones struggling with that issue. Completing reflective logs and then discussing them with the coach forced novices to make an affective
and cognitive connection with themselves, and move beyond their subconscious thinking. This allowed new beliefs formed through discourse and reflection to guide future thinking and actions. A strength of transformative learning theory is the use of the learner as a tool, and their ability to move beyond the disorientating dilemma, through reflection.

The responses that NCPs received to dilemmas, allowed them to self-examine their beliefs and critically reflect on what they were: at other times, NCPs engaged in deeper one-to-one shared reflection or debriefing with the coach. It was during these one-to-one conversations that participants seemed to develop greater self-awareness through being challenged in their thinking. This was particularly useful for novices because it prompted reflection on their personal beliefs, past experiences and prior knowledge. Crucially participants from the feasibility study reported that seeking other people’s opinions on their dilemmas, offered new perspectives, or ways of dealing with things. As growth and development during the intervention was not restricted to cognitive growth the changes observed in novices were also attributed to individual and personal learning.

Coaching questions, prompts for reflective logs and action planning for development plans were tools for NCPs to explore ideas for new ways of practising. Completing action plans provided NCPs an opportunity to experiment with new knowledge and build confidence in using it. By developing specific time-dependent action plans with the coach, novices found opportunities to test behaviours and build confidence. Given the constructive nature of transformative learning theory, this also presented an opportunity for meaning-making in novices, before new knowledge could be fully re-integrated into their perspectives/beliefs. By learning to adapt new knowledge and apply it to new or increasingly demanding situations, NCPs also learned how to manage the stress associated with challenging situations. Throughout this iterative cycle of transformative learning, novices gained in real-world experience, but were always able to refer back to their peers. By getting reassurance of reconstructed meaning, novices built confidence and further developed proficiency and competence.

Findings from the feasibility study suggest that transformative learning was the main way through which intervention components induced changes in the novices’ beliefs, attitudes, and behaviours. This process of reflection in group or one-to-one interactions was used to consider disorienting dilemmas. In addition to the support of the coach or peer group, the educational or developmental knowledge that NCPs became exposed to, included tools for autonomy, being in charge, delegating, managing relationships and workplace conflict or
workload pressure. Early in practice, participants reported changes in very specific behaviours; examples included improved accuracy in dispensing processes, increased confidence or increased assertiveness. During the second round of interviews further changes, such as reduced stress or professional identity development were reported.

Principles of transformative learning theory in the intervention eased transition for NCPs by providing support and reducing professional isolation. The support provided included psychosocial support which was perceived to reduce stress and support for learning which increased confidence, assertiveness, and self-awareness skills. This suggests therefore that the intervention may have reduced the characteristics of job strain and iso-strain.

Taylor suggests that transformative learning theory is an adult learning theory that involves the most significant learning in adulthood, because change comes through discourse and reflection. The person-centred approach advocated by transformative learning theory facilitates the learner taking progressive ownership of their learning. As learners’ levels of ownership increase, the coach simultaneously reduces the level of support learners need until they can take over all their own learning. This correlates with Vygotsky’s ‘zone of proximal development’ and the resulting theory of scaffolding, where support is reduced with increasing novice skill levels. Like many other novice practitioners, NCPs have reported lacking awareness of what they do not know. Given the association between professionally isolated practitioners, poor self-awareness and poor performance, interventions using transformative learning theory may play a crucial role in improving the quality of care NCPs give. This intervention provided interpersonal support to NCPs so they could develop increased affective, conative and cognitive self-awareness using discourse and reflection. These self-awareness skills are key to learner-driven professional development and have been linked with higher competency and safer practice.

6.8 Future research

Three main of areas have been identified for future research. They relate to prior education and training, the community pharmacy environment and the intervention.

The impact of prior education and training on transition experiences was not explored as part of this research. Given that the MPharm degree is designed to equip pharmacists to work independently in different sectors (community, hospital, industry and increasingly primary care), it is possible that all graduates across the sectors may not feel completely
prepared for practice. For example, there is some evidence to suggest that MPharm graduates with integrated or sandwich degrees are better prepared for OTC consultations than those with traditional degrees. Differences in MPharm degrees, including proportions of work-based training, sandwich or integrated format, curricular content and instructional methods, may all impact on the transition experiences of NCPs; so too, may the numerous documented problems relating to the quality and consistency of pre-registration training. A robust quality assurance system for pre-registration training is currently lacking, causing poor training practices from tutors, employers or other training providers to go unchallenged.

The impact of the NCPs’ employment status (employee or locum, store-based or relief pharmacist) was also not explored as part of this research. It is possible that employee pharmacists may have access to additional training or support networks from within their organisation. Though the study sample included both locum and employee NCPs, no differences was noted in the challenges they reported.

As findings from the research suggest the workplace environment was influential in easing the transitions of NCPs, future research should explore the influence of the private sector community pharmacy setting, on novice transition. A recent study on the development of professionalism during the pharmacy pre-registration year highlighted that the hospital sector offers a more supportive learning environment for novices. Research conducted in nursing has shown that the environment in the workplace, and how conducive it is to learning, greatly influences transition for novice practitioners by reducing ‘transition shock.’ A healthy work environment has been defined as a system of people, structures, and practices that facilitate the processes and relationships needed to provide quality patient care. Having a healthy work environment has been shown to mitigate the stressors of transition shock and is believed to be a significant variable in easing transition. More research is needed to determine what defines a healthy workplace environment in community pharmacy, and how it influences the ease of transition.

More research is needed to develop the intervention further in a number of areas that were outside the scope of this study; developing training for the coach, effectively targeting and identifying potential participants and cost effectiveness. Comprehensive training for the coach is needed so that coaches with desirable attributes are recruited and trained to effectively deliver the intervention. Further research is also needed to explore how best to identify employee and locum NCPs who most need the intervention.
Furthermore, the low number of male applicants (for the intervention) observed remains unexplained and requires further exploration. In secondary settings where professional isolation is not endemic, poor performance may be identified through workplace supervision and multisource feedback. Though GPhC data for exam pass marks could be used, it relates only to exam performance rather than practice performance. Cost effectiveness was not explored as part of the feasibility study, but this data would be needed to explore large-scale delivery of this intervention. Recommendations for a large scale trial are provided in detail in the following section.

6.9 Recommendations for the large-scale trial of the intervention

This research study has presented findings for the design and feasibility of a complex intervention. Having concluded that the intervention is feasible, acceptable to participants and proposes a number of outcomes, the next stage of development recommended by the MRC guidance is evaluation of a large-scale trial. This trial would allow the intervention’s effectiveness to be assessed. Before a full-scale trial can proceed however, consideration must be given to how findings from the feasibility study inform recommendations for the intervention. First, is some reflection on the role of the coach and how these perspectives may shape the future refinement of the intervention. This is followed by recommendations for structural changes to the intervention, before recommendations for specific intervention components are described.

6.9.1 Reflections on the coach role

In addition to supporting analysis and interpretation of the qualitative interviews, the coach reflective diary also offered insights into the coach role within the wider intervention: first by identifying coaching practices that resulted in intervention success and second, by highlighting opportunities to develop the coaching role. Consideration of these insights is important as it has implications for the scale up and transferability of the intervention.

A number of coaching practices were reported to lead to successful delivery of the coach role. First was the author’s previous CPPE training in facilitation skills, which were valuable for the individual and group coaching approach. Moreover, her previous experience of being an educator, former academic advisor and pre-registration tutor was valuable for providing pastoral care, structuring debriefing conversations and providing formative feedback. Coupled with the attributes reported by intervention participants in chapter 5,
and the coach’s inherent interest in the success of the intervention, the coaching experience was perceived by the author as personally and professionally rewarding. Part of the success of the intervention may also be attributed to the close relationship that novices developed with the coach: an element of the intervention that may have instilled loyalty in participants and prevented attrition. Through coaching, the author further developed time management and organisational skills, conflict resolution skills and developed proficiency in supporting reflection, motivational coaching and pastoral support. Reflections of successful coaching elements may inform the core competencies and training requirements for future coaches.

Despite the fact that coaching was a rewarding and formative experience for the author, reflecting on the coach role also highlighted areas for further development of the coach role. On occasion, participants presented the author with complex personal problems; however even when they were referred to more appropriate sources of support, participants preferred instead to discuss their problems with the coach. A formal process is needed to allow complex problems to be escalated by the coach and followed through. The author was therefore unprepared for the amount of time spent having one-to-one conversations during evening hours and taking on the role of the ‘venting system’ for NCPs. Going forward, distinction should be made between developmental conversations and debriefing conversations and time allocated in the intervention for each. Findings showed there was much trust and support between the coach and NCPs however this also brought up the issue of ongoing support and training for the coach; specifically the need for bespoke training, training materials and sharing best practice with others coaches.

6.9.2 The pilot-ready intervention structure
A number of structural changes are recommended for the pilot ready intervention (Figure 6.2), based on findings from the feasibility study. First, the length of the intervention should be increased from 17 weeks to 12 months, with most of the developmental tasks happening earlier in the intervention (months 1-7). This should make the early intervention period more structured than the latter part. Next, the maximum number of participants should not exceed ten, in order to facilitate good dynamics, small group work and allow increased one-to-one conversations without overburdening the coach. The number of intervention components should be reduced from eight to six by removing the webinars and handbook. The handbook content should be sent out monthly as part of the discussion topics.
Figure 6.2 The updated (pilot-ready) intervention timeline
Advertisement and recruitment should utilise a wider range of sources, including University alumni associations, local professional networks, employers and locum agencies. Mixed methods evaluation should follow a longitudinal design with control and test groups. Questionnaires should be used to evaluate intervention effectiveness, with outcomes including confidence, autonomy, assertiveness, self-efficacy, stress and skills of critical reflection and self-awareness. In addition, professional isolation may be assessed using an adapted social isolation or ‘feeling supported’ measures. In the absence of pharmacy-specific outcome measures, tools from nursing or other healthcare professions should be adapted for use. Statistical analyses are required to calculate effect sizes and effectively evaluate intervention effectiveness. Qualitative interviews should be conducted as part of a realist, theory-driven process evaluation of the intervention during post-evaluation scale-up. This is particularly important to understand whether the intervention can be delivered in the same way or produce the same outcomes in different contexts. Understanding this is important so that policy-makers have confidence in adopting proposed interventions; a point highlighted by the MRC guidance on process evaluation.

### 6.9.3 Recommendations for specific components

The reduced number of components is illustrated in Figure 6.3.
Figure 6.3 The updated (pilot-ready) intervention structure
6.9.3.1 **Coach**
A number of characteristics and attributes have been identified as important for the coach in their role as facilitator: approachable, interested and engaged, non-judgemental, calming, respectful, diplomatic, available during agreed times and accessible to NCPs. The coach should be an appropriately-trained (training for the coach to be explored in further research, from which a formal training manual and workshop will be developed) practising pharmacist with between 3-10 years of experience. Furthermore, to foster trust and provide a sense of neutrality and confidentiality, the coach should not be employed by the NCPs’ employing organisation.

These characteristics and attributes should be listed in a training manual for the coach in future. In addition, this manual should contain intervention materials, blank intervention logs, coaching theory and a list of coaching questions. Short (10-15 minutes) regular (once a fortnight) one-to-one ‘debriefing’ conversations will be scheduled between the coach and each intervention participant.

6.9.3.2 **Social media group**
The social media group and ground rules should remain unchanged. Important communication about intervention activities, reminders for submission of developmental tasks and weekly case studies should be posted both to the social media group and sent to individual participants, to avoid getting ‘lost’ within conversations.

6.9.3.3 **Workshop**
Two 4-hour workshops should be incorporated into the intervention; one at the start and one at the end of the intervention. Workshop content should focus only on practical/hands-on skills and problem-based learning.

6.9.3.4 **Weekly topics**
Cases/scenarios posts should occur once weekly (month 1-4), then monthly (month 5-12) rather than twice each week, over the longer intervention timeline. Posts should be made to the group and directly to participants via WhatsApp® and a weekly 15-minute time-slot arranged for the group to discuss them.

6.9.3.5 **Intervention handbook**
The handbook should be modified to (shorter) monthly electronic or hardcopy worksheets, with one module sent per month to participants until all modules are completed. The
welcome pack containing resources from the handbook should be supplied before the intervention begins, and contain a list of monthly modules.

6.9.3.6 **Webinars**
The webinars should be removed from the intervention and their content moved to the workshop or weekly topics.

6.9.3.7 **Reflective logs and development plans**
Three development plans and four reflective logs and should be completed according to the new timeline, to provide more time for completion, feedback and follow-through. The additional reflective log at the end of the intervention allows participants to reflect on the year-long intervention. After feedback, reflective logs should be formally submitted as CPD entries to the GPhC revalidation portal.

6.10 **Recommendations for transition support structures and implications for pharmacy education, policy, and practice**
Conclusions drawn from this research are integrated to form evidence-based recommendations for transition support interventions for novice community pharmacists. In addition, the implications of the study findings for policymakers in pharmacy, education and practice are discussed.

6.10.1 **Recommendations for transition support structures**
One key broad recommendation resulting from this programme of work is that current support structures for novice community pharmacists appear lacking or inadequate and consequently need structuring and organisation. Given that the transition to independent practitioner is regarded as the most challenging of any practitioner’s career, the lack of appropriate support for NCPs is concerning. Interventions to support NCPs should be developed in collaboration with professional, regulatory, educational, employer and third sector organisations. Following on from this broad recommendation are more specific recommendations about the transition support, which suggest that formal support structures for NCPs should:

1. incorporate psychosocial support with developmental activities
2. offer coaching and supported reflection with an experienced pharmacist coach
3. provide an accessible facilitated, supportive learning space/environment for developmental discourse
The programme of work in this thesis provided evidence to suggest that nuances of the professional role and characteristics of the community pharmacy setting appeared to intensify the challenges faced by NCPs. The feasibility study findings therefore brought understanding of the role played by intervention components in easing transition.

**Interventions for novice community pharmacists should incorporate psychosocial support with developmental activities within formal support structures**

Study findings generally suggested that during transition, NCPs feel adequately prepared for clinical knowledge, but lack the affective and cognitive skills they need for real world practice. Considered in terms of Miller’s pyramid of clinical competence, this suggests NCPs ‘know how’ and ‘show how’ but struggle to ‘do’.

Findings also show that contextual differences in the community pharmacy setting such as full immediate accountability, target culture, workplace conflict, the inverse hierarchy, and professional isolation contribute to a stressful transition and the increased need for psychosocial support. Another important finding from this study was that NCPs’ lacked the affective skills and emotional intelligence to effectively manage workplace relationships. Indeed, NCPs reported experiencing prolonged stress and using dysfunctional coping mechanisms during transition, perpetuating the development of iso-strain. Developers of formal support structures for NCPs therefore need to recognise the importance of providing psychosocial support as part of transition support interventions, and address this need accordingly.

The nominal group study highlighted that existing support structures appeared inadequate, and that professional support services are not the preferred source of support for NCPs. Novices preferred to access peer support wherever possible, which could offer a combination of the psychosocial and developmental support they needed. The study findings suggest transition was a period of intense learning for NCPs, therefore the manner in which that learning was structured, supported and facilitated was crucial. The level of structure and number of developmental tasks that participants complete should reduce in frequency as the intervention continues and participants develop the skills and strategies needed for independent learning. This supports findings from the intervention which suggest that the overall intervention functioned as scaffolding, allowing learners to increasingly take control over their learning. The proposed 12-month period of the intervention is supported by findings that suggest most novice practitioners may benefit from peer support structures lasting up to one year.
An experienced practising designated pharmacist should offer coaching conversations and supported reflection as part of the intervention structure

Unlike novice practitioners in hospitals, NCPs are professionally isolated during transition, a period when learning and formative feedback is crucial to their development of proficiency and competency. Findings strongly suggest that an approachable, accessible role model who can provide reciprocity, is needed to perform a reassuring and sense-checking function. This was particularly valued by newly-accountable NCPs in the research study, who having lost the support of pre-registration tutors, experienced uncertainty and had low confidence. The coach role provided a more equal relationship than that of tutor, supervisor or mentor, which is useful in supporting a novice practitioner to feel safe to learn and become independent in their practice. Coaching conversations should therefore be used to challenge the NCP in a safe environment, promote deep reflection and promote development of professional behaviours. Activities incorporating coaching conversations with the support of an experienced coach, may help NCPs to develop competency, representing Vygotsky’s zone of proximal development.

Participants in the feasibility study perceived that an ‘external to organisation’ coach was viewed as advantageous to the coach-coachee relationship. Moreover, a number of coach attributes were highly valued and perceived as contributing to the intervention’s success and supportive learning environment: openness, accessibility, approachability, being non-judgemental and objective, experienced, easy to communicate with, respectful and having a calming influence. These findings may be used to inform training for all experienced pharmacists who are supporting NCPs, pre-registration trainees or students.

Support interventions for novice community pharmacists should provide an accessible facilitated, supportive learning space/environment for developmental discourse

Upon passing the registration exam NCPs acquired full and immediate professional accountability for patient care. This pressure was exacerbated by inverse hierarchy and professional isolation, a combination of phenomena which appear to be unique to the experiences of NCPs. This combination of stressors, coupled with job demands and the pressure that NCPs felt to be competent/proficient may cause them to experience iso-strain.

Support structures should therefore provide an accessible network of pharmacists that NCPs can interact with, within a supportive learning environment. One of the main
functions of the draft intervention in the feasibility study was to reduce iso-strain; this was achieved through a virtual support network that provided NCPs with a safe, accessible, responsive environment. Being able to have these interactions has been shown to alleviate transition stress, and foster a sense of belonging. This study demonstrated the benefits of using social media as an instructional strategy that leads to transformative learning. Simply providing a virtual support network does not guarantee that a virtual learning community has been established however. To achieve their purpose of forming meaningful virtual learning communities, social media groups (with 8-10 NCPs) should be easily accessible in the workplace and have ground rules in place. Furthermore, they must be facilitated or monitored by an experienced pharmacist coach that is seen by NCPs, to be present and engaged.

Study findings showed the intervention’s success could be attributed to its ability to effectively facilitate discourse and shared learning, functions that are lacking in iso-strain jobs. Discourse exposed NCPs to new perspectives and new knowledge, both from other novices and from their experienced pharmacist coach; this helped to clarify to NCPs, what is known, and unknown. The coaching approach facilitated an open and trusting relationship with NCPs, so that when coaching conversations happened, NCPs experienced deeper, meaningful reflection and improved self-awareness. In this study, daily messages posted by the coach assured NCPs of her continuing availability and presence, which fostered the sense of community, engagement and support. Though the physical nature of the community pharmacy setting hinders face-to-face contact, this research study showed face-to-face contact was beneficial for strengthening rapport. In the event however that face-to-face contact cannot occur, it is important that experienced peers facilitating the intervention, have the skills and attributes to create and foster a supportive learning environment. It is the ability to create this environment using the intervention processes and relationships that enables learners to genuinely feel valued, included and empowered.

6.10.2 Implications of study findings for regulators, educators and employers

Study findings suggest that problems attributed to undergraduate training, pre-registration training and organisational culture all influence transition, and may lead to an increased risk of adverse events. This has implications for patient safety and the quality of care during transition. This is a well-documented concern in other healthcare professions and one
which requires careful consideration by pharmacy educators, employers/training providers and professional/regulatory bodies. 5,319

First, undergraduate curricula have different proportions of work-based learning and ‘real-world’ experience, which may limit the level of meaningful learning from role models that may help students develop and maintain safety values and beliefs.117,320 Study findings further suggest that stressful transitions resulted from NCPs’ lack of affective or social skills and people management skills. A study by Nelson et al., 2015 demonstrated that including emotional intelligence in pharmacy curricula built skills of self-awareness and professionalism amongst pharmacy students.321 Though some university curricula provide management training, findings suggest it lacks relevance and context for pharmacy students, and does not adequately prepare novices to manage workplace relationships. Education providers could expand communication skills training so that future pharmacists communicate competently and effectively with colleagues as well as patients. This is crucial because improved teamwork has been shown to improve patient safety culture and lead to better quality of care.322

The known lack of quality assurance with current pre-registration training arrangements may impact on NCPs’ transitions to practice.14 Study findings alluded to the notion that the pre-registration year structure focusses heavily on preparation for the registration assessment, rather than preparation for independent practice. It is concerning that novices who receive their exam results on the last Friday of pre-registration training, begin independent practice (often as isolated practitioners) on the following Monday. This coincides with the loss of formal tutor support structures which is detrimental to the professional development of NCPs and increases the risk of poor performance.157 Study findings indicated that often, NCPs are expected to ‘hit the ground running’ with little regard for their status as learners. In order to improve individual and organisational patient safety culture, learning must be enabled and supported at all levels, and crucially, throughout the transition period.322 Given the absence of evidence-based support structures, regulators should consider whether this sudden and immediate acquisition of full professional accountability is appropriate.

While the evolving role of community pharmacists in recent years has led to a more patient-facing role with greater variation in the services offered, the study indicates that increasing workload and commercial pressures, organisational culture, a lack of workplace support and individual characteristics hindered NCPs ability to transition successfully. There
were numerous examples of challenges like these reported in the findings that contribute to preventable adverse events. Latent conditions associated with preventable adverse events were reported in the study, including the target culture, high workloads, poor staffing, the low accessibility of management, workplace cultures and norms, and relational power dynamics with pharmacy colleagues or managers. Participants also reported unsupportive managers and the failure of organisations to provide appropriate training to NCPs. These latent conditions increased the risk of adverse events when coupled with the nature of work (complex drugs/patients, lack of teamwork or competing tasks) and the novices’ levels of skills, knowledge, capabilities and competence. Given that there is increasing evidence of workplace pressures on the pharmacy workforce, employers should consider the impact of the workplace environment and specifically how it may increase risks to patient safety during the transitions of NCPs.

6.11 Concluding comments
Characteristics of the pharmacist role within the context of the community pharmacy setting can make the transition to independent practitioner challenging, complex and multi-faceted. This research suggests that implementing evidence-based transition support interventions which incorporate appropriately-facilitated developmental discourse, reflection and psychosocial support, may help ensure novice community pharmacists develop competence and proficiency in their novice-to-expert journey.
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APPENDICES

Appendix 1 Table 2.3 Experiences reported in the nursing literature as challenging to transition

<table>
<thead>
<tr>
<th>Author and Year Country</th>
<th>Methods, study design</th>
<th>Findings</th>
<th>Effects</th>
<th>Study quality</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>The personal experience</td>
<td>The social experience</td>
<td>The job-related experience</td>
</tr>
<tr>
<td><strong>Bjerknes M Bjork I. 2012, Norway</strong></td>
<td>Qualitative ethnography using observation, individual interviews and documentary analysis. Sample n=13 Thematic analysis.</td>
<td>low professional confidence, anxiety, stress, poor self-perception of capabilities, overwhelmed by responsibility, frustrated by colleagues</td>
<td>Dismissive physicians, little available support, disrespectful colleagues who were not understanding, poor nursing role models</td>
<td>Concurrent responsibility for multiple patients with complex care needs during busy shifts</td>
</tr>
<tr>
<td><strong>Bisholt B 2012 Sweden</strong></td>
<td>Qualitative ethnography using symbolic interactionism framework. Observation and individual</td>
<td>Upset and uncertainty at work, feeling unprepared</td>
<td>Colleague criticism from breaching hidden rules and expectations</td>
<td>Expectations for novices to perform tasks they were not adequately trained for, risking patient care</td>
</tr>
<tr>
<td>Author and Year</td>
<td>Country</td>
<td>Methods, study design</td>
<td>Findings</td>
<td>Study quality</td>
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<tr>
<td>Chang E. Hancock K.</td>
<td>Australia</td>
<td>Quantitative longitudinal survey at 2-3 months and 10-11 months n= 154 at 2-3 months. N=110 graduates at 10-11 months Factor analysis</td>
<td>Interviews of 30-50 minutes. Sample n=18 Thematic analysis</td>
<td>All studies used self-reporting of perceptions of participants</td>
</tr>
<tr>
<td>Clark T, Holmes S.</td>
<td>UK</td>
<td>Qualitative exploratory approach using twelve focus groups and interviews n=105 (50 newly qualified staff, 55 preceptors and 11 practice development</td>
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<td>The personal experience</td>
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<td>The job-related experience</td>
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<tr>
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<td></td>
<td>Stressed by role ambiguity, lack of autonomy, clarity of role, meeting expectations and role overload</td>
<td>Adapting to social networks was problematic, were unclear and inconsistent expectations</td>
<td>Ward rotation exposed variations in management practices and ward cultures, high workloads were stressful</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Feelings of self-confidence being ineffective, unready, undervalued and lacking professional acceptance</td>
<td>Perception by ward managers that support programmes held little value, ‘overcrowding’ preceptors, overstretched preceptors, variations in</td>
<td>Challenging workloads</td>
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<td></td>
<td></td>
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<td>Challenging workloads</td>
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</table>

Multiple recruitment sites and saturation achieved through multiple focus groups, however purposive sampling and retrospective data collection may lead to some bias.
<table>
<thead>
<tr>
<th>Author and Year</th>
<th>Country</th>
<th>Methods, study design</th>
<th>Findings</th>
<th>Study quality</th>
</tr>
</thead>
<tbody>
<tr>
<td>Duchscher J</td>
<td>Canada</td>
<td>Qualitative longitudinal approach using individual semi-structured interviews and within 2 months, after 6 months monthly reflective journals n=5</td>
<td>Low self-confidence, stress, initial self-doubt, feeling dependent/burdened or isolated, feared marginalisation, intimidated by physicians</td>
<td>Multiple sources of in depth, rich data collected longitudinally with no reported attrition however had a small self-selected sample size, limited to one site and interpreted by a single researcher who was a previous educator to 2 of 5 participants</td>
</tr>
</tbody>
</table>

**Methods, study design:**
- nurses and ward managers
- Content analysis and thematic interpretation

**Findings:**
- The personal experience:
  - assessment methods between preceptors, lack of professional acceptance

- The social experience:
  - Low self-confidence, stress, initial self-doubt, feeling dependent/burdened or isolated, feared marginalisation, intimidated by physicians

- The job-related experience:
  - Gaining professional acceptance restricted ability to ask questions, comparisons with more experienced colleagues, unhelpful peers, verbal abuse from physicians

- Performance, learning and implications for care:
  - High pace of work, error reporting was a challenge
  - Reluctance to ask questions, attempts to manage alone, slow decision-making, little application of knowledge, poor organisation and communication skills, task-focused, lacking patient-centred/holistic care, unable to challenge decisions or physician abuse

**Study quality:**
- All studies used self-reporting of perceptions of participants
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<tr>
<th>Author and Year</th>
<th>Method, study design</th>
<th>Findings</th>
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<th>Study quality</th>
</tr>
</thead>
</table>
| Duchscher J  
2008  
Canada | Qualitative ethnographic longitudinal approach using grounded theory. Initial demographic survey at start, 6 individual face-to-face interviews at 1, 3, 6, 9, 12, 18 months and two focus groups at 1, 3 months, and pre-interview exercises, monthly journals, and ongoing email contact. n=14  
Grounded theory analytical approach | The personal experience  
Fear of non-acceptance, Uncertainty, Unprepared, Stressed or worried. Felt undervalued and disappointed  
Frustrated self-doubts, Sense of loss | The social experience  
Lacking access or consistent support from experienced peers, unbalanced supervision, colleagues using archaic methods, expectations to comply in order to fit in | The job-related experience  
Full patient loads quickly assigned, no graduated responsibility, Clinically unstable/complex patients, varied, unpredictable clinical contexts, unfamiliar tasks | Performance, learning and implications for care  
Difficulties with application of knowledge or skills, poor problem solving, multi-tasking and clinical judgement skills, task-focused; non-holistic care, rigid prescriptive thinking, unable to challenge/question decisions, concealing feelings of inadequacy | Multiple sources of in depth rich data collected longitudinally from two cities with no reported attrition however the small sample size was selected from the same programme |
| Goh K, Watt E | Qualitative approach using  
Fearful, overwhelmed by need to fit in - 'don't rock' | Overwhelming workload, time | Professional-bureaucratic work conflict Unable to | Retrospective accounts from a small sample of |
<table>
<thead>
<tr>
<th>Author and Year</th>
<th>Country</th>
<th>Methods, study design</th>
<th>Findings</th>
<th>Study quality</th>
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</thead>
<tbody>
<tr>
<td><strong>2003 Australia</strong></td>
<td></td>
<td>Individual semi-structured interviews of 1 hour. n=5 Thematic analysis through constant comparative analysis.</td>
<td><strong>The personal experience</strong></td>
<td>Accountability, legal and ethical responsibilities, low self-esteem, guilt and disappointment, frustrated with realities of the job, isolated</td>
</tr>
<tr>
<td><strong>Kelly B, 1998 US</strong></td>
<td></td>
<td>Qualitative, grounded theory approach, using open-ended in-depth individual interviews n=22 Constant comparative thematic data analysis.</td>
<td><strong>The social experience</strong></td>
<td>The boat', comparison of self with experienced peers, horizontal violence, low hierarchical standing, lack of positive feedback</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td><strong>The job-related experience</strong></td>
<td>Constraints, ward rotation interrupted socialisation and increased isolation</td>
</tr>
<tr>
<td>Author and Year</td>
<td>Country</td>
<td>Methods, study design</td>
<td>Findings</td>
<td>Study quality</td>
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<tr>
<td>Kumaran S, Carney M.</td>
<td>Ireland</td>
<td>Qualitative Heideggerian Hermeneutic phenomenological approach using semi-structured individual interview lasting 45-60 minutes. n=10 Van Manens approach to thematic analysis</td>
<td>The personal experience</td>
<td>Performance, learning and implications for care</td>
</tr>
<tr>
<td>Malouf N, West S</td>
<td>Qualitative longitudinal</td>
<td>Feelings of inadequacy, anxiety</td>
<td>The social experience</td>
<td>Work, coping mechanisms included resignation, working fewer hours, leaving the profession, avoidance of patient interaction</td>
</tr>
</tbody>
</table>

**Challenges**
- Powerlessness
- Managerial and peer support
- Nervous, stressed and vulnerable from responsibility, accountability and loss of student protections, Anxious, fearful of making mistakes and frustration from reality of practice
- Low hierarchical standing, horizontal violence, trying to fit in was daunting
- Quick pace of work, unfamiliar ward/area, insufficient time for patient care
- Difficulty providing holistic care, making decisions independently

**Effects**
- Participant verification of data for internal validity, no
<table>
<thead>
<tr>
<th>Author and Year</th>
<th>Methods, study design</th>
<th>Findings</th>
<th>Study quality</th>
</tr>
</thead>
</table>
| **2010**  
**Australia** | approach using grounded theory approach  
Three in-depth interviews with each participant at quarterly intervals lasting 45-90 minutes  
n=9  
Data analysis in keeping with grounded theory – initial, focussed selective and theoretical coding | The personal experience  
and stress about fitting in or measuring up or appearing ‘stupid’ initial uncertainty in ‘figuring out’ the environment | Performance, learning and implications for care  
pretended to understand terms/jargon in order to not look ‘stupid’, learning and nursing care became secondary to fitting in | All studies used self-reporting of perceptions of participants  
reported attrition multiple settings/sites, however limited by small self-selected sample |
| **Maxwell et al. 2011**  
**UK** | Qualitative approach using in depth individual interviews, within 8- 18 months of qualification. | Fear of working independently and responsibility for patients, seeking help, Unprepared for practice,  
Understanding organisational culture was most challenging, colleague expectations  
Challenge of unfamiliar work areas, new tasks, shifts patterns and demanding or angry patients | Avoided seeking help, carried out unfamiliar tasks against their better judgement, medicines administration caused apprehension, forced to be | Lacking detail on methodological strategies and small sample size |
<table>
<thead>
<tr>
<th>Author and Year Country</th>
<th>Methods, study design</th>
<th>Findings</th>
<th>Effects</th>
<th>Study quality</th>
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<tr>
<td></td>
<td></td>
<td><strong>Challenges</strong></td>
<td><strong>The job-related experience</strong></td>
<td><strong>All studies used self-reporting of perceptions of participants</strong></td>
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<tr>
<td></td>
<td></td>
<td><strong>The personal experience</strong></td>
<td><strong>The social experience</strong></td>
<td><strong>Performance, learning and implications for care</strong></td>
</tr>
<tr>
<td>McCalla-Graham J., De Gagne J</td>
<td>Qualitative approach using interviews lasting 45-60 minute Purposively sampled participants with up to 12 months post-qualification n=10 Thematic analysis using Colaiazzi’s method</td>
<td>Unprepared for complex patients, lacking confidence for practical work, uncertain what to do, stressed and overwhelmed by workload and responsibility, emotional and physical fatigue</td>
<td>Critical or complex patients, new skills or tasks, inadequate staffing, high workload</td>
<td>Unable to function effectively or demonstrate skills adequately, lacking some practical skills, difficulty with time management, prioritisation, customer service, accessing resources</td>
</tr>
<tr>
<td></td>
<td>Concurrent thematic and narrative collection and analysis</td>
<td>uncomfortable establishing boundaries around their limitation, lacking assertiveness and confidence</td>
<td>caused concern, support and guidance was inconsistent, poorly structured or absent preceptorship frameworks,</td>
<td>proactive about identifying learning needs/negotiating learning opportunities</td>
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<td>Author and Year Country</td>
<td>Methods, study design</td>
<td>Findings</td>
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<tr>
<td><strong>McKenna L, Green C, 2004 Australia</strong></td>
<td>Qualitative longitudinal approach using two focus group interviews at 6 months and 12 months into practice n=7 Thematic analysis</td>
<td>The personal experience: Fear and feeling unprepared or uncertain where to seek help</td>
<td>The social experience: Initially felt like sole practitioners rather than part of a team, and did not perceive themselves as equal or able to provide valid contribution to the team (did not initially feel professional acceptance)</td>
<td>The job-related experience: Reality of practice mismatch with ideals, expectation to perform new clinical tasks, high workload, time constraints, help was less accessible on night shifts</td>
</tr>
<tr>
<td><strong>Newton J, McKenna L, 2007 Australia</strong></td>
<td>Qualitative longitudinal approach using three focus groups lasting 40 minutes, at 4-6 months, 11-12 months and at 16-18 months n=25 Thematic analysis using Colaizzi’s</td>
<td>The personal experience: Unprepared for practice Daunted by rotations, social network changes and dynamics, awareness of limitations caused uncertainty</td>
<td>The social experience: Understanding organisational culture and their position within it, unapproachable preceptors</td>
<td>The job-related experience: Rotations hindered professional socialisation and increased learning of ward cultures</td>
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<td>Author and Year</td>
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<tr>
<td><strong>Parker et al. 2014 Australia</strong></td>
<td>Mixed methods, cross-sectional design. Questionnaire survey n=282 7 focus groups n=55 Thematic analysis</td>
<td>The personal experience: Uncertainty anxiety and stress from workload, role, patients, and meeting expectations. Felt unprepared and disappointed by lack of support. Difficulty negotiating their own position in the workplace.</td>
<td>The social experience: Unreasonable, unsafe expectations of others, caused stress and differed across wards. Unsupportive colleagues, horizontal violence from territorial, overly critical, hierarchical nurses, unhelpful feedback, variable availability of support, no supernumerary time.</td>
<td>The job-related experience: High/complex workloads, challenging client groups.</td>
</tr>
<tr>
<td><strong>Phillips et al. 2014 Australia</strong></td>
<td>Mixed methods, cross-sectional design. Electronic survey focussing on open</td>
<td>Fear of causing harm, Feeling pressured and overwhelmed by rotation or</td>
<td>Assumptions and expectations of colleagues, unsupportive senior staff, lack of</td>
<td>High speciality areas, new rotations, Night shifts, insufficient staffing, inappropriate</td>
</tr>
<tr>
<td>Author and Year, Country</td>
<td>Methods, study design</td>
<td>Findings</td>
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<td>Study quality</td>
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<td>The personal experience</td>
<td>The social experience</td>
<td>The job-related experience</td>
</tr>
<tr>
<td>Pinchera B 2012 US</td>
<td>Qualitative phenomenological approach using unstructured interviews 15-60 minutes (average 48 minutes) n=5</td>
<td>Low confidence, fear of making mistakes, feeling overwhelmed, powerless from responsibility or poor communication with colleagues</td>
<td>Frustration with reality of practice</td>
<td>Unfamiliar tasks or procedures, patients with traumatic injuries, family member interactions, care of dying patients</td>
</tr>
<tr>
<td>Walker et al</td>
<td>Qualitative data from open-ended</td>
<td>Belittled, demoralised,</td>
<td>Surgeons and physicians belittling</td>
<td>Physically demanding shift work was,</td>
</tr>
<tr>
<td>Author and Year Country</td>
<td>Methods, study design</td>
<td>Findings</td>
<td>Effects</td>
<td>Study quality</td>
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<td>Challenges</td>
<td>The job-related experience</td>
<td>Performance, learning and implications for care</td>
</tr>
<tr>
<td>2013 Australia</td>
<td>survey question in a longitudinal study Pilot study n=13 Cohort 1: graduate nurses (n=38) and managers (n=12) Cohort 2: graduates (n=31) and managers (n=13). Content analysis</td>
<td>The personal experience</td>
<td>The social experience</td>
<td>The job-related experience</td>
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<tr>
<td></td>
<td></td>
<td>embarrassed or angered by unprofessional workplace behaviour from physicians and nurses, low self-esteem/confidence, stress, depression and burn out from shift work</td>
<td>novices, swearing/shouting in front of patients and horizontal violence, unconstructive feedback</td>
<td>coping with death and dying</td>
</tr>
<tr>
<td>Wangensteen et al 2008 Norway</td>
<td>Qualitative approach using individual interviews) lasting 45-60 minutes n=12 Manifest and latent content analysis</td>
<td>Uncertainty from unfamiliar experiences, seeking help and decision-making, worried by loss of safety net, relative lack of feedback and colleague expectations</td>
<td>Variable and or no preceptor support, feedback was negative or absent, expectations of others caused insecurity</td>
<td>Chaos of multiple patients with differing diagnoses, unfamiliar workplace, routines, patients and colleagues a variable/no induction programmes/precept or support systems , night shifts</td>
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<tr>
<td></td>
<td></td>
<td>Small purposive sample from single university but working at multiple sites, analysis independently agreed by three researchers</td>
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<td>Author and Year Country</td>
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<td>Challenges</td>
<td>Effects</td>
<td>All studies used self-reporting of perceptions of participants</td>
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<td>The personal experience</td>
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</table>

All studies used self-reporting of perceptions of participants.
## Appendix 2 Table 2.4 Experiences reported in the medical literature as challenging to transition

<table>
<thead>
<tr>
<th>Author and Year Country</th>
<th>Methods, study design</th>
<th>Findings</th>
<th>Challenges</th>
<th>Effects</th>
<th>Study quality</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Brennan et al 2010 UK</strong></td>
<td>Qualitative longitudinal using individual interviews at 3-4 months and 8-9 months and audio diary recordings. n=31 at 3-4 months n=17 at 8-9 months n=10 audio diaries Thematic analysis and coding</td>
<td>The personal experience</td>
<td>Fear, anxiety or stress from accountability uncertainty, low confidence about competence/knowledge Feeling unprepared Intimidated by senior staff</td>
<td>Night duty shifts Lack of support for coping with death/dying patients (unable to take ‘time-out’ to deal with emotions) Unfamiliar tasks</td>
<td>Autonomy developed purely from the lack of support from seniors Difficulty with decision-making, processing paperwork for a death certificate – unfamiliar task</td>
</tr>
<tr>
<td><strong>Kilminster et al 2010 UK</strong></td>
<td>Qualitative longitudinal approach using desk-based</td>
<td>Uncertainty low self-confidence in prescribing skills, feared not</td>
<td>Consultant preferences/supervisors/workplace culture determined</td>
<td>Severity of patients condition Night shifts reduced available access to</td>
<td>Prescribing was challenging When supervisors were inaccessible/unapproachable</td>
</tr>
<tr>
<td>Author and Year Country</td>
<td>Methods, study design</td>
<td>Findings</td>
<td>Study quality</td>
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<tr>
<td>Kilminster et al 2011 UK</td>
<td>Research (documentary analysis of national/local training requirements, protocols, policies, literature review) interviews and observations. n=21 at t1 n=16 at t2 (2-3 months later) n=13 (supplementary interviews with consultants, sisters, pharmacists, occupational therapist) Interpretive data analysis</td>
<td><strong>The personal experience</strong> Recognising deteriorating patients <strong>------ Uncertain or overwhelmed when staffing was low, unsure when/from whom to seek help particularly on night shifts or when senior doctors were absent</strong>  <strong>------ Access to supervision and supervision styles varied widely</strong>  <strong>------ Level of responsibility depended on workload and time of day(forced to be in charge during staff shortages/night shifts), and other Dichotomies - practice did not mirror formal frameworks. Learning opportunities were dependent on ‘fitting in’</strong> <strong>Prescribing was a</strong></td>
<td>All studies used self-reporting of perceptions of participants</td>
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<tr>
<td>Author and Year</td>
<td>Methods, study design</td>
<td>Findings</td>
<td>Effects</td>
<td>Study quality</td>
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<td>Challenges</td>
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<tr>
<td>Prince et al 2004 The Netherlands</td>
<td>Qualitative approach using four focus group interviews lasting 2 hours n=17</td>
<td></td>
<td>Performance, learning and implications for care</td>
<td>All studies used self-reporting of perceptions of participants</td>
<td></td>
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<tr>
<td></td>
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<td>The personal experience</td>
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<td>The social experience</td>
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<td>The job-related experience</td>
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<td></td>
<td></td>
<td>colleagues, accountability was not gradually increased</td>
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<td></td>
<td></td>
<td>particular challenge Actual practice was determined by situational and contextual factors, not formal ones(regulatory and management)</td>
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<td>colleagues, accountability was not gradually increased</td>
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<td></td>
<td></td>
<td>Insufficient feedback which was focussed on good patient care, not learning, colleague relationships were</td>
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<tr>
<td></td>
<td></td>
<td>Extremely long working hours No gradual build-up of responsibilities/workload</td>
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<td></td>
<td></td>
<td>Difficulties with prescribing, paperwork, adjusting blood glucose levels, interpreting diagnostic data, uncertainties in clinical</td>
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<tr>
<td></td>
<td></td>
<td>Variety of work settings, participant validation of interviews however small self-selected sample from one university</td>
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</tbody>
</table>

Colleagues’ perceptions of novices determined learning opportunities given and support received. Prescribing dependent upon site-specific practices/consultant preferences, expectation to complete unexpected tasks.
<table>
<thead>
<tr>
<th>Author and Year Country</th>
<th>Methods, study design</th>
<th>Findings</th>
<th>Effects</th>
<th>Study quality</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Challenges</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td>The personal experience</td>
<td>The social experience</td>
<td>The job-related experience</td>
</tr>
<tr>
<td>Satterfield J, Becerra C, 2010 US</td>
<td>Mixed methods longitudinal approach. Quantitative measures of burnout (validated Tedium Index) and satisfaction (Likert scale) used n=62 Analysis; iterative consensus building</td>
<td>Categories of challenging emotions; guilt, anger sadness, numbness /affective blunting, anxiety/fear, hopelessness overwhelmed, stress, boredom, apathy, loneliness, upset, shock, Criticism from seniors and expectation to cope with death, Anger towards programme directors and programme Interpersonal or peer conflicts and managing the team caused fear</td>
<td>Errors made in in the workplace Coping with death, Erosion of an idealised view of medicine</td>
<td>Challenged by ethical and medical decision-making and with clinical reasoning Deficits expressed in clinical skills, professional confidence, Initial lack of self-awareness, assertiveness, self-esteem Coping mechanisms included displacing anger onto nursing staff, losing compassion, taking sick</td>
</tr>
<tr>
<td>Author and Year</td>
<td>Methods, study design</td>
<td>Findings</td>
<td>Effects</td>
<td></td>
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<td>Challenges</td>
<td>Study quality</td>
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<td>The personal experience</td>
<td>Performance, learning and implications for care</td>
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<td>The social experience</td>
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<td>The job-related experience</td>
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<tr>
<td>Tal lent ire et al 2011 Scotland</td>
<td>Qualitative approach using six homogenous focus groups lasting 70-95 minutes n=36 Cross group thematic framework analysis</td>
<td>Uncomfortable initiating treatment Overwhelmed or paralyzed when patients were acutely unwell, diagnostic and professional role uncertainty with assigned level of responsibility Medical hierarchy respected and not questioned in order to 'fit in' and referred to using military analogies ‘battle, foot soldiers, shot down, take orders’, comparisons of self with colleagues, Expectations influenced help-seeking behaviours, Seniors expected novices be equipped to work Responsibility levels were higher than novices felt ready for, managing acutely unwell patients was traumatic, involved time-pressured situations, high-stakes outcomes for novices</td>
<td>Not challenging or questioning decisions, not seeking help to prevent perceived incompetence and wanting to exceed expectations Inability to structure patient assessment, apply knowledge, fixated on a diagnosis, procrastinated in decision-making, preferred that harm to patients occurred from inaction, rather than action- 'do no harm'</td>
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<td></td>
<td>Theoretical sampling of self-selected participants , coding by multiple researcher, validation exercise with some participants data saturation achieved through multiple focus groups, however single site study</td>
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</tbody>
</table>

Days, taking antidepressants, taking more social activities.

Disappointment. Guilt from terminating relationships with patients.
<table>
<thead>
<tr>
<th>Author and Year Country</th>
<th>Methods, study design</th>
<th>Findings</th>
<th>Study quality</th>
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<td></td>
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<td></td>
<td></td>
<td>The personal experience</td>
<td>Performance, learning and implications for care</td>
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<tr>
<td></td>
<td></td>
<td>The social experience</td>
<td>All studies used self-reporting of perceptions of participants</td>
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<td>The job-related experience</td>
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<td>on ‘automatic pilot until their anxiety sinks to a level where they can think again’, in critical situations</td>
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</table>
Appendix 3 Nominal group study participant information sheet
NGT – PIS 22 July 15

Foundation years in private sector partners – exploring the challenges to transition and support needs for newly qualified community pharmacists

PARTICIPANT INFORMATION SHEET

You are being invited to take part in a research study. Before you decide if you want to take part it is important for you to understand why the research is being carried out and what it will involve for you.

Please take time to read the following information carefully and discuss it with others if you wish. Please ask if there is anything that is not clear or if you would like more information. Thank you for reading this.

Who will conduct the research?
A team of researchers from Manchester Pharmacy School led by Ms Esnath Magola-Makina is conducting the research.

What is the aim of the research?
The aim of the study is to identify the challenges that newly qualified/novice community pharmacists experience when they register and begin independent practice, the perceived effect of these challenges on their performance and how they cope with this. This will be used to inform the development of a supportive intervention for newly qualified/novice community pharmacists in a subsequent project.

Why have I been chosen?
You have been chosen because you have insight into the transition experiences of novice community pharmacists, through personal experience or observation of these experiences in your work.

What would I be asked to do if I took part?
You will be asked to take part in a nominal group interview. This is a structured method for group interviews where you will be asked to participate in a brainstorming activity followed by contribution to a group discussion. The interview will ask questions about the challenges experienced by novice community pharmacists, how these challenges are believed to affect their performance and how they currently address them. You will be asked to write down
your responses individually before discussing them and ranking them in order of importance within the group. Within two weeks of the interview you will receive an electronic summary of the discussion that you will be asked to read and verify. We expect that it will take between 60-90 minutes to complete the interview/read the summary and you will be given a high street voucher for £25 to say thank you for taking part. Travel and other reasonable expenses incurred as a result of taking part in the study will be reimbursed.

If you are interested in taking part please sign and return the attached consent form to: Esnath Magola-Makina, Centre for Pharmacy Workforce Studies, Manchester Pharmacy School, Stopford Building Room 1.136, Oxford Road Manchester, esnat.magola@manchester.ac.uk

Once we have received a consent form from you, you will be contacted in order to arrange a convenient time for you to take part in a nominal group discussion.

**Where will the research be conducted?**
The research will be conducted in the Stopford Building, Manchester Pharmacy School, The University of Manchester, Oxford Road, Manchester.

**What happens to the data collected?**
All information provided by you during the group interview will be kept strictly confidential. The nominal group discussion will be audio-recorded on an encrypted, password protected device and notes you make will be collected and stored securely in a locked office for analysis. The recording will then be transcribed – this means that the discussion will be listened to and then the discussion will be put into written words. Once the transcripts have been checked for accuracy by the research team the audio-recordings will be destroyed. Little research exists on the experiences of newly qualified community pharmacists and so the anonymised data may be stored for use in other research within Manchester Pharmacy School relating to early career pharmacy.

The transcripts of the nominal groups will have any names or other information that might make it possible to identify you removed. This means that we can then store the transcripts in an anonymised form on a secure password protected secure network drive computer. The anonymised transcripts will then be analysed by the researcher team to look for any common themes. Findings from the analysis may be published in a report, journal articles and/or conference presentations and may include quotations from the group discussions but these will not have your name or be attributed to any particular participant.

**What are the benefits and risks to me of taking part in the study?**
There is no direct benefit although the information you provide will help us gain a better understanding of the challenges experienced by novice community pharmacists, their support needs and how transition may affect their performance. This will help us make recommendations about the ways novice pharmacists might be better supported during transition. Taking part may also help you reflect on the way in which you work. It is unlikely that you will experience any dangers, discomfort or inconvenience
How is confidentiality maintained?
Confidentiality will be maintained at all times. This is very important to us. Your name and any identifying features will be removed so that all written transcripts are anonymised. This means we can respect confidentiality at all times. All completed consent forms will be stored in a locked filing cabinet in a locked office. All findings reported in reports, articles and presentations will not be traceable back to you. Details of your participation will not be divulged to any person outside of our research team. The study will respect confidentiality and ask you not to mention patients or colleagues by name. If any details of colleagues or patients are mentioned they will be promptly removed from the interview data.

In the interests of patient safety, it may be deemed necessary to break this confidentiality if you describe some seriously unsafe practice of yours (e.g. dispensing a ten-fold overdose of warfarin for a patient) that you state as not having been previously reported though your professional body. We have an obligation to report this to the appropriate bodies. If this situation occurs, the interview will be stopped and the matter discussed with you, making it clear what is happening and before discharging that responsibility.

What happens if I do not want to take part or if I change my mind?
It is up to you to decide whether or not to take part. If you do decide to take part, please complete a consent form. If you choose not to take part, simply do not complete the consent form.

What happens if I want to change my mind?
You can withdraw from the study at any time without giving reason and without detriment to yourself. You may also leave the interview at any point, if you wish to. The information collected can be destroyed after you withdraw if you prefer.

Who is funding the research?
The research is funded by Pharmacy Research United Kingdom, PRUK.

Research ethics
This study has received ethical approval from the University of Manchester Research Ethics Committee.

What do I do next?
Please complete the consent form.

Contact for further information
Ms Esnath Magola-Makina | 0161 2752421 | esnat.magola@manchester.ac.uk

What if something goes wrong?
If you want to make a formal complaint about the conduct of the research then please contact the Research Governance and Integrity Manager, Christie Building, University of Manchester, Oxford Road, Manchester, M13 9PL. research.governance@manchester.ac.uk | 0161 275 8093
Appendix 4 Nominal group study consent form

Consent form 22 July 15

CONSENT FORM

Title of project:

Foundation years in private sector partners – exploring the challenges to transition and support needs for newly qualified community pharmacists

If you are happy to participate with the statements below please write your initials in the box provided and sign below.

I confirm that I have received enough information about the study and I have read and understood the information sheet for the above study.

I have had the opportunity to consider the information and ask questions. (If you have any questions you wish to ask, please contact Esnath Magola by telephone on 0161 275 2421 or by email: esnat.magola@manchester.ac.uk) and I have received satisfactory answers to all my questions.

I understand that my participation is voluntary and that I am free to withdraw at any time, without giving any reason.

I give my permission for this group interview to be audio recorded and for notes made by the researchers to be kept.

I understand that any information given by me during the interviews may be used anonymously in future reports, articles or presentations by the research team.

I give my permission that the information I give during the interviews may be used for secondary analysis.

I agree to take part in the above study.

_________________________   __________________________
Name of Participant             Date                         Signature

_________________________   __________________________
Researcher                   Date                         Signature
Appendix 5 Nominal group study ground rules for data collection process

Facilitator notes

Thank participants for agreeing to take part in the interview. Confirm that they have received sufficient information about the study and the consent form has been signed. Answer any queries about the research that the participants might have. Confirm that, as per the consent form, the participants are still happy to have the interview digitally recorded and notes made collected for analysis by the research team. Explain the background to the research and the aim of the interview. Reassure participants about confidentiality. Remind participants that their participation is voluntary and at this stage confirm if they are happy to proceed. Read out the ‘house (ground) rules’ briefing (below) for the group interview, and ensure that any information shared as part of the discussion/interview are, and must remain confidential.

House (Ground) Rules

1. Please ensure that all mobile phones are turned off/on silent
2. We would like to hear about your experiences and stories and for you to participate as fully as you can.
3. Please show respect (verbally and non-verbally) when challenging each other’s opinions or seeking clarification.
4. Please listen actively and respect others peoples’ views and opinions and refrain from interrupting when another member of the group is speaking.
5. Please speak in turn rather than at the same time. Should this occur I will raise my hand just to indicate that a pause is required.
6. Please remember that any/all information you say, hear or comment on during this discussion is confidential and as such, it should not be repeated to or shared with anyone outside of this group.
Appendix 7 Nominal group study tables showing the initial themes generated during the NGT, and the final challenges they represented at the end of data analysis

<table>
<thead>
<tr>
<th>Sticky note items</th>
<th>Thematic challenge generated</th>
<th>Thematic challenge post combined analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Customers not speaking English and not understanding advice</td>
<td>Difficult patients</td>
<td>Customer service and patient care</td>
</tr>
<tr>
<td>2. Dealing with abusive patients</td>
<td>Difficult patients</td>
<td>Customer service and patient care</td>
</tr>
<tr>
<td>3. Patients expecting things they get from the regular pharmacist/unlicensed items</td>
<td>Difficult patients</td>
<td>Customer service and patient care</td>
</tr>
<tr>
<td>4. CD balance discrepancy (methadone)</td>
<td>Decisions for legal and clinical issues</td>
<td>Decision-making for legal and clinical issues</td>
</tr>
<tr>
<td>5. Questionable dose on a CD palliative care script</td>
<td>Decisions for legal and clinical issues</td>
<td>Decision-making for legal and clinical issues</td>
</tr>
<tr>
<td>6. Advising on missed doses of anti-epileptic drug</td>
<td>Decisions for legal and clinical issues</td>
<td>Decision-making for legal and clinical issues</td>
</tr>
<tr>
<td>7. Methadone patient smelling of alcohol</td>
<td>Difficult ethical decisions</td>
<td>Decision-making for ethical dilemmas</td>
</tr>
<tr>
<td>8. Poorly written prescription</td>
<td>Difficult ethical decisions</td>
<td>Decision-making for ethical dilemmas</td>
</tr>
<tr>
<td>9. Culture change</td>
<td>Culture ‘how things are done’ in a pharmacy</td>
<td>Adapting to ‘how things are done’ in a pharmacy</td>
</tr>
<tr>
<td>10. Breaks – dispensers get them but not me</td>
<td>Culture ‘how things are done’ in a pharmacy</td>
<td>Adapting to ‘how things are done’ in a pharmacy</td>
</tr>
<tr>
<td>11. No-one to ask – they all ask me</td>
<td>The responsibility of having to make decisions</td>
<td>Professional accountability</td>
</tr>
<tr>
<td>12. Having to make the final decision</td>
<td>The responsibility of having to make decisions</td>
<td>Professional accountability</td>
</tr>
<tr>
<td>13. Couldn’t log onto the system</td>
<td>Different systems</td>
<td>Adapting to workplaces</td>
</tr>
<tr>
<td>14. Learning how to get to new area</td>
<td>Different systems</td>
<td>Adapting to workplaces</td>
</tr>
<tr>
<td>15. Getting to know the company PMR system</td>
<td>Different systems</td>
<td>Adapting to workplaces</td>
</tr>
<tr>
<td>16. Different systems for owings</td>
<td>Different systems</td>
<td>Adapting to workplaces</td>
</tr>
<tr>
<td>17. Out of stock products and borrowing from other stores</td>
<td>Different systems</td>
<td>Adapting to workplaces</td>
</tr>
<tr>
<td>18. Never done MUR so no format to follow</td>
<td>Different systems</td>
<td>Adapting to workplaces</td>
</tr>
<tr>
<td>19. Accuracy checking a venalink/dosette trays</td>
<td>Different systems</td>
<td>Adapting to workplaces</td>
</tr>
<tr>
<td>20. Having problems preparing a flu jab</td>
<td>Different systems</td>
<td>Adapting to workplaces</td>
</tr>
<tr>
<td>Sticky note items</td>
<td>Thematic challenge generated</td>
<td>Thematic challenge after analysis</td>
</tr>
<tr>
<td>---------------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------</td>
<td>----------------------------------</td>
</tr>
<tr>
<td>1. Who to refer to when you can’t answer something</td>
<td>Being on your own and responsible</td>
<td>Being in charge and accountable</td>
</tr>
<tr>
<td>2. Advice/support Who to turn to</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Moving from everybody to ask to everyone asking you</td>
<td>Stress and time management</td>
<td>Confidence to cope</td>
</tr>
<tr>
<td>4. Being on your own</td>
<td></td>
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<tr>
<td>5. Stress control and staying calm</td>
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<tr>
<td>6. Organising your time and managing workload</td>
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<tr>
<td>7. Time management</td>
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<tr>
<td>8. Coping with responsibility – anxiety and stress</td>
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</tr>
<tr>
<td>9. Who to turn to when workload is too great</td>
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<td></td>
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<tr>
<td>10. Problem solving</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Different procedures in different stores</td>
<td>New situations and ethical, clinical, legal issues</td>
<td>Decision-making</td>
</tr>
<tr>
<td>12. Paperwork to complete</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. Working in new branches every day and adapting to workload</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14. Putting new procedures in place</td>
<td></td>
<td></td>
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<tr>
<td>15. Encountering new situations/medicines</td>
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<tr>
<td>16.</td>
<td>Answers to difficult/unusual queries quickly</td>
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</tr>
<tr>
<td>17.</td>
<td>Ethical issues</td>
<td></td>
</tr>
<tr>
<td>18.</td>
<td>Daily pick-up queries/missed doses</td>
<td></td>
</tr>
<tr>
<td>19.</td>
<td>Legal issues surrounding methadone</td>
<td></td>
</tr>
<tr>
<td>20.</td>
<td>Emergency supplies</td>
<td></td>
</tr>
<tr>
<td>21.</td>
<td>OTC licensing issues</td>
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<tr>
<td>22.</td>
<td>Not relying on technology for clinical issues</td>
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</tr>
<tr>
<td>23.</td>
<td>Applying clinical knowledge</td>
<td></td>
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<tr>
<td>24.</td>
<td>Dosage queries</td>
<td></td>
</tr>
<tr>
<td>25.</td>
<td>Counselling issues and communicating with patients</td>
<td></td>
</tr>
<tr>
<td>26.</td>
<td>Communicating with HCPs and receptionists</td>
<td></td>
</tr>
<tr>
<td>27.</td>
<td>Feeling respected/trusted as pharmacist/first day nerves and confidence</td>
<td></td>
</tr>
<tr>
<td>28.</td>
<td>Dealing with challenging behaviour</td>
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</tr>
<tr>
<td>29.</td>
<td>Being in charge of other people</td>
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</tr>
<tr>
<td>30.</td>
<td>Staff management</td>
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</tbody>
</table>

### NGT 3

**Sticky note items**

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<table>
<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td>1.</td>
<td>Overwhelmed by the responsibility of being manager – sometimes I just wanted to be pharmacist</td>
</tr>
<tr>
<td>2.</td>
<td>The expectation to be a manager (more than leadership)</td>
</tr>
<tr>
<td>3.</td>
<td>Taken 3 years to master the manager/pharmacist role</td>
</tr>
<tr>
<td>4.</td>
<td>Lack of opportunity to shadow/work with another pharmacist manager</td>
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<tr>
<td>5.</td>
<td>Balancing when to intervene/let it go</td>
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<tr>
<td>6.</td>
<td>More time to clinically check a prescription</td>
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<td>7.</td>
<td>Lack of time to check drug-drug interactions</td>
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**Thematic challenge generated**

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<tr>
<td></td>
<td>Exercising leadership/management</td>
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<td></td>
<td>Relationship management</td>
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<td></td>
<td>Clinical skills and decision-making</td>
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<td>Decision-making</td>
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<tbody>
<tr>
<td>25.</td>
<td>Patient counselling</td>
</tr>
<tr>
<td>26.</td>
<td>Communicating with other healthcare professionals</td>
</tr>
<tr>
<td>27.</td>
<td>Leadership and staff management</td>
</tr>
<tr>
<td>28.</td>
<td>Relationship management</td>
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<tbody>
<tr>
<td>25.</td>
<td>Patient care</td>
</tr>
<tr>
<td>26.</td>
<td>Relationship management</td>
</tr>
<tr>
<td>27.</td>
<td>Relationship management</td>
</tr>
<tr>
<td>28.</td>
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<td>25.</td>
<td>Patient care</td>
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<td>26.</td>
<td>Relationship management</td>
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<td>27.</td>
<td>Relationship management</td>
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<td>28.</td>
<td>Relationship management</td>
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<td>8.</td>
<td>Lack of a ‘second’ check by another pharmacist</td>
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<tr>
<td>9.</td>
<td>Lack of time to check things in the BNF</td>
</tr>
<tr>
<td>10.</td>
<td>Poor records on PMR from other pharmacists</td>
</tr>
<tr>
<td>11.</td>
<td>Massive pressure to manage systems/team/ profit/staff well</td>
</tr>
<tr>
<td>12.</td>
<td>Pressure to rush through a MUR</td>
</tr>
<tr>
<td>13.</td>
<td>Feeling disillusioned with career</td>
</tr>
<tr>
<td>14.</td>
<td>Expected to be fully accountable for all day to day activities</td>
</tr>
<tr>
<td>15.</td>
<td>Not knowing whether pharmacy meets all clinical governance requirements</td>
</tr>
<tr>
<td>16.</td>
<td>Time pressures of work</td>
</tr>
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<td>17.</td>
<td>Managing workload</td>
</tr>
<tr>
<td>18.</td>
<td>Not having enough breaks</td>
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<td>19.</td>
<td>Poor work-life balance</td>
</tr>
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<td>20.</td>
<td>Constant change in shifts</td>
</tr>
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<td>21.</td>
<td>Physically getting to places of work</td>
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<td>22.</td>
<td>Worrying about work at home</td>
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<tr>
<td>23.</td>
<td>Lack of positive feedback (especially for relief/locum pharmacists)</td>
</tr>
<tr>
<td>24.</td>
<td>Working in new teams that have some difficult personalities</td>
</tr>
<tr>
<td>25.</td>
<td>Unsupportive support staff</td>
</tr>
<tr>
<td>26.</td>
<td>Not wanting to work with an ACT</td>
</tr>
<tr>
<td>27.</td>
<td>Delegating to others who were at my level</td>
</tr>
<tr>
<td>28.</td>
<td>Responding to management’s demands</td>
</tr>
<tr>
<td>29.</td>
<td>Support staff coercing you – this is what the regular pharmacist does</td>
</tr>
<tr>
<td>30.</td>
<td>The pressure that everything has to go through you</td>
</tr>
<tr>
<td>31.</td>
<td>Not knowing what training is required and when</td>
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<td>32.</td>
<td>Different services in the different areas of the UK</td>
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<td>Clinical-commercial balance and target culture</td>
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<td></td>
<td>Adapting to target culture</td>
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<td>Accountability</td>
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<td>Accountability</td>
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<td>Pressure of workload</td>
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<td>Workload pressure</td>
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<td></td>
<td>Lack of feedback</td>
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<td></td>
<td>Lack of support</td>
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<td></td>
<td>Standing your ground/confidence</td>
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<td></td>
<td>Confidence to manage staff</td>
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<tr>
<td></td>
<td>‘knowing what to do’</td>
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<tr>
<td></td>
<td>Delivering services</td>
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288
<table>
<thead>
<tr>
<th>Sticky note items</th>
<th>Thematic challenge generated</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Lack of role clarity</td>
</tr>
<tr>
<td>2.</td>
<td>Being too task-focused</td>
</tr>
<tr>
<td>3.</td>
<td>Workload and workflow</td>
</tr>
<tr>
<td>4.</td>
<td>Relationship management</td>
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<td>5.</td>
<td>Relationship management</td>
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<td>6.</td>
<td>Relationship management</td>
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<td>Relationship management</td>
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<td>Relationship management</td>
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<td>16.</td>
<td>Relationship management</td>
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<td>17.</td>
<td>Relationship management</td>
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<tr>
<td>18.</td>
<td>Relationship management</td>
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</table>

33. Unfamiliarity with services on offer
34. Locum work outside of my own company
35. The expectation to be an experienced pharmacist from Day 1
36. Dealing with being pregnant as a foundation pharmacist
37. Expectation to know it all (clinical knowledge) in front of the patient

Managing expectations of staff and patients
Relationship management

NGT 4

1. Duty of care/patient safety should be the priority
2. Dealing with problems in a timely manner
3. Work to a model day
4. multi-tasking
5. working towards targets
6. Expectations from NQ and team
7. Accuracy checking
8. Dispensing
9. Computer systems/ PMR
10. Split packs
11. Endorsing
12. Labelling
13. Stock awareness
14. Being aware of stock and cost
15. Working in the grey- lack of experience
16. stay calm
17. accountability
18. Not knowing how to do things in the workplace
19. Adapting to workplace culture
20. Lack of experience
21. Decision-making
22. Self-management /
23. Managing self and confidence
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<tbody>
<tr>
<td>19.</td>
<td>self-motivate and driven</td>
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<tr>
<td>20.</td>
<td>Dealing with the public</td>
<td>Communicating/dealing with the public</td>
</tr>
<tr>
<td>21.</td>
<td>Customer care</td>
<td>Customer service and patient care</td>
</tr>
<tr>
<td>22.</td>
<td>Fitting in</td>
<td>Teamwork</td>
</tr>
<tr>
<td>23.</td>
<td>Working as part of the team not an individual</td>
<td>Adapting to the workplace</td>
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<tr>
<td>24.</td>
<td>Knowing limitations and asking for help</td>
<td>Asking for help and knowing when to ask</td>
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<tr>
<td>25.</td>
<td>Overconfident</td>
<td>Professionalism or effectively demonstrating professional behaviour</td>
</tr>
<tr>
<td>26.</td>
<td>Using mobile phones inappropriately in work</td>
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<td>27.</td>
<td>Professional dress</td>
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### NGT 5

**Sticky note items**

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<tr>
<th></th>
<th>Thematic challenge generated during NGT</th>
<th>Final theme after transcript analysis</th>
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<tbody>
<tr>
<td>1.</td>
<td>Where things are located in the pharmacy</td>
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<tr>
<td>2.</td>
<td>Understanding/knowledge of the jobs/roles of pharmacy staff</td>
<td></td>
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<td>3.</td>
<td>How walk-in and repeat prescription systems work</td>
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<td>4.</td>
<td>Understanding the process of bagging up and handing out medication</td>
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<td>5.</td>
<td>Knowledge of store targets for services</td>
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<tr>
<td>6.</td>
<td>Knowledge of local GP surgeries and how they operate</td>
<td>Lacking local area knowledge</td>
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<td>7.</td>
<td>Working as part of a team</td>
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<td>8.</td>
<td>Working with an ACT</td>
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<td>9.</td>
<td>Working well with other staff members</td>
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<tr>
<td>10.</td>
<td>Getting the team ‘on-side’ using sweets/cakes</td>
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<td>11.</td>
<td>Lacking confidence in making decisions</td>
<td>Confidence (too little or too much)</td>
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<td>12.</td>
<td>Nervous and unable to seek help</td>
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</tr>
<tr>
<td>13. Overconfident and appearing to need no help</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14. Getting to know customers better</td>
<td>Getting on with patients</td>
<td>Patient care and customer service</td>
</tr>
<tr>
<td>15. Building up a relationship with customers</td>
<td></td>
<td></td>
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<tr>
<td>16. Speaking to customers on their level</td>
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<td></td>
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<tr>
<td>17. Interacting with different customers</td>
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</tbody>
</table>
Appendix 8 Nominal group study ethics approval

Ref: ethics/230915

Ms. Magola-Makina
Manchester Pharmacy School

Date 12/10/15

Dear Ms. Magola-Makina

Study title: Magola-Makina: Foundation years in private sector partners-exploring transition and developing a mentoring programme for newly qualified community pharmacists (15388)

Research Ethics Committee [3]

I write to thank you for coming to meet the Committee on the 23rd September 2015. I am pleased to confirm a favourable ethical opinion for the above research on the basis described in the application form and supporting documentation as submitted and approved by the Committee.

This approval is effective for a period of five years. If the project continues beyond that period an application for amendment must be submitted for review. Likewise, any proposed changes to the way the research is conducted must be approved via the amendment process (see below). Failure to do so could invalidate the insurance and constitute research misconduct.
You are reminded that, in accordance with University policy, any data carrying personal identifiers must be encrypted when not held on a secure university computer or kept securely as a hard copy in a location which is accessible only to those involved with the research.

**Reporting Requirements:**

You are required to report to us the following:

1. Amendments
2. Breaches and adverse events
3. Notification of Progress/End of the Study

**Feedback**

It is our aim to provide a timely and efficient service that ensures transparent, professional and proportionate ethical review of research with consistent outcomes, which is supported by clear, accessible guidance and training for applicants and committees. In order to assist us with our aim, we would be grateful if you would give your view of the service that you have received from us by completing a feedback sheet


We hope the research goes well.

Yours sincerely,

Mr. Adrian Jarvis

Secretary to University Research Ethics Committee 3
Appendix 9 Distress protocol

DISTRESS PROTOCOL - PHARMACIST INTERVIEWS

1. Observe
   Participant indicates they are experiencing distress, or exhibit signs of distress

2. Stop
   Stop the interview/discussion and offer support immediately from the healthcare professional researcher

3. Assess
   S sensitively ask the participant if they feel able to carry on with the interview/discussion - remind them of confidentiality and their right to withdraw at any time

4a. Review - Continue?
   If participant feels able to continue and wishes to, restart the interview after a short break

5a. Monitor
   Continue to monitor the participant for further signs of distress

6a. Signpost
   At the close of the interview/discussion, confirm the participant is fine and provide support details

4b. Review - Terminate?
   If participant feels unable to continue, terminate their participation immediately

5b. Refer
   Provide support details and refer participant

6b. Follow up
   Follow up within 24 hours and signpost further if required

1. Support details for pharmacists
   a. Pharmacist Support Listening Friends line - 0808 168 5133 or info@pharmacistsupport.org
   b. Samaritans (24 Hours) – 116 123
<table>
<thead>
<tr>
<th>Measure /tool</th>
<th>Tool</th>
<th>Measures</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td>CFGNES</td>
<td>Casey Fink Graduate Nurse Experience Survey</td>
<td>Graduate Nurse Experience</td>
<td>A five-section survey with: demographic information, skills, procedure performance (including assessment of comfort/confidence), organizing–prioritizing ability, perceived support, patient safety, personal stress, communication leadership, professional satisfaction, and job satisfaction</td>
</tr>
<tr>
<td>ATS</td>
<td>Anticipated Turnover Scale</td>
<td>Measures recruitment, retention and turnover rates.</td>
<td>The scale contains 12 items with 7 response options that range from “agree strongly” to “disagree strongly.” It provides an index of an employee’s perception or opinion of the possibility of voluntarily terminating his or her job.</td>
</tr>
<tr>
<td>MMSS</td>
<td>The McCloskey–Mueller Satisfaction Survey</td>
<td>Resident Job Satisfaction</td>
<td>A 31-item scale with eight domains of satisfaction: intrinsic rewards, scheduling, work - family life balance, co-workers, interaction opportunities, professional opportunities, praise and recognition, control and responsibilities</td>
</tr>
<tr>
<td>CONP</td>
<td>Gerber Control Over Nursing Practice Scale (CONP)</td>
<td>Autonomy</td>
<td>A 16-item scale that measures the extent to which nurses believe they could engage in consultation about complex care problems, influence the care their patients received, and act on their own decisions</td>
</tr>
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</table>
Appendix 11 Interview schedule for GP Mentor and Nurse preceptors

GP Mentor/Nurse Preceptor Interview topic guide 22 July 15

Project title - Exploring transition and developing a peer support intervention for newly-qualified community pharmacists

Interview topic guide

Interviews will explore with participants their experiences of providing support to novice practitioners, their motivation to perform this role, how they implement their role in practice, and the barriers and facilitators to this in the practice setting.

Facilitator notes

Thank participants for agreeing to take part in the interview. Confirm that consent form has been signed. Answer any queries about the research that the participants might have. Confirm that, as per the consent form, the participants are still happy to have the interview digitally recorded. Explain the rationale for the research and the aim of the interview. Reassure participants about confidentiality. Participants will also be reminded that their participation is voluntary and at this stage will be asked again whether they are happy to proceed.

Topics to be covered:

GP Mentor/Nurse Preceptor role

1. Tell me about how (the way in which you prefer to) support trainee GPs/newly qualified nurses?

2. What factors help you to do your job well (facilitators)?

3. What factors prevent you from doing your job well (barriers)?

4. What is your motivation for taking on this role?
5. What are the benefits to you in providing this support to novice practitioners?

6. What reward/recognition do you feel you should get for doing this?

7. What support do you receive to help you in this role? Who from?

8. What preparation do you receive to help you in this role? How long for?

Novice practitioners

9. What types of problems are most common amongst the newly qualified nurses/trainee GPs you support?

10. How long do you feel they need this level of support for?

Probes will be used when necessary to obtain more in-depth information

- Could you say something more about that?
- Can you give more detailed description of what happened?
- You said...what do you mean by that?
- Why did you hesitate just then?
- Can you unpack that for me....

Thank you for taking part in this interview.
Appendix 12 The NCPPC intervention handbook (p1-28)

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# NCPPC Programme - Transition to Practice Handbook

The Novice Community Pharmacist Peer Coaching (NCPPC) programme
A programme resource to support professional practice

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Published in August 2016

Author
Ennath Magola MRPharmS, University of Manchester
About this handbook

Transition

Your transition from pre-registration trainee pharmacist to registered community pharmacist can be a daunting and overwhelming experience. During transition, you experience a period of intense learning and adjustment until you become more comfortable in your role and gain professional confidence. Some pharmacists (and other healthcare professionals) have reported that getting to this point can take from several months up to three years.

The NCPPC programme

This handbook is for the Novice Community Pharmacist Peer Coaching (NCPPC) programme. Use it alongside NCPPC discussions, workplace experiences and meetings. The handbook aims to ease your transition from pre-registration trainee to pharmacist by:

- informing you of the challenges commonly faced by novice community pharmacists at transition
- prompting reflection and providing coaching on managing these challenges

How was this handbook developed?

This handbook is based on a series of group discussions with pharmacists that had recently experienced the transition, pre-registration tutors, as well as pharmacy technicians and managers who had worked alongside recently qualified pharmacists. The discussions identified the challenges that novice community pharmacists face at transition. (See some of their quotes in this handbook.)

At the end of the discussions, they then decided what the most important challenges are, which are outlined in Modules 1-5.

How should you use this handbook?

Not all pharmacists will encounter every challenge or experience challenges in the same way; therefore use this handbook in the way that is most relevant to your development needs.

The handbook has 5 modules. Each module begins with a description of the challenge and is followed by reflective questions, workplace activities and hints and tips.
Starting out

Welcome to the community pharmacy profession! The pre-reg year is over, the exam is written, and you have passed! You’ve done it and all those years of hard work have now paid off. Congratulations! How do you feel? Relieved, euphoric and celebrating? Maybe you feel a bit nervous, anxious, not sure you’re ready to be responsible pharmacist? It is likely your first few days or weeks in practice will include a mixture of all those things.

How does this handbook fit with other programme activities?
Use your experiences at work, the group activities, and handbook activities for
1. personal reflection
2. shared reflection (discussions with programme peers)
3. writing reflective logs (CPD) and development plans
4. discussing and reviewing development plans with your coach

1. Do this!
As a healthcare practitioner you should reflect regularly, engage with your peers, and strive continuously for improvement. This is probably a good time to reflect on what you could do if you get faced with a challenge in the workplace. Where would you seek support, who would you contact and why?

If I was faced with a challenge I would seek support from...
By engaging with other pharmacists through NCPC programme you will get personal, professional, social or practical support from other pharmacists who have had similar experiences. This is known as peer support. Having peer support will help you to be prepared for your role, particularly if you do not regularly work alongside a second pharmacist. Unlike most other healthcare professionals, community pharmacists are commonly the only pharmacist in the team; this can be both a challenge and an opportunity.

2. Do this!

To begin with, a simple but effective suggestion – **ASK!**

1. Ask for help – from your immediate team who know the local systems, practices and culture, from your patients who are experts of their own conditions and importantly, other pharmacists. Like you, they have gone through transition.
2. Ask lots of questions – this is a time of intense learning; remember, there’s no such thing as a stupid question!
3. Ask for time – time to reflect and think through your decisions; don’t feel pressured to know everything.
4. Ask for a break – yes there may be a lot of work, but a pharmacist who is hungry, tired and dehydrated is more likely to make an error, and less likely to recognise one.
5. Ask ___________ (What would you add to this list?)

**MODULE 1: Professional Accountability**

As a pre-registration pharmacist, you are accountable for your actions within the team. When you register as a pharmacist, it is your legal and professional responsibility to ensure:
- the safe effective running of the pharmacy
- that workload and working conditions do not present a risk to patient care or public safety

Today, the responsible pharmacist sign has your name on it! But what does this feel like, what does it really mean in practice?

> It's about, you know, running the whole show, but, it's like, hang on a minute, I haven't done this before....'

Pharmacists qualified August 2013

The transition from pre-registration pharmacist to fully accountable, responsible pharmacist can feel overwhelming.

**Challenges**

During transition you may:
- feel uncertain or have low confidence
- wonder 'how do I know if what I'm doing is right?'
- worry about making a mistake or causing patient harm
- worry what the legal ramifications of your professional accountability are
- struggle to be fully aware of/monitor all the activities happening in your dispensary you're responsible for
It is important to recognise that professional accountability requires a range of skills, including effective communication, leadership, autonomy and professional judgement. With time and experience, you'll become more comfortable managing those responsibilities and meeting professional standards.

3. Do this!

**What is the difference between accountability and responsibility?**

What elements are you responsible for in the pharmacy? How does this responsibility make you feel?

As responsible pharmacist, are you accountable for other staff managers, dispensers or ACTs?

**Hints and tips for professional accountability**

- Be continuously aware of your own actions and those of individual pharmacy team members.
- Do you know everyone’s role, responsibility and capability?
- [resource link]

...
MODULE 2: Decision making

Situations regularly arise in the pharmacies which require you to apply objective clinical, legal or ethical reasoning to reach an effective decision.

I found it difficult to balance when to let something go or not. So as a rule, I didn’t let anything go…you’ve got no idea what other pharmacists would do...

...Because you learn from doing it, decision-making - you learn from doing it - you don’t really do it up until that point at registration.

Note down any experiences you’ve had that are similar.

Making effective decisions and developing professional judgement requires experience and skill. Ideally you’d make a correct and fully-informed decision in every situation, however this is unrealistic. Your circumstances or setting may influence your decision-making.

During transition you may

- feel pressured by colleagues or patients who expect answers/decisions to be made quickly
- not know the answer to the query and fear looking incompetent
- have your decisions challenged or compared to those of other (more experienced) pharmacists
- lack the information needed to make effective decisions and make mistakes along the way
- have no clear cut answer or feel uncertain whether you explored every available option

4. Do this!

Write a brief account of a recent difficult (clinical, legal or ethical) decision that you made recently at work.

Did you have time to gather information and reflect?

Who did you involve in making that decision?

What would you do differently next time?
Hints and tips for decision making

Remember that your decisions may be influenced by expectations [of yourself and others], the available resources and environment. Consider the following:

1. Have you seen a similar situation before?
2. Are you thinking critically, using best practice, listening actively and communicating effectively with your team?
3. Are you reflecting on what would you have done differently?
4. Are you sharing your learning with the team or other pharmacists and getting feedback?

What hints and tips can you add from discussions with the group and coach?

---

MODULE 3: Workplace relationships

The most important relationships you will build in the pharmacy are with your patients and immediate colleagues. Reflect regularly on your communication skills and assess where and how you can improve them.

Newly qualifieds need to learn to work as a team. Because teamwork to me is just as important as having the ability and the knowledge to check prescriptions......

...because they are assistant managers, they think they are higher than you, and they try and sort of question your judgement, your way of doing things...

Store manager and technician

Pharmacist qualified August 2015

Positive relationships facilitate communication, teamwork and productivity in the pharmacy. Working together for eight or more hours a day can be a challenge for any team as personalities, perspectives or priorities may differ.

Good communication skills improve teamwork, trust, mutual respect and safe effective working. How well do you know yourself? And how do you know what you don’t know?
During transition you may
- lead established teams with older team members
- feel pressured to meet/exceed colleague expectations
- not understand colleague expectations
- need to challenge negative attitudes or poor professional practice from colleagues
- find your decisions challenged by dispensary staff, managers or prescribers

5. Do this!

You are working in a pharmacy for the first time and observe some poor practices which may impact on patient safety. How would you challenge that respectfully?

When you start out it helps to identify where you fit into the team. Fill in the grid and reflect on a) where you fit in? b) who you call on for support? c) what type of support that individual can provide?

| Name | Role and responsibility | Helpful for...
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I've had it in a couple of stores, where patients stand over you, when you're checking and when you're first newly-qualified, it's the worst feeling in the world.

Pharmacist qualified 2015

A newly-qualified pharmacist said... "Oh you're here for your methadone!". And you can see the patient cringing, and it was just... They need to know when to be a bit more discrete.......

Technician

Think about your verbal, non-verbal and written communication skills: do you risk miscommunication through jargon, lack of confidence, not listening actively or making assumptions? How you would tailor your language to suit the age, sex, ethnicity or mental capacity of a patient during a consultation.

During transition you may
- encounter angry, upset, demanding, intoxicated, verbally abusive or aggressive patients/customers
- lack communication confidence so patients may not follow your recommendations

Hints and tips for managing conflict

Are personal factors (hungry, tired pharmacist) and system factors (time pressure, high workloads) contributing to difficult interactions?

- 
- 
- seek feedback from peers in a ‘debrief’ and consider whether you have any training needs

Challenges
**MODULE 4: Personal challenges**

**Challenge 1: Emotional wellbeing & stress**

During transition you may

- feel concerned about your abilities, fear making a mistake/error or feel the need to protect yourself
- feel pressured to meet or exceed patients or colleagues expectations
- feel mentally overloaded by the workload, different workplace systems and practices
- struggle to manage your time effectively or remain calm in difficult situations

**7. Do this!**


2. Spend 5-10 minutes completing the Blank Brain Task (get a blank template from coach)

**Hints and tips for managing stress**

Pharmacist Support offers the Wardley Wellbeing service or E-therapy programmes for pharmacists [http://www.pharmacistsupport.org/how-we-can-help/wellbeing/](http://www.pharmacistsupport.org/how-we-can-help/wellbeing/)

Mindfulness and wellbeing – [http://bejointful.co.uk/](http://bejointful.co.uk/)

**Challenge 2: Managing self**

During transition you may

- be uncertain how to prioritise, manage/organise workload, delegate work or seek help
- struggle to juggle multiple tasks, manage interruptions and complete what you start

**8. Do this!**

- List all the different tasks you need to do (get a blank template from coach)
- Assign each task to a section in the matrix. Identify which tasks to leave or delegate
- Assign remaining tasks a rank order for completion

**Hints and tips for managing self**

- 
- 
- 
- 
-
Challenge 3: Leadership and assertiveness

During transition you may
- Feel that you are unable to get staff on board with your decisions because of your novice status
- Feel uncomfortable leading, delegating or disciplining older, experienced pharmacy team members.
- Feel that admitting you don't know makes you weak or incompetent.

9. Do this!

What factors do you feel influence your ability to lead the dispensary team and be assertive? Is it your lack of experience or skills, your relatively young age?

2. Watch the Pharmacist Support video on assertiveness and time management (13 mins). Note down any hints and tips you find helpful below: https://vimeo.com/97921064

10. Do this!

1. Often, getting extra staff is not an option. Are the available staff (such as accuracy checking technicians, ACTs, pharmacy technicians) being used effectively to maximise their skills (skill mix)? Think back to activity 5. (p11).

2. Do you have an SOP for working alone? What else can you do to work as effectively and as safely as possible?

Hints and tips for developing leadership and assertiveness skills:
- [ ]
- [ ]

Hint or tip for managing workload and staff shortages:
- [ ]
- [ ]
Challenge 2: Clinical or commercial?
During transition you may:
- Feel pressured by the expectation to work towards targets for services that you feel are high.
- Have your performance judged against the service or sales targets rather than the quality of care you give to patients.
- Find that business, retail and accounting skills are needed alongside your clinical expertise.

11. Do this!
Ensure a balance is met between protecting and promoting the health and well-being of patients whilst maintaining ethical business practices.

Challenge 3: New or unfamiliar situations
During transition you may:
- Feel nervous about working in unfamiliar locations with new patients, staff and systems.
- Notice that practices between different branches of the same company differ.
- You may have to set a new service or perform an unfamiliar one (care homes, dosettes, supervised consumption).
- Be uncertain of the format of your very first MUR, NMS or EHC consultation.

Challenge 4: Managing risk
During transition you may:
- Be overcautious in your practice for fear of making a mistake.
- Feel it is more important you do not break the law or deviate from an SOP, even if that means you can’t help the patient.

12. Do this!
Look at your Day One checklist. What can you do to prepare yourself for a day in an unfamiliar store?

Hint or tip for managing new or unfamiliar situations:
- 

Try this!

13. Do this!
Complete learning or update your knowledge for safeguarding, whistleblowing, clinical governance, audit, duty of care and risk assessment.

Resources for risk management and assessment:
- 

Try this!
Other challenges
There may be other concerns you have during transition. Which of these have you encountered?

- Difficult pre-registration experiences
- Feeling lost without your pre-reg tutor
- Controlled drugs prescriptions and balances
- Interpreting unclear prescriptions
- Communicating across language barriers
- Challenging conversations with prescribers
- Getting time to learn and receiving feedback
- Career progression, training and development
- Finding employment (locum or employee positions)
- Paperwork for self-employment (tax, insurance)
- Life changes (marriage, having children, illness, house purchase, relocation)

Note down any concerns here 14. Do this

---

<table>
<thead>
<tr>
<th>REFLECTIVE LOG</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENTRY TYPE</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>□ PLANNED ENTRY □ PEER DISCUSSION</td>
</tr>
<tr>
<td>□ UNPLANNED ENTRY □ CASE STUDY</td>
</tr>
</tbody>
</table>

1. Describe the activity/event that enabled you to learn something new or refresh your knowledge or skills

2. Give an example of how this learning has benefited your patients or service users
NCPPC programme: IPDAP INDIVIDUALISED PERSONAL DEVELOPMENT ACTION PLAN

INDIVIDUALISED PERSONAL DEVELOPMENT ACTION PLAN

DATE:

GOAL – What do you want to achieve? (SMART) +

REALITY – What is the current situation?

OPTIONS – What could you do? Are there any obstacle?

WAY FORWARD – What will you do?

BY WHOM WHEN

Step 1
Step 2
Step 3

REVIEW DATE:

GOAL ACHIEVED? NEXT STEPS

*SPECIFIC, MEASURABLE, ACHIEVABLE, REALISTIC, TIMED

The NCPPC programme Day One Checklist

Contact the pharmacy before your shift

Arriving for your shift

During your shift

Completing your shift

*Ensure any communication sent from the previous day is actioned
*Ensure your contact information for inputs is correct & your contact number should be visible on your ID

FIND, FOCUS, BUILD, ACCREDIT, GENERAL ABILITY, 100% PREPARED, 100% COMPLIANT
## Useful contacts and resources

<table>
<thead>
<tr>
<th>Service</th>
<th>Contact Information</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Regulation and Professional</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GPhC</td>
<td><a href="http://www.gphc.org.uk">www.gphc.org.uk</a>, 0500 779 555</td>
<td>Professional guidance, registration, regulation, professional guidance of pharmacists, business services, training, education, etc.</td>
</tr>
<tr>
<td>NPSA</td>
<td><a href="http://www.npsa.nhs.uk">www.npsa.nhs.uk</a>, 020 7 747 5555</td>
<td>Health care regulation, professional standards, pharmaceuticals, business services, training, education, etc.</td>
</tr>
<tr>
<td><strong>PCG</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACPC</td>
<td><a href="http://www.acpc.org.uk">www.acpc.org.uk</a>, 020 7 747 5555</td>
<td>Evidence, best practice guidance, professional standards, pharmaceuticals, business services, training, education, etc.</td>
</tr>
<tr>
<td>GPhC</td>
<td><a href="http://www.gphc.org.uk">www.gphc.org.uk</a>, 0500 779 555</td>
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</tr>
<tr>
<td><strong>NHS England</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NHSE</td>
<td><a href="http://www.nhs.uk">www.nhs.uk</a>, 0500 779 5555</td>
<td>National health service, England, Wales, Scotland, Northern Ireland, Health Information Network, etc.</td>
</tr>
<tr>
<td><strong>Local Authorities</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manchester City Council</td>
<td><a href="http://www.manchester.gov.uk">www.manchester.gov.uk</a></td>
<td>Regimental hospital, Manchester Mercedes Benz Hospital</td>
</tr>
<tr>
<td><strong>Manufacturers &amp; Distribution</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manufacturer</td>
<td><a href="http://www.medicines.org.uk">www.medicines.org.uk</a></td>
<td>Products, services, healthcare, etc.</td>
</tr>
<tr>
<td><strong>Pharmaceutical Alliance</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NFDA</td>
<td><a href="http://www.nfda.co.uk">www.nfda.co.uk</a>, 0800 182 352</td>
<td>National formulary, drugs, treatments, etc.</td>
</tr>
<tr>
<td><strong>PCG</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACPC</td>
<td><a href="http://www.acpc.org.uk">www.acpc.org.uk</a>, 020 7 747 5555</td>
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<td>Professional guidance, registration, regulation, professional guidance of pharmacists, business services, training, education, etc.</td>
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<td>NPSA</td>
<td><a href="http://www.npsa.nhs.uk">www.npsa.nhs.uk</a>, 020 7 747 5555</td>
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<td></td>
</tr>
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<td>Regimental hospital, Manchester Mercedes Benz Hospital</td>
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<td>Health care regulation, professional standards, pharmaceuticals, business services, training, education, etc.</td>
</tr>
</tbody>
</table>

**Notes:**
- GPhC: General Pharmaceutical Council
- NPSA: National Prescribing Centre
- ACPC: Association of Chief Pharmacists
- NHSE: NHS England
- NFDA: National Formulary Development Agency
- PCG: Primary Care Group
Appendix 13 ‘NCPPC ground rules’ for WhatsApp group

Function of this WA group
1. Need a quick answer to this?
2. Has anyone ever seen this before?
3. I need a second opinion?
4. What would you do in my position?
5. Clinical/legal or ethical dilemma to discuss?

If you know the answer, have a dispensing technician who can help or can easily find it in the BNF/MEP that’s fine. Post your questions/comments/opinions to give and receive support within the group.

We are all here to help and advise each other; however final decisions are made by and accountable to each responsible pharmacist

For what
Topics – any pharmacy-related query that you need support with; from clinical query, to entering an MUR on a particular computer screen, unrealistic MUR targets, to communicating with an aggressive/terminally-ill patient.

Communication type - Urgent or non-urgent queries
Urgent? You decide how urgently you need that help – is the patient on the premises, waiting? FOR URGENT QUERIES/REQUESTS, PLEASE USE FLASHING LIGHT/AMBULANCE SIGN

Non urgent Can it wait until the end of the day? Are you thinking about something that happened last week but would like to discuss it? Need a second opinion (less urgent)/has anyone ever seen this before/any idea what this means/what would you do?

General communication
1. Alerts
2. Events/training
3. Meeting reminders
4. CPD reminders
5. New/unusual event/experience

Ground rules
1. No question is too stupid
2. All communication is confidential
3. Try to avoid posting before 8am and after 7pm unless you are at work or it is urgent
4. We are all practising pharmacists supporting each other so there may be times we are at work but please check phones regularly
5. Post to group or direct to any individual – up to you
6. No criticism/disrespect/aggression/abusive language
7. You can post a picture of a prescription/drug/document as long you hide all identifier patient details etc........
Appendix 14 Coaching questions

“Based on the information on your development plan, we will discuss your goal, how things currently are in that area, the options available to you and then plan a way forward.

<table>
<thead>
<tr>
<th>GOAL</th>
<th>REALITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>What would you like to achieve? Short term? Long term? Why is that important to you?</td>
<td>What is happening now? (what, where, when, who)</td>
</tr>
<tr>
<td>Is that feasible, possible realistic?</td>
<td>Who are the people involved?</td>
</tr>
<tr>
<td>Could you make your goal more specific?</td>
<td>Are there any other factors that might be relevant?</td>
</tr>
<tr>
<td>When would you want to do this by?</td>
<td>How do you feel when things are not going to plan?</td>
</tr>
<tr>
<td>How will you know you have achieved it? How will you measure it?</td>
<td>Does this affect other people? In what way?</td>
</tr>
<tr>
<td>On a scale of 1 – 10, rate yourself now, and where you would like to be after this</td>
<td>Can you think of anything that might be holding you back?</td>
</tr>
<tr>
<td>How could you personally influence achieving that goal?</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OPTIONS</th>
<th>WAY FORWARD</th>
</tr>
</thead>
<tbody>
<tr>
<td>What things could you do to make that happen?</td>
<td>Which options are you going with?</td>
</tr>
<tr>
<td>Who might be able to help at work?</td>
<td>Do feel those options meet your aims?</td>
</tr>
<tr>
<td>What else could you do?</td>
<td>Is there anything that might prevent you from doing that? How will you manage that issue?</td>
</tr>
<tr>
<td>Would you like another suggestion from me?</td>
<td>Who do you need to support you in that?</td>
</tr>
<tr>
<td>Which options do you like the most?</td>
<td>How can I support you to achieve that?</td>
</tr>
<tr>
<td>Would you like to choose an option to act on?</td>
<td>When shall we review this plan?</td>
</tr>
</tbody>
</table>

Appendix 15 Intervention recruitment document

Participant invitation for interview 1

Title of project: What are the views of novice community pharmacists about a group peer coaching programme during transition to practice?

You are being invited to take part in a research study which aims to evaluate the acceptability and feasibility of a coaching programme for novice community pharmacists during transition to practice. When you were invited to join this coaching programme, you were also informed that some evaluation of the programme would occur through interviews. We are now inviting you to consider participating in the first of these interviews. We would like to hear your views on the contribution of the programme to addressing the challenges of transition as you are participating in this programme. Before you decide if you want to take part it is important for you to understand why the interview is being carried out and what it will involve for you. Please take time to read the following information carefully, discuss it with others if you wish and ask if you would like more information. Thank you for reading this.

Who will conduct the research?

A researcher from Manchester Pharmacy School, JF is conducting the interviews.

Why have I been chosen?

You have been chosen because you are participating in The Novice Community Pharmacist Peer Coaching (NCPCC) programme.

What would I be asked to do if I took part?

You are being invited to take part in a telephone interview; this interview will take place 6 weeks after the start of the programme. The interview will ask questions about your experiences during the coaching programme, how suitable or acceptable you felt the programmes activities were, and how you feel the coaching programme influenced your transition to practice period. If you become uncomfortable, upset or distressed while discussing you experiences, our distress protocol will be followed. You will be given the option to stop the interview, not cover that question, discuss an alternative question or take a short break before returning to that question. The interviewer will also provide information sources for additional support, such as the charity Pharmacist Support (weekday) or the Samaritans (weekend). The day after the interview, the interviewer will contact you by phone to check on your wellbeing.

We expect that it will take up to 60 minutes to complete the interview and you will be given a high street voucher for £25 to say thank you for taking part. You will be interviewed by a researcher from the University of Manchester, SW. This interviewer is independent of Esnath and is not supervised by Esnath. If you are interested in taking part please contact: Jane Ferguson, Manchester Business School, Oxford Road, Manchester, M13 9PL jane.ferguson@manchester.ac.uk. If you are happy to
take part you will be asked to sign a consent form. Once we have received a consent form from you, you will be contacted in order to arrange a convenient time for you to take part in a telephone interview.

What happens to the data collected?

All information provided by you during the interview will be kept strictly confidential. The recorded interview will be transcribed – this means that the interview will be listened to and then put into written words by a transcription company approved by the University to provide this service. This transcript will be sent back to the interviewer (SW) who will anonymise the transcripts by removing any names or other information that might make it possible to identify you. Your coach, Esnath, who is delivering the programme, will be unable to identify you from the transcripts and will only have access to them after the programme ends. Findings from the analysis may be published in a report, journal articles and/or conference presentations and may include quotations from the interview but these will not have your name or be attributed to any particular participant. Once anonymised, study data may not be withdrawn.

In the interests of patient safety, it may be deemed necessary to break this confidentiality if you describe some seriously unsafe practice of yours (e.g. dispensing a ten-fold overdose of warfarin for a patient) that you state as not having been previously reported though your professional body. We have an obligation to report this to the appropriate bodies. If this situation occurs, the interview will be stopped and the matter discussed with you, making it clear what is happening before discharging that responsibility.

Where will the research be conducted?

The interviews will be conducted on the telephone, somewhere you can speak privately to the interviewer who will be located in the Stopford Building, Manchester Pharmacy School, The University of Manchester, Oxford Road, Manchester.

How is confidentiality maintained?

Confidentiality will be maintained at all times. This is very important to us. Your name and any identifying features will be removed from findings reported in reports, articles or presentations and will not be traceable back to you.

Will I be paid for participating in the research?

You will be given a high street voucher for £25 to say thank you for taking part in this interview.

What is the duration of the research?

We expect that it will last up to 60 minutes to complete the interview.

If you are interested in taking part please contact: Jane Ferguson, Manchester Business School, Oxford Road, Manchester, M13 9PL jane.ferguson@manchester.ac.uk.
Appendix 16 Feasibility study participant information sheet
18 July 2016 Version 3

Participant information sheet

Title of project: What are the views of novice community pharmacists about a group peer coaching programme during transition to practice?

You are being invited to take part in a research study. Before you decide if you want to take part it is important for you to understand why the research is being carried out and what it will involve for you. Please take time to read the following information carefully, discuss it with others if you wish and ask if you would like more information. An information sheet with the programme objectives and activities (meetings, reflective logs and development plans) and consent form have also been attached. Thank you for reading this.

Who will conduct the research?
A team of researchers from Manchester Pharmacy School, led by Ms Esnath Magola is conducting the research.

What is the purpose of the research?
The study aims to explore the views of newly qualified (novice) community pharmacists participating in a coaching programme during transition to practice. In particular, we aim to evaluate the acceptability and feasibility of the programme and your views on the contribution of the programme to addressing the challenges of transition.

Why have I been chosen?
You have been chosen because you have expressed an interest in participating in an evaluation of The Novice Community Pharmacist Peer Coaching (NCPPC) programme.

What would I be asked to do if I took part?
You will also be invited to take part in two telephone interviews; the first interview will take place 6 weeks after the start of the programme and the second interview will take place 4 weeks after the end of the programme. The interview will ask questions about your experiences during the coaching programme, how suitable or acceptable you felt the programmes activities were, and how you feel the coaching programme influenced your transition to practice period. If you become uncomfortable, upset or distressed while discussing you experiences, our distress protocol will be followed. You will be given the option to stop the interview, not cover that question, discuss an alternative question or take a short break before returning to that question. The interviewer will also provide information sources for additional support, such as the charity Pharmacist Support (weekday) or the Samaritans (weekend). The day after the interview, the interviewer will contact you by phone to check on your wellbeing.
You will be interviewed by a researcher from the University of Manchester [not Esnath]; because she is running the coaching programme you will be participating in. This interviewer is independent of Esnath and is not supervised by Esnath. If you are interested in taking part please return the consent form at the end of this information sheet to: Esnath Magola, Manchester Pharmacy School, Stopford Building Room 1.136 esnat.magola@manchester.ac.uk. Once we have received a consent form from you, you will be contacted in order to arrange a convenient time for you to take part in a telephone interview, once the programme has started.

What happens to the data collected?
All information provided by you during the interview will be kept strictly confidential. The interview will be audio-recorded on an encrypted, password protected device and stored securely in a locked office for analysis. The recording will then be transcribed – this means that the interview will be listened to and then put into written words by a transcription company approved by the University to provide this service. This transcript will be sent back to the interviewer who will anonymise the transcripts by removing any names or other information that might make it possible to identify you. Instead, a reference number (code) will be assigned to each participant in the study. This way, Esnath, who is delivering the programme, will be unable to identify you from the transcripts. The transcripts will be stored in an anonymised form on a secure password protected secure network drive computer and analysed after the coaching programme ends to look for any common themes. Findings from the analysis may be published in a report, journal articles and/or conference presentations and may include quotations from the interview but these will not have your name or be attributed to any particular participant. Once anonymised, study data may not be withdrawn.

Your anonymised data may be stored for use in other research within Manchester Pharmacy School relating to transition and foundation pharmacy practice or feasibility studies.

How is confidentiality maintained?
Confidentiality will be maintained at all times. This is very important to us. Your name and any identifying features will be removed so that all written transcripts are anonymised. This means we can respect confidentiality at all times. All completed consent forms will be stored in a locked filing cabinet in a locked office. All findings reported in reports, articles and presentations will not be traceable back to you. Details of your participation will not be divulged to any person outside of our research team and Esnath, who is delivering the programme, will not know if you have participated in an interview and will be unable to identify you from the transcripts. The study will respect confidentiality and ask you not to mention patients or colleagues by name. If any details of colleagues or patients are mentioned they will be promptly removed from the interview data.

In the interests of patient safety, it may be deemed necessary to break this confidentiality if you describe some seriously unsafe practice of yours (e.g. dispensing a ten-fold overdose of warfarin for a patient) that you state as not having been previously reported though your professional body. We have an obligation to report this to the appropriate bodies. If this situation occurs, the interview will be stopped and the matter discussed with you, making it clear what is happening and before discharging that responsibility.

What are the benefits and risks to me of taking part in the study?
There are no direct benefits to taking part in the interviews although the information you provide will help us gain a better understanding of the acceptability, feasibility and perceived value of the coaching programme. This will help us make recommendations for the requirements of programmes designed to support novice community pharmacists during transition to practice. Taking part may
also help you reflect on the way in which you work. It is unlikely that you will experience any
dangers, discomfort or inconvenience.

What happens if I do not want to take part or if I change my mind?
It is up to you to decide whether or not to take part. If you do decide to take part, please complete
the consent form attached. If you choose not to take part, simply do not complete the consent form.
You can withdraw from the evaluation of the programme at any time without giving reason and
without detriment to yourself. You may also leave the interviews at any point, if you wish to. The
information collected can only be withdrawn up to the point at which it is anonymised.

Will I be paid for participating in the research?
You will be given a high street voucher for £25 per interview (total £50) to say thank you for taking
part.

What is the duration of the research?
We expect that it will last up to 60 minutes to complete each interview.

Where will the research be conducted?
The interviews will be conducted on the telephone, somewhere you can speak privately to the
interviewer who will be located in the Stopford Building, Manchester Pharmacy School, The
University of Manchester, Oxford Road, Manchester.

Will the outcomes of the research be published?
Outcomes and findings of the research may be published in reports, peer-reviewed journals or
professional journals or through conferences. All findings reported in reports, articles and
presentations will be anonymised and not traceable back to you.

Who is funding the research?
The research is funded by Pharmacy Research United Kingdom, PRUK*.

What do I do now?
If you have any queries about the study or if you are interested in taking part then please contact
the researcher Ms Esnath Magola | 0161 275 2421/07778 745 833 | esnat.magola@manchester.ac.uk

Who has reviewed the research project?
The project has been reviewed by the University of Manchester Research Ethics Committee [ ].

What if something goes wrong?
If something goes wrong this research study has a distress policy which will be implemented. You
may be referred to Pharmacist Support or the Samaritans for further support. The interviewer will
also follow up by contacting you via telephone the following day.

What if I want to make a complaint?
Minor complaints
If you have a minor complaint then you need to contact the researcher(s) in the first instance. Ms
Esnath Magola | 0161 275 2421/07778 745 833 | esnat.magola@manchester.ac.uk or her
supervisor Dr Ellen Schafheutle | 0161 275 7493 | ellen.schafheutle@manchester.ac.uk

Formal Complaints
If you wish to make a formal complaint or if you are not satisfied with the response you have gained from the researchers in the first instance then please contact the Research Governance and Integrity Manager, Research Office, Christie Building, University of Manchester, Oxford Road, Manchester, M13 9PL, by emailing: research.complaints@manchester.ac.uk or by telephoning 0161 275 2674 or 275 2046.

This Project Has Been Approved by the University of Manchester’s Research Ethics Committee [].

- *To be confirmed
CONSENT FORM

Title of project:
What are the views of novice community pharmacists about a group peer coaching programme
during transition to practice?

If you are happy to participate with the statements below please write your initials in the box
provided and sign below.

I confirm that I have received enough information about the above research study and the peer
coaching programme.

I have had the opportunity to consider the information and ask questions and I have received
satisfactory answers to all my questions. (If you have any questions you wish to ask about the
interviews, please contact: Jane Ferguson, Manchester Business School, Oxford Road, Manchester,
M13 9PL jane.ferguson@manchester.ac.uk.

I understand that my data will remain confidential. ‘In the interests of patient safety, it may be
deemed necessary to break this confidentiality if I describe some seriously unsafe practice of mine
(e.g. dispensing a ten-fold overdose of warfarin for a patient) that I state as not having been
previously reported though my professional body. If this situation occurs, the interview will be
stopped and the matter discussed with me, making it clear what is happening before discharging
that responsibility.’

I understand that my participation is voluntary and that I am free to withdraw interview data or
withdraw from the evaluation at any time, without giving any reason. I understand that once the
data is anonymised, it will no longer be possible to withdraw it.

I give my permission the interview to be audio recorded and for notes made by the researchers to
be kept.

I understand that any information given by me during the interviews may be used anonymously in
future reports, articles or presentations by the research team.

I give my permission that the information I give during the interviews may be used for secondary
analysis.

I agree to take part in the above study.

________________________   ___________________   ______________
Name of Participant   Date   Signature

________________________   ___________________   ______________

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Appendix 18 Interview guide 1

INTERVIEW SCHEDULE 1

Title of project:

What are the views of novice community pharmacists about a group peer coaching programme during transition to practice?

Week 6 of programme

Interviews will explore with participants their own experiences and perceptions of a coaching programme designed to ease the transition to practice period. The first interview lasting up to 60 minutes will take place 6 weeks after the start of the programme and participants will be asked to describe their experiences of the first weeks of practice, their support needs and engagement with the programme and the feasibility of the programme activities.

Interviewer instructions;
Before the start of the interview remind the participant of the purpose of the interview. Ask if they are still happy to continue and remind that the interview is being recorded and notes may be made (with their consent). Also remind them that their responses are confidential but they are free to withdraw from the interview or study at any time. Use the prompts to get further responses from participants.

What made you decide to join the programme?

Programme processes
The coaching programme is designed to help meet some support needs that you may have. I’d like to hear a bit about what it’s been like being a part of the coaching programme.

Given that you are working as a pharmacist have been able to
- complete the logs ?
- make development plans ?
- attend the meetings ?
- seek help from your coach ?
  - about what kinds of things
- seek help from your peers?
  - About what kinds of things

What has made it easier/what would make it easier to do these activities?
What has made it harder/what would make it harder to do these activities?

Early programme experiences
You have been working as a registered healthcare professional for a few weeks now.
- Can you describe to me what being professionally accountable means to you?
- How has the programme helped you as you learn to make judgements about clinical, legal and ethical issues?
  - What about the programme helps you do that?
I’d like to know a bit more about what that’s been like since you qualified.

- Tell me what your first week was like as a newly qualified community pharmacist.
- Did you contact the coach or other programme members during this time?
  - What was that contact in relation to?
- Are there any times that stand out that were particularly challenging? What was it particularly that made it challenging? What did you do about it? Did you contact your coach?

How has the programme helped you manage difficult relationships or communication issues with people in the workplace?

- Your colleagues
- Your patients
- Other healthcare practitioners

How do you think being on the programme is making a difference to your transition at this stage?
Are there any other things about your experiences that you would like to add?
Appendix 19 Interview guide 2

The development of a peer support intervention to address the challenges faced by novice community pharmacists at transition to practice.

INTERVIEW SCHEDULE 2

Title of project:

What are the views of novice community pharmacists about a group peer coaching programme during transition to practice?

The second interview lasting 30 - 60 minutes will take place 4-6 months after the end of the programme. The second interview will ask participants to reflect back on their experiences during the programme, and in particular, how their support needs changed over the course of time and how they perceived that the coaching programme influenced the transition to practice period.

Interviewer instructions:

Before the start of the interview remind the participant of the purpose of the interview. Ask if they are still happy to continue and remind that the interview is being recorded and notes may be made (with their consent). Also remind them that their responses are confidential but they are free to withdraw from the interview or study at any time. Use prompts to get further responses from participants.

Now the programme is finished ....

Programme processes

- The programme ended officially in December [you only have the WhatsApp group now, which I will come back to later]. Was it quite clear at the time that the programme was ending? Were you happy with the way the programme ended/finished? What would you change and why?
- Were you able to complete all the activities in the programme? Did anything facilitate/prevent that?
- The programme was quite structured (in terms of tasks/guidance and deadlines). Was that helpful for you during the transition period? How?
- Since the programme ended and you don’t have that structure anymore, are there times you feel you still need it? Or you had it for long enough? Do you think the length of the entire programme was right?

Programme impact; we’re now going to talk about the impact of the programme.....

- Thinking back to around a year ago when you first qualified, that initial few weeks can be a stressful time. What difference did being on the programme make towards any nerves/anxiety/stress you felt?
- How would your transition to practice have been any different (better/worse) without the programme? If you had never joined this group/programme how would the early days of practice have been different?

- How has doing reflective logs/development plans made a difference to your practice?
- How did being on the programme affect your level of confidence over the past year?
- How did being on the programme affect your level of assertiveness over the past year?
- What other impact do you think being on the programme has had on your development over the past year?
**The WhatsApp group**
- So the WhatsApp group was continued after the programme ended. How was this group different to other social media groups out there? Any better, worse or the same?
- The WhatsApp group is used less now, and the coach has not been posting information regularly on there. What impact do you think that has had?
- How often do you use/look at the group now? If she was posting as regularly as during the programme, would you use the group more or not?

**Looking forward**
- Do you think you would ever similarly mentor/coach a newly qualified pharmacist in future? Is that something you might consider?
- Has being on this programme made you more likely to consider mentoring/coaching another newly-qualified pharmacist in future?

**Probes [if needed] to obtain more in-depth information**
- Could you say something more about that.... give more detailed description of what happened?
- You said...what do you mean by that?

**Thank you for taking part in this interview.**
## Appendix 20 Excerpt from the intervention log (Coach Diary)

<table>
<thead>
<tr>
<th>Week</th>
<th>Log Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week 8</td>
<td>Reflective Log 1. Every participant engaged and completed the task on time. Where this didn’t happen (1) they informed me in advance to request extra time as they were away. The logs were completed as requested however it was during conversations with each individual where they got to do more of the reflection and this enhanced the feedback that I gave them. I found that asking them questions about their logs was useful, and this helped them gain a better picture about their train of thought during the event. There was some guidance given to them on the WA group about the type of content, and how long the logs should be. They varied in length, but overall, it was the lack of reflective in the writing that I had to prompt, so I found the one-to-one talks that I had with them very useful. I think the incentive of giving them feedback also ensured that they did them as properly as possible. Feedback was added to logs and they were then emailed back to participants after my discussion with them. Making comments on the logs didn’t take too long – this ranged from 5-10 minutes BUT the telephone conversations were on the whole too long. They ranged from about 12-50 minutes per participant. This was partly my fault as I also used it as a chance to ‘catch up’ and debrief. This led to some of them taking the time to talk more freely about some of their experiences – particularly the challenging ones. One participant began the conversation by saying she only had 10 minutes but she found she had a lot to say and stretched the conversation to 25 minutes. Next time, I will have to be stricter with time and keep the conversation more focussed to the task.</td>
</tr>
<tr>
<td>Week 9</td>
<td>IPDAP 1 week. Whatsapp chat slowed quite a bit this week. I’m not sure if this is because, they have had some time to speak to me on a 1-to-1 or if they think they are spending enough time doing the task so they will dedicate so much time.</td>
</tr>
</tbody>
</table>
Appendix 21 Feasibility study ethics approval Ref 16308

Ref: ethics/16308

Dr Ellen Schaefheutle, Ms Estath Magola
Manchester Pharmacy School
Faculty of Medical and Human Sciences
University of Manchester
M13 9PL

Ellen.schaeheutle@manchester.ac.uk / esnath.magola@manchester.ac.uk

26 July 2016

Dear Dr Schaefheutle, Ms Magola,

Study title: What are the views of novice community pharmacists about a group peer coaching programme during transition to practice? (Ref 16308)

Research Ethics Committee 1

Many thanks for attending the University Research Ethics Committee meeting held on 7th July 2016 to discuss the above study. I am pleased to confirm a favourable ethical opinion for the above research on the basis described in the application form and supporting documentation, as submitted to and approved by the Committee.

This approval is effective for a period of five years. If the project continues beyond that period an application for amendment must be submitted for review. Likewise, any proposed changes to the way the research is conducted must be approved via the amendment process (see below). Failure to do so could invalidate the insurance and constitute research misconduct.

You are reminded that, in accordance with University policy, any data carrying personal identifiers must be encrypted when not held on a secure university computer or kept securely as a hard copy in a location which is accessible only to those involved with the research.

Reporting Requirements:

You are required to report to us the following:

1. Amendments
2. Breaches and adverse events
3. Notification of Progress/End of the Study
Feedback

It is our aim to provide a timely and efficient service that ensures transparent, professional and proportionate ethical review of research with consistent outcomes, which is supported by clear, accessible guidance and training for applicants and committees. In order to assist us with our aim, we would be grateful if you would give your view of the service that you have received from us by completing a feedback sheet https://survey.manchester.ac.uk/powweb/index.php/197136/ang-en.

We hope the research goes well.

Yours sincerely,

[Signature]

Katy Boyle
Secretary to University Research Ethics Committee 1