An evaluation of the scope and practice of Non Medical Prescribing in the North West  
For NHS North West  

Final Report  
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EXECUTIVE SUMMARY

Background
Prescribing has traditionally been a medically dominated activity but is now extended to other health professionals as part of the NHS modernisation agenda through ensuring capacity to deliver accessible and quality care to patients. Part of this process was to provide quicker and more efficient access to medicines for patients by expanding the roles of existing health care professionals, whilst maintaining patient safety. Following the success of community nurse prescribers in 1994, appropriately qualified nurses, pharmacists and allied health professionals can now prescribe a range of medications within their clinical competence and legislative frameworks. Little is known about how health professionals manage this new role within their other responsibilities, the supporting structure, inter-professional relations including collegiate and mentor relations with medical practitioners. This project was commissioned by NHS North West. It was developed as a collaborative evaluation of the scope and practice of non medical prescribing among the eight North West universities offering non medical prescribing courses to health professionals and the North West Strategic Health Authority. The evaluation was implemented during 2006-2008.

Literature Review
A literature review was conducted to identify findings on the impact of the non medical prescribing role as well as under-researched issues, in order to inform future research, education and practice in this area. A review of current literature, post 2002, in the UK was undertaken using electronic databases and specified search terms; some hand searching was also carried out. Forty-three studies were identified and included in the review; nine of which were large multi-method evaluations of independent and supplementary prescribing in nursing and pharmacy. The review concluded that there was substantial evidence of competent non medical prescribing practice by experienced practitioners operating in their specialist areas. In addition, the success of non medical prescribing and its extension to other health practitioners was positively viewed by stakeholders to increase quality of care by practitioners themselves, their patients and other health workers to some extent but there remain several unaddressed barriers and under researched issues that point to the need for further investigation into this important policy initiative.
Aims and objectives
The aims of the study were to undertake an evaluation to assess perspectives of the impact of non medical prescribing on:
- individual stakeholders
- the health service within the North West of England

Specific objectives were to:
- assess the structure of support and organisational activity in non medical prescribing
- identify current non medical prescribing practice to inform a clearer vision for future planning of non medical prescribing policy
- assess how the role of the independent practitioner has changed because of their non medical prescribing competence
- develop a baseline data set that can be used to profile and follow up information longitudinally
- identify appropriate indicators of impact that are meaningful and relevant to practitioners themselves, to colleagues and to their patients
- identify observations of competence
- identify barriers and facilitators to sustainability of the initiative
- understand the impact of non medical prescribers on the service
- develop an approach to context through qualitative work

Design
A multi-method design was employed comprising of three stages:

Phase 1 comprised of five focus groups with non medical prescribing leads representing 24 of 59 Trusts across the North West region. They discussed the organisational structures, support and barriers to non medical prescribing in their area.

Phase 2 comprised a survey of 628 non medical prescribers in practice in the North West region.

Phase 3 comprised a survey of 70 medical practitioners in regular contact with non medical prescribers in the North West region.
Findings

Phase 1: Focus groups of non medical prescribing leads

Four key categories were used to frame the results:

Understanding the role of the non medical prescribing lead

- There was no consistency generally among the Trusts represented about the roles and responsibilities of the non medical prescribing lead. There was a wide variation in allocation of time for the role and no common agreement as to which aspects of the role were dominant and where the boundaries of the role lay. Some non medical prescribing leads were responsible for over 300 staff whereas others had 10
- Two levels of the lead role were identified: strategic and operational. Strategic level involvement influenced trust policy through meetings and discussion at senior or executive level, supported the development of policies, governance and risk assessment. Operational involvement included the sensitive coordination of numerous stakeholders, managers, prescribers, designated medical practitioners within and outside the trust in order to ensure that non medical prescribing targets were met and ongoing support for those already qualified to maintain safe practice. Respondents felt that part of their role should be strategic but, in reality, many were wholly operational
- Non medical prescribing leads were all positive in their descriptions of taking on the operational responsibilities, but there were strong indications of training or support needs for communication in the strategic role

Good practice

- The North West region has probably the most well developed non medical prescribing structure with established forums, regional development groups and the strategic health authority supports continued professional development events that are well promoted and valued
- Good infrastructure support mechanisms were identified at both strategic and operational levels – in collaborative working to develop organisational infrastructure; regional NHS North West supported forum groups; practitioner prescriber networks and continued professional development workshops
- The North West strategy is succeeding in supporting and communicating the need for updates, training and support of non medical prescribers at the practice level
Barriers to non medical prescribing practice

- Strong political dimensions around the entire topic of non medical prescribing have emerged, not necessarily negative towards the non medical prescribing practitioner, but around the policy context in which non medical prescribing operates.
- Non medical prescribing leads noted difficulties for some non medical prescribing staff where their managers/employers had a poor understanding of the roles and responsibilities of the clinical non medical prescribing practitioner.
- The heavy demands of the programme affect the release of staff from their own clinical area and subsequently impact on service provision. Non medical prescribing leads indicated that medical practitioners require encouragement to support staff undertaking the programme.
- Non medical prescribing leads described a “loss of confidence” or reluctance to prescribe as associated with support needs in practice: isolation, lack of opportunity for collegiate decisions and generic support.

The success of non medical prescribing

- There was a very positive and universal acknowledgement across all the focus groups that non medical prescribing has impacted upon the service and ultimately the individual patient by providing increased access to medication and a continuous uninterrupted consultation.

Phase 2: North West Survey of non medical prescribers

Completed questionnaires were received from 628 health professionals (48% response) achieving a non medical prescribing qualification at one of the eight North West Universities between January 2004 and April 2007.

Sample characteristics

- The majority of non medical prescribers were working in senior nursing roles such as nurse practitioner, nurse specialist or nurse manager. Like previous studies, the majority (approximately two thirds) worked in community practice, for a PCT or GP. There were a minority of pharmacists (3%) and allied health professionals (3%).
- Samples were similar to those from previous studies of senior nurses in non medical prescribing roles.
- More than half of the sample (56%) were aged 45 and over.
• Only 4% had fewer than ten years experience as a qualified health professional and half the sample had two years or more non medical prescribing practice experience, post qualification
• Seventeen percent of the sample said they had no current prescribing activity (which includes 14% who had never prescribed)

**Non medical prescribing practice**

• The North West has the highest level of active prescribers compared with other regions in England; 83% of respondents were actively prescribing, a higher proportion than a previous study in the Midlands
• Most non medical prescribers (nearly 80%) remained in the same area of practice as before their qualification
• Most non medical prescribers identified communication with patients as the prescribing related activity on which they spent most time (providing medication information to patients 19% of the time and supporting patients 19% of time). The next most frequent activity was communicating with the medical team (16% of time)
• Fifty seven percent of non medical prescribers thought they spent over half of their working time on prescribing related activity that includes 24% who thought that all their working time was spent this way. However, 18% of non medical prescribers thought they spent only up to 25% of their working time on prescribing related activity and 26% said between a quarter and a half of their working time was spent this way
• Most non medical prescribers were frequently exercising their non medical prescribing powers with 60% issuing 10 or more prescriptions in a week and 29% issuing more than 20. This is an improvement on findings from previous studies. However, 19% were issuing five or less prescriptions in a week
• Half of all non medical prescribers had prescribing related clinical contact with 10-50 patients in a week. Twenty eight percent saw more than 50 patients in a typical week and this included 7% in prescribing related clinical contact with more than 100 patients. However, 18% of non medical prescribers said they had prescribing related contact with only up to 10 patients in a week
• Non medical prescribers used a range of methods to prescribe and supply medicines to patients in practice. Sixty eight percent of the non medical prescribers were using their independent non medical prescribing role, but some 24% of non medical prescribers were using both the supplementary and their independent role
• Analgesia, respiratory medications, diabetes medication, cardiology, wound care and musculoskeletal disorders were the most common conditions for which non medical prescribers in the sample prescribed.

• Fifty eight percent indicated their non medical prescribing activity was focused on up to four specialist areas. Sixty eight percent of responding non medical prescribers indicated their non medical prescribing activity also included common minor complaints, repeat prescriptions, advice, and non specific areas. Five percent indicated they prescribed only on non specialist areas.

Impact of non medical prescribing and influences on practice

• The majority of respondents felt strongly that their non medical prescribing competency had a positive impact on the quality of patient care, patient access to medicines and a better patient experience in that they were not passed from one healthcare professional to another.

• Ninety two percent of respondents achieved one of 10 patient safety related outcomes in the last year. Over half of respondents had identified contra-indications (64%), corrected or changed an existing prescription (54%). The majority (69%) said they had achieved more than five identified patient safety outcomes in the last year. This was identified as a key meaningful and relevant indicator of non medical prescribing impact.

• The non medical prescribing process was overwhelmingly acknowledged as a competence where a prescription may or may not be generated. This role expansion impacts holistically on the clinical contact with patients.

• Estimates from the vast majority of NMPs indicated that their non medical prescribing competency saved significant time in access to medication for an average patient. In the rural zone of Lancashire/Cumbria, the average estimate was a time saving of 7 hours, in the suburban zone of Cheshire/Mersey, the time saving was 14 hours and in the Greater Manchester urban zone, the estimate was 21 hours. This was the second key meaningful and relevant indicator identified from the practitioner survey.

• The vast majority of NMPs (91% of respondents) indicated a time saved for them of around 30 minutes per patient over a week but respondents indicated that time saving might not be a meaningful measure.

• Respondents’ comments indicated that the responsibility of the medication made patient care more time consuming, but this contributed to their own autonomy and satisfaction.
Support for non medical prescribing practice

- Forty three percent said they were well supported with regular opportunities for updates and training and a further 35% said they had occasional opportunities. However, 21% said there had been no opportunities for updates or training in the last year. Fifteen percent of non medical prescribers indicated a lack of networking structure and opportunity to receive support from other non medical prescribers

- Most of those who had never prescribed cited poor organisational structure or lack of policy as the main reason for this

- The majority of respondents were well supported through regular liaison with a range of colleagues from different healthcare areas. The most commonly consulted professions were pharmacists, medical colleagues and nurses

- Non medical prescribers would generally appreciate more opportunities for liaison with medical consultants, General Practitioners and pharmacists

Training needs in non medical prescribing practice

- Of those who reported they had continued professional development needs in relation to non medical prescribing, clinical skills and the action and use of drugs were the most commonly mentioned

- A significant number of non medical prescribers indicated a need for regular updates and more peer support

Organisational support for the non medical prescribing role

- The average rating for perceived support from colleagues, line managers, senior managers and associated services was positive

- Colleagues were perceived as the most supportive with an average score of good

- The support of senior management was the area that was reported least satisfactory overall

- The urban areas were more positive in every aspect and most positive about the quality of training available, whereas the rural areas were less satisfied with the support of colleagues and their immediate employing organisations
Phase 3 Regional Survey of medical practitioners
Completed questionnaires were received from 70 medical practitioners (52% response) working alongside non medical prescribing colleagues.

Sample characteristics

- The selected sample of medical practitioners were very familiar with non medical prescribing and thus constituted an expert group
- Eighty four percent of the sample had regular contact with more than one non medical prescriber and 63% of the sample were in regular contact with two to five non medical prescribers
- Sixty one percent were working daily in practice with non medical prescribers and 79% for 3 or more years including 21% who had worked with non medical prescribers since the pilot projects 6 or more years ago
- Approximately half the sample worked in primary care and the other half worked for an Acute Trust or at a Hospital. All 70 medical practitioners had more than four year's postgraduate medical experience in practice
- Sixty seven percent were aged 35 to 50 years, 79% were male and 82% were of white British ethnicity, all representative of British medical practitioners. Geographically, medical practitioners in Greater Manchester were over represented at just under half the sample (49%)
- Medical practitioners themselves had most liaison contact with nurses (93%), pharmacists (74%), GPs (69%) and other medical (60%) and they repeated the same order for professions with whom they would like more contact

Impressions of non medical prescribers prescribing practice

- Medical practitioners generally viewed non medical prescribing as a positive policy development. Within the experience of the medical practitioner, non medical prescribing was considered to work well, particularly in primary care. However, a number of medical practitioners specifically related their opinions to their own experience of a very well qualified, experienced and well known member of their own team in a specialist area and their comments about other practitioners were more reserved. Medical practitioners often mentioned the importance of a range of clinical skills for more generic prescribing
- Almost half of medical practitioners (43%) indicated a specialist area of expertise of their non medical prescriber commenting that non medical prescribers enhanced the service.
The four most common specialist areas of non medical prescribers in the experience of the medical practitioners were: diabetes, wound care, analgesia and respiratory medicine

- Almost half the medical practitioners indicated that non medical prescribers were treating common minor complaints (49%) and providing patient consultation/advice (46%)

**Impressions of support structures for non medical prescribers in practice**

- Approximately 80% of medical practitioners felt able to comment on most of the support structures for non medical prescribers, indicating knowledge and understanding of their practice, training and management framework
- Medical practitioners were generally positive in their impressions of support structures for non medical prescribing. However, comments included acknowledged the need for structure and systems development at Trust level to support non medical prescribing
- Seventy five percent of medical practitioners indicated the training of non medical prescribers was good or excellent
- Thirty eight percent of medical practitioners commented on gaps in training for non medical prescribers, particularly in relation to mental health
- Just over half the sample thought that employment conditions, expectations and communication structure for non medical prescribers were good to excellent while 17% thought they were adequate. However a few medical practitioners included comments that expressed a frustration with their local Trust management’s supportive structure for non medical prescribers
- Fifty five percent of medical practitioners indicated that the structure for continued professional development and knowledge updating was good or excellent and 21% indicated adequate. However, many medical practitioners included comments indicating the importance and need for more continued professional development specifically relating to the role of a non medical prescriber, particularly in mental health. Others commented that continued professional development was needed in diagnosis, clinical examinations and drug action generally and six indicated that there was a need for more continued professional development and updating
- Thirty six percent of medical practitioners thought that clear accessible patient safety guidance was in place and this was monitored. However, half of the medical practitioners' impressions were that guidance was unmonitored and this included 10% who thought guidance was unclear
• A clear accessible and monitored competence framework was thought to be in place by 31% of medical practitioners, 48% thought that guidance or policy was unmonitored. 

• Twenty percent were unable to comment on the support structures for updating non medical prescribers, continued professional development, conditions, management and competence frameworks of non medical prescribers in practice; 14% indicated they had insufficient knowledge of guidelines for patient safety and 10% indicated insufficient knowledge of non medical prescribers initial training.

Impressions of impact of non medical prescribing and influences on practice

• The majority of medical practitioners were positive about the contribution of non medical prescribing to patient outcomes. 

• Just under half of the sample thought patients were seen more quickly by non medical prescribers (43%) than by a medical practitioner and that patients received more time with a non medical prescriber (82%).

• Medical practitioners generally thought patients would be less confident in seeing a non medical prescriber for more serious complaints (76%).

• The majority of medical practitioners indicated that non medical prescribers were just as likely as a medical practitioner to issue a prescription (82%), to prescribe for similar conditions (65%) and to see patients as frequently (63%).

• Non medical prescribers were perceived just as likely to prescribe for minor complaints as medical practitioners (76%).

• Medical practitioners perceived non medical prescribers to be good at dealing with the social side of patient consultation (69%) but not particularly any better in dealing with women’s rather than men’s complaints (68%).

• Medical practitioners thought non medical prescribers were less effective than a medical practitioner in the management of patients with mental health problems (88%).

• The majority of medical practitioners suggested the addition of a non medical prescriber saved them clinical time (82%) and this was the most useful impact indicator from the survey. However, just below half the sample also indicated that working with NMPs added significant time to their job (43%); some added comments that time was consumed in supportive consultation about prescribing decisions or supervision.

Conclusions

The introduction of non medical prescribing has been pivotal to increasing patient access to
medicines and contributes to modernising the NHS. Non medical prescribing has continually evolved with increasing groups of professionals able to prescribe in tandem with an increase in the scope of non medical prescribing practice.

This evaluation acknowledges previous studies and adds a greater understanding of the integration of the non medical prescribing role and the responsiveness of the organisational infrastructure of the health service. The medical practitioner’s survey and the views of non medical prescribing leads add different stakeholder perspectives of both the experiences and the structures that support this initiative.

The findings from this study indicate non medical prescribing has a positive impact on efficiency and effectiveness of services. The vast majority of non medical prescribers considered that their non medical prescribing competency enhanced their own practice and that of patient care. Medical practitioners considered that non medical prescribers were a positive investment, contributing to the service, ultimately saving time for medical staff and reducing pressure on other services. Non medical prescribing leads particularly viewed the introduction of non medical prescribing as an holistic improvement to the service and in saving the patients time and trouble.

Overall, the findings that relate to non medical prescribers and their medical colleagues suggest that non medical prescribing has enhanced the service, particularly in terms of patient safety and the quality of the patient’s experience.

**Key recommendations**

1. Continue the multi-professional collaborative approach that has been established as good practice within NHS North West.

2. Promote non medical prescribing at a higher strategic level to raise awareness of the benefits in relation to patient experience and employee satisfaction.

3. Use divergent approaches to promote a greater understanding of the non medical prescribing role across all of the health and social care workforce.
4. Promote the non medical prescribing qualification as an asset to the clinical role through the knowledge and skills acquired, demonstrating time saving benefits, cost savings, patient safety and improving patient access to appropriate medication.

5. Organisations should consider workforce and succession planning as 57% of all respondents were aged 45 years or over.

6. Ensure local policy includes access to regular updates and opportunities for continuing professional development for all non medical prescribers. Facilitate opportunities for non medical prescribers to liaise with medical practitioners post qualification to improve team working and efficiency.
Introduction

1.1 The current state of non medical prescribing practice

Nurse prescribing was introduced as part of a process to improve the effectiveness of the National Health Service (NHS) workforce. Nurses were not making the most effective use of their time in requesting prescriptions from the General Practitioner for items like wound dressings. The Cumberlege Report (DHSS, 1986) recognised that nurses were already covertly prescribing and included the following recommendation to improve patient care and use resources more effectively:

’The DHSS should agree a limited list of items and simple agents which may be prescribed by nurses as part of a nursing care programme, and issue guidelines to enable nurses to control drug dosage in well defined circumstances’.

Nurse prescribing became part of the NHS plan to change the roles of NHS health workers and professionals (DH, 2000) and the UK Department of Health (DH) has recognised the key role that the extension of prescriptive authority has in this process (DH, 2002a). The National Prescribing Centre (NPC) has described the extending of prescribing responsibilities as playing a key role in achieving the NHS plan by:

• Increasing their contribution to meeting the needs of local health economies
• Enabling teams of health care professionals to deliver more flexible services and, complete episodes of care for hard to reach and vulnerable groups (NPC 2005).

The introduction, development and extension of non medical prescribing has in policy terms been rapid and has had a mixed reception in the medical and nursing professions (Luker 1997, 98; Baird, 2001; Bradley et al, 2004 and 2005; Harris et al, 2004; Latter et al, 2004, 2005 and 2007a; Avery and Pringle, 2005).

Nurse prescribing first became part of the Westminster policy agenda following the success of pilot programmes introduced in 1994 (Luker, 1998) and became a national initiative in 1998 (DH, 1999). The first phase of the initiative launched training and extended a limited
prescriptive authority to district nurses and health visitors with a recognised NMC specialist community qualification (called independent nurse prescribers but now called community practitioners). These nurses were able to prescribe all General Sale List and pharmacy medicines prescribable by GPs and a list of nearly 180 prescription only items from the original Nurses Formulary. The only alternative to independent nurse prescribing was the use of protocols. Policy on protocol development was introduced following the first Crown report (DH, 1989). Protocols were then referred to as patient group directives (PGDs).

In 2001, a more substantial formulary for nurses working in minor injury, minor ailments, palliative care and health promotion services in England was introduced (DH 2001, 2002b, 2005a and b). The second Crown report preceded the extension of supplementary prescribing to include independent nurse prescribing in 2002 to appropriately qualified nurses working in a range of different settings. These nurses were called extended formulary independent nurse prescribers (EFINP) and the Nurses Prescribers Extended Formulary was introduced [NPEF]. The NPEF was expanded between 2003 for medicines related to minor ailment, minor injury, health promotion and palliative care and in 2005 to circulatory, endocrine, gastrointestinal, respiratory and urinary drugs, and immunizations (DH, 2005b). In 2005 there were 240 Prescription Only Medicines (POMs), along with all the Pharmacy (P) and General Sale List (GSL); it has since been extended to include some controlled drugs (DH, 2006c).

The Crown report (DH, 1989) made a distinction between independent prescribers (medical practitioners) and dependent (or supplementary prescribers as they are now known, that might be extended to other health workers). The second Crown report (1999) introduced the ideas for independent nurse prescribing and by 2006, other professions started to prescribe independently. The (UK) Department of Health now defines independent prescribing as

… prescribing by a practitioner, responsible and accountable for the assessment of patients with diagnosed or undiagnosed conditions, and for decisions about the clinical management including prescribing (Department of Health (DH) 2006b).

Non medical supplementary prescribing was launched in 2003 (DH 2003). The first group of professionals eligible for training for this role were nurses, midwives, health visitors and pharmacists. This was extended to include physiotherapists, podiatrists, optometrists and radiographers in 2005 (DH, 2005a).
Supplementary prescribing is:

... a voluntary partnership between an independent prescriber (a medical practitioner or dentist) and a supplementary prescriber to implement an agreed patient specific and written Clinical Management Plan (CMP) with the patient’s agreement (DH, 2005a).

The plan, includes a list of medicines (within the supplementary prescribers area of knowledge and competence) from which the supplementary prescriber is able to prescribe. This type of prescriber is able to prescribe any medicine, but this mode of prescribing is best suited to patients with long-term conditions (DH, 2005b) and continues to have a role for independent non medical prescribers when there is a need for a team approach.

EFINPs could then take on an independent role, but also were able to practice within the supplementary role. Extended nurse prescribing came to an end when nurse, midwife, health visitor and pharmacist independent prescribing was announced in 2006 (DH, 2006c). More recently, optometrists have been given approval to independently prescribe for conditions of the eye and surrounding tissue. A suitably trained independent prescriber may prescribe any licensed medicine and some controlled drugs according to their knowledge and competence (DH, 2006b). The NPEF was discontinued in 2006 (DH, 2006c).

1.2 Education and training of non medical prescribers

Since 1999, preparation to prescribe from the Nurse Prescribers’ Formulary was included in the district nursing and health visiting / public health nursing pathways of specialist practitioner programmes. Until 2006, such prescribing was integral to the education of all district nurses and health visitors / public health nurses who successfully completed the assessment requirements of either the stand alone or integrated course and whose non medical prescribing status is noted on the Professional Register held by the Nursing and Midwifery Council (NMC). The training programmes remain for Community Practitioner Nurse Prescribers. In 2006, the NMC adopted standards for the educational preparation of independent non medical prescribers that have to be met by Higher Education Institutions (HEIs) in order to run an approved non medical prescribing educational programme. During training the potential non medical prescriber is supervised by a Designated Medical Practitioner (DMP) who is responsible for assessing
whether learning outcomes are met and assures clinical competency levels of non medical prescriber trainees.

In summary there are three types of non medical prescriber in practice:

1. Nurses who are community practitioners, prescribing from the community practitioner prescriber formulary which is restricted to a small number of medications and dressings (known as V100/V150 programmes). This group of prescribers were not included in the current study. The preparation programme for community practitioners is a minimum of 6-10 study days depending on the programme and 12 practice days.

2. Independent prescribers who are nurses, midwives, health visitors, pharmacists and optometrists. This group of prescribers have access to the whole of the British National Formulary within their area of competence (except certain controlled drugs). The education programme for independent non medical prescribing is 26 study days and 12 practice days with supervision from a designated medical practitioner.

3. Supplementary prescribing for nurses, midwives, health visitors, pharmacists, optometrists, physiotherapists, podiatrists, radiographers. The education programme for independent non medical prescribing includes supplementary prescribing. Supplementary prescribers do the same course but practice within a CMP under the direction of a medical practitioner. Independent prescribers can act as supplementary prescribers but allied health practitioners cannot yet practice independently.

1.3 Non medical prescribing in other countries

Internationally, several health care systems now include some form of prescribing by non medical healthcare professionals (Cooper et al, 2008a; Creedon et al, 2009). Hemingway and Ely (2009) identify a number of countries around the world where professionals, other than medical practitioners, are prescribing, such as Africa, Australia, Canada, Ireland, New Zealand, Sweden and the United States. There are a range of non medical prescribing models worldwide due to the international differences between legislative procedures and professional bodies responsible for regulating clinical practice (Creedon et al, 2009). The United Kingdom’s model of
non medical prescribing that has a nationally recognised and accredited educational programmes is in contrast with other countries, such as America, where prescriptive authority varies from state to state in terms of independence given and competence is assessed locally (Plonczynski et al, 2003; Cooper et al, 2008b; Creedon et al, 2009).

In Sweden, non medical prescribing was introduced for nurses in the early 1990s, with the aim of improving patient services, reducing medical practitioners’ workload and ensuring the continuity of care by a mix of healthcare professionals in a community setting (Courtenay and Carey, 2008a). Swedish nurses are now able to prescribe from a restricted list of medicines and for a limited number of conditions. Non medical prescribing in Canada and several states in Australia has been predominantly in rural areas, where there is a shortage of medical practitioners, and where nurses work independently (Courtenay and Carey, 2008a) but it is restricted to Nurse Practitioners and they have limited prescribing rights. In New Zealand, initially as a pilot, some nurses working in child family health or older persons care were granted prescriptive authority (Lockwood and Fealy, 2008). Later this was extended to nurses who worked in diabetes or asthma care, mental health or occupational health, family planning or palliative care. In the United States of America nurse prescribing varies across the fifty states with regards to requirements, standards and practices. In Africa, non medical prescribing training for nurses is available (Meyer, Summers and Moller, 2001) and is needed in low-income countries, such as Botswana and South Africa, where the pandemic of AIDS could be helped by nurses’ abilities to prescribe medication (Miles, Seitio and McGilvray, 2006). Plans are in place to introduce non medical prescribing in the Netherlands (Van Ruth et al, 2008). The introduction of prescriptive authority for nurses has necessitated the enactment of specific legislative provisions in most countries in order to enable the required role expansion. Courtenay and Carey (2008a) suggest there is very little evidence evaluating nurse prescribing in any of these countries except America where there is indication that nurses are prescribing effectively, improving patient outcomes and reducing health care costs.
Literature Review

2.1 Methods

A thematic literature review was undertaken to explore and update research understanding of how the role of non medical prescriber has impacted on the NHS, clarify the evidence and explore the discussion areas of the main literature post Latter and Courtenay’s (2004) review of the evaluative studies in this area up to 2002. Independent and supplementary prescribing research was included, also opinion and commentary papers and some grey literature relating to policy and changes in legislation. Research papers, post 2001, were the main topic, but reference has been made to earlier work in order to provide context. The reason for including such potentially diverse literature was a lack of clarity in the synthesis of relatively recent empirical research relating to post 2002 developments in non medical prescribing, the introduction of other disciplines into the initiative and the limitations of focus on quantitative empirical studies in Latter and Courtenay (2004). Hence, a thematic rather than systematic review was performed that included smaller studies and discussion of the issues apparent in the literature that offered the opportunity not only of identifying evidence, but also of considering more broadly how non medical prescribing is achieving its originally envisaged impact of change in the traditional hierarchies and professional boundaries of the NHS. Searches were made of the literature from 2001 to 2009 using different combinations of two of the following keywords: ‘research’, ‘supplementary’, ‘independent’, ‘prescrib*’, ‘nurs*’, ‘non medical’ ‘pharmac*’. These search criteria were used to allow for the inclusion of papers on non medical prescribing more generally if these were relevant to the current understanding of non medical prescribing, post 2002. Because the time period was fairly short, it was possible to examine a wide variety of literature but exclusion criteria included papers solely relating to audit of PACT data for example and also empirical studies relating to nurses using protocols such as patient group directions and health visitor or district nurse independent prescribing. The following electronic databases were searched: MEDLINE, EMBASE, CINAHL, ISI Web of Knowledge. In addition, on-line searches of the publications: Nurse Prescribing, Nursing Times, Nursing Standard, Department of Health websites and an internet search (Google) was also carried out with the same keywords to access other relevant documents.
2.2 Results

Using the search criteria described, 43 research papers and reports were retrieved although some were reporting different aspects of the same study (appendix 9.1). Eleven empirical papers/reports related to nine large multi method rigorous evaluations of independent and supplementary prescribing in nursing and pharmacy. Nine studies used large surveys and questionnaires and there were 23 other studies that elicited perspectives of nurses, patients and medical prescribers on non medical prescribing through mixed methods, more qualitative surveys, focus groups or interviews. Eight recent reviews of non medical prescribing informed our study (Harris et al, 2004; Latter and Courtenay, 2004; Courtenay and Carey, 2006; Pollock, 2006; Van Ruth et al, 2008; Creedon et al, 2009, and O’Connell et al 2009 [2 parts of one study]) but some of these reviews included studies of health visitor or district nurse prescribing. The reviews by Creedon and O’Connell (2009), although timely, were quite superficial, included some studies with very small samples and others that are not included in our main review but contribute to discussion. Creedon et al (2009) and O’Connell et al (2009) also included some international studies which are difficult to relate to the British context due to differences in healthcare systems. We reference a further 29 studies that are not included in our main review but contribute to discussion points and three research studies of prescribing errors. A further 59 papers were identified which presented informed views on policy developments, discussions, impressions, anecdotal opinions and experience of clinical practice from journals and publications such as Nurse Prescribing or Nursing Standard. Twenty five key policy documents are also referenced and a few older studies providing background context. The findings are presented in a thematic discussion that identifies the research evidence and the implications for practice.

There have been nine major evaluations in recent years that take a comprehensive approach using multiple methods over a range of stakeholders to describe the experiences and perceptions of non medical prescribers on the impact of the initiative and also to audit safe practice. There have been a notable few studies that isolate supplementary prescribing and the introduction of pharmacist prescribing, but, due to the fast pace of change of the initiative, most of the studies on the general impact of non medical prescribing have included different types of prescriber, few attempting to differentiate practice areas.
2.2.1 Research evidence of the success of non medical prescribing

Latter and Courtenay's (2004) comprehensive literature review included 18 evaluations of the first phase of non medical prescribing in England, published up to 2002. Much of the research they reviewed compared perceptions of safety and competence in non medical prescribing amongst the earlier community practice nurses. Since the introduction of these new roles, several studies have shown that community nurse prescribing has been cautiously welcomed by healthcare staff and patients. There are conflicting reports regarding the saving of time for nurses but if time has not been saved then it has been suggested that it is better used (Luker et al, 1997, 1998, 2002; Hall et al, 2003).

2.2.2 Research evidence of competency in non medical prescribing practice

Since 2000, following continuous policy changes, introduction of new roles, lifting of restrictions on practice, the opening up of the BNF and widening participation in the programme to other healthcare practitioners, the literature has increased considerably, but much of it has been the discussion of the wider implications for the health service and of professional practice. Clear evidence of the competence and safety of non medical prescribing practice has recently become apparent from a tranche of studies deriving from methods piloted through the national evaluation of non medical prescribing practice (Latter et al, 2005). Latter et al surveyed 246 nurses with an extended formulary prescribing qualification registered with NMC and included 10 case study sites and interviews with clinical stakeholders and patients. This work was carried out in 2004 and therefore did not explore the further legislative lifting of restrictions on prescription drugs in the BNF, but a convincing body of evidence now shows the advance in nursing and healthcare practice that non medical prescribing represents. Latter and others have extrapolated the detail in the use of panel methods and comparison of practice decisions as judged by experts to demonstrate effective prescribing practice by nurses through a number of papers deriving from the 2004 evaluation. A number of large, controlled and rigorous studies have since demonstrated that non medical consultations universally produced clinically appropriate (Venning et al, 2000; Latter et al 2007a; Bissell et al 2008; Watterson et al 2009; Drennan et al 2009;) and safe (Latter et al, 2007a; Bissell et al, 2008) decisions in primary care situations with positive perceptions of concordance (Latter et al 2007b). A review by Cooper et al (2008b and c) reports supplementary prescribing as perceived more safe, but the same DH funded study (Bissell et al 2008) found similar positive practice results in their audit of PACT
data in a that included a survey of 518 nurse prescribers and 411 supplementary prescribing pharmacists. Watterson et al (2009) also commended the careful prescribing practice of nurses in Scotland in an evaluation of non medical prescribing that included an activity log over two weeks of non medical prescribing activity by nurses at six case study sites. They surveyed 948 nurse prescribers, evaluated 10 study centres and interviewed a small number of patients and clinical stakeholders. Norman et al (2007) has demonstrated competency in non medical prescribing decisions from supplementary prescribers in mental health situations in their study of 224 registered supplementary non medical prescribers that included practice audits, interviews and six case studies. A number of smaller studies have since completed detailed audits of non medical prescribing practice on the same lines and confirmed consistency and completeness in non medical prescribing competency, in diagnosis, accuracy and documentation in the opinions of experts in prescribing practice (Sampson, 2007; Latter et al, 2007a; Drennan et al, 2009 audit of the non medical prescribing practice of 25 Irish nurses). Critics, however, have cited methodological weaknesses in some studies, particularly in the evaluation of safety and patient experience (Avery and Pringle, 2005; Sampson, 2007; Cooper et al, 2008a). The quality of prescribing is much harder to measure than the cost of drugs, and indicators of prescribing quality generally have low validity (Campbell et al, 1998). The issue that no current standards for safe practice or quality of patient care in this context are formalised, means findings could be viewed as equivocal.

2.2.3 The limitations of research evidence

Latter and Courtenay, in their review of 2004, report a dearth of evidence on costs of nurse prescribing, its effectiveness and aspects of implementation following negative forecasts by critics on rising costs and salaries. Some aspects of the early evidence have now been addressed in two literature reviews; Pollock (2006) builds on a previous review by Harris et al (2004) commissioned to explore the case for extension of nurse prescribing in Scotland. Cooper et al (2008b) also goes some way to addressing this issue in their explanation of the defray of costs against needed updates in training for nurses and pharmacists in supplementary prescribing. Cooper et al (2008b) argue that pharmacists are already aware of the costs of medicine and thus better information for patients’ increases compliance within supplementary prescribing. However, the fast pace of change in policy on non medical prescribing mentioned above has led to confusion about the exact role and definition of an independent non medical prescriber. The final restrictions on the BNF were only removed in 2006, allowing those who
qualified as an independent non medical prescriber full access to the whole BNF with the exception of certain controlled drugs. Extended formulary nurses were offered an update to allow them to practice as supplementary prescribers in addition to their independent role, but a few among them have never updated so are still restricted to independent non medical prescribing. Community practitioners (the first phase health visitors and district nurses) retain a restricted formulary. Most of the research literature has been surveys or qualitative studies focusing on views of nurse prescribers, patients and various professional groups on the ‘benefits and challenges’ of nurse prescribing because of the tensions and interprofessional boundaries this new development is felt to be infringing. However thus many research studies include a mixture of different cohorts, different competencies, roles and skills amongst respondents, thus different perceptions of the role of a non medical prescriber and their frustrations and limitations. Latter et al (2005) and Watterson et al (2009) both recognise this and comment on a lack of research evidence that is differentiated to different settings and roles. The initial studies of health visitors and district nurses focus entirely on community practice; as the initiative widened there is still a heavy emphasis on primary care but later studies include a much broader spectrum working under very different structures. Bradley et al (2005a), for example, in a study of extended formulary nurse prescribers in the Midlands, found that there were almost as many nurse prescribers working in hospital settings as in general practice and community settings (40% and 54% respectively). Latter et al (2005) suggest that different groups of non medical prescribers have role distinctions and should be grouped separately and Cooper et al (2008b) particularly stress role differences between disciplines and legislative capacity.

2.2.4 Research evidence of benefits of the non medical prescribing role: perceptions by NMPs

There have been a number of research studies undertaken on the perceived benefits and disadvantages of nurses adopting the non medical prescribing role. O’Connell et al (2009) attributed a number of benefits to the initiative but their review was quite superficial and included some studies with very small samples. Latter et al (2005) identified perceived benefits to the role that seem consistent across a number of studies including different types of non medical prescriber. Non medical prescribers perceived benefits of the role as: quicker earlier treatments, better therapeutic management of patients, easier access to medication, more holistic and better quality patient care (Courtenay et al, 2007a, reporting results from the 2004
national evaluation; While and Biggs, 2004 in a survey of 90 health visitor/district nurses; Pontin and Jones 2007 in a survey of 135 nurse prescribers; Nolan et al, 2001, surveying 73 nurses; Bradley et al, 2005 surveying 91 nurses in non medical prescribing training; Latter et al, 2005; Drennan et al, 2009, surveying 102 Irish nurses; Bradley and Nolan, 2007, surveying 45 non medical prescribing nurses; George et al, 2007 in a study of supplementary prescribing by pharmacists). Support and job satisfaction (Lockwood and Fealy, 2008, in a study of Irish nurses expansion of their roles; Lewis-Evans and Jester 2004 in qualitative interviews; While and Biggs, 2004; Bradley et al, 2005; Latter et al, 2005; George et al, 2007; Drennan et al, 2009), non medical prescribing confidence and autonomy (While and Biggs, 2004; Bradley and Nolan, 2007; George et al, 2007; Drennan et al, 2009) are also noted. Consistently noted were savings in time for nurses and medical practitioners (While and Biggs, 2004; Pontin and Jones, 2007; Avery et al, 2007a and b; Bradley and Nolan, 2007; George et al, 2007; Drennan et al, 2009). The role also improved relationships and recognition between nurses, pharmacists and GPs (Bradley et al, 2005; Avery et al, 2007a; George et al, 2007) the ability to increase autonomous working (Bradley and Nolan, 2005; Latter et al, 2005). The majority of nurses believed that non medical prescribing had made a positive impact on their clinical practice, their professional development and quality of care they were able to offer patients, enabling them to make better use of their skills.

2.2.5 Research evidence on the effects of the non medical prescribing role: perceptions by patients

The Department of Health (2006a) assert that non medical prescribing has provided patients with faster access to medicines, improved communication, flexible team working and access to health services for patients and positive findings in regard to team working have been confirmed by Bradley and Nolan (2007). Although superficially it may seem that patients welcome the initiative as clinically more effective (O’Connell et al, 2009), Latter et al and others (Latter et al, 2005; Watterson et al, 2009) point out that too many studies of patient outcomes are positive public opinion surveys of attitudes towards the potential of prescribing nurses (for example Berry et al [2006] reported a high level of confidence in nurse prescribing in a general population sample of 74 people), rather than people who had experienced the service. In addition, studies have been limited to the use of the nurse prescribing formulary. Creedon et al (2009) criticises the lack of research on patient perspectives, but until recently it was quite difficult to research this issue as patients rarely recognised the initiative and explanations of
supplementary prescribing have been difficult to convey (Cooper et al, 2008b; Bissell et al, 2008 Watterson et al, 2009; Hobson et al, 2010). Although generally positive attitudes towards this development have been reported, some studies indicate that nurses are struggling to be recognised as prescribers by patients (Harrison, 2003). More research is needed on patient views since the legislative changes with the BNF. Only one study has attempted to evaluate the impact of nurse prescribing on patient outcomes. Courtenay and Carey (2008c) attempted to evaluate the impact of a Diabetes Specialist Nurse (DSN) prescriber on insulin and oral hypoglycaemic agent medication errors, length of hospital stay, and patient's ability to self manage their diabetes whilst in hospital. It was evident from the findings that a DSN prescriber reduced prescribing errors, and this reduction had some effect on length of stay.

A few large sample studies have compared and contrasted patients perceptions of the non medical prescribing practice of healthcare staff against medical practitioners, finding patients generally positive with high confidence in non medical prescribers and no preferences for nurses or medical practitioners (Courtenay et al, 2007a; Bissell et al, 2008; Drennan et al, 2009; Watterson et al, 2009). Norman et al (2007) concluded similarly for patients in mental health settings. Patients interviewed or surveyed have felt as nurses do, that non medical prescribing saved medical practitioner’s time and therefore was convenient (Brooks et al, 2001; Bissell et al, 2008; Watterson et al, 2009). They reported they found nurses easier to talk to (Brooks et al, 2001; Watterson et al, 2009) more concerned although sometimes less knowledgeable (Bissell et al, 2008).

Recent studies specifically identify key skills in: assessment, observation, diagnosing and providing information (Latter et al, 2007a; Watterson et al, 2009). Earlier studies indicate concerns around training and competence and disadvantages of the limitations of the nurse prescribers formulary at the time of the study (Banning and Cortazzi, 2004; Latter et al, 2005), further reinforcing the need for more research post legislative changes of 2006.

2.2.6 Research evidence and discursive papers on the perceptions of medical practitioners and clinical stakeholders of non medical prescribing

Evidence suggests that non medical prescribing has been both effective and efficient without any huge surge in drug budgets, unnecessary prescribing or threats to public health or patient safety (Latter et al, 2005, 2007a; Drennan et al, 2009; Watterson et al, 2009). All these
elements must benefit the health service organisation, contribute to service delivery and are reported well received by patients and, according to numerous omnibus surveys, by the public (Berry et al, 2006).

Studies that include the impressions of clinical stakeholders on the non medical prescribers they work with also report positively (Latter et al, 2005; Courtenay and Berry, 2007; Bissell et al, 2008; Drennan et al, 2009; Watterson et al, 2009). Drennan et al (2009) collected the opinions of over 300 clinical stakeholders who agreed that non medical prescribing freed up medical practitioners time as did a study of 30 medical practitioners opinions compared with 31 nurses by Courtenay and Berry (2007). A focus group study of 12 medical practitioners (Avery et al 2004) reported impressions of a large investment of time in supervision of non medical prescribers by medical practitioners. Avery’s results stand in contrast to the later studies when non medical prescribing was more widely implemented and probably indicates that medical practitioners in the later study were not all involved in continuous training of non medical prescribers. Thus non medical prescribers were more likely viewed as colleagues rather than a burden on their own practice (although nurses in Courtenay and Berry’s study saw themselves as performing better with the patients than medical practitioners did and only nurses saw an improved relationship with their medical colleagues). Latter et al (2005) like Bissell et al (2008) and Drennan et al (2009) identified that although those medical staff working with prescribers were confident of the non medical prescribers they were familiar with, defended their competence, integrity and knowledge and agreed that the initiative impacted positively on patients, they were less positive about the initiative as a whole. Even Watterson et al (2009), whose report was mostly positive, noted “attitudinal snags” amongst some medical staff towards the initiative. This reluctance to believe the evidence without developing a personal confidence in the nurse was also indicated by Wilson (2002) in an early study of medical practitioners’ opinions on the initiative and noted and criticised by Bissell et al (2008). The need to personally co-opt and inform medical practitioners in order to address the power differential is reflected consistently in perceptions of the impact and implementation of extending non medical prescribing to healthcare practice. Recommendations for implementation in practice studies often include a note that the doctor/ health practitioner relationship be established early (While and Biggs, 2004; Avery et al, 2007a; Cooper et al 2008b; Courtenay and Carey, 2009). This is particularly important where the medical practitioner does not normally need to personally interact with the healthcare practitioner, such as in pharmacy where uptake of the initiative is variable (Elvey et al, 2008; Hughes & McCann, 2003; While et al, 2005; George et al, 2007).
2.2.7 Research evidence and debate about the powerful opposition of the medical establishment to non medical prescribing and its consequent impedance of the impact of the initiative

The medical establishment has recorded their vociferous opposition to the deregulation of prescriptive authority and interpreted the direction of policy as contributing to deprofessionalisation of medical staff (see BMJ discussion and editorials by Avery & Pringle 2005; Day 2005; Waring, 2007; Elsom et al, 2009). The politics of professional boundaries have arisen within the paradigm of non medical prescribing not only in Britain, but also in Australia (AMA, 2005), New Zealand (Mackay, 2003) and America (Sharp, 2000; Draye Brown, 2000; Hales, 2002). Britten (2001) provides an interesting analysis of the defence of clinical autonomy examining the historical precedents and politics of the reduction of the power base of medical staff through the NHS agenda to introduce consumer interest through a greater emphasis on the informed patient through such policy initiatives as the UK Patient’s Charter (DH, 1991). For Britten (2001), prescribing is the main battleground bringing general practitioners into conflict with other parties who threaten their autonomy whether these are patients, health authority or other staff. However, Britten (2001) sees the expansion of pharmacist roles as the main threat, not nurses, in common with others who ignore or seem unaware of the development of health service roles (Koperski, 1997; Clarke and Newman, 2007; Watterson et al, 2009). Medical opinion supports the development of supplementary prescribing but is more cautious of wider roles (Horton, 2002; Bissell et al, 2009) or dismisses the education and clinical expertise of other staff as inadequate (Wilson, 2002; Banning and Cortazzi, 2004; Brimblecombe, 2005; Avery and Pringle, 2005; McGavock, 2007; Bissell et al, 2008; Cooper et al, 2008b; Strickland Hodge, 2008). Most of the conflict and argument on the opening up of the formulary has been developed through discussion papers (Avery and Pringle, 2005; Day, 2005; Hawkes, 2009) and the opinions of medical practitioners with little or no experience of the initiative on developing advanced nursing roles in general practice. For example Wilson (2002), in focus groups with 12 medical practitioners, identified threats to GP status, capabilities and training, responsibility and structural barriers, concern about the training of nurses and deskilling of medical practitioners (i.e. that NMPs would take on the easy cases leaving the medical practitioners to deal with the difficult time consuming patients).
2.2.8 Research evidence about the comparative danger of non medical prescribing

Nurse prescribing is widely accepted in the USA (Plonczynski et al, 2003; Nolan, 2004; Hamric, 1998; Byrant and Graham, 2002) however comparisons are not straightforward because of differences in training, politics and systems. The demonstration of careful comparisons across a number of large rigorous studies in the UK (see 2.2.2 competence section), the persisting impression amongst medical practitioners is of danger (Hawkes, 2009; Holmes, 2006b who discusses the findings of a survey in the GPs newsletter, Pulse, in which 89 percent of GPs said they felt nurse prescribing was not safe). A central issue for the medical profession concerns the adequacy of the training nurses receive to diagnose medical conditions, which is the basis for appropriate prescribing (BMA, 2005). Undoubtedly the rationale for restricting access to certain medicines is based on their capacity for harm, particularly controlled drugs and the tensions of psychiatrists about legislative changes in prescribing by mental health nurses have sparked a very large literature (Brimblecombe, 2005; Norman et al, 2007) and the same concerns are emerging for children’s nursing (Courtenay and Carey, 2009). The potential for hazardous combination of drugs has received some media coverage recently as prescriptions by nurses were reported to have increased 49 percent after the lifting of restrictions on prescribing complex medicines the same year (Guardian editorial, 2007, commenting on a an analysis of NHS figures in the GPs newsletter, Pulse 2007). Siriwardena (2006) makes the point that there is a general lack of data on safety in prescribing but made reference to a study over four general practices in England to show that combination errors are rare, thus implying that prescribing errors by medical practitioners in their regular practice are also rare (Chen et al, 2005). In fact variability amongst medical practitioners in non medical prescribing errors is well recognised (Esmail, 2003) and also that medical practitioners prescribe beyond licensed indications (Conroy et al, 2000). Recent research among 19 hospital trusts in North West England funded by the General Medical Council has revealed 10 percent medical prescribing errors across the board, most corrected by pharmacists (Dornan et al, 2009). Similar evidence has emerged from Copenhagen (Bregnhoj et al, 2007) where 39 percent of medications prescribed by medical practitioners had one or more inappropriate ratings. Dornan et al (2009) revealed that medical practitioners rely heavily on pharmacists and nurses to identify and correct errors so it would certainly seem reasonable to assume a need for better support in the working environment and interprofessional education for all clinical staff. In fact, recent research examining the prescriptions of independent non medical prescribers, both nurses and pharmacists, among 71
prescribed medications have revealed no non medical prescribing errors (Bissell et al, 2008) and in mental healthcare, no significant difference between the NICE audits of supplementary mental health nurse prescribers and medical practitioners (Norman et al, 2007).

2.2.8 Research evidence about the understanding of non medical prescribing roles by medical practitioners and others

A number of studies have identified the need to acknowledge GP concerns, provide information and training, share learning through joint doctor and nurse networks and encourage widespread debate (Dray and Brown, 2000; Wilson, 2002; Bradley et al 2005; Holmes 2006b; Norman et al, 2007) and also to encourage medical practitioners to act as mentors to maintain prescribing standards (Holmes, 2006b). However, difficulties of recruiting medical practitioners as supervisors have been identified by many studies in different areas of practice (Ring, 2005; Latter et al, 2005; Avery et al, 2004; Watterson et al, 2009). Some of this may be the considerable confusion in distinguishing the different types of non medical prescriber and their responsibilities (Hay, 2004; George et al, 2007; Strickland Hodge, 2008; Courtenay and Carey, 2008a, 2009; Ahuja, 2009; Hawkes, 2009; Cooper et al, 2008b; Watterson et al, 2009). Watterson et al (2009) found that pharmacists and hospital based medical staff were unclear, not only about who was prescribing within the nursing team but about what prescribing powers the different types of non medical prescribers had. Historically, nursing titles have reflected practice areas rather than qualifications. Wilson (2002) pointed out that the misuse of the nurse practitioner title by nurses without special training fuelled GPs anxieties about employing them and although there have been consultations by NMC in recent years, there has been no consensus on what the title implies. The designation ‘practice nurse’ does not imply extra training for the nurse, but specialist practitioners must have an additional post registration education. It seems unlikely that medical practitioners will be encouraged to act as mentors when a number of studies have pointed towards the poor understanding by medical practitioners of the non medical prescribing role. The role of supplementary prescribers has particularly poor organisational recognition and lack of awareness by health practitioners and the public (George et al, 2007; Cooper et al 2008b; Elvey et al, 2008), particularly in mental health (Jones and Harbourne, 2009). Additionally, legal responsibilities, governance ethical and audit issues have been previously identified as confusing and still not clear to many medical practitioners (Wilson, 2002), pharmacists (Pleasance and Brownsell, 2004; Watterson et al, 2009) and healthcare managers (Lockwood and Fealy, 2008). A number of trusts have not yet
clarified, or in some cases, agreed, their policies for non medical prescribing (Ring, 2005; Strickland Hodge, 2008; Lockwood and Fealy, 2008). Undoubtedly, lack of information about how knowledge and responsibility for different aspects of patient care is shared contributes to intra-professional tension and misunderstanding of the role of the non medical prescriber by colleagues. This is detailed in a number of studies (Latter et al, 2005; Bradley et al, 2005; Ring, 2005; Nolan & Bradley, 2007; Norman et al, 2007; Bissell et al, 2008; Courtenay and Gordon, 2009). Furthermore, negative medical opinions may influence attitudes of other healthcare professionals and nurses have already expressed concerns that prescribing is pushing nursing towards a medical paradigm away from the caring nurturing side (Cutliffe and Campbell, 2002; Bradley and Nolan, 2004). Against this Nolan et al (2003) have argued that nurse prescribing is a logical extension of the nursing role, because nurses prescribe anyway, albeit unofficially. Clarification would help to dispel misconceptions amongst multidisciplinary teams and prevent instances of non medical prescribers being asked to act outside their competencies.

2.2.10 Research evidence for the impact of non medical prescribing education and professional development

Continual changes to the curriculum and content of the NMP course and the changes in role of practitioners has meant it is difficult to evaluate fitness for purpose. Banning and Cortazzi (2004) report the dawning realisation by students of the relevance to practice during the earlier NMP programme for those undertaking a community specialist practitioner qualification and the previous extended formulary independent nurse prescribing (EFINP) courses and their disappointment in the limitations of their prescribing powers. Latter et al (2005) evaluating the extended formulary nurses prescribing practitioners’ comments about their training, some two years after graduation generally concluded positively as did Bradley et al (2005) in a study of nurse practitioners whilst they were still training. Watterson et al (2009) concluded that the later independent prescribers were more satisfied with their course content than the previous extended formulary practitioners and presumably it can be assumed that satisfaction increases with autonomy.

There has been a considerable discursive literature about the pharmacology content of courses, diagnostic and other course determinants that mostly relate to community nurse prescribing (Hall et al 2004; Latter et al, 2005; Bradley et al, 2005 and others). Bradley and Nolan (2005) suggest that criticisms of non medical prescribers’ pharmacology knowledge are predominantly
about the earlier community nurses, but King (2004) suggests pharmacology education is a major issue for all nurses and discursive critical opinion is broadly in agreement. Across the literature, there is a consistent need for more support by medical practitioners and difficulty recruiting supervising medical practitioners. Many authors have criticised the lumping together of students from different disciplines and different practice limitations to the same student cohort and classes (George et al, 2007). Banning and Cortazzi (2004) reported pharmacist students were unduly apprehensive about the intensity of the course, the content and diagnostic skills required. Despite this, somewhat later the training has been criticised as too nurse oriented, with too much pharmacology for pharmacists (George et al, 2007; Cooper et al 2008b) lacking in consultation, clinical examination and monitoring skills. There have been calls for discipline specific training, particularly for mental health non medical prescribing where knowledge of psychopharmacology is very important (Bradley and Nolan, 2005; Norman et al 2007) and this lack of attention to discipline probably contributes to the low take up of non medical prescribing practice amongst pharmacists and mental health nurses.

Post qualification, the picture seems rather bleak. Latter et al (2005) noted only half their sample had access to formal CPD and there were few instances of feedback or training following the initial training despite a majority perceived need for pharmacology, polypharmacy and legal/ethical issues. Of course, non medical prescribers are required to update through self directed study but this need for some formal provision has been echoed through a number of studies (and the recommendation from Latter et al for accreditation); this remains a concern. There is growing evidence that structural development of non medical prescribing policy is addressing some of these aspects; the North West NHS, for example has encouraged and funded study days, regular cross practice forums and updates on non medical prescribing practice that has contributed to a regional reputation for excellence but generally formal support for CPD is not a priority for Trusts. McKay (2007) like Latter et al (2007b) identified the need for formal time to update and access structure in the South East, reporting that only a third of staff were able to attend study days and the vast majority not appraised on their non medical prescribing practice. Watterson et al (2009) has identified pressing CPD needs to ensure fitness for practice in Scotland and Drennan et al (2009) has reported similar position in Ireland for prescribing nurses. A recent study in England (Courtenay and Gordon, 2009) has reported that 44 percent of a sample of 240 non medical prescribers had CPD needs for knowledge of conditions, half said they needed assessment and diagnosis updates and three quarters said they needed more knowledge of the pharmacology of medicines.
2.2.11 Research evidence and discussion about the special case of mental health non medical prescribing

Non medical prescribing in mental health has still retained its supplementary status in many trusts, and there has been a slow take up of the initiative, probably because of the uncertainty about how legislative changes will affect restrictions on controlled drugs along with the legal aspects for Trusts. Mental health nurses (MHN) represent 14 percent of the UK nursing population but only 3 percent of nurses prescribe (Snowden 2008) and those infrequently (Gray et al., 2005; Snowden, 2007; Green and Courtney, 2008). Mental health nurse supplementary prescribing in the United Kingdom has evaluated as cost effective and safe with no significant difference in health and social care outcomes (Norman et al., 2007). The study examined data from a sample of 90 service users suffering from depression or schizophrenia, whose medication was managed by an MHN supplementary prescriber or by an independent medical prescriber for a period of at least 6 months.

There is an enormous discursive literature on the rights and wrongs of mental health non medical prescribing; despite the positive evaluation and that non medical prescribing by mental health nurses is developing across a wide range of services, implementation by mental health service providers (NHS Trusts) in the UK has been patchy (Bradley et al., 2008; Watterson et al., 2009). Documentation was reported in the national evaluation as poor (Norman et al., 2007) and local arrangements for Trusts within the same health authority, exist; pose organisational barriers (Bradley et al., 2005; Snowden, 2007) and restrictive work environments (Hemingway, 2005). Similar barriers are reported in New Zealand (Chaston and Seccombe, 2009) and the US (Hemingway, 2004, 2005; Jones et al., 2007; NPC, 2005).

In the United Kingdom in mental health, there has been acceptance of widening prescribing to MHNs, and some psychiatrists have welcomed the change (Hemingway, 2008; Jones et al., 2007). There is cautious optimism about supplementary nurse prescribing (Harris, 2004). However, there is still a strong consensus amongst medical and nursing staff that the preparation does not adequately skill non medical prescribers for independent prescribing in relation to pharmacology, medication management and the monitoring of the side-effects of psychiatric medication (Pembroke, 2002; Hemingway, 2004; Bradley and Nolan, 2005; Skingsley et al., 2006; Jones, 2008; Jones and Harbourne, 2009). The National Prescribing Centre asserted in 2005 that most mental health and learning disability nurses would not be
clinically competent to prescribe as extended nurse prescribers. However, they did recognise that some specialist services might wish to develop their nursing staff to prescribe from the formulary. Much of the discussion refracts the wider negative opinions and stereotypes about nurses to the mental health arena with its additional problems of dangerous drugs, and the power relations of psychiatrists and nurses (Brimblecombe, 2005). More positive medical opinions have emerged as the initiative is integrated into practice; a recent survey (Rana et al, 2009) of 147 psychiatrists suggested that consultants were less concerned about the need for supervision and restrictions on access to drugs than junior doctors. In Scotland, mental health nurse prescribers reported that nurse prescribing had taken some pressure away from the consultant and perhaps, GPs (Watterson et al, 2009). This suggests that some of the concerns of junior doctors might be attributed to increasing role conflict, also indicated as a major concern for mental health teams in focus groups with 22 nurses and 3 psychiatrists (Jones, 2008). Pharmacists consulted by Watterson et al (2009) also reported improved relationships with nurses and psychiatrists and that this was having a positive impact on patient outcomes.

The expressed concern of non medical prescribers practicing in mental health settings in England about the increased responsibility of non medical prescribing and that they may be put in a position outside their competence by colleagues unwittingly has been detailed through survey results (Bradley et al, 2005; Tomar et al, 2008) albeit low numbers compared with the other areas of practice. Lockwood and Fealy (2008) studied Irish settings and reflected the main concerns for non medical prescribing for clinical specialist nurses in mental health was litigation.

2.2.12 Research evidence and discussion about the impact of the non medical prescribing role on mental health practice

There has been some evidence to indicate that non medical prescribers in mental health have developed a role with a positive impact on their nursing practice, but most of these comments reflect an improvement in relationships with medical staff as perceived by nurses or more frequent liaison (Otway, 2002). However, for patients there has been a more equivocal view. A number of authors (Pembroke, 2002; Otway 2002) recognise that some patients do not value the initiative although more recent qualitative studies are contrastingly positive in their opinions of nurse prescribing (Jones et al, 2007; Norman et al, 2007). Both Luker et al (1998) and Nolan et al (2001) have pointed towards potential impact on concordance or adherence to treatment.
This is because of the quality of the relationship between the nurse and patient is perceived differently than between patient and doctor, partly because nurses are perceived to be more accessible and of an equal social standing with patients and use more accessible language. Lipley (2000) argues that nurses have much more prolonged contact with patients and a more stable relationships than have psychiatrists and there are a number of small studies (Pearce, 2000; Harrison, 2003) with examples of an enhanced the nurse patient relationships through nurse prescribing that generally indicate patients value the more accessible information provision available from the prescribing nurse. Britten (2001) points out that the medical practitioners are typically poor communicators of information about medication, probably purposefully, to preserve their expert status and alleviate the threat of a lay challenge, that this brings them into conflict with the patient centred agenda of the NHS. This could indicate a very positive development for nurse prescribing, but, given previous anecdotal evidence that more information about side effects in leaflets have increased non compliance, more research is required on this aspect. Britten (2001) points out that there are social issues involved in taking medicine and that non compliance is a form of resistance that threatens the doctor patient relationship. Issues concerning the impact on the nurse patient relationship in nurse prescribing in mental health have been the subject of heated debate (Barker and Gournay, 2002) and argument that mental health nursing’s strength is in its non medical alternative approach to recovery (Barker, 2006). The recovery model is popular with nurses and patients (Reisner, 2005; McLoughlin and Getter, 2006) possibly because of its focus on the therapeutic relationship. Others (Titmarsh, 1999; Pembroke, 2002; McCann and Barker, 2002; Harrison, 2003; Avery and Pringle, 2005; Montgomery, 2005; Barker, 2006; Snowden, 2007) have also expressed concerns that the prescribing of medicine by nurses may place an emphasis on diagnostic activity and pharmacological cures. This would thus impact in diminishing attention to caring, destabilising the holistic elements of nursing and directing the relationship away from therapeutic care towards an illness model, distancing itself from the central concept of recovery as a personal journey. Countering that position, Bailey and Hemingway (2006) suggest that prescribing by MHNs positively challenges nurses to work within a holistic framework, one where psychobiologic perspectives can be seen alongside psychosocial approaches.
2.2.13 Research evidence on the numbers and proportions of non medical prescribers who are actively prescribing

The non medical prescribing initiative was actually slower to recruit and implement nationally than expected after the pilot studies and UK government figures were well short of targets (DH, 2002b). It is evident from studies examining the non medical prescribing practice of health visitors and district nurses who completed the first non medical prescribing qualifications that these nurses prescribed infrequently but there have been wide variations in reporting the percentage of non active prescribers (While and Biggs, 2004; Hall et al, 2006). While and Biggs’ (2004), survey of three healthcare organisations included over 90 health visitor or district nurse prescribers, most of whom prescribed three or fewer times a week, while Hall et al (2006) included surveys and interviews of 67 health visitor or district nurses and 5 non medical prescribing leads, most of whom were prescribing once a week or less. Luker and McHugh (2002) in a survey of 164 health visitor or district nurse prescribers reported 25 percent not prescribing but Banning and Cortazzi (2004) reported figures from NMC in 2004 indicating only 22 percent of health visitor or district nurses continued to prescribe. The picture from several studies (Larsen, 2004; Latter et al, 2005; Courtenay et al, 2007a) reporting on the prescribing rates of independent extended nurse prescribers indicated an improvement although Larsen (2004) reported that just over half of 55 nurses who had qualified as independent extended prescribers had continued to prescribe medicines. In contrast, Latter et al (2005) reported only 14 percent of their sample of 246 independent extended nurse prescribers mostly working in general practice and primary care were not prescribing and figures were similar from a similar sample of 868 (Courtenay et al, 2007a). Both studies reported the vast majority using their independent role (90% and 87% respectively). Latter et al reported only 18% still using supplementary prescribing but Courtenay et al (2007a, 2008a) found up to 40 percent in national studies of around 1400 mixed non medical prescribing nurses and around 50 percent by nurses prescribing for diabetes (Courtenay & Carey, 2008c).

2.2.14 Research evidence that shows limitations in the organisational structure that supports staff in non medical prescribing

A number of studies have assessed the infrastructure necessary to support non medical prescribing and consistently across different samples, factors that impede independent non medical prescribing have been identified. The main issue until recently was limitations in the
formulary, but all studies indicate the lack of a supportive structure that placed restrictions on local arrangements so that non medical prescribers find it difficult to access materials needed to do the job (waiting for prescription pads, access to budgets and analysis data, access to computer generation of prescriptions). The DH paper, *Improving access to medicines* (2006a), clearly identifies that non medical prescribers should be supported through local fora; that organisations should monitor and appraise non medical prescribing practice and provide CPD. Studies, however, have consistently reported, across all stages of implementation, lack of peer support and objections by medical staff and pharmacists. In addition, lack of trust agreement and even lack of awareness of the non medical prescribing role by organisations appears problematic. This is in addition to perceived limitations in confidence and clinical expertise of NMPs themselves (Humphries and Green, 2000; Otway, 2002; Luker et al, 2002, Sodha et al, 2002; Latter et al, 2005; Hall et al, 2006; Courtenay et al, 2007; 2008). There have been similar results from studies of mental health audits (Mills, 2008).

A number of Trusts lack policies to support non medical prescribing in practice (Ring, 2005; Latter et al, 2005). Hall et al (2006) interviewed 29 NMP leads and found them operating at a non strategic practice support level, focused on minutiae and not accessing deep policy knowledge. Ring (2005) also found many leads had difficulty in identifying long term objectives for non medical prescribing and service changes and few identified involvement in decision making processes. Around half the leads had no input into training and there was a lack of evaluative activity. Half the leads also identified a lack of clinical supervision and difficulty recruiting medical supervisors for students. Others have added to this structural analysis: encumbering management plans impeding the setup of supplementary implementation (Cooper et al, 2008b), lack of strategic engagement (Hawkes, 2009; Watterson et al, 2009) and lack of job descriptions (Mills, 2008). Norman et al (2007) however, found leads very positive about the implementation of mental health non medical prescribing but most Trusts are restrict independent prescribers to their supplementary roles which might have impacted on their views.

### 2.2.15 Research evidence on the limitations of training and structure that supports non medical prescribing in specialist areas

As the legislative changes progressed, non medical prescribing became less restrictive and more differentiated to different specialist circumstances and a few studies have reported increases in activity rates (Courtenay and Gordon, 2007, report 11 percent and Watterson et al,
2009 report 20 percent not prescribing) although structural issues remain and because of later changes, earlier studies are already outdated. Supplementary prescribers are reported to write more prescriptions than independent non medical prescribers, but the picture does not simply reflect a hierarchical strategy by medical staff. In many specialist areas, such as mental health, palliative care and children’s nursing, Trust restrictions and budget controls mean that non medical prescribing practitioners are restricted to a supplementary role. For example, Stenner and Courtenay’s (2007) study of nurses prescribing for patients with acute or chronic pain found, not many actually prescribe controlled drugs for pain although most were using their non medical prescribing knowledge in order to recommend medication through the medical practitioner rather than offer prescriptions. McIlfatrick (2007) criticises the lack of clear guidance in the definition of palliative care restrictions for Trusts, thus increasing the confusion and restrictions on non medical staff. A recent study showed a lack of medical mentorship and only half of 168 extended formulary qualified non medical prescribers in palliative care actually prescribing (Ryan Woolley, McHugh and Luker, 2007). This represented just six percent (88 of 1575) of Macmillan nurses who were eligible. Of those eligible, 62 percent indicated a marked reluctance to undertake training. The course was seen by those who had completed it as not specific enough in pharmacology and clinical practice to meet the needs of nurses working in palliative care. Similar concerns and the need for training of medical professionals and others have been aired around children’s nursing (Courtenay and Carey, 2009) and mental health where mutual respect, unsupportive behaviour of key medical staff and organisational issues are common (Norman et al, 2007). Recent studies have found networks of informal support impact on confidence amongst non medical prescribers and have identified a need for formalised support as CPD needs have become more obvious (Avery and Pringle, 2005; Latter et al, 2005; Bradley et al, 2005; Courtenay et al, 2007; Stenner and Courtenay, 2007).

There is other evidence of low prescription rates as the qualification is opening up to allied health professionals. George et al (2007) reports a survey of 401 supplementary prescribing trained pharmacists, of whom only 195 (49%) self identified as active. 154 (38%) had written one prescription. A recent survey of pharmacists who had completed the academic part of the non medical prescribing course in the NE suggests only 40 percent of 97 respondents currently active while 13 percent never finished their mentorship (Baquir et al, 2010a). George et al (2007) and others (Cooper et al, 2008b; Elvey et al, 2008; Baquir & Smith, 2010b) indicate that recognition of the non medical prescribing role is poor, there is a lack of medical support and infrastructure that integrates pharmacists into the healthcare team.
2.2.16 Summary

Although a few studies have interviewed key stakeholders, there is little critical policy analysis. Despite significant legislative changes over the last few years, most studies have not differentiated the different types of non medical prescribing practitioners and some refer back to the initial pilot studies to evidence non medical prescribing as a whole. Most previous reviews are limited because they include studies of community practitioners prescribing from the original NPF and doing a very different job than those under the current policy context. There have been few studies focusing purely on the new roles of supplementary and independent non medical prescribers because they were only introduced in 2003 and legislative changes were implemented in 2006. There is demonstrable evidence of the competence in practice of independent and supplementary non medical prescribers against the judgement of experts from a number of studies. Reported perceptions of the independent and supplementary NMP role have generally been positive, from NMPs themselves and from medical practitioners, although there remain ranges of structural and collegiate issues to address. Newer studies indicate large variations in non medical prescribing practice, range, knowledge and training needs, particularly among the different disciplines. Non medical prescribers tend to be positive about the implications of the role, their job satisfaction and conviction that patient care is enhanced and remain optimistic that the potential is still developing for interprofessional practice. Previous studies have found role satisfaction for prescribing nurses who are supervised and mentored by medical practitioners, but as the level of independence increases, it seems that professional tensions might also be increasing, partly due to blurring of boundaries between medical and caring roles. It is argued that much interprofessional tension could be alleviated by increasing the awareness of medical and other colleagues about the non medical prescribing role but there have been no advances. Despite structural and other barriers identified as impeding the development of non medical prescribing, particularly in the areas of mental health and children’s medicine, newer studies report little change. Most of the research on attitudes to non medical prescribing and the relative status of nurses versus medical practitioners as non medical prescribing practitioners is limited because of methodological flaws in sampling.

2.2.17 Conclusion

By judicial standards (reasonable doubt), competence of non medical prescribing practice by experienced practitioners operating in their specialist areas can be concluded. Generally, also
the success of non medical prescribing and its extension to other health practitioners is positively viewed by stakeholders to increase quality of care by practitioners themselves, their patients and other health workers to some extent but there remain several unaddressed barriers and under researched issues that point to the need for further investigation into this important policy initiative.

3. Methods and Design

3.1 Introduction

This section describes the research methods employed in this study and some of the methodological thinking behind the choice of the key methods used during the different stages of the project. It also describes the ethical and governance approvals and structures within which the research operated.

Non medical prescribing has in recent years been researched using a range of methods. These have included qualitative, quantitative and mixed methods and data gathering tools such as questionnaires, interviews, focus groups and participant observation. These methods individually and together have different strengths and weaknesses. In the initial planning for this study, the focussed literature review was used extensively to inform the method.

Varieties of methods were then selected to achieve the two main project objectives: the investigation of the impact of non medical prescribing on the NHS and the development of the role of the non medical prescriber in practice. The evaluation of non medical prescribing in practice included:

- Focus groups of non medical prescribing leads;
- A postal questionnaire of a sample of non medical prescribers who completed courses at one of the eight North West universities;
- Postal questionnaire of a sample of medical practitioners in frequent or regular contact with non medical prescribers;

The evaluation group benefited from the advice and constructive feedback from forum presentations and consultation with the North West non medical prescribing forum network.
throughout the study. Members of the commissioning team were also generous with their time and advice. The study also benefited from a steering/advisory group of advisors with experience of previous evaluations and course leaders from each of the eight universities offering post registration qualifications to health professionals in the North West. Some of the course leaders facilitated the focus groups in their regions, helped to design, pilot and distribute the questionnaires through their universities’ student database and constructively commented on the progress and results throughout the study.

Most evaluative studies recommended inclusion of the views of patients as well as clinical stakeholders and this study included a pilot questionnaire to establish the feasibility of a future survey of patients of non medical prescribers.

As one of the outcomes of discussions around the approach to the evaluation, NHS North West has for the past three years, implemented an audit of non medical prescribing over the North West and information from the first audit also contributed to the evaluation.

The study focus is on workforce development and the effect of changing skill base in the healthcare service in Northern England, a focus that has been referred to, sometimes obliquely (e.g. in referring to power relations between medical and non medical prescribing staff in evaluative studies Latter et al, 2005; Cooper et al, 2008b and a number of discussion articles). The study therefore approaches the NMP in situ, looking at context and conventions. We do not provide a competency audit of non medical prescribing practice as previous evaluations (for example, Latter et al, 2005; Ryan Woolley et al, 2007) have demonstrated that prescribers were conducting their practice appropriately and there have been several confirmatory studies around the competence of non medical prescribers (for example, Courtenay and Carey 2006; Watterson et al, 2009). While the study attempts to capture an overview of skills gained, it does not undertake to evaluate the effectiveness of the non medical prescribing course. A number of other studies have focused on this issue or included it in an overall evaluative framework.

3.2 Aims and Objectives

The twin aims of the current study were to carry out an evaluation to assess perspectives of the impact of non medical prescribing on:

- individual stakeholders
• the service as a whole.

Specific objectives were to:
• assess the structure of support and organisational activity in non medical prescribing
• identify current non medical prescribing practice to inform a clearer vision for future planning of non medical prescribing policy
• assess how the role of the independent practitioner has changed because of their NMP competence
• develop a baseline data set that can be used to profile and follow up information longitudinally
• identify appropriate indicators of impact that are meaningful and relevant to practitioners themselves, to colleagues and to their patients
• identify observations of competence
• identify barriers and facilitators to sustainability of the initiative
• understand the impact of non medical prescribers on the service
• develop an approach to context through qualitative work

3.3 Design

It has been judged important in the design of previous evaluations of non medical prescribing practice to include the views of clinical stakeholders, medical practitioners and non medical prescribing practitioners themselves. The study was designed around a three phase triangulation of different perspectives of stakeholders to help to identify the characteristics of effective policy and practice.

The first phase of study was designed to provide an overview of the organisational structure of non medical prescribing practice. A focus group design was selected to include NMP leads, who are the people responsible for supporting the non medical prescribing networks and promoting the development of non medical prescribing in each Trust. Their impressions of the implementation, scope and development of the structure and policy of non medical prescribing in practice would identify the main issues for non medical prescribing at both a practice and a strategic level. The sample of NMP leads were those who volunteered to be included in the study.
The study progressed to phase two, a large scale survey of non medical prescribing practitioners on their area of practice, activity and role, their perceived impact on the service and perceptions of role development through non medical prescribing. The survey also asked about support and training. This allowed the research team to study and understand the experiences of a large number of practitioners. The sample of NMPs were currently in practice in the North West who responded to an invitation by their former university course provider.

Phase three was a survey of those medical practitioners who were identified by the non medical prescribers surveyed in phase two as in regular professional contact with non medical prescribing staff. The comparison of medical and non medical views allowed us to focus on the team context of non medical prescribing and boundary issues identified in the focus groups. Combining qualitative and quantitative methodologies, coupled with a triangulation approach to data analysis allowed a more comprehensive understanding of non medical prescribing practice in the North West of England.

These three phases have resulted in a shared service perspective of non medical prescribing. An extension to this work, phase four, will survey patients of those NMPs surveyed in phase two who indicated they were willing to distribute the survey.

The study uses a whole population sample of a defined area and there are limitations on the sample strategy in that non medical prescribers trained elsewhere than the North West will not be included. Those non medical prescribers who moved addresses, but are still practicing in the North West may not have received a questionnaire and those who moved out of the area would have been sent a questionnaire that was returned.

All of the eight individual University Ethics Committees and Research Governance bodies approved this study, as a whole, including the examination and appraisal of each questionnaire. The Salford and Trafford Local Research Ethics Committee reviewed and approved the overall evaluation including the non medical prescribing practitioner and medical practitioner survey (appendix 9.2).

Very few previous studies have been able to assess the impact on patients, since, as Latter et al (2005) remarked, few patients have had experience of the new initiative and their understanding of the role is typically confused. An extension of this study planned to survey the
patients of NMPs. The extension will be reported separately; because it involved NHS staff and patients, it was appropriate to seek research ethics approval. Cumbria and Lancashire Research Ethics Committee approved the patient study in 2008 granting an extension for implementation in 2010. Local research governance has been difficult to achieve because of the number of trusts, their different policies and organisation. Approval is currently in process and the distribution of questionnaires is expected late in 2010.

3.3.1 Phase 1 – Focus groups of NMP leads

3.3.1.1 Introduction

The aim of this part of the study was to find out whether structural processes and local policy to support and develop the growth of non medical prescribing were evident in practice. As part of the preparation for this evaluation, NHS North West had already implemented an audit of policy documents and processes; the focus groups aimed to extend and supplement the data to gain a deeper understanding from leaders in the field. Not all trusts have a lead for non medical prescribing (Kelly, 2010) but policy guidance generally for NHS North West recommends each Trust to select a named person. Previous studies have identified non medical prescribing leads at Trust level as key informants in their role of devolving strategy to practice level (for example, Ryan Woolley et al, 2007; Norman et al, 2007).

The lead is responsible for the operational and strategic devolvement of policy within the Trust although there appeared to be a lack of consensus on the scope of that responsibility. For this study, it was first necessary to understand how the lead role was interpreted, since it seemed that the implementation of policy to support and broaden NMP within a Trust was dependent or associated with the perception of the scope of the responsibility and position of the NMP accorded to the lead within that Trust. NHS North West have, for the past three years, implemented an annual audit tool for Trusts to record and assess policy development, prescriber information, communication, support and monitoring systems. A minority of Trusts are still at an early stage of policy development. The NHS North West encourages all Trusts to select a non medical prescribing lead, responsible for developing and supporting non medical prescribing within their Trust. Part of the responsibility of the lead is the maintenance and promotion of study days, held regionally and locally for non medical prescribers to network and update. Job descriptions and local policy imply strategic links and in some cases the role of
lead has been allocated to a senior manager, who might supervise an ‘operational lead’. More often than not, however, the responsibility is held by an early entrant to non medical prescribing who has shown an aptitude for supporting others and interest in taking on the role.

This part of the study investigated an overview of the context of the organisational structure that strategically and operationally supports and monitors non medical prescribers within the NHS from the perspective of the people in the lead role.

Some Trusts added the non medical prescribing lead role to the responsibility of senior staff at an executive level (who may not actually have a non medical prescribing qualification) and others have appointed practising non medical prescribers with an interest in supporting others at an operational level. Some leads support very few non medical prescribers, whereas others represent around 300 and this contributes to the varying roles, responsibilities, support at the operational and strategic level that the lead receives and thus the scope of leads to develop and support non medical prescribers. However, there are some common points: the lead is generally understood to have a strategic role in representing the interests of the non medical prescribing employees of the Trust. This often includes sharing of practice and new information along with providing professional leadership1. They are also a key contact for those interested in undertaking a non medical prescribing qualification and work in partnership with Universities in the recruitment and selection process for new non medical prescribers.

This part of the evaluation summarised the common conclusions of five focus groups of NMP leads conducted in the three zones of the North West of England Strategic Health Authority: Cheshire and Merseyside, Cumbria and Lancashire and Greater Manchester.

The majority of the NMP leads who contributed to these focus groups were nurses by profession. There are very few non medical NMP leads that have other disciplinary backgrounds because nursing, historically has the bulk of experience and thus administrates the lead role in the NHS.

“It [NMP lead role] was just added on to Directors of Nursing jobs in the very beginning … it was about nursing in the first instance” (NMP lead, Cumbria and Lancashire zone).

The findings of this study of NMP leads in the North West of England thus may reflect the concerns of nursing more than those of other professions.

3.3.1.2 Objectives

Questions to the focus groups centred on the scope of the lead role and involvement in development of policy, the identification of good operational practice in dissemination and shared learning. We also asked about the reflections of NMP leads as stakeholders in the success of non medical prescribing.

3.3.1.3 Recruitment of sample and methods

All NMP leads in the North West were personally invited by email and by announcement at network meetings to attend a local focus group conducted in their area by one of the extended research team based at a local university. Five locally situated focus groups took place, bringing together non medical NMP leads from each of the three zones of:

- Cheshire and Merseyside
- Cumbria and Lancashire
- Greater Manchester

The focus groups were all conducted to a common format and used the same guide question schedule so that the local responses could be combined to an overview (appendix 9.3). Local researchers conducting the focus groups were course leaders from the collaborating universities. They attended a training session led by the co-ordinating team and received common materials defining the conditions of the focus group, recording of demographics, inclusion criteria, template invitations and information sheets for participants. Two researchers were present at each group, one led the group and the other moderated, took notes and recorded the session. Sessions were no longer than an hour in duration.
3.3.1.4 Analysis of data

Researchers compared their impressions immediately after the group. Transcription and analysis was done by the local researchers and a common method of analysis was agreed at the training session so that the overview analysis done by the co-ordinating team would represent common categories. Analysis adopted a simple categorical approach based on the five guide questions explored in the focus groups; statements were coded to these categories:

- Defining and understanding the role of the non medical prescribing lead
- Good practice
- Barriers to non medical prescribing practice
- Overcoming the barriers
- Developing the future of non medical prescribing

In the primary analysis at local level for each focus group, themes were developed naturally under each category and the analyses were conducted independently at each site by the local university collaborators. At secondary level, the research leads at UCLan brought together an overview analysis that collapsed and developed the local themes to common ones.

3.3.2 Phase 2 - Survey of non medical prescribing practitioners

3.3.2.1 Introduction

A regional survey of non medical prescribers over the North West of England was undertaken in Phase 2 of the project to determine the context and experiences of prescribing non medical health professions who gained their non medical prescribing qualification from 2001-2007.

The majority of the NMPs surveyed were nurses by profession, because NMP was first introduced in Nursing in the late 1990s; only recently, since 2002, have non medical prescribing courses been open to other professions. Therefore, the findings of this study of NMP leads in the North West of England thus may reflect the concerns of nursing more than those of other professions.
3.3.2.2 Objectives

The objectives of the regional survey were to:

- Provide a North West perspective of the range, demographics and non medical prescribing activity of NMPs in practice in the North West including
  - area of practice
  - description of the role of non medical prescribing practitioners
  - non medical prescribing patterns and practice

- Delineate the perceived impact of the non medical prescriber upon the service including
  - time saved for health professionals
  - perceptions of role development
  - examples of positive benefit to patients

- Determine the quality of strategic and operational support within the service for NMPs and training needs.

3.3.2.3 Development of the questionnaire

The survey questionnaire was developed from the review of literature and with advice from others with experience of previous evaluative work invited into the steering group. Advice was discussed in the context of the scope and direction of the evaluative process in association with the education development group and commissioning leads. Survey questions were developed and piloted by the group and feedback and comments were solicited from associated stakeholders and advisors including active nurse prescribers. The policy and practice expert panel and the advisors consulted comprised of:

- Non medical prescribing education programme leads from the eight Universities in the North West offering Non medical prescribing courses
- The NHS North West commissioning team
- Experts identified from previous studies and others within the region interested and involved in active research on non medical prescribing
- Non medical NMP leads who attended from time to time and others who offered feedback
- Designated medical practitioners supporting non medical prescribing staff in practice who offered feedback
Additionally the researchers sought feedback at each stage of the process through presentations at intervals to the well established non medical prescribing local forums in each of the three zones of Cumbria and Lancashire, Cheshire and Merseyside and Greater Manchester. These meetings bring together senior clinical staff, commissioning staff, NMP course leaders from the local HEIs, with non medical NMP leads.

Written and verbal feedback from all stakeholder groups was incorporated into revised questionnaires.

3.3.2.4 Pilot study

Four course leaders in non medical prescribing asked their students to complete the questionnaire and led feedback sessions reflecting on the form and content of the questions, identifying any that were ambiguous or unclear. Additionally ten non medical prescribers who had completed their course two or more years previously were also asked for comments.

The four course leaders provided detailed feedback on the relevance of the questions to non medical prescribing practice. In the main, students of non medical prescribing are already senior staff and their comments indicated the questions were highly relevant and appropriate. As a result of this feedback, a small number of questions required amendment. The comments of respondents on non medical prescribing as a competency rather than a skill were particularly useful in helping us understand non medical prescribing related clinical contact and we restructured questions on the proportion of time spent in non medical prescribing, which was felt to reflect only prescription writing. We also restructured the measures on some of the time saving questions which were felt to be a little confusing.

Following piloting and analysis, the revised questionnaire was again circulated to experts and advisory group members and comments were incorporated into the questionnaire.

The questionnaire was submitted to each of the eight University Ethics Committees and comments as far as possible as they commonly applied across the whole study were incorporated into the final questionnaire. This revised questionnaire (appendix 9.4) was ready for distribution in October 2007.
3.3.2.5 Recruitment of sample and methods

A standard introductory letter and a repeat letter to NMPs was produced by the lead team and customised by each University, but the survey ‘pack’ (questionnaire, inserts, envelope and return envelope) was standardised across the eight universities.

The questionnaire was printed on green double sided A3 folded; with two separate A4 sheets (to be detached on receipt) for recruitment of the medical colleagues and for NMPs who volunteered to distribute the patient survey. An information sheet for participants was printed on the front page of the questionnaire and the pack included an SAE to return the questionnaire to University of Central Lancashire for analysis.

NMPs were identified through University databases listing ex-students of non medical prescribing courses who qualified as an independent and/or supplementary non medical prescriber more than six months from the date of the survey. The sample excluded community practitioner prescribers (for example, District Nurses and Health Visitors). We also excluded a small number of North West based NMPs who had been informed about the study and requested a survey if they had qualified at non North West universities, so that the selection would include only NMPs trained in the North West. We acknowledge that their comments on structure and impact may have added to the area information but not to the training data.

Each university attempted to recruit 100 ex-students. To avoid ethical issues in sharing data between universities, each university lead was responsible for sending the survey pack to their own former students and thus the only access to the university databases was local. We estimated a 40 percent return on first issue of questionnaires, thus each university was issued with around 200 packs that they included with a cover letter to former students of two or more years ago, who had graduated from non medical prescribing courses as independent NMPs. Some universities had more than 200 ex-students and they selected their sample chronologically as the first names to appear on their database. Where some of the database listings were invalid (ex students had moved on or out of the area or were untraceable) and this was known (because post was returned to the originating university), they were replaced with more recent ex-students who were sent a new questionnaire. Some universities had less than 200 ex-students on their databases and they sent out the questionnaires to everyone. Repeat questionnaires were sent out six weeks after the original to capture any late responses.
Our estimate of 17-20 percent of questionnaires undelivered, or returned from wrong, out of date or invalid addresses was based on the numbers returned to University of Central Lancashire by the mail service (these were not replaced) and the reported returns to the university of origin. Not all such invalid mail is returned, so this is probably an underestimate and our true response rate (which included these non returns) was probably better than reported.

### 3.3.2.6 Analysis of data

Qualitative and quantitative responses to the questionnaire items were coded and inputted into Statistical Package for the Social Sciences (SPSS Version 12.0) database. Descriptive and inferential statistics have been undertaken to provide an analysis of the data.

### 3.3.3 Phase 3: Survey of Medical Practitioners

#### 3.3.3.1 Introduction

A regional survey of medical practitioners (doctors) over the North West of England was undertaken in Phase 3 of the project to compare and determine the understanding of the context and experiences of prescribing non medical health professionals.

#### 3.3.3.2 Objectives

The objectives of the regional survey were to:

- Provide a medical perspective on the impact of the non medical prescriber upon the service including
  - use and adequacy of knowledge in practice
  - understanding of the team context of prescribing practice
  - impressions of patient outcomes
- Determine perceptions of the quality of strategic and operational support within the service for NMPs and training needs
- Identify good practice in non medical prescribing together with the contextual and other influences that facilitate this
3.3.3.3 Development of the questionnaire

The medical survey was developed as a counterfoil to the NMP survey, but was also informed by the review of literature and by the policy and practice development group for non medical prescribing. Questions were developed to resonate with the NMP questionnaire and were critically assessed and piloted by the education development group; feedback and comments were solicited from medical practitioner advisors.

Written and verbal feedback from all stakeholder groups was incorporated into revised questionnaires.

3.3.3.4 Pilot study

Ten GPs from the Preston area were asked to participate in the pilot study, answering the questions on the form and providing feedback on the form and content of the questions, identifying any that were ambiguous or unclear.

Nine medical practitioners provided completed responses, all had some regular contact with NMPs in their daily practice but only one had extensive experience of non medical prescribing over ten years. Nevertheless, the questions were considered mostly clear and appropriate and the form was not too long. As a result of the feedback, two questions required amendment. Two items from Q10, outcomes for patients, were shortened so that only one issue was covered and another question was worded more clearly.

Following piloting and analysis, the revised questionnaire was again circulated to experts and advisory group members and comments were incorporated into the questionnaire. The questionnaire was submitted to each of the eight University Ethics Committees and comments as far as possible as they commonly applied across the whole study were incorporated into the final questionnaire. This revised questionnaire (appendix 9.4) was ready for distribution in October 2008.
3.3.3.5 Recruitment of sample and methods

The contacts were derived through a separate contact sheet included with the NMP survey asking participants to nominate a medical practitioner in regular contact with non medical prescribers (who worked with them). Of 142 completed contact sheets returned with questionnaires, 15 were returned with refusals and 127 gave a contact address or email. Questionnaires sent to the medical practitioners were mailed with an introductory letter by the lead team at UCLan. The questionnaire was printed on white double sided A3 folded paper. Information for participants was printed on the front page and an SAE was included to return the questionnaire to SH at University of Central Lancashire for analysis.

3.3.3.6 Analysis of data

Qualitative and quantitative responses to the questionnaire items were coded and inputted into Statistical Package for the Social Sciences (SPSS Version 12.0) database. Descriptive and inferential statistics have been undertaken to provide an analysis of the data.

4. Findings

4.1 Phase 1: Focus groups of NMP leads

4.1.1 Introduction

Five focus groups were completed between October 2007 and July 2008 and there were no infringements of the shared protocol. In total, 25 NMP leads contributed to the focus groups representing 42 percent of Trusts over the North West of England. All NMP leads were over 35 years old and the majority had a non medical prescribing qualification. There are few male and very few non-nursing non medical NMP leads; therefore to indicate inclusion by gender and profession in this study might inadvertently identify individuals. Table one shows numbers of NMP leads from each zone involved in the study, the total number of Trusts per zone and the percentage of Trusts represented (more than one person from a Trust may have attended – see below).
<table>
<thead>
<tr>
<th>Zone</th>
<th>Number of participants</th>
<th>Total number of Trusts</th>
<th>Trusts represented as a percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cheshire and Merseyside</td>
<td>7</td>
<td>25</td>
<td>28%</td>
</tr>
<tr>
<td>Cumbria and Lancashire</td>
<td>8 representing 7 Trusts</td>
<td>12</td>
<td>58%</td>
</tr>
<tr>
<td>Greater Manchester</td>
<td>10</td>
<td>22</td>
<td>45%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>25</strong></td>
<td><strong>59</strong></td>
<td><strong>42%</strong></td>
</tr>
</tbody>
</table>

Table 1: Numbers of NMP leads representing NHS Trusts involved in the focus groups

The range of respondents varied from three participants up to a maximum of seven in each of the focus groups. Originally only one focus group in each area was planned, but it was very difficult to schedule the time for all the NMP leads who wanted to contribute, there were some disparities in geography and the number of Trusts represented so two areas provided extra sessions.

Many of those now leading non medical prescribing had been appointed because of practice experience rather than it being a management decision. In some Trusts, the non medical prescribing lead role was shared. One person (usually in a management position) was the named Trust contact and the other managed the operational aspect of the role, this could represent a commissioner/provider division in some cases but not all. In order to represent both roles, where these divisions occurred, both individuals were invited to focus groups. There were enough representations of each kind of role within the study, but individual Trusts may have only represented one role. Both roles were not necessary and may not have been altogether facilitative. Where both roles were represented, for example, where the non medical prescribing operational lead was attending with their strategic lead, who was possibly their manager, the operational lead might have emphasised the positive aspects of support around the position.

### 4.1.2 Understanding the role of the non medical prescribing lead

There was no consistency generally among the Trusts represented about the roles and responsibilities of the non medical prescribing lead. Some leads had large numbers of non medical prescribers and others did not. There were wide variations in allocation of time for the
role and no common agreement as to which aspects of the role are dominant and where the boundaries of the role lie. The focus groups explored the understandings of NMP leads about their priorities in their role, perceptions of their role, by themselves and by others, the preparation for the role, the support they felt was necessary and the support they received.

In this category four themes were identified that related to perceptions and scope of the role of the NMP lead. These themes were evident in focus groups from all three zones and included:

- The role of the non medical prescribing lead
- Preparation for the role
- Time allocated to the role
- General support for the role

4.1.2.1 Theme one: The role of the non medical prescribing (NMP) leads

We have here identified two levels of the lead role, reflected in respondent's comments: the strategic and operational levels. Some non medical NMP leads perceived their role to include both aspects whereas others focused on either a strategic or operational perspective.

a) The strategic role of the NMP lead

A number of job descriptions for NMP leads describe the lead as a ‘Champion’ and NMP leads interpreted their strategic input as introducing and including a perspective that takes account of non medical prescribing into policy and strategic meetings through agenda items and discussion at a senior or executive level:

I am a Champion for NMP and I get it on any as many of the agendas as I can (Cumbria and Lancashire)

My role is about getting it on the agenda, about governance issues, about working in partnership and supporting colleagues (Cumbria and Lancashire).

Another highly sensitive part of this strategic input is ‘marketing’ non medical prescribing to executive level and enlisting their strategic support for policy and procedure:
I report to the directors within the organisation making sure we have their full support, as well as being involved strategically and implementing policies and procedures relating to NMP within the organisation (Greater Manchester).

Part of my role is to bring forward the non medical prescriber within the Trust, to discuss within the various directorates the potential for further NMP (Greater Manchester).

In partnership working, NMP leads identified their understanding of their communicative role between Universities, Health Authority and the practice environment

I am a conduit for information from both the SHA and the HEI and the students and the DMPs (Cumbria and Lancashire).

Development of the NMP service, for most NMP leads was a strategic priority for the future and they commonly expressed supporting the development of policies and procedures to monitor and evaluate non medical prescribing practice, including governance and risk assessment:

I look at everything that we do from a governance perspective … Where is the risk? (Cheshire and Merseyside).

b) The operational role of the NMP lead

The operational role described by many respondents, included the co-ordination of services across the trust, recruitment onto the non medical prescribing programme, “acting as a reference and resource” and supporting qualified non medical prescribing staff.

One lead described the operational side of the role as:

Everything from attending the network forum meetings, processing applications, liaising with the universities, meeting up with prescribers regularly (Cumbria and Lancashire).

Another stressed the importance of the co-ordination role:
It’s a co-ordination role… so in terms of the existing prescribers we have, helping them with any questions, disseminating information either about seminar days or changes to legislation and providing them with a formal network where they can meet up and discuss practice (Greater Manchester).

As part of partnership working, some respondents particularly emphasised the importance of their role in recruiting and supporting staff:

I see my role as being involved with the selection of the non medical prescribers within my organisation … I see myself as being able to facilitate the NMPs while they are in training and also offer some support post registration (Cumbria and Lancashire).

I see it as an ongoing supportive role to our non medical prescribers … a link between themselves and the PCT organisation … carrying on with CPD (Cumbria and Lancashire).

A few respondents acknowledged what they perceived as their responsibility, not only for patient safety but, perhaps referring back to the context of criticism of non medical prescribing, expressed in the management of ‘risk’, in selection of applicants for the programme, on-going support after qualification, particularly in relation to competency and in relation to the reputation of non medical prescribing:

You’ve got to have very tight selection, risk assessments before you then let them go forwards so you can’t afford take your eye off the ball, you’ve got to manage the ‘select risk’ and ‘post monitoring risk’ (Cheshire and Merseyside).

It’s risk assessment and the selection, and then post prescribing, really. I would feel it was my fault if something inadvertently happened, I think the buck would stop with me (Cheshire and Merseyside).

In some trusts, the non medical prescribing lead role was shared between a managerial / strategic lead and a practice lead. Two practice leads describe their role here. In the first, the focus is entirely on practice concerns that the lead reports back to her manager, the named NMP lead for the trust. Sometimes, as illustrated by the second comment from another operational lead, this could be an advantage if communication is good, with each lead being
able to use their specific skills and contacts between the two roles. The third comment illustrates where this goes wrong and how a lack of focus at strategic level has impacted upon the operational role development:

My role is really the operational co-ordination of non medical prescribing in the Trust. The Director of Nursing is the actual lead but I do all the doings, so I suppose it’s everything really from attending the network forum meetings, processing applications, liaising with the universities, meeting up with the prescribers regularly to find out what they are up to and what the issues are etc, so it’s generally anything really that’s operational for the Trust (Greater Manchester).

The original lead since the beginning sat in a fairly senior position in the PCT, so she’s linked in with board level meetings and things like that, so it’s actually been pretty well stitched through the organisation (Cumbria and Lancashire).

I’ve had three NMP leads in my role in the last year, since I started. The NMP leads have had that role as part of their bigger role, so I think perhaps some of the time they’ve been very divided on whether they’re concentrating on it or not. I don’t know that that’s actually helped to bring it forward as much as if someone had been there consistently (Cumbria and Lancashire).

In summary, respondents felt that part of the role of NMP lead should include strategic responsibilities and some included ‘Championing’ NMP at a number of different organisational levels which was felt to be important in moving the service forward. Local policy in the North West encourages this and local documents reflect it (for example, NHS East Lancashire Policy 44, 2009). However, for many, the predominant role is operational, which essentially is maintenance and involves the sensitive coordination of numerous stakeholders, managers, prescribers, DMPs within and outside the trust in order to ensure that NMP targets are met and the service maintains safe practice. Support for potential non medical prescribers also falls into the operational role as well as ongoing support for those already qualified.

4.1.2.2 Theme two: Preparation for the role

Although regional policy has dictated that each trust appoint a named non medical prescribing lead, there has been little guidance as to the boundaries and strategic responsibility the role
should encompass because the political context of the role has been an emerging one as this aspect of the profession developed and extended. The focus group data reflect the diversity of preparation and perspective of the different roles of the NMP lead. Some non medical prescribing leads were aware of the political arena in which they operated, but many had not previously had preparation for such a complex mix of responsibility as this NMP lead obliquely refers to “what it actually entailed” and how to develop the role strategically:

*People have been, perhaps, given the lead role, as a part of a portfolio, but without perhaps a lot of understanding of what it actually entailed, or how to develop that role* (Cumbria and Lancashire).

*It sat with me because my role was governance and quality, it seemed to sit comfortably under that process...I don’t think there were many people who had any formal preparation or organised preparation* (Cheshire and Merseyside).

At the operational level, people tended to describe learning “on the job” or through their own “nous” as one respondent put it. The first two comments acknowledge that the role encompasses more than practice experience and mentorship. Others had an initial interest in NMP and the role and responsibility developed gradually with collegiate support:

*Mine is purely a background of actually being a non medical prescriber and then asked to take it on under the new PCT* (Cumbria and Lancashire).

*I was very enthusiastic nurse prescriber back in the 90s, on one of the very first cohorts and the trust actually advertised somebody to champion nurse prescribing two days a week. So I actually gained experience from colleagues … to see how I could embed it in practice for our PCT and then having had that knowledge, even when the protected time went, I still kept the title… So I am one of the few fortunate leads who has a lot of tacit knowledge in far as I am a prescriber, I have been in nursing for quite a long time* (Cumbria and Lancashire).

*I certainly have not had any preparation. It’s very much learning on the job, from your own knowledge and picking up information that is available to you, by picking up the reigns, the role, but no preparation as such. There has been no induction period, or training, you just get support from other colleagues who you know have that experience* (Cumbria and Lancashire).
People who were more satisfied with their preparation for the role described a gradual assumption of the responsibilities and tasks through working alongside or through access to a previous post holder, even if it was just by phone:

*I had an interest in it, so I did it on a one day secondment - one day a month secondment - and then gradually took a two day secondment, and then gradually built it up … I’ve sort of supported the lead for a few years. I’ve only just taken the actual lead role myself, so I feel quite well supported* (Cumbria and Lancashire).

*I think I took it with my eyes open basically, because I’ve been working alongside the lead I knew what the responsibilities were, and taken on some of the tasks already* (Cumbria and Lancashire).

Overall the data suggests that formal preparation as in an induction programme was minimal and necessarily limited to informal and collegiate mechanisms due to the evolving role. NMP leads were all positive in their descriptions of taking on the operational responsibilities, but there were strong indications of training or support needs for the strategic role.

**4.1.2.3 Theme three: Time allocated to the NMP lead role**

Part of the inconsistency of the description and operation of the NMP lead role relates to time allocated to the role and the numbers of NMPs supported by the lead. For some there is designated time set aside which varies between 1 full day per week to full time whereas for others there is no protected time and their role is integral to the wider role they have within their own organisation.

A small number of respondents in larger trusts indicated that all their working time is dedicated to the NMP role but for most participants the role was part of a portfolio of the clinical manager’s professional responsibilities:

*I work 30 hours a week and it is purely for NMP, there has been an ‘add on’ when patient group direction agenda arrived and that is another big part of my work but it does tie in with NMP anyway* (Greater Manchester).
Two days dedicated time for that (NMP management) but that is for the whole of the organisation and that’s … just short of 300 prescribers (Cumbria and Lancashire).

Whereas for others the role was integral to their job:

It’s just an ‘add on’ to my role … I just have to try to fit it in as best as I can (Greater Manchester).

I would have to say it’s an integral part of my nursing services manager role. Historically when nurse prescribing was in its infancy I had two days protection for what was then nurse prescribing. Then once nurse prescribing became ready it was considered to be another tool in the general toolkit in senior nursing and my protected time in that post was relinquished (Cumbria and Lancashire).

One respondent noted the differences between trusts in allocation of time:

I cover two areas - and it is actually different in each, in one area it is specifically dedicated time and in the other it’s just added on to my other role so it’s difficult to try and … devote time, it’s got to be meshed in with everything else (Greater Manchester).

There were wide variations in allocation of time to the role, for some the role has protected time whereas for others it is an ‘add on’ to their existing role within the organisation.

4.1.2.4 Theme four: General support for the NMP lead role

Although the most popular construction of the NMP lead role was in support of others, to operate effectively at all levels, NMP leads themselves needed support at strategic, operational and administrative levels. Strategic level support allowed NMP leads to become a bridge from issues in practice to executive levels within the organisation, operational support, which included collegiate and direct management, allowed NMP leads to perform a co-ordinating role and administrative support allowed them to emerge from the paperwork.
a) Strategic support
Where NMP leads had strategic support and executive level commitment to progress non medical prescribing, this fed down to every operational level across the trust:

Those links into all the processes of an organisation are very important. One of the requirements of the implementation process [of non medical prescribing] was that boards had somebody at a senior level, who was, at an executive level, who was responsible for making sure that strategies went to Board and things like that. And in a lot of organisations, we struggled, because it was just seen as something that is operational and Boards aren’t particularly interested in it, but in those organisations where there was a commitment at Board level to see it through, or at executive level, I think they’ve made big progress (Cheshire and Merseyside).

One respondent noted how the organisational infrastructure has been fairly stable since she took on the role of a NMP lead and consequently this had resulted in a range of support being gained at different levels of the organisation:

In our organisation, it certainly is across-service provision; it’s pretty well threaded through. I am quite lucky that we have had a good structure from the NMP point of view, really, since its inception. So we’ve had consistency there and the original lead has been the original lead since the beginning, and sat in a fairly senior position in the PCT, so she’s linked in with board level meetings and things like that... so it’s actually been pretty well stitched through the organisation. So we really haven’t had a problem - we’ve had a good medicines management support, we’ve not had a problem with budget, it’s really been a sort of a “where can we use it next” almost sort of approach really, which is good (Cumbria and Lancashire).

Another NMP lead noted that some colleagues were not as lucky in their strategic support:

Well I feel quite lucky being operational and there is support strategically for me. Not everyone is in that position (Cumbria and Lancashire).
b) Operational support
Operational support at a collegiate or management level, in the form of shared decisions, liaison with senior management, NMP colleagues and their own trust’s medicines management team was experienced at some level and appreciated by all NMP leads:

*I chair the NMP steering group… they provide me with a mandate to go ahead and do things so it’s not necessarily I decide; we decide as a group and then I implement our decisions. So it’s quite useful having the support of that multidisciplinary group of people really* (Greater Manchester).

*It’s the enthusiasm of other non medical prescribers for continued professional development and some kind of structure. I think that need then warrants my role to keep the people prescribing, the competencies in there, will encourage them in the practice* (Cumbria and Lancashire).

This NMP lead identifies how team support at the operational level feeds upwards to support her at the management level and liaise with other health professionals:

*Medicine management support has been crucial to this role; I couldn’t do it without it. We have got really strong links; we are based in the same building; we meet frequently, as well as with the whole nurses’ management team… They provide us with data, incidences, issues … things that I’ve picked up today will go straight for discussion with them before it goes anywhere else, so it is crucial … The NMP Leads meeting feeds into the medicine management committee, which is multi-disciplinary, and also involves the doctors so that does help us tie in with them* (Cheshire and Merseyside).

Because some medical practitioners can feel protective of their medical prerogatives and tensions can arise within the context of non medical prescribing, NMP leads have a role in negotiating bridges and boundaries of this area with medical staff. Some medical practitioners are highly supportive of the role of advanced health practitioners, helping to monitor and mentor staff; such support by medical colleagues was welcomed warmly:

*From my experience, the medical staff in our organisation are very supportive. They’ve proved to be excellent mentors as well* (Cheshire and Merseyside).
I have to say, I was very surprised at how supportive the medical staff were... we used a number of GPs as our mentors and they were all great (Cheshire and Merseyside).

c) Operational support at administrative level

NMP leads talked most about administrative support that gets all the tasks done and there were large variations in such support offered between trusts noted by the first NMP lead with a role in two different trusts. Operational level support for all the administrative “bits and pieces” (IR5) of the role was considered best offered as part of the integrated team at trust level by the majority of respondents. These NMP leads describe the sort of support that made the difference:

In one trust, I do have support from the secretarial staff within the medicine management team who has some time put aside to actually help me out and from the contracts manager who manages the ordering of prescriptions and the register. Whereas in the other PCT I don't have any support at all (Greater Manchester).

Five hours dedicated admin time for support every week. That's one person for me who gets all the prescription pads ordered, come in and check and get them out to the prescribers, does workload around BNFs, drug tariffs and she keeps and maintains my database for prescribers – recording level of qualification. Without that support given that I have no protected time, the job would be impossible (Cumbria and Lancashire).

For some, limited or lack of administrative support interfered with the operational role and undermined their position because they had to rely on 'goodwill' to get basic aspects of the job done:

It's quite often on goodwill on behalf of – sometimes they will just type something for you or just do something for you. It's not part of their role sometimes, in some cases just goodwill (Cumbria and Lancashire).

It is obvious that the type of support available across the region is variable. Some respondents appear well supported at an administrative, operational and executive levels, whereas others receive none or little support.
However, for some support was not explicitly offered as part of the organisational structure but relied on the individual to seek it out:

*I feel that yes, the support is there but it's up to me to recognise my limitations and then go and seek that support. It's there but almost it won't be offered, it has to be sought out* (Greater Manchester).

The respondents identified a varied range of support at strategic, operational and administrative levels. Although there was a strong focus on the administrative aspect of the role many respondents recognised the importance of the strategic and operational support, particularly where they felt part of a team.

### 4.1.3 Good practice

Category two highlights strategic, operational and educational good practice across the region. In this category four themes were identified that related to good practice and again all these themes were evident across all three zones and included:

- Strategic good practice
- Operational good practice
- Good practice in supporting prescriber practitioner networks
- Good practice in provision and support of formal education

### 4.1.3.1 Theme one: Strategic good practice

Some NMP leads saw their strategic role as moving the results of their collaborative working practice, such as in the development of a strategic framework or policies to support the organisational infrastructure of non medical prescribing within their organisation and introducing it at higher levels:

*I've been tasked with developing the strategy for policy, looking at the clinical risk and governance, linking into the integrated governance group which feeds into the provider board, now, so it’s turning it into a slightly different concept to what it was before….to try and get the right sort of safety measures in place* (Cumbria and Lancashire).
This group is very beneficial in the collaborative working around NMP guidelines..... There has been an awful lot of networking and as a result almost by default we have got a consistency across the area (Cumbria and Lancashire).

Respondents across all three zones highlighted a range of examples of good collaborative practice that developed common frameworks and processes that supported evaluative practice, which was widely regarded as developing the future of non medical prescribing. These examples included development of a competency workbook to support non medical prescribers:

We have developed a competency workbook through the NMP champions. They were launched in May so it's early days in terms of how the process works, but they have been used (Cumbria and Lancashire).

Another example discussed by all focus groups and viewed as good practice although noted to be variable across the region, involved monitoring the activity of prescribers. Some NMP leads had developed their own audit tools to provide a range of information and monitor non medical prescribing practice:

I've developed an audit tool so at the end of each month the NMP send me information on the audit tool about what they've prescribed, how many times they've prescribed and what drugs they're prescribing. So I've been able to monitor who is actually prescribing and who isn't (Greater Manchester).

Generally, NMPs saw strategic good practice as extending the reach of results of their considerable skills in co-ordination and collaborative work at the operational level to strategic boards. However there were very few examples suggesting how this could be done and if such an approach was successful.

4.1.3.2 Theme two: Operational good practice

The strongest feature of this category related to the support that comes from the bi-monthly forum groups supported by NHS North West across each of the three zones within the region. This is the opportunity for trust non medical prescribing leads, NHS North West staff and higher
education representatives to meet and exchange information, share practice, common
documents, discuss current issues and support colleagues within each of the three zones.

I think the forum, the once every two months meeting, is wonderful …you are given the support,
the networking so you know, if people are at the stage that you need to write a particular
document then other people in the group say “oh well I’ve done that, I’ll email it” (Greater
Manchester).

I posted a question last time and managed to get suitable answers which, disseminate back out
to our people and obviously other people at that meeting will get the answer, so even if they’ve
not thought of the question, they’re getting that information as well (Greater Manchester).

I think we have been very lucky in that the North West SHA and its predecessor organisations
Cumbria and Lancashire, Greater Manchester, Cheshire and Merseyside, were very proactive in
the way they managed, and very supportive of processes and the leads right from the start and
also because we’ve had that infrastructure (Cheshire and Merseyside).

For one respondent the regular regional forum meetings had been useful in helping her to
understand and function as a NMP lead:

I treat these meetings as almost my personal CPD because we pick up so much from one
another that it’s the meetings that have developed a bigger understanding of the bigger picture
(Cumbria and Lancashire).

Respondents acknowledge clearly how beneficial the regular forum groups have been in
supporting them in their NMP role, updating and exchanging information with others across their
zone.

4.1.3.3 Theme three: Good practice in supporting prescriber practitioner networks

Some NMPs have extended the good practice support network they experienced in the zonal
NMP lead forum to their own trusts, as CPD and support networks, particularly for newly
qualified non medical prescribers. These were noted to be well attended as practitioners found
them very useful for information and guidance:
We run monthly workshops to support the CPD of our prescribers which we run jointly with the PCT pharmacist… We do a lot of information dissemination and we also have a clinical focus at each session and that works very well (Greater Manchester).

The trick is making sure that the support is in there for clinicians so that they don’t go through all this training to feel that they are not supported. Also DMPs are very forward thinking, and have agreed to continue providing clinical supervision (Cumbria and Lancashire).

One respondent noted how she was taking this support mechanism even further by developing an individual ‘buddy’ system for newly qualified prescribers:

\[\text{I’m just in the process of starting a buddy system whereby new prescribers when they finish the course are matched up with an experienced prescriber that they can relate to…that will also be a way of auditing anybody who’s ‘dropping off’ [sic – has stopped or suspended prescribing]} \]

(Greater Manchester).

Trust support networks facilitated by the NMP leads are recognised as being of value to non medical prescribing staff for generic support, sharing information and guiding practice.

4.1.3.4 Theme four: Good practice in provision and support of formal education

NMP leads have noted the importance of providing cross disciplinary continuing professional development opportunities to non medical prescribing practitioners:

\[\text{We run monthly workshops to support the CPD of our prescribers which we run jointly with the PCT pharmacist (Greater Manchester).} \]

\[\text{We’ve set up some mandatory CPD sessions within the Trust which are exceptionally well attended which we do invite the medical mentors to… that’s been of great benefit to all our prescribers (Greater Manchester).} \]

One NMP provided 6 sessions per year and had provided opportunities for both practitioners and management to suggest the topics of interest:

\[\text{We tried to find out what was particularly wanted and needed by the prescribers themselves. Some were decided on the results of the questionnaire and some were decided by what the} \]
management thought [the NMPs] ought to have rather than what they had requested (Cumbria and Lancashire).

Another respondent who worked in primary care talked about sessions across different trusts to encourage sharing practice and knowledge:

*I work very closely with the NMP lead for the hospital and she and I organised a learning event which took place last January which was a great success. It was really, really good - and it was good because we had nurses there from the acute sector and from primary care - so there was a lot of networking and sharing going on…* (Greater Manchester).

As part of the partnership working involving NMP leads, university and SHA representatives, the recruitment and selection processes have been enhanced with the ultimate aim of ensuring safe non medical prescribing practice:

*It’s been really interesting…as we’ve gone through the process we’ve gradually identified more things that we’ve tried to make it safer”*

Researcher: Can you give examples?

…*The numeracy assessment, the application form, the approval to practice process* (Cheshire and Merseyside).

*The things that make it work well are having the processes in place to identify people who are safe to practice…having processes in place that make sure that the people who come out the other end are fit for purpose, the numeracy tool, the way we do the application form* (Cheshire and Merseyside).

The NMP forums have been identified as good practice and a source of positive and useful support for the non medical prescribing leads. Other examples of good practice included the setting up of support forums for non medical prescribing practitioners, CPD support, development of frameworks to support service evaluation and also the changes to recruitment and selection which should ultimately lead to safer non medical prescribing practice.
4.1.4 Barriers to non medical prescribing practice

Three themes were identified within this category. All these themes were evident across all three zones:

- The political context of non medical prescribing at a strategic and operational level.
- Recruitment to non medical prescribing programmes.
- Maintaining non medical prescribing competence.

4.1.4.1 Theme one: the political context of non medical prescribing

The post of ‘non medical prescribing lead’ has become more political as part of the culture of change that has infringed boundaries across the whole health and social care system. New advanced roles have emerged that change the status and independence of healthcare staff, particularly nurses and some elements of the health service are slow to acknowledge, provide support and guidance for these new responsibilities and competencies. Non medical prescribing particularly impacts on one of the most protected areas of medical practitioner’s competency and in some areas, the policy context is unclear. Consequently, strong political dimensions around the entire topic of non medical prescribing have emerged, not necessarily negative towards the non medical prescribing practitioner, but around the policy context in which NMP operates. Individuals at different levels of an organisation can have views that conflict with the policies of development of the service. This is highlighted when NMP leads identified difficulty in finding medical practitioners who would support students undertaking the programme.

*We have difficulty in obtaining a mentor [DMP]. I work in primary care and we still have many GPs who do not realise the benefit of NMP* (Greater Manchester).

These concerns are being addressed in some areas through information and implementation of policy through directives:

*We’ve had to promote NMP quite high up on Medicine Management’s agenda and also high up within management to gain the support of the medical director who has now written to all his medical colleagues to say that this is now happening … you have to encourage and support the nursing colleagues within the trust* (Cumbria and Lancashire).
Whereas in another area, an NMP lead explains a softer strategy to reassure medical colleagues and recruit them as DMPs.

*I had to go round to each of the boroughs and actually meet with the consultant groups… which was quite interesting and actually very scary as well because you can imagine they’re going to ask the most difficult questions you’d never even thought of, but it was well worth doing. We don’t really have a problem now with getting DMPs and I think it’s because I actually took the time to go round and actually speak to the consultants face to face and roll with their resistance as well a little bit at the beginning (Greater Manchester).*

Non medical prescribing leads also note resistance from both colleagues and employers to non medical prescribing at an operational level of their organisations:

*I’ve heard of situations where it’s their practices being subdued by other people that they work with, so that other people are not happy that they can then go on and prescribe. So they are being limited by maybe who’s employing them or by who thinks that they take some kind of responsibility for them. I think that they either don’t want them to prescribe at all or they still expect them to come in and get prescriptions from GPs or doctors, but they don’t want them to be free just to prescribe from the BNF (Cumbria and Lancashire).*

*There are some service managers who do not see prescribing as being useful. I can think of one service where I know they would find it really beneficial, but their manager is adamant that they will not be prescribers, for whatever reason I cannot convince her (Cheshire and Merseyside).*

These NMP leads explain the need to increase understanding of the skills in advanced clinical assessment, diagnosis and management that non medical prescribers can bring to enhance patient care:

*I think one of the issues is the re-organisation. There are different managers – managing diverse staff needs … and there is a lack of understanding around what prescribers can do. … It’s a big educational issue for those who don’t have the knowledge. There is a lack of confidence in those managers… perhaps a misunderstanding (Cumbria and Lancashire).*
I need to develop the (NMP) role and probably increase awareness of the role and increase the awareness of NMP … throughout the Trust and provide a better support framework for the people already prescribing (Greater Manchester).

I think that they [managers] have an overview of what it is, but they don’t have the depth that’s required to ensure safety, everything’s safe (Cumbria and Lancashire).

Another lead gave an example of how some experience of non medical prescribing was an advantage in relation to understanding the politics of non medical prescribing:

I think quite a number of our service managers were V100 prescribers, so they’ve got an idea about what it’s about, and seeing V300 appear… and the depth and the spread that prescribing can actually do. So I think they’ve got an idea, which is more than if they hadn’t been [involved with] V100 prescribing (Cumbria and Lancashire).

On a professional basis it is expected that non medical prescribers maintain their specialist area non medical prescribing competency, but once qualified there is no mandatory update requirement. Many trusts do provide local update or CPD opportunities related to non medical prescribing, but access to these resources was limited or blocked for many:

Certainly for our colleagues who work in general practice we find it’s a constant challenge to release nursing staff from general practice to let them attend anything; CPD prescribing days, anything (Cumbria and Lancashire).

This theme shows that some barriers to non medical prescribing practice have been identified at a strategic and an operational level, manifested in the interaction with medical colleagues, team colleagues and managers. A few respondents have found ways or have ideas of how these can be overcome. NMP leads have indicated the continuing need to encourage and support the development of non medical prescribing at an executive level. At the operational level, a need is indicated for educated management of responsibility for non medical prescribing to embed an understanding of the roles and responsibilities of the advanced clinical NMP practitioner and to support isolated NMPs who find their practice blocked or limited.
4.1.4.2 Theme two: Recruitment to the non medical prescribing course

The NMP course consists of 26 days of theory and 12 days of practice with the DMP. This results in 38 days of removal of staff from their clinical area. NMP leads were aware of the practical issues of cover for service provision. Some courses, leading to specialist registration, are funded by the NHS and additionally ‘backfill’ is provided. ‘Backfill’, meaning the clinical area receives compensatory time or money for the time missed by the staff member, is not provided for the NMP qualification but this issue was raised by a number of NMP leads:

*Our biggest barrier is getting people released to go because although the courses at present are funded it is the back fill costs that are an issue where … you’ve got very high pressurised services, actually releasing somebody for the amount of time of the course... I’ve got a student who hopefully is commencing in January but she’s been deferred twice because of lack of staff to back fill the role she’s in ….so that’s quite frustrating (Greater Manchester).*

*It’s all based around manpower around the ward and they would be unable to carry on their day to day work on the ward … or being supervised [by a DMP] in that role (Greater Manchester).*

Unless I offer to pay back the clinical time cancelled then the nursing staff end up going in their own time. Certainly before the re-organisation much of the practice nurse CPD was held well into the evening and the expectation was that they would attend then (Cumbria and Lancashire).

The issue of cover for service provision, for some clinical areas, obscured the benefits of a significant increase in the skills of the workforce:

*You can see where the prescribing could be useful, and maybe it is the capacity of the service to put them on the course, to get them to prescribe, but that’s something that the PCT, if they really wanted it to happen, they would have to find the resources to do it (Cheshire and Merseyside).*

The NMP course has a reputation of being very demanding due to the time required to meet the professional and academic standards. There was a perception by NMP leads that practitioners needed more detailed information about the benefits and demands of NMP courses, support for
the NMP practitioner and ultimately how the practitioner role could be enhanced through non medical prescribing:

A lot of people can see the benefits of prescribing within their role but lack confidence to actually apply. There is a perception that this course is really hard, you have to do a numeracy assessment and all those things do put some people off (Greater Manchester).

If we could work together with the universities and some of the qualified prescribers who are doing really well and confident in their role, to market this amongst the staff so that they can try and overcome those barriers...Go through with them exactly what is expected of them, that it’s not as scary as some of them think it is... So maybe workshops or a road show ... we could certainly persuade a lot more people to take on the prescribing role (Greater Manchester).

I think there’s an opportunity there for a real marketing exercise to get people together to explain to them that actually there’s a lot of support and help out there, to explain the benefits of prescribing within their role, to help them overcome some of their personal barriers and lack of confidence that some of them do have (Greater Manchester).

A number of barriers were identified in accessing the NMP programmes. The main barriers included staff being released from their own clinical area and the subsequent impact on service provision, difficulty in finding a medical practitioner to support their application and perceived demands of the course. Suggestions made to address these included raising awareness of the benefits of non medical prescribing skills in clinical areas and clarifying the demands of the programme to prospective candidates.

4.1.4.3 Theme three: Maintaining non medical prescribing competence

Previous studies have found a small percentage of non medical prescribers never use their qualification, or let it lapse (Latter et al, 2005; Courtenay et al, 2007). Other studies have reported a higher percentage of nurses (Larsson, 2004; Courtenay & Carey 2008a) and particularly pharmacists (George et al, 2007; Baquir et al 2010), which is a similar effect as reported by the first studies of health visitor or district nurses. This probably indicates a need for a stronger, more clearly defined infrastructure for the emerging allied professions and others. There are implications here for targeting resources as the role may not suit some individuals or may not be sustainable for particular groups and thus we thought this worth some further
discussion. NMP leads used the term “loss of confidence” or “reluctance to prescribe” to describe individual NMPs who had stopped prescribing and this is a common term often found in previous studies and discussion. In these groups NMP leads clearly described their understanding of the loss of confidence as associated with support needs in practice: isolation, lack of opportunities for collegiate decisions and generic support, leading to NMPs “doubting their competence”.

Within our own organisation I have noted a lack of support, lack of CPD, people working on their own - identified as barriers... We are addressing those at the moment in two ways by integrating administration and HR processes and encouraging prescribers to link with others (Cumbria and Lancashire).

The lack of appreciation by some managers in these scenarios, where people come in and said they haven’t had any support. At some point that line manager has signed off to say that clinician has got the relevant skills and that they are prepared to support them in practice. Obviously they haven’t linked the signing of that training to the impact that is going to have to the roles and responsibilities and the support required in individual practice (Cumbria and Lancashire).

Some good practice examples mentioned above such as DMPs continuing to support non medical prescribers beyond studentship and trust forums also helped to alleviate isolation and improved perceived confidence levels.

The non medical prescribing process involves a number of stages, of which the written prescription is one aspect. Loss of confidence may not extend to decision making or other competencies. The accountability issues in prescription writing can be daunting and this can deter NMPs from issuing prescriptions:

Sometimes it’s just losing confidence in writing prescriptions. There nothing wrong with the actual decision making, perhaps not having written a prescription for a while so we hold prescription writing sessions and sometimes a little thing like that. Some of them just haven’t prescribed for a while, various things sometimes it’s something quite simple (Cumbria and Lancashire).
It’s more around, I think, a clinical competence that, as the prescriber starts to doubt their own competence … and the prescriber actually wanting to do it at the end of the day… We’ve one or two that have been perhaps a little bit reluctant to, initially (Cumbria and Lancashire).

Accountability here is illustrated by this NMP lead describing the immersion of the newly qualified non medical prescriber in practice who has questions about the whole process including support for the role and in communicating with other healthcare professionals about their actions:

It suddenly hits them … They ask the questions, “What’s here for me, when will I be doing this and how will I be doing it? How will it work, how will I communicate to 280 GPs in this PCT whose patients I’ve seen?” and it suddenly dawns on them that it’s much more difficult than they thought it was going to be. And they haven’t thought that through in advance (Cheshire and Merseyside).

NMP leads also discussed limitations on non medical prescribing, particularly supplementary prescribing in relation to allied health professionals:

Supplementary prescribing is a big pitfall; there are many AHPs, radiologists and people who should independently prescribe, but the supplementary arrangements are an absolute nonsense, and there is no point in even putting them through [the course] (Cheshire and Merseyside).

NMPs who are independent prescribers choose the medication according to their clinical experience whereas supplementary prescribers must set up a clinical management plan. This is a framework that defines the medication and treatment plan for an individual patient agreed between medical practitioner and supplementary prescriber. A problem identified here was the time taken to set up the structure and process, gather the health professionals together and agree on the treatment:

The biggest barrier we’ve had… has been [the limitations of] our supplementary prescribers. It can get quite hard to get clinical management plans up and running and in use. .. sometimes they don’t actually speed things along (Greater Manchester).
The overall message was that NMPs, like other professions in healthcare, need operational support and access to validation of their practice decisions through contact with similar professionals who would help to support and reassure them through discussion. Respondents acknowledged how qualified NMPs have expressed concerns about how they maintain competency once qualifying whilst working autonomously as an independent or supplementary prescriber within the boundaries of non medical prescribing practice. Examples of overcoming these issues were identified in continuing support through forums to alleviate isolation, continuing support from mentors including DMPs, experienced NMPs and leads. Allied Health professions identified some limitations in supplementary prescribing that are difficult to overcome in the current context of non medical prescribing.

### 4.1.5 The success of non medical prescribing practice

A number of respondents noted that the introduction of NMP staff has resulted in a perceived improvement in service provision and patient safety:

*We’ve got lots of staff in quite acute roles where a patient can come in on our acute medical unit and the nurse prescriber on there can just deal with the whole episode of care, get that patient sorted and it’s definitely better for patients because they haven’t got any of this hanging around waiting* (Greater Manchester).

*These staff are working fairly autonomously, the NMP ability has been immensely advantageous because previously they would have had to have been constantly coming out of the consulting room to get their medical colleague … it means that the clinics flow a lot better. It’s obviously providing a much more stream lined service* (Greater Manchester).

*The ability to get people through a system quickly and safely… the constant bouncing from one person to another is itself a nightmare for most patients and also very, very risky* (Cheshire and Merseyside).

Respondents noted the benefits to patient care of NMP health professionals as a complement to the medical practitioner:
On the site with the client attending to that need as it’s required rather than having to go through a third party. That has had a significant effect and to bring service closer to the patient, which is one of the standards that have to be met (Cumbria and Lancashire).

I think the patient is getting a whole holistic consultation and you’re actually able to perhaps improve their taking of medications; you’re able to thoroughly explore it all with them (Cumbria and Lancashire).

There was a very positive and universal acknowledgement across all the focus groups that NMP has impacted upon the service and ultimately the individual patient by providing increased access to medication and a continuous uninterrupted consultation.

4.1.6 Discussion of findings from Phase 1: focus groups

4.1.6.1 Introduction

The aim of this study was to find out whether structural processes and local policy to support and develop the growth of non medical prescribing across the North West was evident. The findings suggest that the structures and processes for non medical prescribing are still developing, particularly where strategic level involvement is needed to move the service on. Those who undertook the lead role were chosen mostly because of their seniority, prior involvement and their operational competence to support. Within this competency NMP leads are innovating practice development through interdisciplinary learning and sharing, where they have strategic placement, innovating decision making through team working, but there remain wide variations in their responsibilities, team support and capacity to engage in supporting practitioners.

Previous evaluations of non medical prescribing that include managers and nursing leads among stakeholder’s views of the development of the service have indicated institutional mechanisms, particularly training opportunities and support at an organisational level for non medical prescribing are weak (Luker et al, 2002; Avery et al, 2007b; Bradley et al, 2005; Latter et al, 2005; Cooper et al 2008b). The North West is probably the most well developed non medical prescribing structure and has established forums, regional development groups and supports CPD events that are well promoted and valued. While at the practice level, things have
improved since Luker (2002) described support mechanisms as “at best weak and at worst missing”, in the last few years, our findings still suggest the same organisational constraints, the controlling effect of managers and poor institutional mechanisms within the Trusts, consistent with previous studies. NMP leads’ activities and comments are consistent with those of smaller scale studies that include NMP leads (Hall et al, 2004; McKay, 2007) and with Norman’s (2007) evaluation of supplementary prescribing that included 35 non medical NMP leads. In 2004 Kent and Medway started to promote and support non medical prescribing fora (McKay, 2007) but their greatest challenge was in getting staff released to attend. Our findings suggest that the North West strategy is succeeding in supporting and communicating the need for updates, training and support of non medical prescribers at the practice level but less developed at the strategic level for communication to the employing organisations.

4.1.6.2 Strategic and operational tension

Although the individual NMP leads, did not define their role in this way, the analysis of their descriptions of the types of activity they were engaged in could be categorised as two types: strategic activity and operational activity. This split between the strategic and operational role of the NMP lead was also identified recently in an article reviewing the barriers to non medical prescribing by Kelly et al (2010). How the NMP lead negotiates their strategic position across the Trust, their access to decision making processes and the obstacles they encounter can be seen as a measure of the development of the policy structure for non medical prescribing. Previous evaluations have considered the maintenance of the non medical prescribing role, CPD and support for non medical prescribing (for example see Latter et al, 2005) and have criticised mechanisms for CPD and training at an institutional level or during the mentorship of the course. This view presupposes an autonomous structure but actually the structure is negotiated and maintained by the non medical prescribing lead. Non medical prescribers are a very diverse group, non medical prescribing is only part of their role and they may have CPD requirements that relate but are not defined by prescribing (for example assessment skills). Thus support for non medical prescribers cuts across disciplines and includes negotiation and promotion of the role throughout the Trust.

- The operational role can broadly be identified at an individual level in the co-ordination of services, recruitment to the non medical prescribing programme, offering support at a collegiate level and liaising with senior management and NMP colleagues.
The strategic role was identified at a systems level, through its impact on policy change, through introducing the concerns of non medical prescribing at a higher level and also through the promotion of mechanisms to improve accountability and patient safety.

NMP Leads who described most of their activities at the operational level tended to focus on practice concerns, decision making processes were organised as a collegiate collaboration but such processes had little impact on policy at an organisational level. NMP Leads with little impact at a strategic level had no opportunity to influence the effectiveness of structural changes needed to support the projected increase of non medical prescribing staff and for the ultimate benefit of patients.

Strategic activities or influence described by NMP leads were often mediated through another individual at a senior management level. NMP leads all spoke about the importance of promoting non medical prescribing and ‘getting it on the agenda’ as one of their strategic concerns so that it became part of the infrastructure of policy decision making but few had any strategic influence. NMP leads saw a strategic role as bridging issues between practice and policy ensuring that strategy was meaningful and effective for non medical prescribing practitioners with a full consideration of patient safety.

Initially, many NMP leads may have had opportunities to contribute a strategic potential, but this part of the role was often underused, thus most of the NMP policy agenda was being implemented and raised only at an operational level. The quotes from NMP leads illustrate clearly where the two parts of the role – strategic and operational were integrated, development of NMP within the Trust was more successful, more accepted at all levels of the organisation and worked into policy throughout the Trust, easing relations within management and with medical colleagues. NMP leads describing a struggle to raise the profile and awareness of NMPs were those who experienced lack of strategic support, lack of awareness of NMP at executive and senior management level and competing policy agendas. The discussion of preparedness for the political dimensions of the NMP role suggests a lack of recognition in some Trusts and by some NMP leads, of both parts of the role; it is doubtful whether the role of NMP lead is understood outside NMP. Strategic level influence was also implicit in the discussion of the importance of support. Support at all levels of practice was emphasised by all participants across the three zones.
The more successful examples of integration of these roles were where the role was split; a
named strategic lead able to work closely with and support an operational lead, rather than
where the operational NMP lead also had a strategic role, because the operational aspect of the
role is the larger part and their strategic influences thus limited.

### 4.1.6.3 Political context of non medical prescribing

A number of previous studies have commented on the political context of non medical
prescribing, especially in reviewing resistance to the changing relationship between doctors and
nurses and other health professionals (Cooper et al, 2008b, 2009; Courtenay and Berry, 2007).
There were also concerns expressed in much of the literature that costs would increase and
standards drop (Bradley et al, 2005; Avery, 2007a citing a BMA paper of 2005). Consequent
studies auditing the prescriptions of nurse prescribers have found no evidence supporting these
concerns (Latter et al, 2007a and c). Costs have not increased (Norman et al, 2007) and
patients’ confidence in the abilities of non medical prescribers and the information they provide
have been found to be equivalent to those in medical practitioners (Luks et al 1998; Brookes et
al, 2001; Berry and Courtenay, 2006; Norman et al, 2007; Hobson et al 2010). Similarly NMP
leads in this sample, whilst convinced personally of the benefits to patients in continuity of care,
increased time for patients and reduced workload for medical practitioners reflected in increased
quality of service for patients, reflected a predominant concern with educating and alleviating
the fears of medical practitioners and managers in their region. The political context can feel
strained at times; tensions and responsibilities are not sometimes appreciated and not
supported by Trust policy. A particular concern was the attitude of some medical practitioners
to recruitment as a DMP. Medication can be dangerous and significant training and mentorship
by a medical practitioner is required to reach a high standard of error-free practice. Some
medical practitioners can feel protective of their medical prerogatives whilst others are highly
supportive of the advanced health practitioners impacting on the boundaries of this area.

The frameworks that surround NMP are complex, fast changing and diverse. NMPs are not a
single profession or discipline and consequently have a number of different priorities, bodies,
organisations and supervision impacting upon them as well as support needs and relations
across their own discipline that may well not recognise the benefits of independent practice. In
our category of barriers to non medical prescribing practice, we untangled recognised tensions
in three areas: the blurring of professional boundaries, accountability at a policy or Trust level and the recognition of support for a developing workforce. The three areas overlapped:

1. Blurring of boundaries: Most NMP leads referred obliquely to power relations between medical practitioners and nurses, implying an awareness at practice level of the changing role of the advancing practitioner from a collaborative or a supportive position to an independent one. This was also captured as a training need for managers to recognise the potential, skills and benefits of recruiting staff into non medical prescribing and utilising and developing their skills when qualified.

2. There was an awareness, particularly at managerial level, of tensions around accountability and responsibility for extending the provision of non medical prescribing at Trust level

3. Support: There was a need to ensure that professional and managerial staff were aware of the competencies of NMPs and that their support needs were fulfilled in order to ensure proper compliance with procedures, patient safety and personal confidence. A concern expressed in previous studies in relation to support has been for the 20 percent of health professionals who undertake the course but then either never prescribe or stop prescribing. Isolation in practice (Latter et al, 2007b) and lack of managerial interest and support (Kelly et al, 2010) has been found to be a negative influence impacting on nurses’ “confidence to prescribe”. Similarly, the NMPs in this study focused on the support needs of those with low confidence, citing isolation, support and reassurance.

4.1.6.4 Implications for practice and policy

Despite many previous studies (for example, Luker and McHugh, 2002; Bradley and Nolan, 2005; Hall et al, 2006; Ryan-Woolley et al, 2007) identifying the need for policy to specifically support the infrastructure of non medical prescribing and policy drive by DH to increase numbers of NMPs in the UK, this study finds current local strategic support is still rather weak. Local policy suggests a strong strategic link but because most NMP leads are appointed at a fairly low operational level, organisational support is still at a ‘raising awareness’ stage with no clear effective and meaningful impact on long term strategy or workforce development and sustainability. Although some NMP leads recognised the considerable advantage of senior level strategy leads, examples of strategic good practice and their construction of their own roles in a strategic sense was limited.
At workforce development level, the study shows a need for clear guidance on the management of responsibility for non medical prescribers. Like previous authors (Avery and Pringle, 2005), Ryan-Woolley et al (2007) found room for improvement in support and mentoring of NMPs, and pointed towards poor development opportunities in explaining large numbers of NMPs who either never started or gave up prescribing. This is coming to a head currently in pharmacy where most studies conclude with a lack of organisational structure contributing to low uptake and low prescribing rates (George et al, 2007; Cooper et al, 2008b).

NMP leads from our focus groups noted difficulties for some non medical prescribing staff where their managers/employers had a poor understanding of the roles and responsibilities of the clinical NMP practitioner. This resulted in these staff feeling isolated and having limited access to support resources available to maintain their skills. Because non medical prescribers are unlikely to find appropriate development opportunities individually, there is a need to support safe non medical prescribing practice by maintaining informal and formal networking and study days. This may well reduce the numbers of NMPs who had been identified by their leads as suffering a “loss of confidence”, which may well indicate an unmet support need. If so, this designation is unhelpful and misleading.

At a structural level, there is a need to seriously address competence and safety concerns of medical professionals, possibly through including them in mentoring, developing and supporting non medical prescribers after their qualification.
4.2 Findings: Phase 2 Survey of non medical prescribing practitioners

4.2.1 Introduction

Findings are presented below under the following headings:

- Response and sample characteristics
- Non medical prescribing practice
- Impact of non medical prescribing on practice
- Support for non medical prescribing
- Summary of findings

Mostly this report follows the structure of the questionnaire and findings are presented in series with simple descriptive statistics, except for the demographics, which appeared in the questionnaire at different intervals, but are reported after the response rate. We include the question number so that the survey can be easily referenced, although for reasons of clarity, we have changed the order of some questions.

4.2.2 Response and sample characteristics

4.2.2.1 Response rate: surveys

Approximately 1300 questionnaires were distributed to NMPs who had undertaken the post-registration non medical prescribing course and qualified at least six months prior to the survey from the eight universities in the North West; the distribution is detailed below. The combination of Cumbria and Lancashire included the cohorts from only two Universities: Central Lancashire and Cumbria. The others included three: Cheshire and Merseyside included Edge Hill, John Moore’s Liverpool and Chester. Greater Manchester included Manchester Metropolitan, Salford and Bolton. A total of 628 questionnaires were returned not including pilot questionnaires.

Table 2 shows the distribution of surveys and total response rate of 48 percent, which is reasonable for postal questionnaires and consistent across each zone, although lower than the 70 plus percent response rate reported in Latter et al’s (2005) national evaluation, similarly in Courtenay and Carey (2008a) and Drennan et al’s (2009) survey of clinical stakeholders in Ireland. All of these studies recruited their sample through the NMC and none attempted to address a whole population sample. Our response rate is a considerable improvement on the 26 percent response from a similar wider sample of community practitioner prescribers in
Scotland reported by Watterson et al (2009) and comparable with the 51 percent reported by Bissell et al (2008) in a study that included both pharmacists and nurses and also with the 43 percent by Avery et al (2007b) in a study across a single health authority.

<table>
<thead>
<tr>
<th>Zone</th>
<th>No. of questionnaires distributed</th>
<th>No. of questionnaires returned</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cheshire and Merseyside</td>
<td>524</td>
<td>248</td>
<td>47%</td>
</tr>
<tr>
<td>Cumbria and Lancashire</td>
<td>261</td>
<td>116</td>
<td>45%</td>
</tr>
<tr>
<td>Greater Manchester</td>
<td>515</td>
<td>264</td>
<td>51%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1300 (approx)</strong></td>
<td><strong>628</strong></td>
<td><strong>48%</strong></td>
</tr>
</tbody>
</table>

Table 2: No. of questionnaires distributed to each zone and returned

On reflection, recruitment through the professional registers would have been a better choice, although they would not have picked up those who had completed the course but never registered. We estimate that around 20 percent of addresses were out of date. Around 12-17 percent of questionnaires were returned undelivered by the postal service to the mailing university or to UCLan, indicating the addressee had moved away. Our 48 percent response therefore is likely to be an underestimate because it does not include those delivered wrongly, destroyed or not returned.

The Cumbria and Lancashire surveys were distributed and completed before the other cohorts and did not benefit from a second round; delays in administration in the other areas, particularly in the Mersey area were such that repeat questionnaires would have been over too long a gap. The distribution of questionnaires over the eight university cohorts was mostly regular; Cumbria was least represented (n=41, 6%) and Bolton most represented (n=127, 20%).

The data from the 628 completed questionnaires were coded, inputted and analysed using Statistical Package for Social Sciences (SPSS) Version 16. In addition, the qualitative data were analysed thematically.
4.2.2.2 Response rate: questions

The questionnaire consisted of 28 questions and of those that were returned, the vast majority were completed fully. From 41 pieces of information requested:

- 510 (81%) completed 80 percent or more of the questionnaire
- 29 (5%) completed 50-80 percent
- 89 (14%) respondents completed less than 50 percent of the questionnaire, but no respondent completed less than a third of items (30%) which was the ‘stop and return’ part if not currently prescribing. The questionnaire suggested that respondents not prescribing should stop and return the questionnaire at the end of part one, but only some of the one hundred practitioners who indicated they had not written prescriptions did so, the others answered more questions relating to non medical prescribing related activity and advice and they were included in the total

No questionnaires were excluded due to missing data.

4.2.2.3 Sample characteristics, age of respondents (Q9)

The majority of NMPs fell into the age ranges between 35 and 54 (n=549, 88%). As figure 1 indicates, 37 percent were aged 35 to 44 and 51 percent were aged between 45 and 54. Forty-three respondents (7%) were aged between 25 to 35 and 36 were over 55 (6%). This older age distribution is typical for nurse prescribers in training (Bradley et al, 2005; Latter et al, 2005), in practice over community, and acute settings (Latter et al, 2005; Avery et al, 2007 a and b; Mills et al, 2008; Watterson et al, 2009), palliative care (Ryan-Woolley et al, 2007) and of all NMPs over wider settings (Courtenay and Carey, 2008a). Our study contained few pharmacists, because not many had qualified at the time, they tend to be a little younger than nurses, hovering around the early 40s rather than the late 40s (Bissell et al, 2008).
Figure 1

4.2.2.4 Sample characteristics, gender of respondents and ethnic group (Q10 and 11)

Forty eight (8%) respondents declined to indicate their gender, but it is clear that the vast majority of the sample was female (n=536, 92% of respondents) and only eight percent of respondents indicated they were males (n=44), which again is typical of NMPs in practice, but proportionately fewer males than those in training (Bradley et al, 2005). The vast majority indicated they had a White British background, which again is typical of the workforce in practice and also, in the experience of our HEI leads, of those who are in training currently. Two percent (n=13) of respondents indicated they were from an ethnic minority background and a further six declined to say. Because low numbers may inadvertently identify someone, we do not show further details by gender or ethnic minority.

4.2.2.5 Sample characteristics, working patterns (Q8)

Respondents were asked to indicate the working hours of their current job from four categories, Full time, part time (0.5 or more), part time (0.2 to 0.5), or less. Of 628 NMPs who responded to the question, 420 (68%) indicated they worked full time, and 173 (28%) indicated they worked part time (0.5 or more) whilst only twenty nine respondents (5%) indicated the other two categories of less than half time. This seems to be another typical pattern of earlier studies, that were more orientated to NHS settings and nurse prescribers, but later studies of a wider range
of prescribers are showing proportionately fewer nurses working fulltime and fewer still pharmacists (around 50 percent of nurses and 40 percent of pharmacists, Bissell et al, 2008). For our study, respondents over 45 years were more likely to be in full time employment (72% of the 354 in fulltime employment, n=256).

4.2.2.6 Non medical prescribing qualification (Q1)

Respondents were asked to indicate the year they qualified as a non medical prescriber. As figure 3 indicates, at the time of the survey (2008), over half of the sample (319, 51%) had been qualified as a non medical prescriber (NMP) for more than two years (figure 2), and the average NMP had been a qualified prescriber for twenty seven months (standard deviation of 13 months). Thirty two percent (n=204) had received their non medical prescribing qualification over a year ago and seventeen percent (n=105) were twelve months or less post qualification. Our sample was less experienced than the 71 percent who had been practicing for more than two years surveyed by Latter et al (2005) in their national evaluation. However, Latter’s sample was mainly prescribing from a specific or extended formulary (termed the V200 prescribers). Our sample were more similar to the 43 percent of mostly independent prescribers qualified over two years surveyed by Courtenay and Berry (2007) of which sample, 20 percent were within twelve months of qualification.

Postgraduate Prescribing Qualification
North West England (n=628)

Figure 2
4.2.2.7 Length of service or experience (Q3)

Respondents were asked to indicate what year they first registered or became qualified as a health professional. Length of service for respondents in this sample ranged from 2 to 42 years with 59 percent (n=372) qualified 20 years or more, a mean of 22 years service that is similar to other samples of qualified NMPs (Bradley et al, 2005; Courtenay and Berry, 2007; Avery et al, 2007b; Mills 2008;). Only 28 from the 628 respondents were less than 10 years from their registration or healthcare qualification. Table 3 shows that respondents were extremely experienced healthcare professionals, 50 percent of whom had held their independent or supplementary prescribing qualification for two or more years.

<table>
<thead>
<tr>
<th>Post Prescribing</th>
<th>Registered healthcare qualification</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Less than 20 years</td>
<td>20 years or more</td>
</tr>
<tr>
<td>12 months or less</td>
<td>48 (8%)</td>
<td>57 (9%)</td>
</tr>
<tr>
<td>Up to 2 years</td>
<td>78 (13%)</td>
<td>124 (20%)</td>
</tr>
<tr>
<td>2 years or more</td>
<td>117 (20%)</td>
<td>191 (30%)</td>
</tr>
<tr>
<td>Total</td>
<td>243 (41%)</td>
<td>372 (59%)</td>
</tr>
</tbody>
</table>

Table 3: NMPs experience as a healthcare practitioner and post non medical prescribing qualification

4.2.2.8 Areas of practice (Q5)

Respondents were asked to indicate their area of practice from a list of designations that corresponded to categories used in the joint regional application form for the NMP course, categories used by DH to differentiate areas of practice. An ‘other’ box was provided for free text so that respondents could add areas in which they worked that were not included. For example, ‘community matron’ was added by a number of respondents and many added their specialist or nurse-practitioner status. Categories have been combined in table 4. The largest group were Primary Care Nurses which group included Walk in Centre Nurses and Nurse Practitioners at 38 percent regionally. The next largest single group (n=122) were specialist nurses working mainly in diabetes and respiratory care. Pharmacists are grouped together and represent three percent of the total, which is representative of the small numbers qualified at the time of the survey (around 400 pharmacists nationally). Like pharmacists in Bissell et al’s (2008) evaluation, the majority, ten, were hospital based and the other six were community based.
With regard generally to the similarity of our population to that of previous studies, over half of the categories for area of practice were based in a community setting (Latter et al, 2005; Bradley et al, 2005; Avery et al, 2007b, Watterson et al, 2009). However, there seems to be less representation from accident and emergency (only two percent compared to Latter et al’s five percent) and our six percent from mental health might be regarded as over representation from that area. However this is difficult to compare due to differences between categories, the arbitrary distinctions in many studies (for instance Avery’s distinction between primary and secondary care does not specify the place of community hospitals which might be either), the absence in many studies of a mental health category and some arbitrary distinctions between general practice and primary care.

<table>
<thead>
<tr>
<th>Area of current practice</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary Care including practice nurses, nurse practitioners</td>
<td>205</td>
<td>38%</td>
</tr>
<tr>
<td>and walk in centre nurses</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Specialist Nurse</td>
<td>122</td>
<td>22%</td>
</tr>
<tr>
<td>Acute Care Nurse</td>
<td>39</td>
<td>7%</td>
</tr>
<tr>
<td>Mental Health</td>
<td>32</td>
<td>6%</td>
</tr>
<tr>
<td>Community hospital</td>
<td>31</td>
<td>6%</td>
</tr>
<tr>
<td>Community including district nurses and community matrons</td>
<td>27</td>
<td>5%</td>
</tr>
<tr>
<td>Palliative Care</td>
<td>20</td>
<td>4%</td>
</tr>
<tr>
<td>Children's Nurse</td>
<td>19</td>
<td>3%</td>
</tr>
<tr>
<td>Pharmacists</td>
<td>16</td>
<td>3%</td>
</tr>
<tr>
<td>Allied health professionals (Physiotherapist, Podiatrist)</td>
<td>15</td>
<td>3%</td>
</tr>
<tr>
<td>A and E, Minor injuries</td>
<td>9</td>
<td>2%</td>
</tr>
<tr>
<td>Management</td>
<td>9</td>
<td>2%</td>
</tr>
<tr>
<td>Midwife</td>
<td>7</td>
<td>1%</td>
</tr>
<tr>
<td>Health Visitor</td>
<td>3</td>
<td>1%</td>
</tr>
<tr>
<td><strong>Total respondents</strong>*</td>
<td><strong>546</strong></td>
<td></td>
</tr>
</tbody>
</table>

Table 4: Area of Current Practice

* Figures and percentages total more than 100% due to 8 people indicating they had dual roles. Out of a total of 628 respondents, 82 (13%) did not indicate their area of practice,

4.2.2.9 Shift in practice since non medical prescribing qualification (Q4)

Respondents were asked to indicate (simply yes or no) if their practice area had changed since their non medical prescribing qualification. Unlike other studies (for example, Latter et al, 2005; Bradley et al, 2005; Watterson et al, 2009 and many small sample studies over a single Trust have included V100 prescribers who prescribe from the community prescriber formulary), our
sample included only those in independent and supplementary prescribing roles thus operating in broader areas of clinical practice. Shift in practice as a result of additional qualifications is a major concern when it comes to workforce planning because promotion or movement of qualified staff may relocate practice skills in areas other than of need or remove them altogether. Potentially the acquisition of an additional qualification would enable career progression. The majority of respondents (79%, n=487) had not changed their practice. The remaining 21 percent (n=132) said they were now working in a different area or role. Of these, 88 percent (n=116) had indicated their current area of practice. In the table above eight of the nine NMPs who indicated management (6%) had moved into it since their qualification. Almost half of those who changed their area of practice (n=63 48%) were working within community practice including primary care or walk-in centres, five (4% and 33% of all those who indicated allied health as their area of practice) had changed their area of practice within allied health (4 podiatrists and a physiotherapist). Twenty three percent (n=30) were specialist nurses, possibly setting up nurse-led clinics and of the rest, nine (7%) worked in secondary care (of these, three were hospital pharmacists).

4.2.2.10 Employment base (Q6 and 7)

Respondents were asked to indicate their employing organisation as either a PCT, GP clinic, Acute Trust, Mental Health Trust or Partnership or Other.

![NMPs by employing organisation (N=626) North West of England](image)

Figure 3
Overall, approximately a third (n=194, 31%) respondents said they worked for an Acute Care Trust and this included 61 specialist nurses, half (50%) of all the specialist nurses responding. There were some variations in area between the proportions working for a PCT and Acute Trust. More NMPs worked for an acute Trust in Cheshire and Mersey than for a PCT and less in Cumbria and Lancashire.

More respondents worked for a PCT than any other organisation. Forty percent (n=248) of our sample worked for a PCT and another 21 percent worked for GP practices (n=131) confirming that community health was where NMPs were most active. A small proportion (n=34, 5%) of our sample worked for Mental Health Trusts, and the greater proportion of these were located in Greater Manchester. There looks to be a slight discrepancy here since, in table 4 (Q5 area of practice) 32 NMPs said their practice area was in Mental Health, however, only 23 of those worked for a Mental Health Trust, indicating the variety of healthcare areas that fit into community practice. Nineteen (3%) NMPs said they worked elsewhere, 14 of whom had indicated an area of practice in community settings including one pharmacist.

4.2.3. Non medical prescribing practice

4.2.3.1 Involvement in non medical prescribing (Q12)

Respondents were asked to indicate if they had prescribed since qualifying and whether they were currently prescribing. If they were not prescribing (for either situation), respondents were asked to indicate why not from a list of possible reasons or were able to comment. All respondents were able to be allocated to having ever prescribed, but for four, it was difficult to tell if their non medical prescribing activity was current from the information available. Eighty six percent of respondents (n=537) had prescribed since their qualification (column 1, figure 4) and 14 percent (n=91, dark shading, column 2) had not. The dark shaded portion at the top of column one represents an additional 17 of the 537 NMPs who had prescribed since qualifying but were not prescribing currently due to a change of role, secondment or maternity leave and some were awaiting prescription pads or registration. The total number of respondents not currently prescribing was then 108 (17%), 17 of whom had temporarily suspended their activity.

2 Although 60 NMPs did not answer this question directly, 56 answered further questions about numbers of prescriptions written per week and roles utilised, thus could be allocated to the current prescribing category although most were writing only a few prescriptions. Two NMPs gave comments on their lack of prescribing and were allocated to never prescribed. One NMP indicated having stopped prescribing and was allocated to ‘not current’. Six NMPs had indicated they had prescribed at some time for the first question but left the current prescribing question blank, for four of these it was not possible to say from their other answers and current prescribing was left blank, one indicated current prescribing in other answers and the other gave reasons for not prescribing and was allocated not current.
This is a higher proportion altogether than the 14 percent found by Latter et al (2005) but their study sample was smaller, did not include healthcare professionals who had completed the course but not registered and did not differentiate those who had temporarily stopped from those who had never prescribed. Wider studies of other types of health professionals have found up to 50 percent not prescribing (for example, Ryan Woolley et al, 2007 in a study of palliative care nurses).

Table 5 shows the reasons given by 101 of the 108 NMPs not currently prescribing. Of the reasons given for not prescribing by those who had never prescribed, the most often cited was undeveloped policy to support non medical prescribing identified by 47 NMPs (44% of respondents with no prescribing activity) and lack of support more generally cited by 31 NMPs (29% of respondents).

The second most common reason was lack of support more generally, cited by 31 NMPs including two who specifically added comments that a lack of understanding of their role by colleagues had contributed to their lack of activity. Lack of assessment skills included one NMP with ‘confidence’ issues, which as the focus groups have indicated, can also indicate a lack of support more generally.

These results are very different from reasons of the sample surveyed by Latter et al (2005) where only 26 percent of reasons could be described as support or policy. The main reasons given by Latter’s sample were lack of prescription pads. Fifteen respondents in the current survey said they were awaiting a prescription pad, registration or contract. Further investigation of the data revealed none of the 15 had prescribed since their qualification (i.e. they had not indicated a temporary suspension), less than half of them had qualified within the past year (n=7) and of these, only two in the six months before the survey. Two of the respondents who had indicated they were awaiting prescription pads had qualified over two years ago; it seems likely that responses of this kind may mask other systemic problems. Sixteen respondents indicated they had changed roles, but similarly, of these only five indicated that they had prescribed since their qualification. Only one of these 16 was within 12 months of qualification (average months since qualification were 27). Where one or two respondents indicated that post-qualification, their employing organisation had altered their job description or imposed.

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3 The total number of reasons is more than the number of respondents because many added comments to explain with two or three different points as well as the tick boxes and these were separated as far as possible and allocated into reason categories. Two NMPs cited seven and eight reasons using this classification.
restrictions so that they had become unable to prescribe, we assigned these to policy issues rather than change of role but there could have been similar issues for some of those indicating ‘change of role’. Courtenay et al (2007) and Bradley et al (2005) have both described policy and practice struggles including misunderstanding amongst colleagues of the non medical prescribing role, lack of access to computerised notes and prescribing facilities, once qualified.

<table>
<thead>
<tr>
<th>Reasons for not actively non medical prescribing</th>
<th>No</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Undeveloped policies</td>
<td>47</td>
<td>47%</td>
</tr>
<tr>
<td>Lack of support</td>
<td>31</td>
<td>31%</td>
</tr>
<tr>
<td>Time and workload</td>
<td>29</td>
<td>29%</td>
</tr>
<tr>
<td>Other: awaiting registration or prescription pad (15), maternity leave (5), change of role (16) no explanation (4)</td>
<td>42</td>
<td>42%</td>
</tr>
<tr>
<td>Lack of appropriate assessment skills or confidence</td>
<td>11</td>
<td>11%</td>
</tr>
<tr>
<td>Limited supervision</td>
<td>11</td>
<td>11%</td>
</tr>
<tr>
<td>Colleagues misunderstanding non medical prescribing role</td>
<td>11</td>
<td>11%</td>
</tr>
<tr>
<td>Limitations of local/extended formulary</td>
<td>9</td>
<td>9%</td>
</tr>
<tr>
<td><strong>Total number of NMPs indicated a reason for no current activity</strong></td>
<td><strong>101</strong></td>
<td></td>
</tr>
</tbody>
</table>

Table 5: Reasons for not actively non medical prescribing

![Involvement in prescribing](image_url)

Figure 4
At the end of question 12, if NMPs indicated never using their qualification, or not currently prescribing, they were asked to stop at that point and return the questionnaire. We included, for the purposes of the questionnaire, a definition of non medical prescribing activity as wider than simply writing prescriptions. Participants who rarely wrote prescriptions but were still involved in non medical prescribing related activity, for example, through patient consultation or other, were instructed to indicate ‘yes’ to current prescribing, rather than indicate they had no current prescribing activity. If these 108 respondents who indicated they had never prescribed or were not prescribing currently had completed all the questions up to this point they would have completed 32 percent of the 41 items.

Seventy of 91 NMPs with no non medical prescribing activity and 10 of the 17 NMPs with no current activity stopped their participation and returned the questionnaire. However, the remaining 27 respondents went on to answer more questions. Seven NMPs with no current activity filled in the whole questionnaire. Of the remaining 20, seven of the NMPs answered a few more questions scattered through the questionnaire (up to 37% complete) and thirteen more went on to answer 60-95 percent of the questionnaire.

We conclude that a significant minority of NMPs felt that their non medical prescribing competencies were part of the advanced professional role, whether they were participating in defined non medical prescribing activity or not, therefore these responses are included in our results and we note that the impact of non medical prescribing competency on health professionals is more complex than simply writing prescriptions.

4.2.3.2 Numbers of patients (Q13)

Respondents were asked to estimate how many patients they would usually see in a week, in the part of their role that deals with prescribing related clinical contact. Most of the 530 NMPs who responded to the question saw up to about 50 patients in their non medical prescribing role (n=388, 73 percent, the first two columns in figure 5). Our questions specifically asked about prescribing related clinical contact with patients that could include advice and other competencies rather than individual caseloads; 13 NMPs who said they had never prescribed since qualifying and 6 who were not currently prescribing indicated they were still in prescribing related clinical contact with patients. As above, this illustrates that NMPs had a sense of non medical prescribing as a holistic professional competency rather than a simple matter of issuing a prescription. Therefore numbers of prescriptions cannot be the only measure of non medical
prescribing. It is clear that the NMP component of most health practitioner’s role varied considerably; 93 NMPs (18%) said they had prescribing related clinical contact with only up to 10 patients in a week and 148 NMPs (28%) saw more than 50 patients in a prescribing related contact. Of these, thirty nine (7%) said they dealt with more than 100 people a week as part of their non medical prescribing role.

![No. of patients in an average week receiving prescribing related clinical contact (n=530)](image)

Figure 5

**4.2.3.2 Proportion of role work activities requiring non medical prescribing competencies (Q14)**

Respondents were asked to estimate what proportion of their working time (including patient consultation, patient management, advice and prescription writing) required them to use their non medical prescribing abilities. Among the 513 respondents were 12 from the 91 who said they had never written a prescription and six from the 17 not currently prescribing. The average estimation of working time requiring non medical prescribing competence was 65 percent or in other words just over three days a week, assuming a five day working week. Ninety (18%) NMPs thought their work contained 25 percent or less (or one full day FTE) prescribing related activity whereas 132 (26%) NMPs thought they spent up to 50 percent of their time (figure 6). Fifty seven percent (n=291) NMPs, felt that they were spending over half of their working time
on prescribing related activity. Of these, 121 NMPs (24%) said all their working time required their NMP competence.

**How much time do you spend on prescribing related activity? (N=513) North West of England**

- Up to 25% of time: 17%
- Up to 50% of time: 26%
- Up to 75% of time: 33%
- Up to 100% of time: 24%

Figure 6

**4.2.3.4 Number of prescriptions issued (Q15)**

NMPs were asked to estimate how many prescriptions they would normally write in an average week taking the last few months as an example and offered a choice of five options (More than 20, 10 to 20, 5-9, just a few and occasionally) and a box indicating they were unable to answer this way (can’t tell/too varied). Seventeen percent of the sample (n=104) did not respond, but most of this group had indicated previously that they were currently not actively prescribing. Twenty six (5%) NMPs said their practice was too varied to estimate and they couldn’t tell how many prescriptions they wrote in an average week. From 497 respondents who gave an estimate, more than half (n=298, 60%) were issuing 10 or more prescriptions a week (first 2 columns in figure 7), split between 143 (29% of respondents) issuing more than twenty and 155 (31% of respondents) were issuing 10 to 20. Fourteen percent (n=68) were issuing ‘a few’ prescriptions in an average week and a further 27 (5%) NMPs said they only issued
prescriptions occasionally. This is consistent with estimates of 11-30 prescriptions weekly (average 17 items) by Avery et al (2007b) with a similar sample of independent and supplementary prescribers, where over half of non medical prescribers wrote less than five prescriptions a week. Rates are higher than the 42 percent prescribing 11-30 items per week reported in the previous national survey of NMPs with more limited powers (Latter et al, 2005). Rates are also higher than the seven items per week estimated in a study of supplementary prescribers (Courtenay et al, 2007a) and between 2-10 prescriptions per week reported from a recent study in Scotland of health visitors and district nurses (Watterson et al, 2009). The increase on previous national evaluation figures could therefore reflect wider prescribing powers and thus effects on the role; a recent study of independent prescribers averages were similar, 17 items a week for independent prescribers and supplementary prescribers averaging only six items (Courtenay and Carey, 2008a), or higher rates could reflect area effects in the North West.

![Prescriptions in a week (N=497)](image)

**Figure 7**

It seems obvious also that there are variations between role, for instance, in recent studies, pharmacists averaged six prescriptions per week (Bissell et al, 2008) and secondary care nurses averaged 9 prescriptions per week (Morran, 2007). The data was subjected to further investigation to find differences between roles based on our categories of area of practice. Because we did not ask for an exact number of prescriptions, the ranking in table 4 was done on the basis of allocating an average of 50 prescriptions for NMPs who said their weekly
average was over 20 prescriptions, 15 for those between 10 and 20 prescriptions per week, seven for those between 10-15 prescriptions per week and one for those who said they write less than five or only occasionally. The number of respondents is different from the graph because missing data in either field excludes the participant.

Table 6 shows health visitors at the top, but there were only three health visitors in the study, one did not respond, and the other two responses might be non typical. Primary care nurses wrote the most prescriptions, but the number of prescriptions was very varied, as was that of specialist nurses which two groups were represented across the range of categories, some writing large numbers of prescriptions. Like Bissell et al (2008), we found pharmacists who responded were writing very few prescriptions, but nearly half did not answer (n=7, 44% of pharmacists in the study). Secondary care nurses, however, if we consider acute care, palliative care, A and E and specialist nurses together, were writing more prescriptions than Bissell et al (2008) suggested. A surprising finding was that community nurses had an average fairly low prescription count. The figure for mental health nurses may be too low, since the majority (n=24, 75%) did not answer the question.

<table>
<thead>
<tr>
<th>Healthcare role</th>
<th>Average rank (est. no. of prescriptions weekly)</th>
<th>Number of NMPs (n)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health Visitor</td>
<td>33</td>
<td>2</td>
</tr>
<tr>
<td>Primary Care or Practice Nurses including Walk in Centres</td>
<td>30</td>
<td>184</td>
</tr>
<tr>
<td>A and E / Minor injuries</td>
<td>29</td>
<td>9</td>
</tr>
<tr>
<td>Acute Care Nurses</td>
<td>20</td>
<td>31</td>
</tr>
<tr>
<td>Palliative Care</td>
<td>15</td>
<td>12</td>
</tr>
<tr>
<td>Children's</td>
<td>15</td>
<td>13</td>
</tr>
<tr>
<td>Specialist Nurses</td>
<td>13</td>
<td>100</td>
</tr>
<tr>
<td>Community Hospital</td>
<td>11</td>
<td>24</td>
</tr>
<tr>
<td>Mental Health Nurses</td>
<td>10</td>
<td>8</td>
</tr>
<tr>
<td>Allied Health Professions</td>
<td>10</td>
<td>8</td>
</tr>
<tr>
<td>Community, including District Nurse and Community Matrons</td>
<td>9</td>
<td>20</td>
</tr>
<tr>
<td>Midwife</td>
<td>8</td>
<td>7</td>
</tr>
<tr>
<td>Management</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Pharmacists</td>
<td>2</td>
<td>9</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>430 (68% of sample)</strong></td>
<td></td>
</tr>
</tbody>
</table>

Table 6: Number of prescriptions written per week.
4.2.3.5 Non medical prescribing role (Q16)

Respondents were asked which of their roles they had used in the last few months. Figure 8 shows the vast majority (n=356, 68%) of our respondents used only their independent non medical prescribing role compared with 9 percent (n=46) who used only their supplementary role. Twenty four percent of NMPs (n=125) used both independent and supplementary prescribing, indicating that the role of an NMP may be quite variable and include different environments and patients. The use of the independent role by 92 percent of our respondents (summing the sole use and the use of both roles) was consistent with 89 percent of nurses’ use of the independent role reported in Bissell et al (2008), and the 87 percent reported in a survey by Courtenay and Carey (2008a). This proportion was much higher than the 44 percent reported in Bissell et al (2008) but this survey included more pharmacists who tended to use their supplementary role more often since the Independent role was only introduced in 2006.

Figure 8

4.2.3.6 Type of prescriptions (Q17)

Respondents were asked what kind of prescription/consultation they were usually called upon for, and provided a list of potential responses with a free text box providing the opportunity to add another category to capture those who were unsure of allocation or missed categories. All
the added categories written under the ‘other’ box were reassigned\(^4\). Table 7 shows the most frequent treatment was for pain management and respiratory medicine or equipment (such as nasal sprays). The next most frequent treatments were in the specialist areas of diabetes, cardiology, wound care, and musculoskeletal disorders.

This order is quite different from that of previous studies; both Latter et al (2005) and Avery et al (2007b) reported the majority of prescriptions were for skin conditions and urinary tract infections (UTIs). UTIs may be included under minor ailments here but the current survey shows only three percent reported treating skin conditions whereas Latter et al (2005) reported 24 percent. Wound care and tissue viability was reported by almost a third of respondents in the current study whereas only 12 percent of Latter et al’s respondents reported treating these issues. Similarly Latter et al (2005) reported 15 percent prescribing in family planning services whereas the current study reveals 27 percent. The conditions for independent non medical prescribing were very different in both these studies and the most important restrictions were still on antibiotics and some analgesics. In fact, in 2005, a wider range of asthma and respiratory drugs, analgesics and antibiotics were the extensions to the formulary most thought to be helpful in practice (Latter et al, 2005). Asthma, respiratory care and analgesics have now become the top three conditions together with infection control (Bissell et al, 2008) and diabetes is also very common, whereas 60 percent of pharmacists report treating cardiovascular problems.

Although most NMPs (n=307, 58%) indicated an average of four specialist areas, 56 indicated more than 10 of these areas, possibly reflecting a variety of minor treatments across the range. Sixty-eight percent (n=361) of responding NMPs indicated their non medical prescribing activity included the four generic areas in the lower section of table 4 but only 26 NMPs (5%) indicated solely dealing with these kinds of non medical prescribing activity.

\(^4\) The questionnaire provided a free text box for ‘other’ areas. Eighteen respondents added another category of ‘hospital in-patients’ of which five added chemotherapy, these five were reassigned to palliative care and the remaining 13 were assigned to acute care. Another three were prescribing in the area of minor complaints, bowel disorder and continence problems. One specified medication trials which was left unallocated and the other prescribed anticonvulsants for epilepsy, allocated to mental health.
<table>
<thead>
<tr>
<th>Prescriptions/consultations of NMPs</th>
<th>No. of NMPs (n=533)</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analgesia/ Pain management</td>
<td>239</td>
<td>45%</td>
</tr>
<tr>
<td>Respiratory</td>
<td>228</td>
<td>43%</td>
</tr>
<tr>
<td>Diabetes</td>
<td>188</td>
<td>35%</td>
</tr>
<tr>
<td>Cardiology</td>
<td>174</td>
<td>33%</td>
</tr>
<tr>
<td>Wound Care/Tissue viability</td>
<td>167</td>
<td>31%</td>
</tr>
<tr>
<td>Musculoskeletal disorders, back problems</td>
<td>161</td>
<td>30%</td>
</tr>
<tr>
<td>Family Planning</td>
<td>143</td>
<td>27%</td>
</tr>
<tr>
<td>Sexual Health</td>
<td>125</td>
<td>23%</td>
</tr>
<tr>
<td>Adult Immunisations</td>
<td>109</td>
<td>20%</td>
</tr>
<tr>
<td>Gynaecological</td>
<td>86</td>
<td>16%</td>
</tr>
<tr>
<td>HRT</td>
<td>81</td>
<td>15%</td>
</tr>
<tr>
<td>Palliative Care/Symptom control</td>
<td>69</td>
<td>13%</td>
</tr>
<tr>
<td>Controlled drugs</td>
<td>67</td>
<td>13%</td>
</tr>
<tr>
<td>Child Health</td>
<td>46</td>
<td>9%</td>
</tr>
<tr>
<td>Mental Health</td>
<td>36</td>
<td>7%</td>
</tr>
<tr>
<td>Acute Care</td>
<td>27</td>
<td>5%</td>
</tr>
<tr>
<td>Skin Conditions</td>
<td>16</td>
<td>3%</td>
</tr>
<tr>
<td>Midwifery</td>
<td>13</td>
<td>2%</td>
</tr>
<tr>
<td>Renal Medicine</td>
<td>2</td>
<td>0.4%</td>
</tr>
<tr>
<td>Common minor complaints</td>
<td>270</td>
<td>51%</td>
</tr>
<tr>
<td>Repeat prescriptions</td>
<td>191</td>
<td>36%</td>
</tr>
<tr>
<td>Variety of complaints no particular area of prescribing</td>
<td>101</td>
<td>19%</td>
</tr>
<tr>
<td>Listening/advice/ consultation</td>
<td>50</td>
<td>9%</td>
</tr>
</tbody>
</table>

Table 7: Type of prescriptions

4.2.4 Impact of non medical prescribing on practice

4.2.4.1 Time and effort saved through non medical prescribing competencies (Q18a and b)

Respondents were asked to remember how they would access a prescription before they were able to write their own prescription in the first part of this question. A list of four alternatives was provided for the first part and a free text comment box to add 'other' responses. In the second part, respondents were asked to estimate any delay in accessing a prescription: for the patient and for the NMP. A series of alternatives were provided for those who could not answer the question. Sixteen NMPs (three percent of the total) indicated changes in the service over the
last few years made the question difficult. However, nine of these sixteen indicated an answer, the remaining seven simply left the question blank as did another 96 who did not check the ‘I can’t answer this question’ box. Most NMPs (82%, n=517) responded to the question. Seventy-three percent (n=376) of those who responded indicated they would have had to seek out or wait for a medical practitioner before their non medical prescribing powers (figure 10). However, 22 percent (n=112) indicated they would not have to wait (although they had to seek out a medical practitioner) because there was always a prescribing medical practitioner on the premises and the prescription could have been accessed there and then by request from the nurse. Ten percent (n=51) would have had to advise the patient to come back for another appointment, mostly after writing to the medical practitioner by mail and 16 percent (n=82) would have had to send the patient somewhere else.

4.2.4.2 Patient access to medication (Q18c)

In the second part of the question, respondents were asked to estimate the shortest delay and the longest delay that could have been expected for one patient in an average week in access to medication before non medical prescribing competencies. Many respondents indicated they could not answer the question and others commented that a limited formulary had previously been available to them. Seventy five percent (n=474) of the whole sample felt able to make some estimate however. Before their non medical prescribing competencies, the average delay calculated across the whole sample for one patient in accessing the prescription for patients
was estimated to, at the shortest, an average three hours, to, at the longest, an average time of 29 hours. However, there was a lot of variation in these figures; (the range of estimates was up to two weeks (14 days) for the shortest delay and up to two months (60 days) for the longest).

**Time saved for patients of non medical prescribers**

(n=474)

<table>
<thead>
<tr>
<th>Time</th>
<th>Number of respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>up to 30 mins</td>
<td>150</td>
</tr>
<tr>
<td>up to 3 hours</td>
<td>100</td>
</tr>
<tr>
<td>up to 12 hours</td>
<td>50</td>
</tr>
<tr>
<td>up to 24 hours</td>
<td>100</td>
</tr>
<tr>
<td>up to 4 days</td>
<td>50</td>
</tr>
<tr>
<td>more than 4 days</td>
<td>10</td>
</tr>
</tbody>
</table>

Figure 10

Figure 10 above shows a summary of mean estimates categorised into the most common time periods of delay in obtaining a prescription before the introduction of non medical prescribing. Individual estimates for each respondent were calculated by using the midpoint between the shortest estimate and the longest estimate of delay so as to represent the average delay. The final average for the whole sample was the mean of all the mid points at around 16 hours. There were great variations across the estimates and some delays seem surprisingly long. However, some services have changed considerably and across the range of services, impressions of improvement are supported by strong acknowledgement by healthcare professionals of significant advantages for patients in speed of access for treatment (such as those reported by Avery et al, 2007b and Latter et al, 2005). There may be a number of reasons why estimates vary for instance, access to a prescription might be improved through a local specialist service, the patient might have had to wait for an appointment with a consultant before this innovation. Because there were large variations between areas in estimates, figure 11 illustrates the delay by zone and type of area. The mean estimate from the Greater Manchester
zone was 21 hours, the Cheshire and Merseyside zone estimate was lower at 14 hours and Cumbria and Lancashire zone estimate was lower still at 7.5 hours. Figure 11 shows the midpoint estimates. Further investigation of the Cumbria and Lancashire zone, which contains only half the numbers of the other zones, showed a large proportion of the estimates in the 30 minutes or less category. Access to prescription for most patients then is within 30 minutes or at least within 24 hours. NMPs from Greater Manchester made the most estimates of 4 days or more, whereas estimates from Cheshire and Merseyside were more equally distributed between the categories.

**Figure 11**

**4.2.4.3 Time saved for the NMP (Q18d and Q19)**

Respondents were asked to estimate the average time saved for them over a typical patient episode against the time that could have been expected before their non medical prescribing qualification. As before, respondents were given a range of alternatives to indicate why they could not answer the question and 36 NMPs indicated changes in the service, their role, responsibilities and experience were too great to make an estimate. Additionally an alternative was provided to indicate time not saved and a further 39 NMPs indicated they did not save time, although comments were added that showed a positive perception of non medical prescribing overall.
One NMP commented that although non medical prescribing felt “more long winded”, it was “better for the patient journey overall”. Another NMP added “Prescribing probably takes me more time as it is now my responsibility to carefully check the appropriateness of the medication/dose etc, not the doctor’s”. Eighteen respondents indicated it now took longer to get the prescription to the patient, of these, seven added a comment that organisational issues were barriers.

Sixty one percent of the sample (n=388) responded to the questions with an average estimated time saved on attending an average patient of 3.8 hours a week; time estimates ranged from 5 minutes to 30 days with a great deal of variation between areas. As previously, estimates in Greater Manchester were greatest with a range of up to 30 days at the longest, and an average estimate of 5 hours saved. Whereas Cumbria and Lancashire again gave the shortest estimates, ranging up to 48 hours with an average time saved of 1.5 hours. Cheshire and Merseyside estimates ranged up to 10 days at the longest, but averaged at three hours. The most common answer was 30 minutes or less for all zones and figure 12 again shows time saved for the NMP summarised into categories.

The case of NMP time saved is different than that of patients, because each patient delay is occurring for a different person, whereas for the NMP, a delay in accessing one patient’s medication overlaps delay in accessing medication for another patient as the NMP is using the same time period for waiting. Most NMPs were employed full time\(^5\) and most were using their non medical prescribing competencies for over half their working time. Although most respondents indicated they did save time or had positive comments about the impact of non medical prescribing on their efficacy, consistent with the positive impressions reported by Latter et al (2005) and numerous others since (Luker et al, 1997, 1998, 2002; Hall et al, 2003; While and Biggs, 2004; Pontin and Jones, 2007; Avery et al, 2007a and b; Bradley and Nolan, 2007; George et al, 2007; Drennan et al, 2009); the time estimate is rather an artefact, since the time represented would not be wasted, but be used in other work.

Additionally, comparisons may be unrealistic because prescribers may now be actively managing more patients; before modern practice, healthcare staff might not have been able to manage protracted delays on access to medication for as many patients.

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\(^5\) Question 8, 68% were employed full time and question 14, average proportion of working time estimated by NMPs when they were using their prescribing competencies was 65%.
A detailed analysis of delays with estimated figures appears in the appendix (Appendix 9.5)

### 4.2.4.4 Daily activity (Q20)

Respondents were asked to estimate the proportion of their time, through indicating the number of days per week they were involved with each of seven activities. Although the amount of time allocated to non medical prescribing varied between individuals, most of the sample managed to return estimates of their daily activity to show the proportion of seven activities for the 532 responding non medical prescribers over an average week⁶. Table 8 shows the mean number of days indicated. This analysis allows us to describe the frequency of activity as a proportion of the total non medical prescribing role represented by the 532 respondents but not as an analysis of their individual roles. Figure 13 shows a role profile representing the proportion of each activity to the whole; so, for example, providing medication and supporting patients are the most time-consuming daily activities in proportion to the other parts of the role and CPD takes

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⁶ NMPs were asked to identify how many days out of 5 they were involved in each activity in an average week. Each estimate was allocated a point, for example, if the NMP indicated 5 days for supporting patients they were allocated 5 points for that question. The final estimate for the whole population is the mean number of points for each question as a proportion of the total number of points for all seven questions. The percentage indicates this proportion.
up the smallest proportion. As we have come to realise through this survey, active prescribing is most apparent in the daily support of patients, mediating information or advice and communicating with the medical team. The NMPs surveyed spent less time on organisation and CPD.

<table>
<thead>
<tr>
<th></th>
<th>Mean days reported per week involved</th>
<th>Proportion of total Non medical prescribing activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supporting patients</td>
<td>4.26</td>
<td>19%</td>
</tr>
<tr>
<td>Providing medication information to patients</td>
<td>4.10</td>
<td>19%</td>
</tr>
<tr>
<td>Communication with Medical Team</td>
<td>3.60</td>
<td>16%</td>
</tr>
<tr>
<td>Supporting carers</td>
<td>3.31</td>
<td>15%</td>
</tr>
<tr>
<td>Initiating prescribing schedules</td>
<td>3.26</td>
<td>15%</td>
</tr>
<tr>
<td>Continuing Professional Development</td>
<td>2.48</td>
<td>11%</td>
</tr>
<tr>
<td>Pharmaceutical Reps</td>
<td>0.98</td>
<td>4%</td>
</tr>
</tbody>
</table>

Table 8: Mean number of days per prescribing activity

![Diagram showing the proportion of seven non medical prescribing related activities in role (n=530)](image-url)

Figure 13
4.2.4.5 Impact of non medical prescribing on patient safety (Q21)

Respondents were asked to indicate if, as a consequence of their non medical prescribing competency, they had achieved any of nine safety related outcomes in the past year and a free text comment box for alternatives not already provided. The only extra item added was the yellow card procedure which appears in table 9 as a tenth item. A convincing majority (n=485, 93% of the 524 responding to the question) said they had achieved at least one of the outcomes and the remaining 39 (7%) indicated none. Over half the NMPs had identified contraindications (64% of those responding), or corrected or changed an existing prescription (54%). One NMP in the comments box had explained “I maximised medication to avoid a hospital admission”. Polypharmacy was picked up by 50 percent of the sample in this study and remains a nursing concern especially in prescribing for patients with co-morbidities, expressed by 30 percent of nurses and 19 percent of pharmacists in a recent study (Bissell, et al, 2008). Many of the study respondents added comments that reflected concerns in altering medical practitioner’s prescriptions, one such comment added to an indication of the reduction of polypharmacy, “only by advice/discussion with the doctor”. Although, such intervention and discussion by nurses is increasingly encouraged and recognised as good practice as the recent report on medical errors has pointed out the heavy reliance of medical practitioners on nurses and pharmacists to identify and correct errors (Dorman et al, 2009). Early detection and prevention of medication errors could be an important impact issue, recently highlighted by reports indicating that 6.5 percent of patients admitted to hospital and up to 9 percent of those who stay in hospital experience medication-related harm (NPSA, 2007). Medication errors account for 10–20 percent of all adverse events and cost the NHS £200-400m per year (DH, 2004).

Of the 524 respondents, the majority (n=359, 69% of the sample) said they had achieved up to five outcomes from the list, the other 126 respondents (24%) had achieved more than five of the outcomes and of these, 22 respondents indicated all nine items on the list. The items in bold and italics highlight zonal differences. Perception of cost saving was fairly consistent across the three zones although the availability of PACT data was variable. It is interesting that in Cumbria and Lancashire, and also in Greater Manchester, very few NMPs responded that they had identified or prevented a drug interaction. However, in Cheshire and Merseyside, this was a common claim by 42 percent of responding NMPs. This is unlikely to be a terminology difference since responses were consistent to another question with similar wording (herbal drug interactions). This has implications for feedback to students and potential training and audit issues.
<table>
<thead>
<tr>
<th></th>
<th>Cumbria &amp; Lancashire</th>
<th>Greater Manchester</th>
<th>Cheshire &amp; Merseyside</th>
<th>North West</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identified a contraindication</td>
<td>63 66%</td>
<td>142 63%</td>
<td>128 63%</td>
<td>333 64%</td>
</tr>
<tr>
<td>Identified an existing incorrect prescription /allocated more appropriate treatment</td>
<td>54 56%</td>
<td>125 56%</td>
<td>105 52%</td>
<td>284 54%</td>
</tr>
<tr>
<td>Reduction of Polypharmacy</td>
<td>43 45%</td>
<td>117 52%</td>
<td>100 49%</td>
<td>260 50%</td>
</tr>
<tr>
<td>Identified/prevented wrong dose of medication</td>
<td>37 39%</td>
<td>103 46%</td>
<td>90 44%</td>
<td>230 44%</td>
</tr>
<tr>
<td>Changed a medication to save Costs</td>
<td>42 44%</td>
<td>105 47%</td>
<td>88 43%</td>
<td>235 45%</td>
</tr>
<tr>
<td>Identified/Prevented a drug Interaction</td>
<td>2 2%</td>
<td>2 1%</td>
<td>85 42%</td>
<td>217 41%</td>
</tr>
<tr>
<td>Identified/Prevented an allergic Reaction</td>
<td>38 40%</td>
<td>87 39%</td>
<td>81 40%</td>
<td>206 39%</td>
</tr>
<tr>
<td>Corrected another drug error</td>
<td>26 27%</td>
<td>82 37%</td>
<td>65 32%</td>
<td>173 33%</td>
</tr>
<tr>
<td>Identified a herbal/drug interaction</td>
<td>35 36%</td>
<td>45 20%</td>
<td>33 16%</td>
<td>113 22%</td>
</tr>
<tr>
<td>Yellow Card procedure</td>
<td>1 1%</td>
<td>0 0%</td>
<td>1 0.5%</td>
<td>2 0.4%</td>
</tr>
<tr>
<td>None of these</td>
<td>5 5%</td>
<td>17 8%</td>
<td>16 8%</td>
<td>39 7%</td>
</tr>
<tr>
<td><strong>Total N</strong></td>
<td><strong>96</strong></td>
<td><strong>224</strong></td>
<td><strong>203</strong></td>
<td><strong>524</strong></td>
</tr>
</tbody>
</table>

Table 9: Patient safety

**4.2.5. Support for non medical prescribing in practice**

**4.2.5.1 Opportunities to seek advice from other professionals (Q22 and 23)**

Respondents were asked to indicate from a range of frequency options (no need to as needed) their access to advice from medical practitioners. Only fifteen (3% of 517 respondents) indicated there was no need to seek advice from medical colleagues and five (1%) reported they would like such opportunities, but there were none. The majority of the respondents (n=358, 68%) said they had opportunities as needed or regularly in supervision sessions. The remaining 139 (27%) indicated they liaised opportunistically as shown in table 10.
Table 10: Advice from medical practitioners

Respondents were asked to indicate from a range of health professionals their range of prescribing liaison over the last year and results are shown in figure 14 below. The most frequent liaison was with Pharmacists and GPs, by 60 percent of respondents, reflecting perhaps the focus of most of the patient’s care and 39 percent had liaised with Consultant Medical Practitioners. The Consultant category included four psychiatrists, an anaesthetist, a microbiologist, a bacteriologist, cardiologists, substance misuse consultants, neurologists, dermatologists and a haematologist. Nurses were consulted by 343 NMPs (55%) and included MacMillan nurses, specialist nurses and other NMPs. The Allied Health professions comprised two dieticians and a physiotherapist and the manager’s category included medicines management.
Respondents were asked to suggest with which professionals they would appreciate more opportunities for liaison. Thirty three percent (n=208) of the sample indicated they would like more liaison opportunities. The most popular professionals for consultation were GPs and Pharmacists (75% of suggestions) consistent with figure 16, where they were the most consulted professions. The remaining suggestions were for more liaison with nurse practitioners, nurse prescribers, complementary medicine and consultants in all fields, particularly psychiatrists but also all hospital medical practitioners.

4.2.5.2 Support structure: networking with other prescribing health professionals (Q24)

Respondents were asked to indicate whether they had regular networking opportunities with other prescribing health professionals in the last year. Only three NMPs indicated no need for further support, but 77 (15% of 528 respondents) indicated a lack of networking structure that allowed opportunity to receive support from other non medical prescribers, figure 15 includes data from Q22 (liaison with medical practitioners, bar three) for comparison. Bar two shows, over the North West of England, that only half (268, 51%) of the NMPs responding to the question liaised with other non medical prescribing health professionals regularly but just 18 percent of respondents (n=94) said they could seek advice from NMP colleagues as needed. 180 NMPs (34%) said they sought advice from others only occasionally. However, almost 70 percent of respondents regularly sought advice from medical practitioners.
Like the current study, a recent study of independent prescribers (Bissell et al, 2008) suggests the vast majority are satisfied with their support on prescribing decisions but most had access to regular monitoring and advice. Because the role of independent prescribing is relatively new, collegiate or mentoring support of independent non medical prescribers in practice has not been investigated in detail and may be sensitive. Non medical prescribers in this study may, like those interviewed by Latter et al (2005) be keen to demonstrate independence of the medical practitioner despite a need for support (Latter et al, 2005 reported 89 percent as agreeing with the statement ‘I am less dependent on the Doctor’). Latter, however, revealed almost half were fearful of making an incorrect diagnosis (Latter et al, 2005, p.106) and the same percentage felt unprepared once qualified. Latter et al’s (2005) report suggests that a significant minority of non medical prescribing health professionals were poorly supported in practice. Latter et al (2005) recommended continuing support post training and recently, Norman et al (2007) has shown better working relationships where medical practitioners meet mentorship and supervision needs of nurses but it seems unlikely that medical practitioners will volunteer to support nurses outside training. Many smaller local studies mention the difficulty of recruiting medical practitioner mentors even whilst training. For example, Ahuja (2009) in an audit of 16 Trusts particularly details the challenges of finding a DMP in medical practitioners’ capacity, work load,
time and lack of understanding and Cooper et al (2008a) suggests advertising may help medical practitioners understanding of NMP as an alternative to medical prescribing.

4.2.5.3 Support structure: updates and training (Q25)

Five hundred and nineteen NMPs responded to the survey question asking about opportunities for updates and training over the last year. In 2005, Latter found that just under half of her sample had received no formal training since their non medical prescribing qualification. McKay (2007) similarly found poor attendance at local study days and lack of funding and structured programmes. The current sample had a much higher proportion of respondents undertaking training with only 109 (21% of respondents) indicating no regular (not just occasional) opportunities in the last year although nine of these indicated there was no need. Of those who indicated they did have opportunities, 183 NMPs (35%) said these were occasional and 222 (43%) regular, of whom, only 64 said they had frequent opportunities (29% of those having regular opportunities).

4.2.5.4 Training needs in non medical prescribing practice and recommendations (Q26 and 27)

Respondents were asked to identify any training needs they had and 23 percent (n=144) of the sample responded. Training needs were grouped into the five categories shown on figure 16. These are similar to those reported by Latter et al (2005) under the skills and knowledge not covered by the non medical prescribing course. CPD can be formal or informal and Latter et al (2005) reports 95 percent engaging in informal CPD, but it is difficult to compare the need for CPD undertaken as part of independent development with the need for CPD in previous studies. The most common form of CPD needs identified were supplementary prescribing which is now incorporated in the NMP qualification. The most prevalent need was for CPD, identifying clinical skills as an area for development and learning about the action and use of drugs, identified by 60 NMPs (41% of those responding) and also the most popular recommendation by respondents from the Cheshire and Merseyside zone for Q27. Of the courses recommended in Q27, by 146 respondents, the most frequent was formal learning in the form of university courses, for example, an advanced practitioner programme, recommended specifically by eight NMPs whereas less formal local training sessions were very popularly recommended by respondents from Greater Manchester and Cheshire and Merseyside.
The second prevalent need was for updates, identified by 55 NMPs (38% of those responding) although this would be naturally be included in CPD rather than as a separate category, as 150 hours of study are included with professional requirement for continuing registration. Access to workshops for updating is a perennial problem for nurses in practice (Latter 2005; Watterson 2009; Courtenay and Gordon 2009). McKay (2007), citing Burnham, 2006, argues that outdated and poor prescribing costs the NHS billions annually and it is imperative that NMPs maintain and develop their skills. The need for release from practice to attend updates and training events was one of the most prevalent issues concerning NMPs leads in the focus group part of the current study. Twenty three respondents (16%) suggested peer support within a regular forum as the best possible option. Access to CPD was also an issue in some Trusts; one NMP wrote “I have heard the Trust is working towards CPD, but nothing concrete at present”. The NPC survey of 2005 (Latter et al) identified 85 percent of respondents needed support on clinical governance and in our study this was also an issue for some, although proportionately less of the sample mentioned it; 17 NMPs indicated they needed organisational support to clarify their role as an NMP and provide leadership. One of these added a comment describing her lack of contact with the PCT and lack of policy support; “I feel very isolated in (area) now. Only contact for prescribing is friends who qualified same time”. Another wrote “The GP still signs my prescriptions and there is no one to advise at the PCT” and others comment on their disillusion in finding the Trust seems to lack a non medical prescribing policy and their disappointment in their inability to use their qualification.

![Training needs of NMPs](image)

**Training needs of NMPs (n=144)**

- Annual Update or Study Day
- CPD
- Clinical skills training
- Peer support / liaison (other NMPs/GPs)
- Organisational support

Figure 16
4.2.5.5 Satisfaction with the support in current non medical prescribing role (Q28)

Respondents were asked to indicate on a five point scale their satisfaction with the quality of non medical prescribing related support in seven areas, indicated on figure 17. Generally the picture shown in figure 17 was very positive; the mean for the whole sample is much higher than the 'adequate' point at 3. Colleagues were perceived to be the most supportive overall, with a mean score of 4.2 out of 5. This suggests that the service must be moving on from the findings of Latter et al (2005), of misunderstanding and confusion on the part of colleagues relating to miscomprehension of their role and requirements of non medical prescribing. Figure 18, shows colleagues in Cumbria and Lancashire may not be as informed about the roles and responsibilities of non medical prescribers as colleagues in the other two zones. NMPs on the whole were less satisfied with Senior Management; the mean rating was 3.3, although this was still above ‘adequate’. Each zone had small deviations from these mean values, but there were three elements that showed individual differences; particularly in the Greater Manchester area. Figure 19, 20 and 21 show Greater Manchester respondents were much more satisfied with the quality of training, support from their senior managers and employing organisation than the other two zones whose ratings hover around the satisfactory level.

![Mean levels of perceived support for non medical prescribing over the North West of England (n=529) responses from practicing NMPs on a 1-5 scale](Image)

Figure 17
Satisfaction with support: Colleagues understanding of the prescribing role
n=515

Figure 18

Satisfaction with support: Quality of training
n=492

Figure 19
Satisfaction with support: Senior management

n=478

Manchester Cheshire & Mersey Cumbria & Lancs

---

Satisfaction with support: Employer

n=517

Manchester Whole North West Average Cheshire & Mersey

---

Figure 20

Figure 21
4.2.6 Summary of findings from Phase 2: North West Survey of NMPs

The survey elicited a response rate of 48 percent but the non responses included the surveys that were returned undelivered. Completed questionnaires were received from a regional sample of 628 health professionals who had undertaken a non medical prescribing programme at one of the eight North West Universities and had qualified between January 2004 and April 2007.

4.2.6.1 Sample characteristics

- The majority of the sample was working in senior nursing roles such as: nurse practitioner, nurse specialist or nurse manager. Like previous studies, the majority of the sample (approximately two thirds) worked in community practice, for a PCT or GP. There were a minority of pharmacists (3%) and allied health professionals (3%)
- Samples were similar to those from previous studies of senior nurses in non medical prescribing roles
- More than half of the sample (56%) were aged 45 and over
- Only four percent had fewer than ten years experience as a qualified health professional and half the sample had two years or more non medical prescribing practice experience, post qualification
- Seventeen percent of the sample said they had no current non medical prescribing activity (which includes 14 percent who had never prescribed)

4.2.6.2 Non medical prescribing practice

- The North West has the highest level of active prescribers compared with other regions in England; 83% of respondents were actively prescribing, a higher proportion than a previous study in the Midlands
- Most non medical prescribers (nearly 80%) remained in the same area of practice as before their qualification
- Most non medical prescribers identified communication with patients as the non medical prescribing related activity on which they spent most time (providing medication information to patients 19% of the time and supporting patients 19% of time). The next most frequent activity was communicating with the medical team (16% of time)
- Fifty seven percent of non medical prescribers thought they spent over half of their working time on non medical prescribing related activity which includes 24% who
thought that all their working time was spent this way. However, 18% of non medical prescribers thought they spent only up to 25% of their working time on prescribing related activity and 26% said between a quarter and a half of their working time was spent this way

- Most non medical prescribers were frequently exercising their non medical prescribing powers with 60% issuing 10 or more prescriptions in a week and 29% issuing more than 20. This is an improvement on findings from previous studies. However, 19% were issuing five or less prescriptions in a week
- Half of all non medical prescribers had prescribing related clinical contact with 10-50 patients in a week. Twenty eight percent saw more than 50 patients in a typical week and this included 7% in prescribing related clinical contact with more than 100 patients. However, 18% of non medical prescribers said they had prescribing related contact with only up to 10 patients in a week
- Non medical prescribers used a range of methods to prescribe and supply medicines to patients in practice. Sixty eight percent of the non medical prescribers were using their independent prescribing role, but some 24% of non medical prescribers were using both the supplementary and their independent role
- Analgesia, respiratory medications, diabetes medication, cardiology, wound care and musculoskeletal disorders were the most common conditions for which non medical prescriber s in the sample prescribed
- Fifty eight percent indicated their non medical prescribing activity was focused on up to four specialist areas. Sixty eight percent of responding non medical prescribers indicated their non medical prescribing activity also included common minor complaints, repeat prescriptions, advice, and non specific areas. Five percent indicated they prescribed only on non specialist areas

4.2.6.3 Impact of non medical prescribing and influences on practice

- The majority of respondents felt strongly that their non medical prescribing competency had a positive impact on the quality of patient care, patient access to medicines and a better patient experience in that they were not passed from one healthcare professional to another
- Ninety two percent of respondents achieved one of 10 patient safety related outcomes in the last year. Over half of respondents had identified contra-indications (64%) or corrected or changed an existing prescription (54%). The majority (69%) said they had
achieved more than five identified patient safety outcomes in the last year. This was identified as a key meaningful and relevant indicator of non medical prescribing impact

- The non medical prescribing process was overwhelmingly acknowledged as a competence where a prescription may or may not be generated. This role expansion impacts holistically on the clinical contact with patients

- Estimates from the vast majority of NMPs indicated that their non medical prescribing competency saved significant time in access to medication for an average patient. In the rural zone of Lancashire/Cumbria the average estimate was a time saving of 7 hours, in the suburban zone of Cheshire/Mersey, the time saving was 14 hours and in the Greater Manchester urban zone, the estimate was 21 hours. This was the second key meaningful and relevant indicator identified from the practitioner survey

- The vast majority of NMPs (91% of respondents) indicated a time saved for them of around 30 minutes per patient over a week but respondents indicated that time saving might not be a meaningful measure

- Respondents’ comments indicated that the responsibility of the medication made patient care more time consuming, but this contributed to their own autonomy and satisfaction

4.2.6.4 Support for non medical prescribing practice

- Forty three percent said they were well supported with regular opportunities for updates and training and a further 35% said they had occasional opportunities. However, 21% said there had been no opportunities for updates or training in the last year. Fifteen percent of non medical prescribers indicated a lack of networking structure and opportunity to receive support from other non medical prescribers

- Most of those who had never prescribed cited poor organisational structure or lack of policy as the main reason for this

- The majority of respondents were well supported through regular liaison with a range of colleagues from different healthcare areas. The most commonly consulted professions were pharmacists, medical colleagues and nurses

- non medical prescribers would generally appreciate more opportunities for liaison with medical consultants, GPs and pharmacists
4.2.6.5 Training needs in non medical prescribing practice

- Of those who reported they had continued professional development needs in relation to non medical prescribing, clinical skills and the action and use of drugs were the most commonly mentioned
- A significant number of NMPs indicated a need for regular updates and more peer support

4.2.6.6 Organisational support for the non medical prescribing role

- The average rating for perceived support from colleagues, line managers, senior managers and associated services was positive
- Colleagues were perceived as the most supportive with an average score of good
- The support of senior management was the area that was reported least satisfactory overall
- The urban areas were more positive in every aspect and most positive about the quality of training available, whereas the rural areas were less satisfied with the support of colleagues and their immediate employing organisations
4.3 Findings Phase 3: Survey of Medical Practitioners

4.3.1 Introduction and response rates

Surveys were sent out to 135 contact addresses of medical practitioners who were in regular contact with the non medical prescribers in phase one. Seventy were returned completed and we did not follow up; a response rate of 52 percent from one postal recruitment, which was good given that, without follow up or incentives, estimates range around 30-40% (McAvoy 1996; Thorpe et al 2009). The only suggestion for the contact referral from the NMP was that the contact should be a medical practitioner who had regular and current professional contact with the referring NMP. In order to meet the sample criteria, NMPs needed to be six months post NMP qualification and much of our sample were well beyond this point and therefore the medical practitioners in regular contact with them were not necessarily the same as their supervising designated medical practitioner, although they could be supervising another NMP. On qualifying as a non medical prescriber, responsibility of mentoring by a designated medical practitioner (DMP) ends. A sample of DMPs therefore, would not necessarily reflect the attitudes of most medical practitioners working with experienced NMPs rather than those in training or newly qualified.

The average completion was 97 percent and 60 percent of medical practitioners completed all questions; there were only two surveys below 92 percent complete, these were both over 50 percent complete and to maintain numbers, no questionnaires were excluded.

The report follows the structure of the questionnaire and findings are presented below under the following headings:

- Sample characteristics
- Experience of non medical prescribing in practice
- Understanding and impression of the role of the NMP in practice
- Perceived support structure for non medical prescribing
- Perceived impact of non medical prescribing in practice
- Summary of findings
4.3.2 Sample characteristics

4.3.2.1 Age of respondents (Q1)

Respondents were asked to indicate their age from three categories. As figure 22 illustrates, most of the sample (n=47, 67%) was aged 35 to 50. Only seven respondents were aged under 35 and 16 (23%) were 51 or older.

![Age of respondents, medical practitioner's survey (n=70)](chart)

Figure 22

4.3.2.2 Other demographic characteristics, gender, ethnicity and location (Q1a, Q2, Q3 and Q6)

All 70 medical practitioners surveyed had more than 4 years postgraduate experience as a medical practitioner which is consistent with previous findings that the vast majority of medical practitioners working regularly with non medical prescribers have considerable experience and a large proportion act as DMPs (Courtenay and Berry, 2007). Sixty seven medical practitioners indicated their gender; the majority were male (n=53, 79%) and 21 percent were female (n=14). Eighty two percent (n=55) of the 67 respondents who indicated their ethnicity were of White British backgrounds, 17 percent (n=11) were of South Asian background and one was of mixed heritage. No further breakdowns of gender and ethnicity are possible in order to preserve
anonymity. Almost half of 69 respondents who indicated area were located in Greater Manchester (n=34, 49%), but this does not necessarily indicate that the referring NMP was also located there. A third indicated they were located in the Cheshire and Merseyside zone (n=21, 30%) and 20 percent were located in Cumbria and Lancashire (n=14). This was consistent with proportions from the survey of non medical prescribers but represented medical practitioners nominated by only 11 percent of the NMPs surveyed, however medical practitioners typically had experience of working with more than one NMP.

4.3.3 Experience of non medical prescribing in practice

4.3.3.1 Professional contact with non medical prescribers (Q4)

Respondents were asked to comment upon the kind of professional contact with non medical prescribers they had. Sixty seven responses were sorted into the categories shown in table 1.

The vast majority of respondents reported frequent daily contact with non medical prescribers in more than one way and more than one NMP, a typical comment being, “employing, training, mentoring and ongoing support”.

Sixty one percent (n=41) of respondents said they worked “alongside colleagues” in daily practice, one adding “even before independent prescribing. They effectively guided prescriptions for decades”. Another GP in clinical practice indicated “One of our partners is a non medical prescriber”. A further twenty eight percent (n=19) indicated they worked with non medical prescribers as part of a multidisciplinary team.

Although respondents were not asked specifically if they had acted as a DMP in the past or currently, the responses to the questions about professional contact of the medical practitioner indicated that some were DMPs and thus we were able to estimate the proportion of those mentoring or acting as DMPs for NMPs in training. Previous studies that have however, included smaller samples of the opinions of medical practitioners about non medical prescribing suggested that around half may have this experience (A survey of 30 GPs in 2007 by Courtenay and Berry found 46 percent had acted as a DMP). In our study, only 18 (26%) of the medical practitioners in the current survey were currently providing clinical supervision to non medical prescribers. Eleven of these 18 indicated that supervision was their only contribution to a relationship with NMPs; the other seven indicated they were colleagues or worked as part of the
same team. The lower numbers of DMPs are consistent with much of the literature that discusses the reluctance of medical practitioners in practice to act as DMPs even though they have positive attitudes to non medical prescribing in general (Latter et al, 2005; Avery et al 2007b; Bissell et al, 2008).

Five medical practitioners indicated they worked in community practice with non medical prescribers, a further four indicated that they had contact with a variety of nursing staff who were non medical prescribers. Four more medical practitioners indicated only occasional contact; two of these had contact only with specialist diabetes nurses.

<table>
<thead>
<tr>
<th>Medical practitioners stated professional contact with non medical prescribers</th>
<th>N</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Daily working in practice</td>
<td>41</td>
<td>61%</td>
</tr>
<tr>
<td>On the medical team</td>
<td>19</td>
<td>28%</td>
</tr>
<tr>
<td>Provide clinical supervision</td>
<td>18</td>
<td>26%</td>
</tr>
<tr>
<td>Community practice</td>
<td>5</td>
<td>7%</td>
</tr>
<tr>
<td>Contact with nursing staff</td>
<td>4</td>
<td>6%</td>
</tr>
<tr>
<td>Diabetic nurses</td>
<td>2</td>
<td>3%</td>
</tr>
<tr>
<td>Occasional contact</td>
<td>2</td>
<td>3%</td>
</tr>
<tr>
<td><strong>Total N</strong></td>
<td><strong>67</strong></td>
<td><strong>%</strong></td>
</tr>
</tbody>
</table>

*Most medical practitioners indicated more than one type of contact therefore percentages do not sum to 100%

Table 11: Medical practitioners’ professional contact with non medical prescribers

### 4.3.3.2 Length of association with non medical prescribers (Q4a)

Respondents were asked to indicate how long they had been professionally working with non medical prescribers. Figure 23 shows that most had been associated for around three to five years (n=40, 58%). Only three (4%) had not been worked with non medical prescribers for at least a year and 11 (16%) said they had been working for around two years with NMPs. Twenty percent (n=15) said they had been working with NMPs for around 6 years or more, of whom two claimed fifteen years experience, from the first pilot projects.
4.3.3.3 Numbers of NMPs in contact/associated (Q4b)

Respondents were asked to indicate, over the last year the number of NMPs with whom they were in regular contact. Of the 69 medical practitioners who responded, only 11 (16%) had contact with just the one NMP and a further 14 (20%) were in contact with two NMPs. Figure 24 shows that almost half the medical practitioners (30, 43%) were in contact with two to five NMPs, 14 (20%) worked with six or more of whom, one indicated association with fifteen different NMPs during the year and two said they had regular contact with 30 NMPs.


Figure 24

Whilst the cohort of medical practitioners was altogether very experienced in relation to NMPs, they were not sensitive to the changes in non medical prescribing and tended to lump non medical prescribers together as a group. Their impression of non medical prescribing was as a dynamic movement of the same individuals gaining more non medical prescribing powers (which would be true of some professions but not others), rather than differentiated groups of limited community formulary prescribers, independent and supplementary prescribers.

4.3.3.4 Area of practice (Q5)

Respondents were asked to indicate their area of practice and their organisation from a list provided. From the 64 medical practitioners responding to this question, 61 (95%) were both in a medical role and working within the NHS.

The definition of their employing organisation was more complicated than it first seemed. Respondents were asked to circle the best answer if there were overlaps and all 70 medical practitioners responded to the question. In table 12, although most decided on a single organisation; the majority chose Acute Trust (n=24, 38%), or GP practice (n=23, 36%) three practitioners circled both organisations and therefore they are represented as dually employed. Another circled mental health partnership and indicated “drug team” in the ‘other’ box.
<table>
<thead>
<tr>
<th>Medical Practitioners’ employing organisation</th>
<th>n</th>
<th>percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Trust</td>
<td>24</td>
<td>38%</td>
</tr>
<tr>
<td>GP Practice</td>
<td>23</td>
<td>36%</td>
</tr>
<tr>
<td>Hospital</td>
<td>12</td>
<td>19%</td>
</tr>
<tr>
<td>PCT</td>
<td>3</td>
<td>5%</td>
</tr>
<tr>
<td>Acute Trust and Hospital</td>
<td>3</td>
<td>5%</td>
</tr>
<tr>
<td>Mental Health Partnership/Trust (one also in Drug Team)</td>
<td>3</td>
<td>5%</td>
</tr>
<tr>
<td>Hospice</td>
<td>2</td>
<td>3%</td>
</tr>
<tr>
<td>Total</td>
<td>70</td>
<td></td>
</tr>
</tbody>
</table>

Table 12: Medical practitioners’ employing organisation

4.3.4 Understanding and impression of the role of the NMP in practice

4.3.4.1 Perceptions of non medical prescribing practice (Q7)

Respondents were provided with a checklist corresponding with the areas of practice for the NMP sample, and were asked to indicate the kind of treatments and medication usually prescribed by the NMPs they knew. Alternatives provided were ‘don’t know’ and a comment box to add another response type and these were included in the analysis (see table 13). Totals do not sum to 100 percent in table 13 because many medical practitioners were in contact with a number of NMPs and indicated a variety of areas, averaging five. The major category that almost half of medical practitioners indicated was common minor complaints, and second was consultation and advice to patients. Medical practitioners were aware that non medical prescribing focuses on particular areas of expertise and it seems they considered those areas to be mostly diabetes, wound care reflecting the results from the NMP sample: pain management and respiratory medicine.
<table>
<thead>
<tr>
<th>Medical practitioners perceptions of the usual kind of prescription medications and treatments from the NMPs they know</th>
<th>No. of Medical Practitioners</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Common minor complaints</td>
<td>34</td>
<td>49%</td>
</tr>
<tr>
<td>Consultation /advice</td>
<td>32</td>
<td>46%</td>
</tr>
<tr>
<td>Particular area of expertise</td>
<td>30</td>
<td>43%</td>
</tr>
<tr>
<td>Diabetes</td>
<td>27</td>
<td>39%</td>
</tr>
<tr>
<td>Wound care</td>
<td>26</td>
<td>37%</td>
</tr>
<tr>
<td>Analgesia /pain management</td>
<td>25</td>
<td>36%</td>
</tr>
<tr>
<td>Respiratory</td>
<td>21</td>
<td>30%</td>
</tr>
<tr>
<td>Cardiology</td>
<td>19</td>
<td>27%</td>
</tr>
<tr>
<td>Musculoskeletal</td>
<td>16</td>
<td>23%</td>
</tr>
<tr>
<td>Repeat prescriptions</td>
<td>15</td>
<td>21%</td>
</tr>
<tr>
<td>Adult immunisation</td>
<td>14</td>
<td>20%</td>
</tr>
<tr>
<td>Family Planning</td>
<td>13</td>
<td>19%</td>
</tr>
<tr>
<td>Palliative care</td>
<td>11</td>
<td>16%</td>
</tr>
<tr>
<td>Variety of complaints no particular area</td>
<td>9</td>
<td>13%</td>
</tr>
<tr>
<td>Sexual Health</td>
<td>9</td>
<td>13%</td>
</tr>
<tr>
<td>Controlled Drugs</td>
<td>9</td>
<td>13%</td>
</tr>
<tr>
<td>Mental Health</td>
<td>4</td>
<td>6%</td>
</tr>
<tr>
<td>HRT</td>
<td>4</td>
<td>6%</td>
</tr>
<tr>
<td>Gynaecology</td>
<td>4</td>
<td>6%</td>
</tr>
<tr>
<td>Child Health</td>
<td>4</td>
<td>6%</td>
</tr>
<tr>
<td>Midwifery</td>
<td>3</td>
<td>4%</td>
</tr>
<tr>
<td>Dermatology</td>
<td>3</td>
<td>4%</td>
</tr>
<tr>
<td>Substance misuse</td>
<td>2</td>
<td>3%</td>
</tr>
<tr>
<td>Renal medicine</td>
<td>2</td>
<td>3%</td>
</tr>
<tr>
<td>Intensive care and emergency</td>
<td>2</td>
<td>3%</td>
</tr>
<tr>
<td>Haematological malignancy and other chronic conditions</td>
<td>2</td>
<td>3%</td>
</tr>
<tr>
<td>Child health and neonatal</td>
<td>2</td>
<td>3%</td>
</tr>
<tr>
<td>Stroke</td>
<td>1</td>
<td>1%</td>
</tr>
<tr>
<td>Somatisation</td>
<td>1</td>
<td>1%</td>
</tr>
<tr>
<td>Smoking cessation</td>
<td>1</td>
<td>1%</td>
</tr>
<tr>
<td>Neurology</td>
<td>1</td>
<td>1%</td>
</tr>
<tr>
<td>Inflammatory bowel disease/Gastrointestinal liver disease</td>
<td>1</td>
<td>1%</td>
</tr>
</tbody>
</table>

Table 13: Areas of specialist knowledge of the NMPs known to medical practitioners

**4.3.4.2 Opportunities for professional liaison with non medical prescribers (Q8a)**

Respondents were provided with a range of five responses and asked to indicate whether they had regular opportunities to liaise professionally with non medical prescribers. Table 14 shows
the majority indicated they were able to meet with NMPs professionally as needed (n=47, 67%), although a minority saw their opportunities as limited (n=14, 20%, combining the categories ‘would like to’ [n=2] and ‘opportunistically’ [n=12]).

<table>
<thead>
<tr>
<th>Consultation and liaison opportunities</th>
<th>N</th>
<th>percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>No need</td>
<td>3</td>
<td>4%</td>
</tr>
<tr>
<td>Would like to</td>
<td>2</td>
<td>3%</td>
</tr>
<tr>
<td>Opportunistically</td>
<td>12</td>
<td>17%</td>
</tr>
<tr>
<td>Clinical Supervision</td>
<td>6</td>
<td>9%</td>
</tr>
<tr>
<td>As needed</td>
<td>47</td>
<td>67%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>70</strong></td>
<td></td>
</tr>
</tbody>
</table>

Table 14: Opportunities for liaison and consultation with NMPs for medical practitioners

### 4.3.4.3 Professional liaison: other health professionals (Q8b and c)

Respondents were provided with a checklist of seven types of health professionals and asked to indicate those consulted over the past year. A comment box for free text was provided for additional types and two respondents added the professionals in the Allied Health category. Table 15 shows the most common type of liaison was with nurses indicated by 93 percent of responding medical practitioners (n=65) and the next most common were pharmacists indicated by three quarters (74%, n=52). The only professions where opportunities were limited were alternative/complementary medicine and management where responding medical practitioners would have had little daily contact in their usual environment. Table 16 shows, like their non medical colleagues in the NMP survey, medical practitioners indicated that pharmacists were the most desirable group for more liaison (30%, n=21)

<table>
<thead>
<tr>
<th>8b. Medical practitioners professional liaison in the past year</th>
<th>N</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nurses</td>
<td>65</td>
<td>93%</td>
</tr>
<tr>
<td>Pharmacists</td>
<td>52</td>
<td>74%</td>
</tr>
<tr>
<td>GP</td>
<td>48</td>
<td>69%</td>
</tr>
<tr>
<td>Consultant, medical</td>
<td>42</td>
<td>60%</td>
</tr>
<tr>
<td>Hospital Doctor</td>
<td>35</td>
<td>50%</td>
</tr>
<tr>
<td>Manager</td>
<td>5</td>
<td>7%</td>
</tr>
<tr>
<td>Alternative/complementary medicine</td>
<td>2</td>
<td>3%</td>
</tr>
<tr>
<td>Allied health (podiatrist, physiotherapists)</td>
<td>2</td>
<td>3%</td>
</tr>
</tbody>
</table>

Table 15: Medical practitioners’ liaison with other health professionals in the past year
8c. Professionals with whom medical practitioners would like more opportunities to liaise

<table>
<thead>
<tr>
<th>Professional</th>
<th>N</th>
<th>percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pharmacists</td>
<td>21</td>
<td>30%</td>
</tr>
<tr>
<td>Nurses</td>
<td>13</td>
<td>19%</td>
</tr>
<tr>
<td>Consultant Medical</td>
<td>12</td>
<td>17%</td>
</tr>
<tr>
<td>GP</td>
<td>11</td>
<td>16%</td>
</tr>
<tr>
<td>Hospital Doctor</td>
<td>8</td>
<td>11%</td>
</tr>
<tr>
<td>Alternative/complementary medicine</td>
<td>2</td>
<td>3%</td>
</tr>
<tr>
<td>Manager (line/practice/hospital)</td>
<td>1</td>
<td>1%</td>
</tr>
<tr>
<td>Dietician</td>
<td>1</td>
<td>1%</td>
</tr>
</tbody>
</table>

Table 16: Other health professionals with whom medical practitioners would like more opportunities to liaise

4.3.5 Perceived support structure for non medical prescribing

4.3.5.1 Support structures for NMPs in practice (Q9a)

Respondents were asked to indicate their impression of the quality of the support structure for NMPs in practice. Five response categories were provided including a ‘don't know’ option. Seventy medical practitioners responded to the set of questions, of whom two responded to some but not other questions. Table 17 and 18 shows that approximately 20 percent of medical practitioners said they had no knowledge of the support structures for NMPs in practice however 80 percent were able to answer the question. Around a quarter or more of the sample provided clinical supervision and more were in a position to, this might be a matter for concern if some of the sample who indicated a supervisory relationship also indicated little knowledge of training or support mechanisms. Table 19 shows that just over half (n=9) of the 17 medical practitioners who indicated a supervisory relationship also indicated one or more areas of little knowledge of these issues of whom two medical practitioners indicated the ‘don't know’ option for all of the questions. Most medical practitioners who were able to comment indicated their impressions that guidelines for patient safety and competence of NMPs were in existence, but that there was no system of monitoring in place. This is consistent with expressed concerns from medical practitioners about the limitations of nurse training in non medical prescribing (Courtenay and Berry, 2007) and the need for mentorship post qualification from medical practitioners (Latter et al, 2005). The larger proportion of respondents’ impressions of knowledge and training of NMPs were placed at the ‘good’ level, particularly for training and expectations, but fewer medical practitioners thought the knowledge and updating system was good. Ratings were generally, but not strongly positive concordant with previous studies (Latter et al, 2005; Avery et al,
Few medical practitioners in the current sample indicated the ‘poor’ option for support and training, although a significant percentage thought that structures were simply adequate.

<table>
<thead>
<tr>
<th>Support structure</th>
<th>Don’t know</th>
<th>Poor</th>
<th>Some existing guidelines, not clear</th>
<th>Clear guidance, but no monitoring</th>
<th>Clear and accessible and monitoring</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient Safety</td>
<td>14%</td>
<td>0%</td>
<td>10%</td>
<td>39%</td>
<td>36%</td>
<td>69</td>
</tr>
<tr>
<td>Competence Framework</td>
<td>20%</td>
<td>1%</td>
<td>7%</td>
<td>40%</td>
<td>31%</td>
<td>70</td>
</tr>
</tbody>
</table>

Table 17: Medical practitioners’ impressions of the support structure for NMPs surrounding patient safety and competence.

<table>
<thead>
<tr>
<th>Support structure</th>
<th>Don’t know</th>
<th>Poor</th>
<th>Adequate</th>
<th>Good</th>
<th>Excellent</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPD and Knowledge updating</td>
<td>23%</td>
<td>1%</td>
<td>21%</td>
<td>36%</td>
<td>19%</td>
<td>70</td>
</tr>
<tr>
<td>Communication (employer and management)</td>
<td>23%</td>
<td>6%</td>
<td>17%</td>
<td>36%</td>
<td>17%</td>
<td>69</td>
</tr>
<tr>
<td>Job and Time expectations</td>
<td>23%</td>
<td>4%</td>
<td>16%</td>
<td>43%</td>
<td>13%</td>
<td>69</td>
</tr>
<tr>
<td>Original Training of NMP</td>
<td>10%</td>
<td>1%</td>
<td>13%</td>
<td>47%</td>
<td>28%</td>
<td>68</td>
</tr>
</tbody>
</table>

Table 18: Medical practitioners’ impression of the support structure for NMPs surrounding CPD, communication channels and expectations of role and time.

<table>
<thead>
<tr>
<th>Medical practitioners indicating supervisory relationship (n=17) of NMPs knowledge of the following:</th>
<th>Supervising medical practitioners who indicated the ‘Don’t Know’ option for one or more of these structures (n=9)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient safety guidelines</td>
<td>3</td>
</tr>
<tr>
<td>Competence Framework</td>
<td>4</td>
</tr>
<tr>
<td>CPD and Knowledge updating</td>
<td>5</td>
</tr>
<tr>
<td>Communication (employer and management)</td>
<td>5</td>
</tr>
<tr>
<td>Job and Time expectations</td>
<td>4</td>
</tr>
<tr>
<td>Original Training of NMP</td>
<td>3</td>
</tr>
</tbody>
</table>

Table 19: Medical practitioners who specifically indicated a supervisory relationship with NMPs when asked about the type of contact they usually had in practice who also indicated lack of knowledge of the support and monitoring mechanisms for non medical prescribing.
However, other comments written on the questionnaire by a few medical practitioners, echo the frustration of some NMPs in practice and include an acknowledgement of the need for development of the structure and systems support of non medical prescribing,

“Due to bureaucracy and necessary clinical governance measures the NMPs I have mentored are not prescribing yet, nine months after completing the course as systems are not in place to allow them to do so at organisational level. Both they and I are disappointed and worry about competency if delay occurs for much longer. However, they discuss many "prescribing situations" to keep up to date and I have answered the above box based on these real life situations. Overall I am aghast at the potential waste of time, money and effort".

“The NMP in my team had completed her training. However he/she is not able to take her role as NMP as the mental health Trust has not formalised the guidelines and policies regarding NMP prescribing.”

4.3.5.2 Gaps in training for non medical prescribers (Q9c)

Respondents were given an opportunity to identify gaps in training for non medical prescribing and a comment box was provided. Twenty seven medical practitioners took the opportunity to comment. Many medical practitioners reacted in a similar vein; “6 years of medical training!” echoed by eight others, however, many constructive comments were made, based on their experience in practice, recommending CPD to supplement training, such as: “In mental health, NMP training inadequate. There needs to be arrangement for CPD specifically for their role as NMP”.

Three medical practitioners commented that pharmacology training was a major gap for non medical prescribers,

“They simply do not have sufficient pharmacology knowledge. While this is no problem, superficially, when working closely with an NMP it becomes clear they lack understanding of modes of action, side effects, interactions, ‘drug families’, ‘class effects’, etc”.

“It is difficult to provide an overview of the physiological and biological process occurring in the body that may affect how a drug is ‘handled’ by the patient. In other words - in a narrow field, expertise can be developed quite quickly, but it is necessary to have a broad knowledge of
physical process occurring in order to determine best selection of drug and anticipate interactions.”

Training needs in pharmacology for non medical staff have been identified by a number of previous studies of non medical prescribing or attitudes of healthcare professionals to it (Otway 2002; Sodha et al, 2002a; Hemingway, 2004). Latter et al (2005) identified pharmacology as one of the most common subjects of private or self directed study for nurse prescribers and reflected major criticisms of insufficient coverage of this topic on the NMP course at that time. However, in their (Latter’s) stakeholder interviews, and audit of non medical prescribing practice, medical practitioners suggested nurses’ knowledge was more up to date and comprehensive than medical practitioners. Later studies have indicated that non medical prescribing is a relatively safe model in contrast with some speculative opinions of medical practitioners expressed before the widespread adoption of non medical prescribing (Horton, 2002; Cooper et al, 2008c). Expectations in the standard of pre-registration nurse education are rapidly increasing to the point where all nurses will soon be required to qualify at degree level. Post registration programmes are increasingly including an extensive coverage of pharmacology and assessment (for example, the advanced practitioner programme) to reflect the changing role of senior nursing staff. The non medical prescribing course content has also changed with the changing role of the non medical prescriber. Even pre 2006 the NMP course included basic pharmacology and assessment, now pharmacology is a requirement for the course through nationally agreed professional standards to equip non medical practitioners for independent and/or supplementary prescribing. It is likely that most medical practitioners in the current study were reflective of nursing stereotypes and this is becoming less common as NMPs gain more qualifications, knowledge, skills and increasing responsibility. However, there were exceptions who were very up to date:

“There are different levels of non medical prescriber. Ours has full BNF access and works as a substitute for the GP having done her Masters in clinical nursing and being very experienced.”

Four medical practitioners had concerns about the NMPs experience and training in diagnosis, clinical examination and responsibilities, another major concern of nurses in Latter et al’s (2005) study and also for the current study sample of non medical prescribers.
Nine medical practitioners were very positive about the skills of their non medical prescriber and were of the opinion that there were no significant gaps in the NMPs training. Four of these had further comments that the non medical prescribing role should be seen as an enhancement to the service, not as a replacement for medical practitioners,

“Training tries to be too much for all practitioners.”

“There is a need to guard against mission creep. NMPs need to stick to their narrow area of experience only they should not be seen as a cheap alternative to doctors.”

Two medical practitioners were more positive about the advantages of different training, skills and strengths:

“Usually nurse prescribing is linked to area of expertise. Also conversely, nurses and pharmacists are trained in stock keeping/dispensing/admin, but doctors generally are not”.

“Depends on structure of service. E.g. - care and ENPs are overlapping substitutes for medical practitioners, and with their selected caseload, non medical Prescribers may enhance the consultation/ improvement”.

Six did not specify gaps but commented that resources, time and CPD should be made available for NMPs more readily.

“The role and scope of NMPs needs to be extended with high confidence in their role”.

4.3.6 Perceived impact of non medical prescribing on practice (Q10)

4.3.6.1 Service outcomes and competency

Respondents were asked to indicate their agreement on a scale of 1-5 over the range “not at all” to “yes, definitely” on the ten statements in table 20. Average ratings for each item are shown in column two. Ratings above three (the neutral point) indicate agreement overall, while below three indicate disagreement. Column three shows the proportion of the sample that indicated agreement. The statements have been sorted in descending order and mirror the comments of Medical practitioners on potential training need for NMPs. Additionally medical practitioners left comments and these have been indicated in the text to illustrate the kind of points they made.

In summary, medical practitioners impressions overall are that NMPs have more time with
patients, therefore they are able to deal with the social side of a consultation very well. We did not specifically ask about the impressions of NMPs competence, but like the medical practitioners reported in Latter et al (2005), medical practitioners were very positive about the NMPs with whom they were familiar. A comment from a dermatologist, illustrates,

“I work in a specialist field (dermatology) with an experienced nurse for my caseload of inflammatory dermatosis. I have no concerns about her prescribing in this role but would be concerned if she used her prescribing power to prescribe outside her area of expertise.”

However, reflective of medical practitioner’s expressed concerns over structure, policy, monitoring and responsibility, in the previous section, many specifically commented positively on their confidence in NMPs competency within their specialist areas and within minor complaints but were more equivocal about the service as a whole, although generally they were positive in representing NMP as a complement that benefits the service.

“In dermatology the NMP role works extremely well.”
### Medical practitioners' impression of patient outcomes and use of non medical prescribing

<table>
<thead>
<tr>
<th></th>
<th>Average rating</th>
<th>Percent agree</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>NMPs have more time with patients than medical practitioners.</td>
<td>4.07</td>
<td>82%</td>
<td>68</td>
</tr>
<tr>
<td>NMPs save time for medical practitioners.</td>
<td>3.96</td>
<td>82%</td>
<td>68</td>
</tr>
<tr>
<td>NMPs are best used for their expertise in a particular area, rather than generally for minor complaints.</td>
<td>3.88</td>
<td>69%</td>
<td>67</td>
</tr>
<tr>
<td>Non medical prescribers are good at the social side of consultations with patients.</td>
<td>3.82</td>
<td>69%</td>
<td>68</td>
</tr>
<tr>
<td>Use of NMPs is most cost effective for patients with minor complaints.</td>
<td>3.44</td>
<td>46%</td>
<td>68</td>
</tr>
<tr>
<td>Patients prefer to see a medical practitioner on their first presentation, and then see the NMP on subsequent appointments.</td>
<td>3.34</td>
<td>40%</td>
<td>67</td>
</tr>
<tr>
<td>Patients tend to see their non medical prescriber more often than they would do a medical practitioner</td>
<td>3.18</td>
<td>37%</td>
<td>68</td>
</tr>
<tr>
<td>Patients tend to want to see the medical practitioner rather than the NMP because of social concerns (sick notes, worries, something else is concerning them than the illness)</td>
<td>3.21</td>
<td>38%</td>
<td>68</td>
</tr>
<tr>
<td>NMPs are good at managing women’s complaints</td>
<td>3.19</td>
<td>31%</td>
<td>67</td>
</tr>
<tr>
<td>The patient gets seen more quickly through a non medical prescriber than through an appointment with a medical practitioner.</td>
<td>3.00</td>
<td>43%</td>
<td>67</td>
</tr>
<tr>
<td>NMPs prescribe more often for minor complaints than medical practitioners.</td>
<td>2.96</td>
<td>24%</td>
<td>68</td>
</tr>
<tr>
<td>Patients have confidence in NMPs for more serious complaints.</td>
<td>2.91</td>
<td>24%</td>
<td>68</td>
</tr>
<tr>
<td>NMPs tend to see a different range of complaints than medical practitioners.</td>
<td>2.96</td>
<td>35%</td>
<td>68</td>
</tr>
<tr>
<td>Working with NMPs does add significant time to my own job</td>
<td>2.82</td>
<td>43%</td>
<td>68</td>
</tr>
<tr>
<td>NMPs are often more effective than a medical practitioner for patients with mental health problems.</td>
<td>2.68</td>
<td>12%</td>
<td>68</td>
</tr>
<tr>
<td>NMPs are more likely than a medical practitioner to prescribe at a consultation with a patient.</td>
<td>2.65</td>
<td>18%</td>
<td>68</td>
</tr>
</tbody>
</table>

Table 20: Medical practitioners’ impression of patient and service outcomes

#### 4.3.6.2 Cost effectiveness

Despite expressed concerns from a literature that originally was not inclined towards change in the roles of health professionals, and particularly the responsibilities, like the medical practitioners in Latter et al’s (2005) study, medical practitioners fairly strongly disagreed with the suggestion of more frequent prescribing (a mean of 2.65 is below neutral). The unease surrounding the potential substitution of medical practitioners by NMPs highlighted in Bissell et
al (2008) as their understanding of NMP as an alternative to medical prescribing underlay a number of comments on cost effectiveness. It might also have expressed itself in the agreement with a statement that patients prefer to see a medical practitioner on the first presentation and the non medical prescriber on subsequent occasions.

“Overall, we’ve found them less cost effective then GPs, in terms of patient benefit, number of consultations and prescriptions and salary difference.”

4.3.6.3 Saving time

Time saving is an issue of significance to medical practitioners and opinion is divided on the time saved even though the overall mean level of the statements on the questionnaire indicate a very positive response, comments were polarised. Table 20 shows that 82 percent of respondent medical practitioners thought time was saved for medical practitioners and the same percentage did not think that supervision or mentoring took significant time. However, there might have been differences for those in DMP roles where there were issues with the time taken in supervision.

Some medical practitioners suggest the addition of the NMP saves time:

“I feel that they not only save more time than they cost but that they significantly enhance the service we can give our patients.”

Others argue that their commitment to supporting the NMPs does not.

“I am frequently consulted by the NMPs I work with re prescribing decisions so it takes up my time rather than saving me time as they are not truly independent.”

“Adding an NMP provided only short term help with easing pressure on appointments. The analogy is ‘The British Motorway System’. You build a new motorway and within a few years the congestion is just as bad again.”

Some of the comments follow findings by Courtenay and Berry (2007) that non medical prescribers saved them time and allowed them to deal with more complex cases. Some
medical practitioners indicate a more collegiate relationship and acceptance of the NMP as a professional complement to the practice, provided the NMP stays well within their area of expertise. However, much of the literature concurs that time saving might be more at issue if their relationship with NMPs is more an educational one (on the statement that NMPs add more time to the job – one medical practitioner writes “Training takes time”).

4.3.7 Summary of findings; Phase 3 Regional Survey of medical practitioners

The survey elicited a response rate of 52 percent which was good for postal surveys. Completed questionnaires were received from a regional sample of 70 medical practitioners found to be experienced in working alongside non medical prescribing colleagues.

4.3.7.1 Sample characteristics

- The selected sample of medical practitioners were very familiar with non medical prescribing and thus constituted an expert group
- Eighty four percent of the sample had regular contact with more than one non medical prescriber and 63% of the sample were in regular contact with two to five non medical prescribers
- Sixty one percent were working daily in practice with non medical prescribers and 79% for 3 or more years including 21% who had worked with non medical prescribers since the pilot projects 6 or more years ago
- Approximately half the sample worked in primary care and the other half worked for an Acute Trust or at a Hospital. All 70 medical practitioners had more than four year’s postgraduate medical experience in practice
- Sixty seven percent were aged between 35 to 50, 79% were male and 82% were of white British ethnicity, all representative of British medical practitioners. Geographically, medical practitioners in Greater Manchester were over represented at just under half the sample (49%)
- Medical practitioners themselves had most liaison contact with nurses (93%), pharmacists (74%), GPs (69%) and other medical (60%) and they repeated the same order for professions with whom they would like more contact
4.3.7.2 Impressions of NMPs prescribing practice

- Medical practitioners generally viewed non medical prescribing as a positive policy development. Within the experience of the medical practitioner, non medical prescribing was considered to work well, particularly in primary care. However, a number of medical practitioners specifically related their opinions to their own experience of a very well qualified, experienced and well known member of their own team in a specialist area and their comments about other practitioners were more reserved. Medical practitioners often mentioned the importance of a range of clinical skills for more generic prescribing.

- Almost half of medical practitioners (43%) indicated a specialist area of expertise of their non medical prescriber commenting that non medical prescribers enhanced the service. The four most common specialist areas of non medical prescribers in the experience of the medical practitioners were: diabetes, wound care, analgesia and respiratory medicine.

- Almost half of all medical practitioners indicated that the non medical prescribers they knew were treating common minor complaints (49%) and providing patient consultation/advice (46%).

4.3.7.3 Impressions of support structures for NMPs in practice

- Approximately 80% of medical practitioners felt able to comment on most of the support structures for non medical prescribers, indicating knowledge and understanding of their practice, training and management framework.

- Medical practitioners were generally positive in their impressions of support structures for non medical prescribing. However, comments included acknowledged the need for structure and systems development at Trust level to support non medical prescribing.

- Seventy five percent of medical practitioners indicated the training of non medical prescribers was good or excellent.

- Thirty eight percent of medical practitioners commented on gaps in training for non medical prescribers, particularly in relation to mental health.

- Just over half the sample thought that employment conditions, expectations and communication structure for non medical prescribers were good to excellent while 17% thought they were adequate. However a few medical practitioners included comments.
that expressed a frustration with their local Trust management’s supportive structure for non medical prescribers

- Fifty five percent of medical practitioners indicated that the structure for CPD and knowledge updating was good or excellent and 21% indicated adequate. However, many medical practitioners included comments indicating the importance and need for more CPD specifically relating to the role of a non medical prescriber, particularly in mental health. Others commented that CPD was needed in diagnosis, clinical examinations and drug action generally and six indicated that there was a need for more CPD and updating

- Thirty six percent of medical practitioners thought that clear accessible patient safety guidance was in place and that this was monitored. However, half of the respondents impressions were that guidance was unmonitored and this included 10% who thought guidance was unclear

- A clear accessible and monitored competence framework was thought to be in place by 31% of medical practitioners, 48% thought that guidance or policy was unmonitored

- Twenty percent were unable to comment on the support structures for updating non medical prescribers, CPD, conditions, management and competence frameworks of non medical prescribers in practice; 14% indicated they had insufficient knowledge of guidelines for patient safety and 10% indicated insufficient knowledge of non medical prescribers initial training

4.3.7.4 Impressions of impact of non medical prescribing and influences on practice

- The majority of medical practitioners were positive about the contribution of non medical prescribing to patient outcomes
- Just under half of the sample thought patients were seen more quickly by non medical prescribers (43%) than by a medical practitioner and also that patients received more time with a non medical prescriber (82%)
- Medical practitioners generally thought patients would be less confident in seeing a non medical prescriber for more serious complaints (76%)
- The majority of medical practitioners indicated that non medical prescribers were just as likely as a medical practitioner to prescribe (82%), to prescribe for similar conditions
(65%) and to see patients as frequently (63%)

- Non medical prescribers were perceived just as likely to prescribe for minor complaints as medical practitioners (76%)
- Medical practitioners perceived non medical prescribers to be good at dealing with the social side of patient consultation (69%) but not particularly any better in dealing with women’s rather than men’s complaints (68%)
- Medical practitioners thought non medical prescribers were less effective than a medical practitioner in the management of patients with mental health problems (88%)
- The majority of medical practitioners suggested the addition of a non medical prescriber saved them clinical time (82%) and this was the most useful impact indicator from the survey. However, just below half the sample also indicated that working with NMPs added significant time to their job (43%); some added comments that time was consumed in supportive consultation about non medical prescribing decisions or supervision
5 Discussion of findings

5.1 Introduction

The findings from phase one are discussed previously and mainly this section discusses the results from the two surveys aimed to gain a greater understanding of the role of the non medical prescriber and how the initiative is integrated into clinical practice. We bring in points from the discussion of phase one where relevant.

The phase 2 (NMP) survey had a response rate of 48 percent, which was reasonable for a postal survey, better than Watterson et al’s (2009) 26 percent response but not as good as the response to Latter et al’s (2005) national sample of 71 percent. Latter’s response is unusual for a postal questionnaire but her sample were recruited from the national registration data. Our contact data was derived from the University where NMPs had gained their qualification and some NMPs had moved on, others had not registered at all so our study attempts to capture a more detailed perspective over a small area. Latter’s study, of course, was supported by the Department Health and there were far fewer prescribers in practice, all of them nurses and working in very specialised areas. There was a sense of being part of a new regime in nursing that was being closely monitored. In a sense by joining the initiative, the NMPs were already signed up to the monitoring process. This current study has a more diverse population, a much larger sample of health professionals from different disciplines. The expected response rate for questionnaires is typically from 25 percent; we expected reasonable compliance from NMPs but our rate was better and our study is representative of a wide range of practitioners.

The medical practitioners’ survey had a very good response rate at 52 percent. The medical practitioners in our sample were fairly representative of the medical colleagues of NMPs. The recruitment system ensured that we sampled medical practitioners who were experienced in working with NMPs and were thus able to comment upon the practice of NMPs in our research sample rather than any other group of NMPs. Medical practitioners in our sample were probably more positive generally than a sample of medical practitioners we might have accessed independently. However, an independent sample would have included too many medical practitioners with no experience of NMPs, who are still relatively rare in practice. Furthermore, the experience of our sample was probably different from that of medical practitioners who were ‘designated’ medical practitioners (providing clinical supervision during training).
The key findings from the evaluation are discussed below together with an analysis of the implications of the findings for non medical prescribing policy and practice. Where relevant we bring in supporting references from the phase one focus groups.

5.2 Workforce planning

The vast majority of our survey sample were very well qualified, very experienced senior staff who had been in a senior staff position for a number of years and all previous evaluations have similar findings. This was seen by the medical practitioners as very positive in terms of having the most responsible and experienced staff taking on this specialised role. Apprehension detailed in the literature review around the training and experience of non medical prescribers has thus been over-dramatised (Avery & Pringle 2005; Day 2005; Waring, 2007; Elsom et al, 2009). However, for workforce planning, if new younger members of staff are not recruited in the next ten years, there could be problems with succession planning, capacity and capability impacts that affect the future for patient choice when the present staff retire.

The number of men gaining non medical prescribing qualifications is small. Generally this fits with a workforce demographic, but amongst senior staff in education and management in the North West, men are usually overrepresented (Wilkins 2009). It is unlikely that the number of men who declined to answer the questionnaire was greater than women, since our demographic matches the demographic of those studying for the qualification. It is likely that this may indicate a gender specific career move into management or education for men whereas women are more inclined to pursue a clinical career structure.

5.3 Strategic tensions and support for non medical prescribing

The NMP survey revealed that NMPs generally were satisfied with the training and preparation for the non medical prescribing role and the majority felt well supported, being in regular liaison with colleagues from a range of settings. Half of the NMPs indicated they had regular access to CPD and networks and many reported a range of additional courses of study they had undertaken since their qualification. This seems to indicate that individualised learning should be flexible according to the experience and needs of the individual NMP. However, a considerable percentage suggested they had CPD needs in clinical skills, action and use of drugs that were not met and this was also supported by the comments of the medical
practitioners surveyed. This supports the findings of previous research in this area (Courtenay and Gordon, 2009; Courtenay and Carey, 2009; Bissell et al, 2008; Drennan et al, 2009). There was a constant need to supplement the initial training and knowledge required in practice and also for regular updates, which is partly but not altogether satisfied by self directed study. This is well recognised and across the North West the Strategic Health Authority have made investments in building an unprecedented infrastructure of support. Peer support is available through local forums and local study days are set aside in addition to study days. Best practice is apparent in the satisfaction of many NMPs who mentioned these very positively. The peer support forums particularly evaluated well, reflecting the usual co-operative work practices and life skills of healthcare staff. Previous studies have suggested that self directed study alone, although part of the responsibility of an independent practitioner, is not enough (Latter et al 2005; McKay 2007; Courtenay and Gordon, 2009) and it seems here that a mix of forms of study, settings and materials for updates and CPD has been quite successful. However, some NMPs reported their access to these was severely limited because they were not released from practice; this might seriously compromise their maintenance of and updating of their prescribing knowledge in the long term. Some NMPs felt they had no support, were isolated and unable to access organisational support. Supporting this finding, the phase one NMP leads identified this ‘loss of confidence’ and suggested that NMPs in this position may stop prescribing. This study indicates that some loss of non medical prescribing activity attributed to organisational barriers may be due to isolation and access to ongoing support.

The attitudes of medical practitioners towards NMPs that they knew were fairly positive and depended on their own perception of the knowledge, training and experience of the NMP supporting Latter et al’s (2005) similar conclusions. Negative comments tended to focus on the likelihood of other NMPs being less conscientious than their own NMP in updating and access to CPD and clinical responsibility. Generically, supporting Watterson et al’s (2009) conclusions that medical practitioners were unclear about the role of the non medical prescriber, we found medical practitioners’ impressions of support structures for NMPs were rather fuzzy and revealed a lack of awareness or transparency of the support structure, CPD arrangements and competence framework for NMPs. However, a small number of medical practitioners commented on the lack of trust policy for non medical prescribing indicating that some medical practitioners were more aware than others. It seems reasonable to suggest that this might contribute to some of the reservations of medical practitioners about the competencies of NMPs.
and they might be improved through increasing their awareness of moderated systems available for continuing education, monitoring and non medical prescribing competence assessments.

The findings indicate that non medical prescribing is considered to work well in practice, where NMPs are knowledgeable, clinically experienced and well supported in a team context. Non medical prescribing leads might be encouraged to identify those non medical prescribers working in less supportive structures at risk of isolation. The most sought after advisor was a medical practitioner and then other NMPs. The vast majority of NMPs received excellent support in practice from their medical advisor regularly or as needed. Some NMPs identified that they would like to receive continued mentoring from medical practitioners, post qualification, but a number of medical practitioners have reservations already about the medical mentoring of NMPs and therefore it is important to have a range of other forms of organisational support and particularly expressed was a desire for more consultation and meetings with pharmacists.

Although independence in self directed study should be encouraged, Trust responsibilities for providing CPD and peer support structures should not be overlooked and recently the RPSGB has introduced standards for mandatory CPD for pharmacists (2009). Managers of non medical prescribing staff should be made aware of the need for ongoing professional development and peer support. Access to a range of mixed materials encompassing study days, updates and workshops to maintain knowledge and competencies needs to be facilitated by trust non medical prescribing leads. The findings suggest that the extent to which nurses have continued access to CPD to enable them to maintain their non medical prescribing competencies needs on-going monitoring at local and possibly national levels by those responsible for non medical prescribing policy and practice.

5.4 Non medical prescribing practice

Most NMPs (nearly 80%) remained in the same area of practice as before their qualification. Most NMPs were working in primary care reflecting the emphasis on NHS community services. This indicates a long term commitment to clinical practice and thus cost-effectiveness improving the skills and patient experience at the clinical interface without losing those skills to practice through career progression. This initiative supports devolved care into the community by reinforcing the skills of the community sector.
The findings indicate that involvement in non medical prescribing is better framed as a competency than as a series of tasks. Many NMPs indicated they had satisfied a need for further training on diagnosis, assessment and clinical examinations after the non medical prescribing course. Particularly for nursing, non medical prescribing may contribute to a more holistic and competent patient experience through a continuous consultation from diagnosis to treatment without an interruption.

NMPs surveyed indicated that over half their time was spent in non medical prescribing related activity and we found during this study that we had to define non medical prescribing related activity as a competency in order to encompass the complexity of a range of skills rather than just the writing of prescriptions. Active non medical prescribing was most apparent in the daily support of patients, the provision of medication information, and importantly, communication, both with the medical team and others. Therefore we assume that unless the range of skills is specified it is difficult to define what activity recorded as non medical prescribing activity may be elsewhere. For example, the numbers of prescriptions issued were fairly low at an average estimate of 10-20 for the majority of the surveyed NMPs, similarly to Latter et al’s (2005) population, but an estimate of patient related clinical contact was, for the majority of respondents, 10-50 patients. This represents an increase on Latter’s (2005) findings of around 20 patient episodes a week, but contains a puzzling element of patient episodes with no identified non medical prescribing ‘activity’. Much of the NMPs increased non medical prescribing activity may be in patient advice. A substantial number of patient consultations now result in no prescription, or reduction or termination of a medication. Of course it is almost impossible to identify patient episodes this way since their non medical prescribing role is integral to their whole activity as an advanced practitioner. Previous surveys have identified non medical prescribing patient episodes through the end point of the prescription, whereas our framework is more holistic. Another increasingly common use of non medical prescribers is at a screening interview at which the non medical prescriber sees the patient first to screen out fairly simple cases. The more complex patient is sent into the medical practitioner on the same episode, who performs a differential diagnosis and issues the prescription. These ‘advice’ sessions are also confirmed by the impressions of medical practitioners on the kinds of treatment and prescribing activity of their NMPs. Non medical prescribers also reported in our feedback session, that they have become more cautious in recent years of litigation, accountability and responsibility as a non medical prescribing practitioner and many have increased their diagnostic skills to enhance clinical practice.
The introduction of non medical prescribing has been criticised in an evaluation of the non medical prescribing initiative in Ireland in that it was thought to increase costs because of over enthusiastic prescribing (Avery et al, 2007b; Drennan et al, 2009). The findings of this study supports that of Avery et al (2007b) who reported no difference in prescribing rates of medical practitioners and nurses. Non medical prescribers in the current study are not seen by their medical colleagues to prescribe more frequently, to be prescribing different treatments or to have gender bias. Unlike Lipley (2000), the medical practitioners in the current study did not perceive non medical prescribers as better at dealing with patients around mental health problems such as depression. Their own reports of their prescribing activity indicate many of their consultations are prescription free and thus possibly reducing costs through reduction of the potential presentation of somatic symptoms in a medical context.

Another concern has been that supplementary prescribing would decrease when NMPs had the power to prescribe independently; therefore it was surprising to find through the survey that a considerable number of NMPs were using both their independent and their supplementary prescribing role. However, feedback from our advisory group of prescribers has identified two issues here: many NMPs are working with existing clinical management plans particularly where they are working with chronic disease management. Approximately 24 percent of our sample were working in palliative care and thus plans may already be available, therefore non medical prescribers are using their supplementary role more frequently in this position. The other issue is that many mental health trusts will not allow non medical prescribing because of the risk associated with the prescribing of controlled drugs to this group of patients. Controlled drugs however, were being prescribed by our NMPs, which seems surprising as it is only four years since the introduction of non medical prescribing powers. However, many analgesics within chronic disease management are classified controlled drugs and it is likely for end of life care that these are being deployed.

The findings of this study indicate that the majority of prescriptions issued were for analgesia /pain management and respiratory conditions, which reflect the North West priorities in chronic disease management where the demand is and are consistent with that reported by Latter et al (2005). Thus non medical prescribing seems to be consistently meeting both the patient needs and health service needs.
5.5 Impact of non medical prescribing in practice

Of the 27 medical practitioners who added comments that expressed a view, 7 were mostly positive and 17 mostly negative. Like Watterson et al (2009), medical practitioners generally agreed that the NMP had a positive effect on the patient experience in allowing patients more time, having better social assessment skills and were seen more quickly, but although devolved work was saving medical practitioners time, the investment of providing support and advice on clinical decisions also consumed their time. Medical practitioners were very positive about the staff member working alongside them, but their negative comments were focused around responsibility issues.

The findings from all stages of this study so far indicate a positive impact of non medical prescribing. The vast majority of non medical prescribers considered that their prescribing competency enhanced their own practice and that of patient care. Medical practitioners also considered that NMPs were a positive investment, contributing to the service and helped save time for medical staff and thus reduced the pressure on secondary services. NMP leads particularly viewed the introduction of non medical prescribing as an holistic improvement to the service and in saving the patients time and trouble.

The findings from the phase 2 survey estimates of time saved indicate that NMPs saved time for patients and time for themselves, relative to their previous reliance on the medical supervision. One surprising finding was that NMPs in cities consistently estimated more time saved than those in rural areas. There were two issues explored in our feedback from non medical prescribing practitioners: firstly, that rural areas typically have one focus of healthcare and better communication between partnerships. Therefore there are not as many people to link with and the non medical prescriber may be involved in a regular team meeting that ultimately takes less time for a larger area. In cities, there may be a number of different services operating at different locations and partnerships may be more complex depending on trust and other boundaries within the city limits. The NMP may be working as part of a team and time for this communication may be severely limited. Secondly, this may be an effect of the seniority and specialist kinds of people recruited to non medical prescribing thus far. Nurse led specialist clinics are becoming more popular in rural areas where once there would have been a large waiting list and explain the anomaly of the estimate of the wait for a prescription of a small number of patients at around two months. For example, an anticoagulant clinic is a specialised
services usually delivered by medical practitioners. The introduction of nurse-led clinics has led to a considerable reduction in waiting for an appointment. Only the difficult cases are referred to the medical staff. Similarly, the management of diabetes clinics has changed substantially from a secondary to a primary care base and the pattern of the disease has changed. Because of the increase in chronic conditions, more specialised services are now developed at a local level, thus reducing waiting times significantly in areas where such services had not been available before. In central areas, the medical practitioners may still be dealing with the specialised cases or NMPs may be located in specialist clinics, but essentially the service has not changed. These anomalies reflect the advanced nature of the complex process that is prescribing and how it interacts with diagnosis and specialised knowledge. Senior and specialised staff were the first kind of students on the programme and may thus be over represented. The introduction of a more diverse range of NMPs might considerably dilute the estimates of waiting times (and also the kind of medical staff on the consultation list).

The vast majority of NMPs said they saved time compared with their previous dependence on medical staff for prescriptions, thus indicating a cost effective use of senior staff. Again more time was saved in the cities than in rural areas, but the differences were not as marked. In rural areas, the NMP may work less autonomously than in cities but it seems that further detailed research on patient and staff time saved might provide useful cost information.

A very important impact finding of this study was that over half the sample had identified incorrect drugs or reviewed treatment in the last year and performs a useful check on drug errors. These findings are supported by recent evidence from the EQIP study (Dornan et al, 2009) suggesting that medical staff rely heavily on nurses and associated healthcare staff to correct common errors in their prescriptions. Most of the sample identified five patient safety outcomes from our list. Additionally to patient safety outcomes, the findings of reduction of poly pharmacy are very important for cost saving and also preventative of other indications/ side effects and similarly the prevention of allergic reactions, which could be fatal. Most NMPs identified communication with patients as one of the non medical prescribing related activities on which they spent most time. This social role of providing information and guidance to the patient may often identify wrong doses, compliance by the patient or self medication additional to the prescribed medication. Cost saving measures were identified by 40 percent of NMPs which shows a knowledge and interest and involvement with the NHS agenda for change.
6 Conclusions

Recent policy directives are continuing to emphasise modernisation of the NHS and to extend non medical prescribing further. The introduction of non medical prescribing has been pivotal to increasing access to medicines and to modernising the NHS through the development and role enhancement of health care staff. Since Latter et al’s (2005) study, the numbers of non medical prescribers have increased steadily and other professions have started to introduce non medical prescribing. Qualified nurses and pharmacists are currently able to prescribe from the full formulary with the exception of certain controlled drugs. Allied health practitioners are currently able to qualify as supplementary prescribers but there are indications that they are seeking independent non medical prescribing rights. Latter et al (2005) selected her sample from a total UK population of 550 nurses who had registered a V200 qualification with the NMC in 2002 / early 2003, whereas the current study included a larger, more professionally diverse range of non medical prescribers concentrated in one region. The current study is also more focused on the advancement of the clinical practitioner role. Little is known about how NMPs manage the role within their other responsibilities. This project was commissioned to provide an evaluation of the role and practice of non medical prescribing in the North West. Non medical prescribing has continually evolved with increasing groups of professionals able to prescribe in tandem with an increase in the scope of non medical prescribing. In 2005, there were just under 4,000 nurse prescribers in total; there are now 15,000 registered nurse prescribers in an independent or supplementary role, there are over 900 registered pharmacy independent prescribers and nearly 300 supplementary prescribers from allied health (Robinson, 2009).

There are now nine large evaluations of non medical prescribing from a number of disciplinary perspectives demonstrating competency of the practitioners and perspectives of stakeholders. However, there is a limited research and indeed gaps in the evidence for efficiency and effectiveness as far as role enhancement and advancement of non medical practitioners and improvement in patient experiences. The current study acknowledges previous research and builds onto it a greater understanding and responsiveness of the infrastructure of the organisation in relation to non medical prescribing. Through the practitioner survey, we bring a greater understanding of the non medical prescribers as individuals, examining in detail how non medical prescribing is integrated into their clinical role. The medical practitioner’s survey adds a stakeholder view of both the experiences and the structures that support the initiative.
Overall the findings that relate to non medical prescribers and their medical colleagues suggest that non medical prescribing has enhanced the service, particularly in terms of patient safety and the quality of the patient’s experience. Non medical prescribers are generally satisfied with the support structure where it is working well and where there is plenty of team support. Medical practitioners seem to be satisfied with the non medical prescribers in their experience and in their mentoring role but their reservations about the role remain.

For healthcare staff, non medical prescribing is only part of a clinical role; the typical non medical prescriber is predominantly working as part of a care team and their actual prescribing is limited to a specialist area of practice. The activity of writing a prescription itself is only part of a clinical contact in a non medical prescribing role; the clinical contact indeed may finish without the issue of a prescription. However, inevitably this change of role and responsibility is expected to impact holistically, not only on their practice and team relationships, but on their relationships with management, colleagues and patients.

The focus groups revealed an awareness and considerable tensions particularly at managerial level around accountability and responsibility for extending the provision of non medical prescribing at Trust level. Some NMP leads were spending quite a lot of time at an operational level in raising awareness of non medical prescribing at clinical and management level.

Key meaningful and relevant indicators of impact from the NMP survey were the time saved for the patient in accessing medication and the assessment of safety related outcomes such as identification of contraindications, corrections to prescribed medication. The most useful indicator from the medical practitioner's survey was their impressions of clinical time saved. The poorest indicator was found to be the number of prescriptions generated and our evaluation placed non medical prescribing as a competency integrated with practice rather than a set of tasks.

Politically, non medical prescribing is challenging the way we see the role of healthcare staff including the role of medical practitioners. The traditional boundaries between medical and other healthcare professionals are blurring and this change is not always acknowledged organisationally (Norman et al, 2007; Watterson et al, 2009). Previously, the responsibility and the accountability for medication and liability lay only with the medical practitioner but now some of these responsibilities and decisions are part of the work of advanced healthcare practitioners.
Previous studies have consistently reported across all stages of implementation lack of peer support, objections by medical staff and others, lack of trust agreements, lack of clarity or awareness of the non medical prescribing role and perceived limitations in confidence and expertise of the NMP staff themselves. The systems and processes that support medical staff are not usually available and may not be appropriate to non medical prescribers even though they are fast becoming autonomous practitioners. There have been a number of developments to support non medical prescribers in this new role both nationally and across the North West. All non medical prescribers must amass a portfolio of detailed evidence to support self directed maintenance of their skills and knowledge but this has previously been criticised as not supportive enough for a profession that is mostly team driven (Latter et al, 2005). Whilst all non medical prescribers must undertake a training period with medical supervision, their access to mentoring after this training period can difficult and there have been calls for voluntary preceptorship as needed. Local forums and networks have been established through the development of a Trust Non medical prescribing Lead to support non medical prescribing but there are large variations in the amount of support, local updating, education and fora offered. For many, the acquisition of a non medical prescribing qualification introduces them to a more diverse range of health professionals, influences and shared practice than they had previously experienced through their usual practice routes, but for others it can be quite isolating.

There is some scope for improvement of information to management and non clinical staff and to improve the structure of the competency framework. There is also scope to improve support in some areas for those NMPs feeling isolated and where their needs for CPD and updating are not well understood.
7 Recommendations

7. Continue the collaborative approach that has been established on a number of levels as a model of practice within NHS North West. The focus groups and practitioners survey has identified this as a particular strength within non medical prescribing (for example, the regular support forums within trusts for non medical prescribing practitioners, NMP lead forums, HEI regional development group).

8. Promote NMP at a higher strategic level within the trust organisation to ensure an understanding of the benefits of this initiative are in relation to patient experience and employee satisfaction.

9. Encourage greater support from senior management re NMP.

10. Strengthen strategic leadership between service commissioners and employers in order to get NMP ‘on the agenda’.

11. Job description of the non medical prescribing lead should identify a clear line of communication with the named lead director of the trust in which they are employed.

12. Most of those who had not prescribed (17% of respondents) cited poor local organisational structure or lack of local policy to enable non medical prescribers to work effectively. The continuing use of the e-audit should address some of these barriers by raising awareness of local organisational issues and responsibilities.

13. Use divergent approaches to promote a greater understanding of the NMP role across all of the health and social care workforce.

14. Promote the NMP qualification as an asset using the survey results that practitioners’ perceived 65 percent of their clinical role now involved their NMP knowledge and skills.

15. Promote the time saving benefits of reduction in patients’ time in accessing medication to employers. Surveys revealed perceptions of time saved for both patients and professionals.

16. Our study supports previous findings of considerable benefits in patient safety outcomes through the knowledge, skills and experience of non medical prescribing practice. These findings should be disseminated as indicating responsive good practice in cost saving, increased patient safety and improving quality of care.
17. Organisations should consider workforce and succession planning as 57 percent of all respondents were aged 45 years or over.

18. Survey findings reveal 21 percent of NMPs had not accessed CPD or updates in the past year. This is important for their continuing practice. Regular updates or CPD opportunities for all NMPs across the area should be embedded in local policy.

19. CPD needs were identified by 41 percent of NMPs in relation to (a) clinical skills and (b) pharmacology knowledge (re action and use of drugs). These findings were supported by the survey of medical practitioners.

20. Facilitate more opportunities for NMPs to liaise with medical practitioners post qualification to enhance ongoing professional development for all involved.

21. Continue with the multi professional approach to non medical prescribing programmes.

**Implications for the future:**

1. Few pharmacists are represented in this study due to the small numbers of qualified NMP pharmacists at the point of the survey. However, the literature review indicates current tensions around the future integration of independent prescribing of community pharmacists into the system of primary care. Early attention and promotion that demonstrates the benefits of GP/ non medical prescribing pharmacist links and acknowledgement and inclusion of non medical prescribing leads may enhance multiprofessional working.

2. The literature review revealed concern about the utility and practicality of cross disciplinary education and training due to the specialist areas of practice. However, this is against the policy directives and advanced practice culture of creating a more flexible multiprofessional workforce that understands the roles and responsibilities of other practice professionals, driving a more holistic culture of care. The continuation of multiprofessional not uniprofessional activities in education and CPD will support non medical prescribing practice, but CPD arrangements within their own specialist practice should support the missing elements that others have clarified.

3. Previous research findings of the limited knowledge and understanding of medical practitioners about their non medical colleagues’ role and preparation for the role are supported by the medical survey. Initiatives to promote non medical prescribing within
undergraduate medical education may go some way towards a more realistic appreciation of multiprofessional development of workforce capacity, efficiency and effectiveness.
8 References


9. Appendices

9.1 Table of reviewed previous studies: Literature Review
9.2 Ethics approval
9.3 Question schedule for focus groups
9.4 Questionnaires
   9.4.1 Non medical prescribing practitioners
   9.4.2 Medical practitioners
   9.4.3 Proposed patient questionnaire
9.5 Detailed analysis of time saved.
9.1 Table of reviewed previous studies: Literature Review
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<th>Authors</th>
<th>Year</th>
<th>Reference</th>
<th>Sample</th>
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<th>Key Finding 2 summaries</th>
<th>Other key points</th>
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<tbody>
<tr>
<td>Ahuja, J.</td>
<td>2009</td>
<td>Evaluating the learning experience of non medical prescribing students with their designated medical practitioners in their period of learning in practice: Results of a survey Nurse Education Today 29 (2009) 879–885</td>
<td>57 NMP students during their period of learning in practice</td>
<td>Survey</td>
<td>Majority worked in primary care. Spending &gt;30% of the practice hours under direct supervision of the DMP was significantly associated with student satisfaction (p = 0.025). Students commented on the difficulty of getting a DMP and suggest learning might be enhanced if a practicing NMP was to co-mentor. Also suggested was incentives to DMP and provision of information to DMP about NMP</td>
<td>Time and workload constraints, organisational issues and peer support emerged as barriers to student learning</td>
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<tr>
<td>Banning, M., Cortazzi, M.</td>
<td>2004</td>
<td>Questioning Student Learning: an exploration of student's views on learning to become independent nurse prescribers, Journal of Further and Higher Education, 28 (4):</td>
<td>Evaluation study</td>
<td>Focus groups</td>
<td>Students were desperate to learn and to be successful, but many were apprehensive about the intensity of the pharmacological content and diagnostic skills that are required to make a clinical diagnosis. Sadly, some students felt that the restriction of the extended nurse formulary, while valuable to their professional development and credibility as a nurse, would not enhance the care that could be provided to patients. This limitation was not realized until the course had commenced.</td>
<td>For many students, a positive finding was the realization of the relevance to practice and the contribution that could be made to everyday nursing care. Future independent nurse prescribing students would benefit from the provision of pre-course reading, guided studies in pharmacology, normal physiology and physical examination skills before commencing the course of study.</td>
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<tr>
<td>Berry, D., Courtenay, M &amp; Bersellini E</td>
<td>2006</td>
<td>Attitudes towards and information needs in relation to supplementary nurse prescribing in the UK: an empirical study Journal of Clinical Nursing 15, 22–28</td>
<td>74 members of general public, convenience sample</td>
<td>Questionnaire</td>
<td>People would have confidence in a nurse prescribing the best medicine and said they would take it. No concerns about nurses’ status.</td>
<td>People wanted more information about medicines and side effects.</td>
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<td>Bissell, P., Cooper, R., Guillaume, L., Anderson, C., Avery, A., Hutchinson, A., James, V., Lymn, J., Marsden, E., Murphy, E., Ratcliffe, J., Ward, P., Woolsey, I.</td>
<td>2008</td>
<td>An evaluation of supplementary prescribing in nursing and pharmacy, DH</td>
<td>Analysis of community and primary care nurse and pharmacist prescribing using PACT data (2004 – 2007)</td>
<td>postal questionnaire survey of nurse (n=518) and pharmacist (n=411) supplementary prescribers</td>
<td>Implementation barrier included inadequate funding for training and support in practice, accessing medical records and information technology and difficulties using CMPs</td>
<td>Nurses and pharmacists were positive about their prescribing role, although some had reservations about CMPs and their supplementary prescribing training., Doctors and patients were perceived to lack awareness of supplementary prescribing</td>
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10 detailed case studies - supplementary prescribing practice in various settings were conducted, utilising observations, interviews and prescribing data. 43 stakeholders interviewed. Stakeholders broadly welcomed supplementary prescribing, identifying benefits for patients and healthcare professionals, whilst also highlighting similar implementation barriers to those in the literature review. The safety of supplementary prescribing was not considered problematic. Doctors’ experiences of supplementary prescribing were also positive, confirming their expectations that non medical prescribing should be used with protocols. They were more cautious about nurses and pharmacists undertaking a diagnostic role. Assessment of the prescribing safety of 71 prescribed medicines revealed no prescribing errors
<table>
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<tr>
<th>Author(s)</th>
<th>Year</th>
<th>Study Title</th>
<th>Participants, Methods, Instruments</th>
<th>Findings</th>
<th>Implications and Recommendations</th>
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<tr>
<td>Bradley, E. &amp; Nolan, P.</td>
<td>2007</td>
<td>Impact of nurse prescribing: a qualitative study.</td>
<td>45 nurse prescribers (no detail – all qualified, range of specialist nurses) (10 of whom not prescribing)</td>
<td>Prescribing enhances nurses’ knowledge about medication and increases their confidence to engage in prescribing decisions across the healthcare team.</td>
<td>Potential problems in the impact on the multidisciplinary team, (doctors and colleagues). Preparatory information recommended.</td>
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<tr>
<td>Bradley, E., Campbell, P. Nolan, P.</td>
<td>2005</td>
<td>Nurse prescribers: who are they and how do people perceive their role?</td>
<td>91 nurses in NMP course one university.</td>
<td>Potentially, prescribing could advance the professional development of nurses, improve communication between professionals and patients, and make the experience of patients more beneficial. However, some concerns about how supportive the current climate in health care could be, given multiple demands on time and energy.</td>
<td>It is essential that misconceptions about the nurse prescribing role are addressed. Systems to support non medical prescribing are vital, particularly organizational support and a clear strategy for CPD</td>
</tr>
<tr>
<td>Brimblecome, N, Parr A and Gray R</td>
<td>2005</td>
<td>Medication and mental health nurses, developing new ways of working.</td>
<td>Survey of mental health nurse executive directors</td>
<td>Variations in the speed of implementation of supplementary prescribing, nurse leaders recognised the huge potential for improving services</td>
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<td>Cooper , R., Anderson, C., Avery, T., Bissell, P., Guillaume, L., Hutchinson, A., Lymm, J., Murphy, E., Ratcliffe, J., Ward, P.</td>
<td>2008</td>
<td>Stakeholders’ views of UK nurse and pharmacist supplementary prescribing.</td>
<td>43 purposively sampled UK stakeholders including pharmacist and nurse supplementary prescribers, doctors, patient s representatives</td>
<td>Stakeholders generally viewed SP positively and perceived benefits in improved access to medicines, fewer delays. Safety concerns were not considered significant. Views on economic impact varied.</td>
<td>Range of facilitators and barriers to implementation, but on the whole positively received. Need to improve awareness of SP. Potential tensions emerged including nurses’ v pharmacists existing skills and training needs, supplementary v independent prescribing, and</td>
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<tr>
<td>Courtenay, M. &amp; Carey N.</td>
<td>2008</td>
<td>Nurse independent prescribing and nurse supplementary prescribing practice: national survey. Journal of Advanced Nursing 61(3), 291–299</td>
<td>National 1377 random selection</td>
<td>Questionnaire</td>
<td>87% used independent prescribing but many qualified over 2 years. Majority work in general practice but increasing numbers in secondary care. Nearly all respondents had prescribed independently (17 items a week). Half use supplementary.</td>
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<tr>
<td>Courtenay, M. &amp; Berry, D.</td>
<td>2007</td>
<td>Comparing nurses' and doctors' views of nurse prescribing: a questionnaire survey, Nurse Prescribing, 5 (5): 205-210</td>
<td>Random sample of 31 qualified nurse independent and nurse supplementary prescribers and 30 general practitioners</td>
<td>Survey</td>
<td>Both nurse and doctor groups identified fewer disadvantages of nurse prescribing than advantages. Restriction on formulary was nurses disadvantage and nurse training was doctors. Loss of status and less control over budgets were doctor disadvantages reported by over a third of the doctor group. Nearly 60% of the nurse group cited less control over care as a doctor disadvantage.</td>
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<tr>
<td>Courtenay, M. &amp; Gordon, J</td>
<td>2009</td>
<td>A survey of therapy areas in which nurses prescribe and CPD needs. Nurse Prescribing 2009 Vol 7 No 6: 546 Nurses</td>
<td>Online survey</td>
<td>Many nurses reported pharmacological educational needs, and that e-learning is their preferred method of learning. Should be considered by those involved in the development and delivery of CPD needs in therapy areas in which most actively prescribing. Greatest needs for chronic conditions (41%), pain, sexual</td>
<td>Just over 10% of respondents reported that they did not prescribe. Approximately 20% of these participants reported that they worked in education and so, perhaps were not in a role where</td>
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<td>Year</td>
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<td>2009</td>
<td>Drennan et al</td>
<td>National independent evaluation of the nurse and midwife prescribing initiative, Health Services executive (Ireland)</td>
<td>Survey, interviews, observation and audit</td>
<td>The greatest gains were made by course participants in relation to their overall ability and self-confidence to prescribe, an understanding of pharmacology and pharmacotherapeutics and an understanding of the legal and ethical aspects of prescribing practice. Concerns recorded in areas related to accountability, legislation, pharmacology and application of the prescribing to professional practice.</td>
<td>The experience of prescribers in relation to continuing professional development was variable. While the majority reported that they had not accessed any form of formal continuing professional development related to prescribing following the completion of their prescribing education programme all prescribers reported that they engaged in some form of informal continuing professional development. The extension of prescriptive authority has a positive impact on clinical roles; particularly enhancing their professional development, increased job satisfaction. Patients. Nurses and midwives said prescribing had improved the quality of care for patients, ensured better use of their skills and increased their professional autonomy.</td>
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<td>Author(s)</td>
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<td>Title</td>
<td>Methodology</td>
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<td>Elvey, R., Ashcroft, D. M. &amp; Noyce, P.</td>
<td>2008</td>
<td>General practitioner engagement: the key to repeat dispensing?</td>
<td>Interviews</td>
<td>14 GP 4 NMP from 15 practices across England</td>
<td>Repeat dispensing varied between practices. At some sites there was a mix of active and non active GPs in the same practice.</td>
</tr>
<tr>
<td>Green, B. &amp; Coutney, H.</td>
<td>2008</td>
<td>Evaluating the investment: a survey of non medical prescribing.</td>
<td>Survey</td>
<td>10 NMPs</td>
<td>Only 50% prescribing, but those who weren’t were developing strategies. Strategies facilitate the development of practice: relationships with medical supervisors, sharing prescribing governance, and role definition.</td>
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<tr>
<td>Authors</td>
<td>Year</td>
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<td>Participants</td>
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<td>Hall, J., Cantrill, J., Noyce, P.</td>
<td>2004</td>
<td>Managing independent prescribing: the influence of primary care trusts on community nurse prescribing.</td>
<td>22 community nurse prescribers and 5 PCT prescribing leads.</td>
<td>Interviews</td>
<td>PCTs used formularies and guidelines, education and training, individual prescriber feedback and directives to varying degrees to influence nurse prescribing. Some nurse prescribers considered formularies and guidelines to be restrictive.</td>
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<td>Harrison, A.</td>
<td>2003</td>
<td>Mental health service users’ views of nurse prescribing. Nurse Prescribing, 2003, Vol 1 No 2</td>
<td>9 service users</td>
<td>Focus groups</td>
<td>Service users have a number of concerns regarding the adoption of nurse prescribing within the mental health context, in particular the need for nurses taking on a prescribing role to be adequately educated and supported in this function.</td>
</tr>
<tr>
<td>Hemingway, S</td>
<td></td>
<td>The mental health nurse’s perspective on implementing nurse prescribing. Nurse Prescribing, 2004, 2 (1):37-44</td>
<td>35 mental health nurses and a service user</td>
<td>Questionnaires</td>
<td>Mental health nurses feel they are close to patients and most were in favour of prescribing by MHN. Prescribing was more than knowledge of drugs, involves working in systems and dealing with certain pressures.</td>
</tr>
<tr>
<td>Jones, A. (2008)</td>
<td>2008 Exploring independent nurse prescribing for mental health settings</td>
<td>Journal of Psychiatric and Mental Health Nursing 15, 109–17</td>
<td>22 nurses and three psychiatrists</td>
<td>5 focus groups</td>
<td>IP could support system redesign. Training and competency requirements need to be in place. Types of setting and diagnostic restrictions. Conclusions are cautious in terms of general acceptance by nurses and psychiatrists, and issues relating to training, particularly psychopharmacology and ability to formulate a diagnosis are important for development.</td>
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<tr>
<td>Jones, A. &amp; Harborne, G. C. (2009)</td>
<td>2009 Independent mental health nurse prescribing</td>
<td>Journal of Psychiatric and Mental Health Nursing 16, 508–515</td>
<td>Opportunistic sample of 119 respondents made up of nurses, doctors, support workers, occupational therapists and social workers</td>
<td>Online survey</td>
<td>A total of 68% of the sample identified pharmacology as the area for further training. And 40% of the sample felt that IP had been introduced to make services more effective. This opportunistic sample supported IP as a means to offer greater patient choice and as a method to broaden the boundaries of nursing practice. Integral to this development is the link between the psychiatrist and IP nurse in terms of work allocation and supervision.</td>
</tr>
<tr>
<td>RL King</td>
<td>2008 Nurses’ perceptions of their pharmacology educational needs,</td>
<td>Journal of Advanced Nursing 45(4): 392-400(9)</td>
<td>a purposive sample of 10 qualified nurses from an emergency admissions unit in a city in the north of England.</td>
<td>Focus group</td>
<td>This paper reports a study to explore nurses’ pharmacology education needs by identifying nursing roles that require pharmacology knowledge, and nurses’ preparation for practice from preregistration pharmacology education. Limited understanding of the subject, and dissatisfaction with the teaching of pharmacology, with resulting anxiety on qualifying. Nursing roles identified as requiring pharmacology knowledge included drug administration, patient assessment, nurse prescribing, and patient medication education. Although nurses have a limited understanding of pharmacology, they recognize the need for pharmacology knowledge in practice.</td>
</tr>
<tr>
<td>Latter, S., Maben, J., Myall, M., Courtenay, M., Young, A., Dunn, N.</td>
<td>2005</td>
<td>An evaluation of extended formulary independent nurse prescribing, DH</td>
<td>246 nurse prescribers EFINP</td>
<td>Questionnaire Positive about their education and practice</td>
<td>Patient satisfaction good, 10 case studies 118 NPs practice; Interviews with a range of stakeholders</td>
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<td>Latter, S., Maben, J., Myall, M., Courtenay, M., Young, A., Baileff, A.</td>
<td>2007</td>
<td>Evaluating prescribing competencies and standards used in nurse-independent prescribers’ prescribing consultations: an observation study of practice in England, Journal of Research in Nursing 12(1):7-26</td>
<td>7 experts rated 12 transcripts of NP consultations</td>
<td>Description of how well 14 nurses met national standards for prescribing.</td>
<td>Prescribing nurses in this study were generally considered to be making clinically appropriate prescribing decisions. Method is sound Nurses showed remarkable consistency and completeness in meeting competencies diagnostic assessment, prescription writing accuracy, and record documentation</td>
</tr>
<tr>
<td>Latter, S., Maben, J., Myall, M., Young, A.</td>
<td>2007</td>
<td>Evaluating nurse prescribers’ education and continuing professional development for independent prescribing practice: findings from a national survey in England. Nurse Education Today (2007) 27, 685–696</td>
<td>246 nurses registered as nurse independent prescribers with NMC</td>
<td>Postal questionnaire survey</td>
<td>The initial taught course met nurses needs. 77% received the specified 12 Days medical support. 62% reported that they were receiving support/supervision for prescribing. Majority engaged in self-directed informal CPD but only half had formally provided CPD and half identified such needs.</td>
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<tr>
<td>Authors</td>
<td>Year</td>
<td>Title</td>
<td>Methodology</td>
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<td>Latter, S., Maben, J., Myall, M., Young, A.</td>
<td>2007</td>
<td>Perceptions and practice of concordance in nurses’ prescribing consultations: Findings from a national questionnaire survey and case studies of practice in England, International Journal of Nursing Studies, 44:9-18</td>
<td>Questionnaire for patients and NMPs</td>
<td>99% of the nurses in the national survey stated they were practising the principles of concordance. The majority of patients surveyed also reported experiencing concordance in practice.</td>
<td>Some evidence from both observation of practice and patient questionnaires suggested that a professionally determined ‘compliance’ agenda may still be partially operating in practice.</td>
</tr>
<tr>
<td>Lockwood, E B . &amp; Fealy, G.M.</td>
<td>2008</td>
<td>Nurse prescribing as an aspect of future role expansion: the views of Irish clinical nurse specialists, Journal of Nursing Management 16, 813–820</td>
<td>283 CNSs practising in a variety of care settings in Ireland.</td>
<td>Findings indicate that the majority of clinical nurse specialists were positively disposed towards nurse prescribing as a future role expansion. The fear of litigation was identified as the most significant barrier to nurse prescribing. The majority of respondents equated nurse prescribing with increased autonomy and holistic care</td>
<td>The findings indicate that there is a need for further examination of the educational requirements of the CNS in relation to nurse prescribing. The legislative implications for nurse prescribing and fear of legal consequences need to be considered prior to any implementation of nurse prescribing.</td>
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</table>

While senior clinicians are willing to embrace future role expansion in the area of nurse prescribing, their Nurse Managers should recognize that facilitation of nurse prescribing needs to address the legal and educational requirements for such activity. Failure to address these requirements can represent a barrier to role expansion.
<table>
<thead>
<tr>
<th>Nolan, P. &amp; Bradley, E. (2007)</th>
<th>2007</th>
<th>The role of the nurse prescriber: the views of mental health and non mental health nurses, Journal of Psychiatric and Mental Health Nursing 14, 258–266.</th>
<th>Subsample of a questionnaire sample, 33 mental health nurses and a sample of primary care nurses from the remaining 293.</th>
<th>Questionnaire</th>
<th>Non-mental health nurses perception was prescribing powers would increase efficiency and maximize resources. Mental health nurses saw prescribing primarily in terms of the benefits to clients – increased choice, improved access to care, better information about treatments and better quality of care.</th>
<th>some respondents from both groups felt that non medical prescribing would give them the opportunity to explore alternatives to medication, suggesting that it will not necessarily lead to increased drugs bills</th>
</tr>
</thead>
<tbody>
<tr>
<td>Norman, I., While, A., Whittlesea, C., Coster, S., Sibley, A., Rosenbloom, K., McCrone, P., Faulkner, A., Wade, T.</td>
<td>2007</td>
<td>Evaluation of mental health nurse supplementary prescribing. DH</td>
<td>Compared health and social outcomes of a group of MH patients in receipt of SP with patients in receipt of MP</td>
<td>Two national surveys. MH NMP leads (n=35); and MH SP nurses (n=224).</td>
<td>Frequently cited barriers to development included: unsupportive behaviour of key medical staff; organisational failures resulting in delays in adopting policies and procedures to regulate MHNSP; and the reluctance of MHNSPs to engage with the initiative due to perceptions of inadequate pay for assuming additional responsibilities.</td>
<td>6 case studies, leading edge sites. Interviews with MH NSPs, doctors, NMP leads (n=29), patients(n=17)</td>
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<td>Authors</td>
<td>Year</td>
<td>Study Title</td>
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<td>Findings</td>
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<td>Pontin, D. &amp; Jones, S.</td>
<td>2007</td>
<td>Children's nurses and nurse prescribing: a case study identifying issues for developing training programmes in the UK.</td>
<td>Focused group</td>
<td>Main themes: training, supervision and the development of confidence, record keeping, benefits of nurse prescribing, autonomous practice, the formulary and its use in practice.</td>
<td>Course content needs to focus on children and psychology and pharmokinetics. Children's nurses frequently advise junior medics on prescribing issues. Patient group directives useful alternative to prescribing.</td>
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<td>Health visitors/nurses</td>
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<tr>
<td>Rana, T. Bradley, E.; Nolan, P.</td>
<td>2009</td>
<td>Survey of psychiatrists' views of nurse prescribing, Journal of Psychiatric &amp; Mental Health Nursing, Volume 16, (3): 257-262</td>
<td>Survey</td>
<td>The more senior doctors appeared less concerned about nurse prescribing. Junior doctors expressed equivocation towards the role, suggesting that nurse prescribers be consistently supervised and have limited access to mental health drugs.</td>
<td>Without the assistance of trusts in facilitating role change, the introduction of new roles could potentially heighten conflict between professions.</td>
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<td>147 Psychiatrists</td>
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<tr>
<td>Ring, M.</td>
<td>2005</td>
<td>An Audit of the Organisational Structures and Systems in Place to Support Non Medical Prescribing in Shropshire and Staffordshire, Shropshire and Staffordshire Strategic Health Authority.</td>
<td>Questionnaire &amp; interviews</td>
<td>Only half policies in place 8 people interviewed</td>
<td>Lack of strategic focus on NMP sits outside workforce planning</td>
<td>Lack of information on impact on medical supervisors</td>
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<td>Prescribing leads in 17 orgs. Identified NMPs (all)</td>
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<tr>
<td>Ryan Woolley McHugh Luker</td>
<td>2007</td>
<td>Prescribing by specialist nurses in cancer and palliative care: results of a national survey. Palliative Medicine 21: 273–77</td>
<td>1575 MacMillan nurses. 168 Extended formulary independent nurse prescribers</td>
<td>Survey</td>
<td>Half were prescribing, representing just 6% (88 of 1575) of the sample. Medical mentorship. 40% reluctant to undergo training.</td>
<td>Training deficits highlighted included poor organization and insufficient length, depth and specificity of courses (to meet the needs of nurses working in palliative care) and a lack of medical supervision.</td>
</tr>
<tr>
<td>Snowden, A.</td>
<td>2008</td>
<td>Quantitative analysis of mental health nurse prescribers in Scotland. Journal of Psychiatric and Mental Health Nursing 15, 471–478</td>
<td>365 MH NMP</td>
<td>Questionnaires</td>
<td>Significant differences were found between mental health nurse prescribers and others in terms of age, gender, prescribing practice, academic achievement, method of prescribing, workplace, experience and attitude to prescribing.</td>
<td>Included V100 and only 11 MH nurses against 123 others. Mental health prescribers did not prescribe often.</td>
</tr>
<tr>
<td>Stenner, K. &amp; Courtenay, M.</td>
<td>2007</td>
<td>A qualitative study on the impact of legislation on prescribing of controlled drugs by nurses. Nurse Prescribing 5 (6): 257-262</td>
<td>26 qualified Nurse Independent and Nurse Supplementary Prescribers working in chronic/palliative pain.</td>
<td>Qualitative study on the adoption of the role of prescribing for patients in pain, and how the legislation on prescribing controlled drugs has had an impact on practice.</td>
<td>The findings indicate that factors such as budgetary control, problems accessing patient records and concerns over continuity of care are limiting nurse prescribing in this setting.</td>
<td>Practice is unimpeded by current legislation. Factors other than current legislation determine prescribing. The current restrictions are confusing. Nurse Supplementary Prescribing is of limited use in pain.</td>
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<tr>
<td>Author(s)</td>
<td>Year</td>
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<td>Sample Size</td>
<td>Method</td>
<td>Findings</td>
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<tr>
<td>Stenner, K. &amp; Courtenay, M</td>
<td>2008</td>
<td>The role of interprofessional relationships and support for nurse prescribing in acute and chronic pain.</td>
<td>26 nurses prescribing medicines for patients with acute or chronic pain.</td>
<td>Qualitative interviews</td>
<td>Nurses’ believed that prescribing encouraged collaborative working and sharing of knowledge across professional boundaries and that this helped to broaden understanding of the wider remit of pain management. Collaboration with doctors served a number of functions, including support and continuous learning. Barriers to effective nurse prescribing were a lack of understanding of its role amongst healthcare professionals and inadequate support.</td>
<td>Formal support structures, such as regular clinical supervision, were seen as crucial to meeting nurses’ ongoing learning. A more consistent approach is required within organisations to support nurse prescribing.</td>
</tr>
<tr>
<td>Tomar, R., Jakolvije, T., Brimblecome, N.</td>
<td>2008</td>
<td>Psychiatrists’ and nurses’ views of mental health nurse supplementary prescribing: a survey, Psychiatric Bulletin (2008), 32, 364-365</td>
<td>57 psychiatrists and 106 nurses only 4 of whom were prescribers.</td>
<td>Survey</td>
<td>Specific concerns expressed by psychiatrists were around issues of accountability, nurses’ knowledge and that supplementary prescribing would increase rather than decrease their own workload. Where nurses expressed concerns, these related to an increased workload, inadequate training and accountability.</td>
<td>Unlike nurses, psychiatrists were cautious about potential benefits of nurse supplementary prescribing on patient care. Both nurses and psychiatrists expressed concerns. Most nurses and psychiatrists were aware of nurse supplementary prescribing.</td>
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<td>Year</td>
<td>Study Title</td>
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<td>Findings</td>
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<td>2009</td>
<td>An evaluation of the expansion of nurse prescribing in Scotland</td>
<td>280 patients with a nurse prescription survey, 948 nurse prescribers</td>
<td>The study identified some obstacles that may restrict the successes of nurse prescribing relate to institutional and resource factors and partly to personal and professional attitudes and organisational factors.</td>
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<td>2009</td>
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<td>Interviews with 15 patients</td>
<td>Hindrances to nurse prescribing practice often centred on administrative issues, including budget and budgetary allocation issues which resulted in major delays in receiving prescription pads and difficulties with prescriptions not being computerised.</td>
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<td>2009</td>
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<td>The public generally showed considerable confidence in the nurse prescribing processes that they experienced. The evaluation found that there was however patchy geographical or professional implementation of nurse prescribing.</td>
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<td>2009</td>
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<td>6 case studies in 2 areas. Nurses kept a log of their actions. Interviews 6 medical staff, 5 pharmacists, 3 managers and 3 stakeholders. Course evaluation 10 centres.</td>
<td>Patient care had been improved by nurse prescribing, particularly in specialist areas and areas of particular competence. Log provided data on nil prescriptions. Benefits include improving patient access to treatment, enhancing patient care, maintaining and improving patient experiences, enhancing professional satisfaction and application of nurse skills, building inter-professional working, enabling effective use of medical staff time, and maintaining public health standards.</td>
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<td>2009</td>
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<td>There sometimes appeared to be a lack of a coherent, integrated and stable Board level infrastructure for prescribers. In some instances, it was felt that this demonstrated a slow response to the prescribing agenda. The need to have CPD to ensure prescribers’ fitness for practice was identified by respondents.</td>
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<tr>
<td>Wells J., Bergin M., Gooney M. &amp; Jones A</td>
<td>2009</td>
<td>Views on nurse prescribing: a survey of community mental health nurses in the Republic of Ireland, Journal of Psychiatric and Mental Health Nursing 16, 10–17</td>
<td>103 community mental health nurses in Ireland</td>
<td>Questionnaire</td>
<td>Results indicated a distinct difference of view between male and female community mental health nurses, with female nurses having greater reservations towards the desirability of nurse prescribing in relation to educational preparation and impact on professional relationships.</td>
<td>Overall, only 17% of respondents favoured being supervised in their prescribing practice by their consultant psychiatrist.</td>
</tr>
<tr>
<td>While, A.E. &amp; Biggs, K.S.M.</td>
<td>2004</td>
<td>Benefits and challenges of nurse prescribing Journal of Advanced Nursing 45(6), 559–567</td>
<td>91 health visitors and district nurses in 3 trusts in S.England</td>
<td>Postal survey</td>
<td>Most respondents prescribed less than three times a week, with district nurses prescribing significantly more than health visitors (P = .001). Over two-thirds of the sample found nurse prescribing at least moderately helpful to their professional role and over four-fifths reported that they were more than moderately confident nurse prescribers.</td>
<td>Over two-thirds reported that the current Nurse Prescribers’ Formulary did not cover their prescribing needs, and a number of factors were identified as hindering prescribing. Most respondents said that their general practitioner/primary care team was at least moderately supportive of their prescribing role.</td>
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<tr>
<td>Name(s)</td>
<td>Year</td>
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<td>Participants</td>
<td>Methodology</td>
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<tr>
<td>While, A., Shah, R., Nathan, A.</td>
<td>2005</td>
<td>Interdisciplinary working between community pharmacists and community nurses: the views of community pharmacists'</td>
<td>166 pharmacies in 3 metropolitan boroughs of a HA.</td>
<td>Postal questionnaires</td>
<td>The community pharmacists reported positive views regarding teamwork and nurse prescribing which it is suggested provides a readiness to develop interdisciplinary working which hitherto had foundered on lack of contact and in consequence insufficient understanding of roles and a shared view of primary care. A greater understanding of roles will need to occur to achieve the potential of teamwork. This highlights the importance of paying equal attention to people issues in the midst of rapid organizational change since health policy may set the necessary conditions for interdisciplinary working but attention is also needed to develop the processes.</td>
<td></td>
</tr>
<tr>
<td>Wilson, A, Pearson, D. And Hassey, A.</td>
<td>2002</td>
<td>Barriers to developing the nurse practitioner role in primary care – the GP perspective</td>
<td>25 GPs from 4 practices in the UK</td>
<td>Focus groups</td>
<td>Significant concerns by GPs in regard to nurse practitioner role in general practice. Four themes were identified that may impede the development of nursing roles - Threats to GP status, including job and financial security, nursing capabilities, training and scope of responsibility and structural and organisational barriers. There is a need to acknowledge GP concerns and encourage a more widespread deviate about the appropriate mix of skills required in primary care. Joint educational events and development of GP preceptorship may help.</td>
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</table>
9.2 Research Ethics Review Approval
Dr Sue Hacking
Senior Research Fellow in Evidence Based Practice
Room 317 Brook Building
Dept of Nursing
University of Central Lancashire
Preston
PR1 2HE

Dear Dr Hacking

Re:- ‘Evaluation of the practice and impact of Non Medical Prescribing in the North West: Focus groups and surveys 2a and 2b.’

Following Diane Catterall’s letter assuring you that the above study was seen as ‘service evaluation’ and therefore not falling within the remit of the NHS Research Ethics Committee, may I confirm that the opinion was given by Ms Janet Marsden, vice-chair Salford and Trafford REC.

Ms Marsden, Senior Lecturer in Health Care Studies, Manchester Metropolitan University. has served the Committee for several years in her capacity as ‘expert’ member.

I hope this is sufficient information for your enquiry

Kind regards

Yours sincerely

Maggie Twiney
Committee Co-ordinator, Salford and Trafford

E-mail: maggie.twiney@manchester.nhs.uk
Dear Sue & Jean

**Re: Faculty of Health Ethics Committee (FHEC) Application - (Proposal No.219)**

The Faculty of Health Ethics Committee (FHEC) has granted approval of your proposal application ‘Evaluation of the practice and impact of Non Medical Prescribing in the North West’ on the basis described in its ‘Notes for Applicants’.

Within a month of the anticipated date of project completion you specified on your application form, we shall e-mail you with a copy of the end-of-project report form. This should then be completed and returned to Research Office within 3 months or, alternatively, an amended end-of-project date forwarded to Research Office. Completion of an end-of-project form is required under the University’s ethics research governance procedures.

Additionally, FHEC has listed the following recommendation(s) which it would prefer to be addressed. Please note, however, that the above decision will not be affected should you decide not to address any of these recommendation(s).

Should you decide to make any of these recommended amendments, please forward the amended documentation to the Research Office for its records and indicate, by completing the attached grid, which recommendations you have adopted. Please do not resubmit any documentation which you have not amended.

Yours sincerely

Andy Bilson
Deputy Vice-Chair
Faculty of Health Ethics Committee

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**Response to FHEC Application - Proposal No.219 (Version No.2)**

<table>
<thead>
<tr>
<th>Recommendation</th>
<th>Applicant Response</th>
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<tr>
<td>1) I would advise that you check with the relevant REC that the surveys are considered by it to be evaluation and not needing to be referred to a REC</td>
<td>This has now been done.</td>
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<td>2) should the questionnaires be changed following the pilot these changes will need to be referred back to this committee</td>
<td>Questionnaires as submitted.</td>
</tr>
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</table>
26 January 2009

Dr S Hacking
Senior Research Fellow
University of Central Lancashire
Department of Nursing
Rm 313 Brook Building
Preston
PR1 2HE

Dear Dr Hacking

Full title of study: Survey of patients of Non Medical Prescribers
REC reference number: 08/H1016/155

Thank you for your letter, responding to the Committee’s request for further information on the above research and submitting revised documentation.

The further information has been considered on behalf of the Committee by the Chair.

Confirmation of ethical opinion

On behalf of the Committee, I am pleased to confirm a favourable ethical opinion for the above research on the basis described in the application form, protocol and supporting documentation as revised, subject to the conditions specified below.

Ethical review of research sites

The Committee has designated this study as exempt from site-specific assessment (SSA). The favourable opinion for the study applies to all sites involved in the research. There is no requirement for other Local Research Ethics Committees to be informed or SSA to be carried out at each site.

Conditions of the favourable opinion

The favourable opinion is subject to the following conditions being met prior to the start of the study.

Management permission or approval must be obtained from each host organisation prior to the start of the study at the site concerned.

Management permission at NHS sites (“R&D approval”) should be obtained from the relevant care organisation(s) in accordance with NHS research governance arrangements. Guidance on applying for NHS permission is available in the Integrated Research Application System or at http://www.rdforum.nhs.uk.
**Approved documents**

The final list of documents reviewed and approved by the Committee is as follows:

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<thead>
<tr>
<th>Document</th>
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<tr>
<td>University of Central Lancashire Indemnity</td>
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<td>Authorisation trust</td>
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<td>Guide to recruitment</td>
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<td>Trust information</td>
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<td>Participant Information Sheet: On front of the patient survey</td>
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<td>Letter of invitation to participant</td>
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<td>Questionnaire: Patient survey response rate</td>
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<td>Covering Letter</td>
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<td>05 November 2008</td>
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<tr>
<td>Protocol</td>
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<td>Investigator CV</td>
<td>Sue Hacking</td>
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<tr>
<td>Application</td>
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<td>31 October 2008</td>
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<tr>
<td>Response to Request for Further Information</td>
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<td>Questionnaire: Patient Survey</td>
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<td>Covering email</td>
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**Statement of compliance**

The Committee is constituted in accordance with the Governance Arrangements for Research Ethics Committees (July 2001) and complies fully with the Standard Operating Procedures for Research Ethics Committees in the UK.

**08/H1016/155 Please quote this number on all correspondence**

With the Committee’s best wishes for the success of this project

Yours sincerely

**Dr Patricia Wilkinson**

Chair

Email: sian.parker@northwest.nhs.uk

Enclosures: “After ethical review – guidance for researchers”

Copy to: Prof John Wilson, University of Central Lancashire
9.3 Question schedule, information for focus groups and common procedures
Evaluation of the practice and impact of Non Medical Prescribing in the North West: HEI lead protocol

Background - This protocol is for (University name) limited involvement in part of an 8-university collaboration of North West University Prescribing Course leaders and the Strategic Health Authority (SHA) that resources and supports prescribing in the North West to evaluate and respond to needs of patients, prescribing Health Professionals (HPs) and service development. The North West Universities non medical prescribing collaboration has set up a steering group to manage this process.

The University of Central Lancashire (UCLan) has been designated the co-ordinating lead for the project and will undertake the quantitative analysis, the co-ordination of the qualitative part, development and research element of the project and the Universities of: Bolton, Chester, Edge Hill, John Moores, MMU, Cumbria (currently St. Martins), Salford will participate in the evaluation. The whole project has been submitted to the UCLan REC and guidance is being sought regarding the status of the patient survey (stage 3) from NRES. UCLan recognises the responsibilities of each site REC and has asked each individual HEI to submit their part to their respective University RECs for site approval for the first stage only (focus group and survey a).

The part of (University name) in the evaluation will be limited to the involvement of (named lead) in these tasks:

- Holding 1 focus group of prescribing leads for the area – which will contribute to an integrated North West picture of organisational readiness for prescribing. Standardised materials, with a schedule for the group are provided and have been passed by the UCLan REC.
- Analysing the focus group results using a common matrix procedure (the proposed researcher has been trained by UCLan in this procedure). Materials are provided and have been passed by the UCLan REC.
- Despatch of surveys to ex-students of the University using the university database. SAEs and survey are provided and have been passed by the UCLan REC.
- Support and collaboration over the project with the UCLan co-ordination team and attendance at the steering group meetings.

Collaboration: Each university has a designated Lead researcher who will be responsible for the HEI site specific part of the evaluation (HEI Lead for XXX University is xxxx) and the HEI Leads together with representatives from the SHA and an advisor from the West Midlands prescribing group who has recently completed a smaller evaluation of prescribing practice in the West Midlands) form the steering group for the project. There are a number of strands to the evaluation, designed to triangulate information qualitatively and quantitatively.

The study is a 3 stage design, with stage 1 – audit of management, resource and support systems at North West trusts (see proposal) and the analysis of the audit being undertaken by the SHA. Therefore ethical permission is not sought for stage 1.

Stage 2 builds upon the audit exploring some of the barriers and facilitators to resource prescribing health professionals for each area. 8 focus group of prescribing leads will be recruited; one focus group will run at each of the 8 HEI sites. Permission to conduct this part of the evaluation is sought at this stage. Details appear below.
Stage 3 involves 3 linked surveys and permission to distribute the survey for ex-students IS sought at this stage (Survey 2a). Survey 2a asks ex-students who have become prescribing HPs to indicate their willingness to be involved in stage 3, where they would deliver another survey to their patients. We are seeking guidance from NRES currently as to the status of this sub-study and survey – it is anticipated we WILL need LREC approval or trust approval for this part of the study since it involves prescribing HPs employed by the health authority and trusts and surveys NHS patients’ views. The survey is still at a draft stage and a pilot study is planned. Permission has been granted by UCLan REC at this stage to conduct the pilot study and collect contact details from ex-students volunteering them. UCLan will NOT have access to the University of XXXX database at any time. UCLan will at this stage collect contact details where indicated, but will not contact any prescribing HP until ethical processes are complete. If ethical processes can not be completed within 6 months, UCLan will destroy these details.

For clarity the 2 parts of the study are separated.

Stage 2 - Focus Groups at each HEI site:
All forms for focus groups, information sheets and schedules have been approved by the UCLan REC and their conditions and recommendations adopted as a common method for use with the 8 university focus groups. The question schedule has been developed to cover the key areas of experience of prescribing leads in barriers and facilitators to good prescribing practice, the support issues brought up by the audit, competency and safe practice frameworks, and potential CPD needs. The terms used as probes as far as possible avoid the assumption of negative support systems. The guide schedule was developed from a draft by the co-ordinating team and finalised at our training day in June together with the adoption of a common method to be used by all leads. Forms are included in this application. The overall aim of the focus groups are to explore the key issues identified by the practice audit that support and detract from organisational readiness (Organisational readiness is thought to be achieved when the infrastructure to support the non medical prescribers, such as adequate training, quality control, clinical governance in place).

Sample: Each HEI Lead will select, identify, and contact as far as possible a purposive but representative sample (we recommend in our guidance document including a mix of gender, ethnicity, practice discipline and geographical area covered) of 8-12 prescribing leads from different sections of the area covered by the HEI. All participants will be invited to participate by letter or email from the HEI Lead and given information about the study (see information sheet).

Process and information: Participants will be asked to indicate consent, and consent to the recording at the time of the group and at the same time to fill out a simple information sheet allowing us to describe the sample (see attached participant information sheet). After gaining consent, the group session will be audio-recorded lasting 60-90 minutes guided by a semi-structured question schedule (see attached draft guide schedule). All researchers will be trained to facilitate groups: a lead researcher and a moderator will facilitate the focus groups using our common guide to procedure and our research protocol form (attached).

Setting: We recommend in our guidance document that HEI Leads select a setting where people feel comfortable to speak and where there are no pressures to conform to a ‘corporate view’.
Procedure and researchers:
The broad approach is guided phenomenology using grounded theory: we will use broad areas of enquiry to elicit the experience, attitudes and thoughts of the participants about key issues in organisational readiness. Whilst the planned numbers of informants in each centre will be small, numbers combined across centres will inform findings of commonality as well as difference. This strength will also allow us to identify supportive management policy and practices that might be useful to mainstream and the barriers and risks that our informants can predict or have experienced in practice.

Researchers: all researchers from each HEI conducting focus groups have attended a workshop day/have had training in the common method facilitated by the co-ordination team at UCLan in:
- conducting the focus group.
- analysing the data.

Data Analysis: (delete the inapplicable parts)
- The tape-recorded data will be transcribed at each centre.
- The HEI centre will apply a content analysis exploring emerging themes under the categories identified in the question schedule.
- The HEI will send the completed matrix to the co-ordinating team where an overview technique developed in a study of PND (Oates et al 2004) to help researchers of differing professional backgrounds and research experience will be applied so that results can be analysed locally but can be compared across centres meaningfully. The co-ordinating team (UCLan) contains a member (SH) with previous experience of this method and SH will supervise the overview.

Dissemination: HEI representatives will be given an opportunity to link in with the dissemination strategy for the wider study. Priority will be given to making findings understandable and relevant for staff in the field, education professionals and the Health authority supporting the service.

Ethical Issues: Because sensitive issues may be discussed (ie. Opinions about management support of the participant), this raises particular ethical issues about group discussion:
- If the HEI Lead has reason to believe that focus groups as a whole may be dominated by these issues, we have recommended that individual interviews would be more appropriate or that participants may want to feed back after the focus group their thoughts in another form. All research team members coming into direct contact with participants during interviews will have had appropriate training in the common method.
- If the HEI Lead is in a position that might affect the issues discussed we have recommended that a lower status researcher takes the lead in the focus group
- No access to any information held by the HEIs is required for the UCLan component of the study. Our data information sheets for participants do not include the participant name.
- The co-ordination team is experienced in qualitative research and analysis and will provide support for less experienced partners.
- Consent to recording, data collection and participation will be sought through invitation and at the time.
**Consent:** Initial information about the study (see information sheet) will be provided on invitation to participate by the HEI Leads who are known to participants. Confirmed acceptance will indicate initial consent, but participants will sign a form at the time of the group session (see attached forms). We recommend that confidentiality and opportunities to withdraw are reiterated at the start of the focus group.

**Data security:** All recordings from interviews will be kept in a locked cabinet in a locked office at the participating HEI and destroyed as soon as the transcript is complete. Any computer versions of transcripts will only be held on computers with secure storage at the participating HEIs and the co-ordinating team at UCLan, which are network specific machines, passworded and kept in locked offices. No identifying information will be passed to UCLan. Information shared by UCLan with project partners as part of the wider study will be fully anonymised and care taken to ensure that no information is attributable to individuals.


**Phase 3 – Survey of prescribing health professionals.**

a) **Survey of non medical prescribing health professionals 2a**

Survey 2a was developed and piloted by the steering group of the evaluation collaboration (see attached survey).

**Sample of prescribing HPs:** Each university will contact up to 100 HP ex-students holding a prescribing qualification currently thought to work in the North West with an invitation to participate in the survey enclosing a copy of the survey. This data will be extracted from records held by the university system by the local HEI. **UCLan will not have any access to this information.** Included will be all HPs who qualified from a prescribing course in one of the 8 HEIs identified from January 2004 onwards.

**Process and information:** All surveys include an information sheet about the study and completion and return will indicate consent. A follow up letter will be sent 2 months after the first contact with a copy of survey 2a.

**Data Analysis:** Surveys will be analysed by the co-ordinating university team using descriptive statistics and compared between regions and combined overall.

**Ethical Issues:**

- All participants will be anonymous, however we have asked participants of survey 2a to identify themselves as potential partners for the survey of patients. This information will be detached from the form on receipt and no link will be made to any survey information.
- No access to any ex-student information held by the HEIs is required for the UCLan component of the study. All students will be contacted through their former HEI.
- The co-ordination team is experienced in survey research and analysis and will provide support for less experienced partners.

**Data security:** All data will be entered at one point into a secure computer system and surveys will be destroyed as soon as the database is checked for consistency and reliability. Computers at UCLan are network specific machines, passworded
and kept in locked offices. No identifying information will be passed to or by UCLan. Information shared by UCLan with project partners as part of the wider study will be anonymous and care taken to ensure that no information is attributable to individuals.

We have received permission to pilot survey 2c through the Comensus team (the service user forum at UCLan) and also to collect information about potential partners for the 2c survey through the procedure detailed on the 2a survey.

No contact will be made with any volunteer until full ethics permission is complete for the 2c survey. We are currently applying to NRES for permission.

c) Survey of patients:
The questionnaire is likely to be revised following the pilot study and therefore it is not included here. It covers satisfaction with the service and the experience of patients. Permission for the pilot study has been granted by REC UCLan; we provide information here so that the background will be clear.

Initial pilot study would take place in association with the Service User Agency, Comensus. Comensus will recruit a minimum of 30 patients from the Preston area who have consulted an HP within the last month who consent to completing and commenting on the survey.

Comensus will be asked to recruit a mixed sample including:

- People with long term conditions and people who access the prescribing professional for occasional or single consultations.
- Some people with experience of each professional group (nurses, pharmacists and allied health)
- Some people from minority ethnic backgrounds
- People who have the ability to complete the survey

Exclusion criteria:

- Young people under 18
Focus Group demographic Information

Participant

Time ___________________                 Place _____________________________
Non medical prescribing collaboration team members
Lead ___________________________     Moderator ________________________
University___________________________________________________________

<table>
<thead>
<tr>
<th>Identifier (a number or name assigned to you by the researcher)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Role</td>
<td></td>
</tr>
<tr>
<td>Professional background</td>
<td></td>
</tr>
<tr>
<td>Geographical Area represented</td>
<td></td>
</tr>
<tr>
<td>No. of prescribing health professionals you represent (are responsible for)</td>
<td></td>
</tr>
<tr>
<td>Gender (please circle)</td>
<td>Male</td>
</tr>
<tr>
<td>Age group (please circle)</td>
<td>Up to 25</td>
</tr>
<tr>
<td>Ethnicity (please describe)</td>
<td></td>
</tr>
<tr>
<td>How long have you worked in a prescribing role</td>
<td></td>
</tr>
<tr>
<td>I have received information about the study</td>
<td>Yes</td>
</tr>
<tr>
<td>I consent to participate in the focus group</td>
<td>Yes</td>
</tr>
<tr>
<td>I agree to the recording of the session</td>
<td>Yes</td>
</tr>
<tr>
<td>I understand that I will not be identified in any way from written material resulting from this group and no-one will have access to my individual details except the study researchers.</td>
<td>Yes</td>
</tr>
<tr>
<td>I agree to keep opinions and information revealed by the other participants of this group confidential to the group.</td>
<td>Yes</td>
</tr>
</tbody>
</table>

THANK YOU FOR PARTICIPATING IN THE STUDY
FOCUS GROUP QUESTIONS – NMP study

NB the focus of the questions are in relation to the role of the prescribing lead and in particular the organisational issues of managing, monitoring, developing and delivering this service provision within their trust.

1) NON MEDICAL PRESCRIBING LEAD ROLE

What do you see as being your role as a non medical prescribing lead for your organisation?

- How much of your time is dedicated to this prescribing lead role?
- How were you prepared for this role?
- What type of support do you have for this role?
  (Probe: secretarial / team / management / time. 
  Probe for specific examples – anecdotes, documents that might be available)

2) BEST PRACTICE

Can any one share any examples of ‘good practice’?

- What was the one significant ‘thing’ that made it work?
  (Probe: systems / management / policies – patient safety (medicines / audit); competency – how do you know people are doing a ‘good job’? 
  Risk management.)

3) BARRIERS TO PRESCRIBING

What do you perceive to be the barriers to effective prescribing within the organisation?

- When someone has gained a prescribing qualification, what would be the main issues regionally, locally stopping her/him from being able to use it effectively?
- What do you perceive to be the responsibility of the prescribing lead when someone identifies that there is a lack of support?
- How can these barriers be overcome?
  (Probe: ideas of causes and awareness of barriers to prescribing with reference to support from management, SHA, local trusts, patients, other.)

4) NMP PROGRESSION / FUTURE ROLE DEVELOPMENT

How do you see the role of the non medical prescribing lead developing / progressing within your organisation?

- How could you be supported in fulfilling your role as a prescribing lead?
  (Probe: CPD for non medical prescribers.)

There will be inevitably differences between centres in sample selection and interview and analysis techniques due to researcher individuality or style of working, training, trust policies, time and relations between the research team at each centre.
If you vary the procedure would you please write a sentence or two explaining what you did on the researcher information sheet.
Information sheets (personalised to each university local lead)

Contact Details for focus groups:

Your name  
Department of Nursing  
Your University  
Your Town/City  Postcode  
Your Tel:  
Email: yourname@university.ac.uk

OR

Your name  
Department of Nursing  
Your University  
Your Town/City  Postcode  
Your Tel:  
Email: yourname@university.ac.uk

This project is part of a 3 stage evaluation of practice and impact of prescribing health professionals co-ordinated by the University of Lancashire, in partnership with Bolton, Chester, Edge Hill, John Moores, Manchester Metropolitan, Cumbria, and Salford Universities. Evaluation and research lead: Dr. S. Hacking, University of Central Lancashire. Email shacking@uclan.ac.uk
Invitation to a focus group

The North West Universities non medical prescribing collaboration has representatives from 8 Universities in the North West offering prescribing courses to health professionals, and the North West Health Authority. We are conducting a study to evaluate the impact of prescribing Health Professionals (HPs) on practice and patient outcomes to help develop and progress the service.

Further details of the study are available from the contacts overleaf. This part of the study involves focus groups of prescribing leads for your area. We would like you to come to a focus group to discuss resourcing and support for prescribing health professionals locally and regionally.

Before you decide to help us it is important for you to know why the research is being done and what it will involve. Contacts on the back of this leaflet are for the researchers who will be conducting the groups from your local University; you can contact them to ask questions about the focus groups or the study. No-one else from the collaboration will have access to any identifying information from the group.

What is the purpose of the study?
This study will collect information about your understanding of the role of the prescribing HP and the support that helps place the HP most effectively in the health service; we will also ask what local support (managerial, regional, educational) has or might help new and existing prescribing HPs in the health service.

Why have I been chosen?
You are a prescribing leads or a named representative with organisational understanding of service development and needs for your area.

Do I have to take part?
No, it is up to you to decide whether or not to take part. If you agree to join the group, you will be asked to sign a consent form at the group. Even after agreeing, you are still free to withdraw at any time and without giving a reason.

What do I have to do if I take part?
You will need to come to the group and participate in the discussion led by the researcher. You will be asked to talk about your experiences, thoughts and ideas about support and development of the role of prescribing health professionals. The focus group will take place at a location and time that will be convenient for most of the group and we will try to make it a pleasant experience. The group session will last one hour.

What about privacy?
All information will be kept strictly confidential. You will be asked if we can tape record the conversation so that we get things right and we will ask you for some basic demographic information so that we can describe the group (age group, gender, ethnicity etc.). We will then write notes from the tapes. The tapes will be identified as “prescribing group – date” and stored in a locked cupboard in a locked office until the researcher writes notes for a period of not more than 2 months. The tapes will be destroyed immediately the notes written up from them are checked. Notes will be written and stored on a computer at the local University and sent electronically to the co-ordinating University (Central Lancashire) where they will be kept on a secure drive, password protected and anonymised as to area and group. After 5 years all this information will be deleted from all computers involved. Anything that could be personal to you, such as your name, will be changed on the notes to protect your identity and neither the co-ordinating university nor the SHA will have access to any personal information. You will be given the chance to read through anything we write about your group and comment on it if you wish. Only members of the research team will have access to the notes and tapes.

What if I change my mind?
You have the right to change your mind about your taking part in the study. You can leave at any point without giving a reason.

What will happen to my answers?
All the conversations from each focus groups will be combined in a written report that will help to explore how support for prescribing health professionals can be resourced and implemented better. Some results may also be printed in academic journals.

Thank you for your interest in this study
9.4 Questionnaires

9.4.1 Non medical prescribing practitioners

9.4.2 Medical practitioners

9.4.3 Proposed patient questionnaire
Survey of Non Medical Prescribing Health Professionals

Information for participants

The North West Universities Non Medical Prescribing Collaboration (*) is conducting an evaluation to advise the Strategic Health Authority in the North West on outcomes for non medical prescribing and also to help improve and develop courses for health professionals in the region.

We are asking Health Professionals who graduated from one of the North West Universities with a non medical prescribing qualification to help with this project in order to evaluate the outcomes of non medical prescribing. To participate you simply fill in this survey and send it back in the next 2 weeks if possible to ensure it will be processed in May.

We would like to assess how many former students are currently prescribing and your use of the skills you learnt on the course. However, if you are not yet prescribing or if you do not work in this area any more we still want your questionnaire back as it will help us understand overall provision within the region.

- If there are any questions you don’t want to answer just leave them blank.
- If you make a mistake, cross over the wrong answer and circle the new answer you choose.
- If you don’t find an answer that suits you, write your answer underneath the question.
- It should take around 15 to 20 minutes.
- When you have finished, if there is anything else you want to say, please write in the comments box at the back.

Your answers are completely confidential. If you include comments we might use direct quotations, where appropriate, in published material but we will not use any information or combination of information that might identify you.

Your survey is only one part of the evaluation project. You can participate in this stage-one survey only, or in any or both of two more parts of the study. Please look at the separate sheets attached.

If you would like further information about the survey or the extended projects, please tell us your name and contact information on the separate sheet provided or email us:

Email: Jean Taylor email jmtaylor2@uclan.ac.uk (01772 893771) or Sue Hacking shacking@uclan.ac.uk (01772 893703) or Sue Hacking, Non Medical Prescribing Project, Dept. of Nursing, University of Central Lancashire, Brook Building, PRESTON PR1 2HE

NOTE: If you decide to participate in the survey, please send your survey back within 2 weeks whether or not you want to participate further.

When you have finished, please seal the survey inside the stamped addressed envelope. In case the envelope is missing just write the above address on another envelope and post it to us. If you want to send the survey by email please contact SHacking@uclan.ac.uk for an electronic copy.

Thank you very much for your assistance

(*) The North West Non Medical Prescribing Collaboration is a professional development group of Prescribing course leaders and researchers from UCLAN Bolton, Chester, Edgehill, John Moore’s, Liverpool, MMU, St. Martin’s, Salford and members of the Strategic Health Authority North West.

Data storage: Returned surveys will be destroyed within 3 months of receipt. The information will be entered on to a password protected database stored on a secure drive at the University of Central Lancashire. No information will be stored on individual computers. Data will be stored digitally for a period of 5 years and then destroyed.
Survey of Non Medical Prescribing Health Professionals

1. What month/year did you qualify from your prescribing course? 

2. At which University did you complete your prescribing course? 

3. What year did you first qualify/register as a healthcare professional? (for example: nurse, pharmacist, social worker) 

4. Have you changed your area of practice since qualifying from your prescribing course? Please circle your answer: Yes  No

5. Please indicate which area of practice best reflects the majority of your work now (mark one only)
   - Practice nurse
   - PMS Nurse
   - District Nurse
   - Nurse A+E/Minor injuries unit
   - Palliative Care Nurse
   - Children’s Nurse
   - Other Nurse (please state)
   - Community Pharmacist
   - Primary Care Pharmacist
   - Physiotherapist
   - Optometrist
   - Management (Nursing / Allied Health / Pharmacy please delete)
   - Other – please state

6. What kind of organisation do you currently work for? Please circle your answer
   - PCT
   - GP
   - Acute Trust
   - Mental Health Partnership
   - Other

7. In which zone are you based? Please circle your answer
   - Cumbria /Lancs
   - Cheshire /Mersey
   - Gtr./Lancs
   - Manchester

8. Is your current job? Please circle your answer
   - Full time
   - Part time (0.5 or more)
   - Part time (0.2-0.5)
   - 1 day/wk (0.2) or less
   - Other (please state)

9. How old are you? Under 25  25-34  35-44  45-54  over 55

10. Are you? Male  Female

11. How do you describe your ethnic group?
   - White British/Irish
   - Other White group
   - Chinese
   - Mixed ethnic origin (of groups below)
   - Pakistani
   - Bangladeshi
   - Indian
   - Other Asian group
   - Black British
   - Black Caribbean
   - Black African
   - Other Black group
   - Other

12a. Have you prescribed since qualifying? Yes  No

12b. Are you currently (last 3 months) Prescribing*? Yes  No

(a) Please go to Question 13

Thank you for your help - now return the survey
13. How many patients do you usually see in a week in the part of your job that deals with prescribing related clinical contact? Please circle your answer

<table>
<thead>
<tr>
<th>One or none</th>
<th>Under 10</th>
<th>11-50</th>
<th>51-100</th>
<th>Over 100</th>
</tr>
</thead>
</table>

14. Approximately what proportion of your role or work activities require you to use your non medical prescribing competencies? *(this includes patient consultation, management including prescription writing)* Please mark your estimate on the line below – from 0 (none at all) to 100% (all the time)

<table>
<thead>
<tr>
<th>0</th>
<th>25%</th>
<th>50%</th>
<th>75%</th>
<th>100%</th>
</tr>
</thead>
</table>

15. Thinking about the last few months, how many prescriptions would you write in an average week?

<table>
<thead>
<tr>
<th>More than 20</th>
<th>10 to 20</th>
<th>5-9</th>
<th>Just a few</th>
<th>I only prescribe occasionally</th>
<th>Can't tell/ too varied</th>
</tr>
</thead>
</table>

16. Which of your prescribing roles have you utilised? Please circle one answer

<table>
<thead>
<tr>
<th>Supplementary</th>
<th>Independent</th>
<th>Both</th>
</tr>
</thead>
</table>

17. What kind of prescription/consultations are you usually called upon for? *Mark all the boxes that apply*

- Repeat prescription
- Mental Health
- Child Health Clinics
- Sexual Health
- Musculoskeletal disorders, back problems
- Controlled drugs
- Common minor complaints
- Midwifery
- Wound care/ tissue viability
- Palliative care/symptom control
- Adult immunisations
- Analgesia/ pain management

Management of chronic diseases:

- Respiratory
- Cardiovascular
- Diabetes
- Gynae
- HRT
- Family planning

Women’s Health

- I find myself listening to patients and consulting more than prescribing
- Other (please state)

18. Thinking about before you gained your prescribing qualification

How would you have accessed a prescription for the patient (thinking about an average patient in an average week)?

- There and then (a Doctor is available on the premises)
- I would need to seek or wait for a Doctor
- Advise patient to come back for another appointment
- Patient would have to travel to somewhere else
- Other (please state)

From your answer above:

a. What would the shortest delay have been for the patient? [ ] minutes
b. What would the longest delay have been for the patient? [ ] minutes

c. Can you estimate below how much time is saved for you for one patient episode, on average, through your ability to prescribe?

<table>
<thead>
<tr>
<th>No. of minutes for you</th>
<th>□ I don’t save time</th>
</tr>
</thead>
</table>

(Place to Q20)

(Place to Q19)

19. If you could not answer parts or all of Q18, please tell us why opposite

- Changes and innovations in the service make Q18 impossible to estimate
- I don’t know/can’t remember what the previous situation was like
- I don’t know
- It now takes longer to get the prescription to the patient because:
  - Prescriptions used to be done in batches
  - The previous service had more resources/ less responsibilities
  - Organisational/structural issues
  - Another reason
20. How many days a week are you involved with each of the following activities in an average week? Please circle the number of days opposite

<table>
<thead>
<tr>
<th>Activity</th>
<th>Number of days</th>
</tr>
</thead>
<tbody>
<tr>
<td>Providing information to patients about medication</td>
<td>1  2  3  4  5 days</td>
</tr>
<tr>
<td>Initiating prescribing schedules</td>
<td>1  2  3  4  5 days</td>
</tr>
<tr>
<td>Supporting patients</td>
<td>1  2  3  4  5 days</td>
</tr>
<tr>
<td>Supporting carers</td>
<td>1  2  3  4  5 days</td>
</tr>
<tr>
<td>Continuing Professional Development</td>
<td>1  2  3  4  5 days</td>
</tr>
<tr>
<td>Dealing with Pharmaceutical Representatives</td>
<td>1  2  3  4  5 days</td>
</tr>
<tr>
<td>Communication with medical team</td>
<td>1  2  3  4  5 days</td>
</tr>
</tbody>
</table>

21. Have you, as a direct consequence of being a non medical prescribing health professional, achieved any of the following in the last year? (please mark all that apply – but only use one box for one incident)

- Reduction of polypharmacy
- Identified a contraindication
- Identified an existing incorrect prescription
- Corrected another drug error
- Identified a herbal/drug interaction
- Something else (please state) ____________________________

22. In the last year, how often have you had opportunities to seek advice from medical practitioners?

<table>
<thead>
<tr>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>No need</td>
</tr>
<tr>
<td>None but would like to</td>
</tr>
<tr>
<td>Only opportunistically</td>
</tr>
<tr>
<td>As part of clinical supervision</td>
</tr>
<tr>
<td>As needed as well as supervision</td>
</tr>
</tbody>
</table>

23a. In the last year, which of the following professionals have you liaised with in relation to prescribing decisions. (Please mark as many as apply)

- Nurses/Nurse Consultants
- Pharmacists
- Alternative or Complementary Medicine
- Manager
- GP
- Consultant Medical
- Hospital doctor
- Other (please state) ____________________________

23b. With which of the above would you appreciate more opportunities for liaison and advice? (please state)

24. Have you had regular opportunities to network with other prescribing health professionals in the last year?

<table>
<thead>
<tr>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>No need</td>
</tr>
<tr>
<td>No Occasion - ally</td>
</tr>
<tr>
<td>Regularly as needed</td>
</tr>
</tbody>
</table>

25. Have you had regular opportunities for updates and further training in the last year?

<table>
<thead>
<tr>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>No need</td>
</tr>
<tr>
<td>No Occasion - ally</td>
</tr>
<tr>
<td>Regularly as needed</td>
</tr>
</tbody>
</table>

26. Can you identify any training needs in prescribing practice you may have that are not fulfilled?

27. Are there any additional courses you have found helpful in your prescribing practice that you would recommend?

28. How satisfied are you with the support in your current prescribing role? Please circle your answer

<table>
<thead>
<tr>
<th>Source</th>
<th>Very poor</th>
<th>Poor</th>
<th>Adequate</th>
<th>Good</th>
<th>Excellent</th>
</tr>
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<tbody>
<tr>
<td>Employer level</td>
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<tr>
<td>Senior management level</td>
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<tr>
<td>Line management level</td>
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<td>Colleagues</td>
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<td>Associated services</td>
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<td>Premises &amp; equipment</td>
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<tr>
<td>Quality of training</td>
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Thank you very much for filling in the survey
Survey of Medical Practitioners working with Non Medical Prescribing Health Professionals

The North West Universities Non Medical Prescribing Collaboration (*) is working with the Strategic Health Authority in the North West to evaluate the non medical prescribing service, helping to improve the service and also to further develop courses for health professionals in the region.

The first part of this project is a survey of non medical prescribing health professionals but this is only one part of the evaluation. We would also like to survey the views of medical practitioners currently working with non medical prescribers in the North West.

This is why we ask you to identify a medical practitioner with whom you work so that we can send them a survey. The medical practitioner is in no way obliged to participate but we would like you to give us their contact details or send this form to them so that they can request a survey and details of the evaluation.

When we receive your completed survey back, we detach this form; there is no way to cross link from your form to that of anyone else. Our invitation is a standard letter to medical practitioners working with non medical prescribing health professionals and contains details of ethics clearance and protocols etc.

Could you identify a medical practitioner/medical doctor (MD) with whom you work regularly? So we can send them a survey (a short 10 item tick box version).

☐ I have asked the MD and he/she would like you to send an invitation to participate.
☐ I have not asked the MD.
☐ I am the MD.
☐ I have asked the MD but he/she prefers not to participate.
☐ I do not wish to ask my MD (but I am still sending my survey back).
☐ I have emailed Shacking@uclan.ac.uk with the details opposite

Medical Practitioner
Type of practitioner (area of Practice)

Medical Practitioner - Name and address

Name…………………………………………………
Email ..........................................................
Position .....................................................
Contact address ...........................................................................................................
Postcode .....................................................

NOTE to MD: If you agree to be contacted, you will receive information about the study and an invitation to participate which may be declined. Your details will be kept confidential to the study co-ordinators. Questionnaires will not be linked to details. The list of contacts will be kept for 12m. and then destroyed.

Thank you very much

(*) The North West Non Medical Prescribing Collaboration is a professional development group of Prescribing course leaders and researchers from UCLAN Bolton, Chester, Edgehill, John Moore’s, Liverpool, MMU, St. Martin’s, Salford and members of the Strategic Health Authority North West.
Survey of patients of Non Medical Prescribing Professionals

Information for Non Medical Prescribing Professionals who wish to participate

The North West Universities Non Medical Prescribing Collaboration (*) is working with the Strategic Health Authority in the North West to evaluate the non medical prescribing service, helping to improve the service and also to further develop courses for health professionals in the region.

The first part of this project is a survey of non medical prescribing health professionals but this is only one part of the evaluation. We would also like you to help us survey the views of your patients.

If you would like to participate by asking your patients to fill in a survey, you may either send this form to us separately, email it or include it in the envelope with your completed survey (when our administration receives your completed survey back, they detach the form so that the survey you have already filled in remains anonymous). This is why we ask you for your contact details so that we can send you details about the evaluation and an invitation to participate, including information about our ethics clearance and information sheets for your employer. Your part will simply be to ask a number of your patients to fill in a survey at home and send it to us. We will send you updates of the project and our findings at the end. Contacting us for information in no way obliges you to participate and you may decide not to participate or to withdraw at any time.

Would you be interested in participating in the next part of this evaluation? This will involve you distributing a short questionnaire to your patients?

☐ Yes you can send me information about the next part (I have filled in my contact details opposite)

☐ No I do not want any more involvement (but I am still sending my survey back)

☐ I have emailed SHacking@uclan.ac.uk with the details opposite.

Non medical health professional
Type of health professional (area of Practice)

<table>
<thead>
<tr>
<th>Name and address</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name………………………………………………………….</td>
</tr>
<tr>
<td>Email …………………………………………………………….</td>
</tr>
<tr>
<td>Position …………………………………………………………….</td>
</tr>
<tr>
<td>Contact address (if you prefer email – please indicate)</td>
</tr>
<tr>
<td>…………………………………………………………….</td>
</tr>
<tr>
<td>Postcode ………………………………………………….</td>
</tr>
</tbody>
</table>

NOTE: If you agree to be contacted, you will receive information about the study and an invitation to participate which may be declined. Your details will be kept confidential to the study co-ordinators. Questionnaires will not be linked to details. The list of contacts will be kept for 12m. and then destroyed.

Thank you very much

(*) The North West Non Medical Prescribing Collaboration is a professional development group of Prescribing course leaders and researchers from UCLAN Bolton, Chester, Edgehill, John Moore’s, Liverpool, MMU, St. Martin’s, Salford and members of the Strategic Health Authority North West.
Dear Dr.,

If you have already completed the enclosed questionnaire on Non Medical Prescribing over the North West of England, or decided not to participate, thank you and please ignore this reminder. Because our questionnaire is anonymous, reminders are sent to everyone.

The North West Universities non medical prescribing collaboration in association with NHS North West is evaluating the impact of non medical prescribing over the region. There has not previously been a large scale study on the impact of non medical prescribing on the NHS and this study will inform regional planning.

As a medical practitioner in regular contact with non medical prescribers, your views on non medical prescribing are important and we invite you to complete our survey. Your participation is voluntary and the questionnaire is anonymous. Please read the front page for more information to help you decide if you wish to participate.

Should you decide to participate, a reply paid envelope is enclosed. We would be grateful if you could return it in the next couple of weeks.

Alternatively, you can contact idonnelly1@uclan.ac.uk for an electronic version.

If you have any queries, please contact the researchers at the address on the questionnaire.

Thank you for your time.

Sue Hacking and Jean Taylor
Co-ordination team, NW Universities - nmpc,
Dept. Nursing, University of Central Lancashire
Preston.

Enc: Copy of the questionnaire, return envelope
Survey of Medical Practitioners working with non medical prescribing health professionals

Invitation to medical practitioner

This survey for medical practitioners is part of an evaluation of the impact of non medical prescribing in the North West conducted by the North West Universities non medical prescribing collaboration (*). We have already surveyed non medical prescribers (NMPs) in your area. Part of that survey asked NMPs to help us identify medical practitioners with whom they have regular contact. You were identified as a medical practitioner who has regular contact with non medical prescribers; we now invite you to help us by filling in this survey and sending it back to us, if possible in the next 2 weeks to ensure processing in March/April.

There are 10 questions, it should take about 10 minutes. The survey is about your contact and impression of the skills, working practices and training of non medical prescribers.

- If there are any questions you don’t want to answer just leave them blank.
- If you make a mistake cross over the wrong answer and circle the new answer.
- If you don’t find an answer that suits you, write your answer or comment underneath the question.
- There is a comments box at the back if you have anything to add.

Your responses are completely confidential and there is no way to link your contact information with your survey responses. If you include comments we might use direct quotations in publications, where appropriate, but we will not use any information or combination of information that might identify you. No-one but the research staff at University of Central Lancashire will have access to contact details or completed surveys and all contact details will be deleted in August/September 2008. If you wish us to remove your name from our database, please let us know, using the reply envelope or by email.

When you have finished, please seal the survey inside the addressed envelope. The envelope does not need a stamp. In case the envelope is missing just write this address on another envelope and post it to us:

Sue Hacking, Non Medical Prescribing Project
Dept. of Nursing, University of Central Lancashire
317 Brook Building, PRESTON PR1 2HE

Thank you very much for your assistance.

Contact us: If you have any questions about this survey or the research please contact Sue Hacking, shacking@uclan.ac.uk (01772 893703) or Jean Taylor jmtaylor2@uclan.ac.uk (01772 893771) University of Central Lancashire Dept. of Nursing

Data storage: Returned surveys will be destroyed within 3 months of receipt. Information is stored on a database on the passworded secure drive at the University of Central Lancashire which operates a networked secure system. Anonymised data will be retained for a period of 5 years and then deleted.

(*) North West Universities Non Medical Prescribing Collaboration is a professional development group of leaders of non medical prescribing courses and researchers from the Universities of Central Lancashire, Bolton, Chester, Cumbria, Edgehill, John Moore’s, Liverpool, MMU, Salford and includes members of NHS North West.
Please circle your answer

1. How old are you?  
   - 35 or younger  
   - 36-50  
   - 51 +

1a. Are you?  
   - Male  
   - Female

2. Your ethnic group

White British /Irish
Pakistani
Black British
Other White group
Bangladeshi
Black Caribbean
Chinese
Indian
Black African
Other Asian group
Black British
Black Caribbean
Black African
Other Black group
Mixed or other ethnic origin (please write in) ..................................................

3. How many years Post Graduate experience as a qualified Medical Practitioner do you have?  
   Please Circle:
   - Under 2 Years
   - 2-4 Years
   - More than 4 Years

4. What kind of professional contact do you have with non medical prescribers?  
   Please write below

   4a. How long have you been working with non medical prescribers? ____________ years

   4b. How many NMPs have you had regular contact with in the last year? ___________

5. What area of practice are you currently working in?

   5a. Allied Health
   - Medical
   - Pharmacy
   5b. NHS?  
      - Yes  
      - No

   Please circle the best answer

   PCT
   GP
   Acute
   Hospital
   Mental Health
   Other (please tell us)
   Practice
   Trust
   Partnership/Trust
   ________________

6. Which zone are you based?  Please circle

   - Cumbria/Lancs
   - Cheshire/Mersey
   - Gtr. Manchester

7. What kind of prescription/consultations is the NMP you work with usually called upon for?  Please mark all the boxes that apply.

   - I don’t know
   - Repeat prescriptions
   - Common minor complaints
   - Mental Health
   - Midwifery
   - Child Health Clinics
   - Wound care/ tissue viability
   - Sexual Health
   - Palliative care/symptom control
   - Musculoskeletal disorders or back problems
   - Adult immunisations
   - Controlled drugs
   - Analgesia/pain management
   - A particular area of expertise
   - Variety of complaints, no particular area
   - Somatisation / areas where medical practitioners are less certain
   - Consultation and advice to patients
   - Management of chronic diseases:  
     - Respiratory
     - Gynae
     - Cardiovascular
     - HRT
     - Diabetes
     - Family planning
     - Other (please state) ..............................................................
8a. Are you given regular opportunities to consult with or meet non medical prescribers professionally? *Please circle the best answer*

<table>
<thead>
<tr>
<th>No need</th>
<th>No but would like to</th>
<th>Only opportunistically</th>
<th>only as part of clinical supervision</th>
<th>As needed as well as supervision</th>
</tr>
</thead>
</table>

8b. In the last year which of the following health professionals have you liaised with in relation to prescribing decisions. *Please mark as many as apply*

- Nurses/Nurse Consultants
- Pharmacist
- Alternative or Complementary Medicine
- Manager (line/ practice/ hospital / _______)
- Other (please state) __________________

8c. Please indicate the health professionals you would like more opportunities for consultation with

- Nurses/Nurse Consultants
- Pharmacist
- Alternative or Complementary Medicine
- Manager (line/ practice/ hospital / _______)
- Other (please state) _______________

9a. Thinking about the NMPs you have contact with, please circle your impression of the following support structures for NMPs in practice.

<table>
<thead>
<tr>
<th>Guidelines for patient safety</th>
<th>Don’t know</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poor</td>
<td>some existing guidelines</td>
</tr>
<tr>
<td>Not always clear</td>
<td>No monitoring</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Competence framework</th>
<th>Don’t know</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poor</td>
<td>some existing guidelines</td>
</tr>
<tr>
<td>Not always clear</td>
<td>no monitoring</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CPD and knowledge updating</th>
<th>Don’t know</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poor</td>
<td>adequate good excellent</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Communication from their employer and management structure</th>
<th>Don’t know</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poor</td>
<td>adequate good excellent</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Job and time expectations</th>
<th>Don’t know</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poor</td>
<td>adequate good excellent</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>The original training of NMPs (adequacy of knowledge, experience etc.)</th>
<th>Don’t know</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poor</td>
<td>adequate good excellent</td>
</tr>
</tbody>
</table>

9c. Can you identify any gaps in training for non medical prescribers?
10. What is your impression of patient outcomes and use of non medical prescribers?

<table>
<thead>
<tr>
<th>Statement</th>
<th>Not at all</th>
<th>Particularly</th>
<th>Don’t know</th>
<th>Sometimes</th>
<th>Yes, definitely</th>
</tr>
</thead>
<tbody>
<tr>
<td>NMPs have more time with patients than medical practitioners.</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>NMPs are more likely than a medical practitioner to prescribe at a consultation with a patient.</td>
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<tr>
<td>Use of NMPs is most cost effective for patients with minor complaints.</td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>NMPs save time for medical practitioners.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The patient gets seen more quickly through a non medical prescriber than through an appointment with a medical practitioner.</td>
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<tr>
<td>NMPs are best used for their expertise in a particular area, rather than generally for minor complaints.</td>
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<tr>
<td>NMPs are often more effective than a medical practitioner for patients with mental health problems.</td>
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<tr>
<td>Patients tend to see their non medical prescriber more often than they would do a medical practitioner</td>
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<tr>
<td>Non medical prescribers are good at the social side of consultations with patients.</td>
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<tr>
<td>Patients have confidence in NMPs for more serious complaints.</td>
<td></td>
<td></td>
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<tr>
<td>Patients prefer to see a medical practitioner on their first presentation, and then see the NMP on subsequent appointments.</td>
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<tr>
<td>Patients tend to want to see the medical practitioner rather than the NMP because of social concerns (sick notes, worries, something else is concerning them than the illness)</td>
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<tr>
<td>NMPs are good at managing women's complaints</td>
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<tr>
<td>NMPs prescribe more often for minor complaints than medical practitioners.</td>
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<tr>
<td>NMPs tend to see a different range of complaints than medical practitioners.</td>
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<tr>
<td>Working with NMPs does add significant time to my own job</td>
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</tbody>
</table>

Anything you’d like to add/ comment upon
Prescribing Survey

Information

A non medical prescribing Health Professional is a qualified Nurse, Allied Health worker, or Pharmacist (we do not include Dentists in this survey) specially trained to prescribe medicine, treatment or pills, like a doctor can do, but who is not a medical Doctor. The survey is ONLY about the non medical prescribers; don’t include visits to your Doctor.

Why me? (Name and profession)
Your non medical prescriber ______________________________ is helping us to find patients who have received a prescription in the last three months so they can tell us what they think of the service.

What is it for?
The survey covers patients in Lancashire, Cheshire, Merseyside, Manchester and Cumbria. Your answers will help NHS health planners in the North West to understand the views of people using the service.

Privacy
The survey asks five questions about you; this is so we can find out what kind of people use the service and to represent the views of different groups (for example, people in work might have different needs than people who don’t work). We do not ask for names or addresses and we do not have any information about the people the NMP contacts; there is no way anyone can be identified. No one from your healthcare service will see your answers or know if you have sent the survey back. No combination of information that might identify you will be used in any public document.

What if I don’t want to do it?
Even if you say yes, you will help, and your NMP gives you a survey, and then later decide that you do not want to fill in the survey, this is your decision and you do not need to explain. Whether you fill in the survey or not, it will not affect any care or service that you receive.

How long will it take?
The survey has 15 questions and should take around 10-15 minutes to complete.

I need extra help
Your non medical prescribing health professional should ask you if you need extra help and contact us for large type or foreign language versions. Please ask your non medical prescriber to contact us for other help. If you want to know how someone else such as a relative can help you, so that you can be included, ask them to read the questions to you and to circle the answer or tick the box that you choose.

What if I make a mistake or can’t find an answer?
If there are any questions you don’t want to answer just leave them blank.
If you make a mistake cross over the wrong answer and circle the new answer you choose.
If you don’t find an answer that suits you, write your answer underneath the question.
There is a comments box at the back if you have anything to add.

I’ve finished, what do I do now?
Please seal the survey inside the addressed envelope. It does not need a stamp. In case the envelope is missing, phone us for another one, or write this address on a stamped envelope and post it to us.

Sue Hacking, Non Medical Prescribing Project
School of Nursing and Caring Science, University of Central Lancashire, 313 Brook, Preston, Lancs PR1 2HE
Thank you very much for your assistance. Sue Hacking and Jean Taylor. If you have any questions about this research contact Sue Hacking 01772 893703 or email shacking@uclan.ac.uk or jmtaylor@uclan.ac.uk
**ABOUT YOU:**  
*Please circle your answer*

1. How old are you?  
   - Under 25  
   - 25-34  
   - 35-44  
   - 45-54  
   - over 55

2. Are you?  
   - Male  
   - Female

3. **ABOUT YOU:** Your ethnic group  
   *Please mark the box for the best answer*
   - □ White British/Irish  
   - □ Other White group  
   - □ Chinese  
   - □ Mixed ethnic origin (of groups below)  
   - □ Pakistani  
   - □ Bangladeshi  
   - □ Indian  
   - □ Other Asian group  
   - □ Black British  
   - □ Black Caribbean  
   - □ Black African  
   - □ Other Black group  
   - □ Other (please write in)

4. **ABOUT YOU:** Are you in paid employment?  
   *Please circle the best answer or write in underneath if none apply*
   - Full time  
   - Part time  
   - Odd days  
   - No  
   - Retired  
   - Sick  
   - Student
   Other (please write in)

5. **ABOUT YOU:** Where are you living at the moment?  
   *Please mark one best answer*
   - At home  
   - shared with other people *(that I share a relationship with eg. partner and /or children)*
   - At home  
   - shared with other adults *(no relationship)*
   - At home  
   - Alone
   - □ Temporary accommodation B & B, hostel
   - □ A health/social service related accommodation *(e.g. care home)*
   - □ I don’t have a fixed address
   - □ In hospital *(any type)*
   - □ Other *(please write in)*

6. **ABOUT YOUR HEALTH:** Please write in this box whatever words you think best describe your main health problems over the last few months *(not just the problem that you saw the non medical prescriber for)*. Use as many or as few words as you like. This might be a diagnosis, or you may prefer to use your own words. If there isn’t enough room you can include more on a separate sheet.

7. **ABOUT YOUR HEALTH:** Please briefly describe the health problem that you saw the non medical prescriber named in the information sheet *(If this is the same as Q6 just mark this box)*

8a. Have you seen a medical doctor *(GP/consultant/hospital doctor/mental health doctor)* for the health problems above in the last few months?  
   - Yes  
   - No

8b. Over the past few months, have you taken medication regularly for your health? *(physical or mental health)*  
   - Yes  
   - No

9. **ABOUT YOU AND YOUR NMP:** The meeting/visit with the non medical prescriber who gave you this survey was: *(please circle)*
   - At a clinic  
   - At a hospital  
   - they visited  
   - At the GP  
   - a pharmacy  
   - by practice  
   - telephone
   Other *(please tell us)*
10. **ABOUT YOU AND YOUR NMP:** On your last contact with the non medical prescriber, did you feel satisfied with the treatment/service you were given? *Please circle your answer*

<table>
<thead>
<tr>
<th>Not at all</th>
<th>Not particularly</th>
<th>So-so</th>
<th>Yes</th>
<th>Yes definitely</th>
</tr>
</thead>
</table>

10a. Can you tell us briefly why you chose the answer above to Q13?

11. **ABOUT YOUR CONTACT WITH THE NMP:** Do you see the non medical prescriber for someone else’s health problems? *If Yes, please mark as many as apply below*

- [ ] No
- [ ] All my visits are for another person
- [ ] Occasionally for another adult
- [ ] Frequently for another adult
- [ ] For a Child
- [ ] Other ____________________________

Please go on to Q12.

12. **ABOUT YOUR CONTACT WITH THE NMP:** Over the past three months, on average, how often have you had contact with a non medical prescriber at the service where you got this survey? *(Please include all contacts if you have seen more than one NMP. If you didn't get a prescription, please include the visit anyway.) Please circle the best answer – some answers overlap. Please make a best guess if you are unsure about who is and who isn't an NMP.*

<table>
<thead>
<tr>
<th>First visit</th>
<th>2 or 3 times</th>
<th>4 -10 times</th>
<th>Weekly</th>
<th>Frequently (more than once a week)</th>
</tr>
</thead>
</table>

13. **ABOUT YOUR USE OF NMP:** What kind of prescription or medical advice have you visited the non medical prescriber for in the last three months? *(Please mark as many as apply even if you didn't get a prescription on that occasion).*

- [ ] Repeat prescription
- [ ] Child health
- [ ] Women’s health (HRT etc.)
- [ ] Back problems or other orthopaedic
- [ ] Controlled drugs
- [ ] Pain management
- [ ] Sexual health / family planning
- [ ] Mystery pains/symptoms that the doctor does not understand
- [ ] Need to talk to someone / advice
- [ ] A particular problem where the non medical prescriber is an expert *(please write in)*
- [ ] Severe condition that needs regular check-ups and prescriptions ____________________________

Other (please specify)______________________________

14. **ABOUT YOUR USE OF OTHER HEALTH PROFESSIONALS:** Have you had contact with any of these health professionals in the last few months for your own health? *Please mark as many as apply.*

- [ ] Nurse or health visitor (any type)
- [ ] Allied Health Professional *(physiotherapist/ osteopath)*
- [ ] Pharmacist
- [ ] Nurse consultant
- [ ] GP
- [ ] Hospital doctor (any type)
- [ ] Hospital consultant / specialist
- [ ] Counsellor or mental health worker
- [ ] Alternative/ Complementary medicine practitioner *(eg acupuncture, homeopath, herbalist, massage)*
- [ ] Other ____________________________ (please tell us what kind)
15. What do you think of your non medical prescriber?  
*Please mark the best answer for each question*

<table>
<thead>
<tr>
<th>Question</th>
<th>Not at all</th>
<th>Not particularly</th>
<th>Don't know</th>
<th>Yes</th>
<th>Yes, definitely</th>
</tr>
</thead>
<tbody>
<tr>
<td>(S)he has more time to listen to patients than Doctors</td>
<td></td>
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<tr>
<td>(S)he is more likely to give me a prescription than the Doctor</td>
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<tr>
<td>I would see the NMP for minor problems</td>
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<tr>
<td>I don't have to wait as long to see her/him as a Doctor</td>
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<tr>
<td>Getting a prescription there and then saves me time some other way</td>
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<tr>
<td>I don't really know if they can deal with the condition so I'd rather see a Doctor</td>
<td></td>
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<tr>
<td>(S)he is particularly good/knowledgeable for the kind of problem I am being treated for</td>
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<tr>
<td>My previous experience of NMPs is good</td>
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<tr>
<td>I feel I can visit them more often than I would do a GP or Doctor</td>
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<tr>
<td>I don't particularly go for a prescription, more for advice or to talk to someone about health problems</td>
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<tr>
<td>I would go to see him/her about more serious problems</td>
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<tr>
<td>I prefer to see a Doctor as a first appointment and then I’m happy to see the NMP if it needs following up</td>
<td></td>
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<tr>
<td>I feel like I’m being ‘fobbed off’ when I really want to see the GP or Doctor</td>
<td></td>
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<tr>
<td>I need to see the Doctor anyway because I need a sick note or other paperwork</td>
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<tr>
<td>I need to see the Doctor rather than the NMP because I have worries about the condition</td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>(S)he is very good at dealing with women’s problems</td>
<td></td>
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<tr>
<td>(S)he deals with different medicines or treatments than my Doctor would do</td>
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</tr>
</tbody>
</table>

Anything you’d like to add

Thank you very much for filling in the survey.
9.5 Detailed analysis of time saved.
Q18b Delay in accessing medication for the patient

Eighty four NMPs responded to this question in Cumbria & Lancashire. Before their prescribing competencies, the delay in accessing the prescription for patients was estimated to, at the shortest, an average 2.6 hours to, at the longest, an average time of 12 hours, but there was a lot of variation in these figures. Shortest estimates ranged from one minute to 48 hours, and longest estimates ranged to a whole week.

Taking the median point, at 7.48 hours for one patient and the average 20 patients a week served by an NMP, potentially each week 150 hours of delays or 6 days are saved for patients of one NMP. Extrapolating to the average 40 weeks a year of activity, approximately 6000 hours or 250 days of delay annually for patients of one NMP could have been saved and thus for this sample of 84 NMPs, 21,000 or so patient days every year assuming estimates are near accurate.

<table>
<thead>
<tr>
<th>LANCS/CUMBRIA</th>
<th>Time saved (on average patient over one week)</th>
<th>Time saved for an average caseload of 20 patients in one week attending one NMP</th>
<th>Time saved for an average caseload of 20 patients per week in one year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Estimate of delay in access for patient</td>
<td>Shortest estimate (hours)</td>
<td>Longest estimate (hours)</td>
<td>Median</td>
</tr>
<tr>
<td>Estimate of time saved for NMP</td>
<td>2.6 (SD 8.8)</td>
<td>12 (SD 23.3)</td>
<td>7.4</td>
</tr>
<tr>
<td>Estimate of time saved for NMP</td>
<td>1.44 (SD 6.7)</td>
<td>30 (1.5 days)</td>
<td>1200 (50 days) of NMP time</td>
</tr>
</tbody>
</table>

Of course while these statistics can represent a real saving of patient time and access to medication, this exercise is not intended to represent a real situation for staff since staff would be occupied with other activities and waiting would not actually consume consecutive working time as such.

Q18c Time saved for the NMP

In asking NMPs either about time saved for them, sixty one NMPs responded to the questions with an average estimated time saved on attending an average patient of 1.5 hours a week. Shortest estimates were 5 minutes and longest, 48 hours. Extrapolating as before, to the average 20 patients a week, 30 hours might be saved and over 40 weeks activity potentially approximately 50 days of NMP time could be saved per annum, approximately 3050 days (73200 hours) of time between the 61 NMPs in this sample were potentially saved.

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7 This estimate was derived from our question 13 (How many patients do you usually see in an average week in the part of your job that deals with prescribing related clinical contact?)
8 7.4 hours/24 x 40 weeks x 20 patients per week; NMPs = 1.5 hours/24 x 20 patients x 40 weeks = days of waiting for patients saved annually.
In Cheshire and Merseyside, 182 NMPs responded to this question. Before their prescribing competencies, the delay in accessing the prescription for patients was estimated to, at the shortest, an average 1.9 hours to, at the longest, an average time of 25 hours, again there was a lot of variation in these figures. Shortest estimates ranged from no time at all to 48 hours, and longest estimates ranged to two weeks. Taking the median point, at 13.4 hours for one patient and the average 20 patients\(^9\) a week served by an NMP, potentially each week 267 hours of delays or 11 days are saved for patients of one NMP. Extrapolating to the average 40 weeks a year of activity, approximately 11000 hours or 445 days of delay annually for patients of one NMP could have been saved and thus for this sample of 182 NMPs, 81,000 or so patient days every year\(^10\) assuming estimates are near accurate.

<table>
<thead>
<tr>
<th>CHESHIRE/MERSEY</th>
<th>Time saved (on average patient over one week)</th>
<th>Time saved for an average caseload of 20 patients in one week attending one NMP</th>
<th>Time saved for an average caseload of 20 patients per week in one year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Estimate of delay in access for patient</td>
<td>Shortest estimate (hours)</td>
<td>Longest estimate (hours)</td>
<td>Median</td>
</tr>
<tr>
<td>Estimate of time saved for NMP</td>
<td>1.9 (SD 7.2)</td>
<td>25 (SD 59.5)</td>
<td>13.4</td>
</tr>
</tbody>
</table>

Of course while these statistics can represent a real saving of patient time and access to medication, this exercise is not intended to represent a real situation for staff since staff would be occupied with other activities and waiting would not actually consume consecutive working time as such.

**Q18c Time saved for the NMP**

In asking NMPs either about time saved for them, the same number of NMPs responded to the questions with an average estimated time saved on attending an average patient of three hours a week. Shortest estimates were no time and longest, 246 hours. Extrapolating as before, to the average 20 patients a week, 60 hours or so might be saved and over 40 weeks activity potentially approximately 100 or so days of NMP time could be saved per annum, approximately 18,624 days (446,992 hours) of time between the 182 NMPs in this sample were potentially saved.

---

\(^9\) This estimate was derived from our question 13 (How many patients do you usually see in an average week in the part of your job that deals with prescribing related clinical contact?)

\(^10\) 13.4 hours/24 x 40 weeks x 20 patients per week; NMPs = 3.07 hours/24 x 20 patients x 40 weeks = days of waiting for patients saved annually.
In Manchester, 208 NMPs responded to the patient question. Before their prescribing competencies, the delay in accessing the prescription for patients was estimated to, at the shortest, an average 4.48 hours to, at the longest, an average time of 38.5 hours, again there was a lot of variation in these figures. Shortest estimates ranged from no time at all to two weeks, and longest estimates ranged to 60 days.

Taking the median point, at 21.5 hours for one patient and the average 20 patients 11 a week served by an NMP, potentially each week 429 hours of delays or 18 days are saved for patients of one NMP. Extrapolating to the average 40 weeks a year of activity, approximately 17,000 hours or 700 days of delay annually for patients of one NMP could have been saved and thus for this sample of 208 NMPs, 1458,928 or so patient days every year 12 assuming estimates are near accurate.

<table>
<thead>
<tr>
<th>MANCHESTER</th>
<th>Time saved (on average patient over one week)</th>
<th>Time saved for an average caseload of 20 patients in one week attending one NMP</th>
<th>Time saved for an average caseload of 20 patients per week in one year</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Shortest estimate (hours)</td>
<td>Longest estimate (hours)</td>
<td>Median</td>
</tr>
<tr>
<td>Estimate of delay in access for patient</td>
<td>4.47 (SD 24.6)</td>
<td>38.4 (SD 131.3)</td>
<td>21.48</td>
</tr>
<tr>
<td>Estimate of time saved for NMP</td>
<td>5.18 (SD 54.9)</td>
<td>103 (4.31 days)</td>
<td></td>
</tr>
</tbody>
</table>

Of course while these statistics can represent a real saving of patient time and access to medication, this exercise is not intended to represent a real situation for staff since staff would be occupied with other activities and waiting would not actually consume consecutive working time as such.

**Q18c Time saved for the NMP**

In asking NMPs either about time saved for them, 172 NMPs responded to the questions with an average estimated time saved on attending an average patient of five hours a week. Shortest estimates were no time and longest, 30 days. Extrapolating as before, to the average 20 patients a week, 100 hours or so might be saved and over 40 weeks activity potentially approximately 172 or so days of NMP time could be saved per annum, approximately 29,698 days (712,768 hours) of time between the 172 NMPs in this sample were potentially saved.

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11 This estimate was derived from our question 13 (How many patients do you usually see in an average week in the part of your job that deals with prescribing related clinical contact?)

12 21.5 hours/24 x 40 weeks x 20 patients per week; NMPs = 15.18 hours/24 x 20 patients x 40 weeks = days of waiting for patients saved annually.
FOR THE WHOLE NORTH WEST SAMPLE, 474 NMPs responded to the patient question. Before their prescribing competencies, the delay in accessing the prescription for patients was estimated to, at the shortest, an average 3.17 hours to, at the longest, an average time of 29 hours, again there was a lot of variation in these figures. Shortest estimates ranged from no time all to two weeks, and longest estimates ranged to 60 days. Taking the median point, at 15.8 hours for one patient and the average 20 patients a week served by an NMP, potentially each week 318 hours of delays or 13 days are saved for patients of one NMP. Extrapolating to the average 40 weeks a year of activity, approximately 12,700 hours or 529 days of delay annually for patients of one NMP could have been saved and thus for this sample of 474 NMPs, 251,026 or so patient days every year assuming estimates are near accurate.

<table>
<thead>
<tr>
<th>NORTH WEST</th>
<th>Time saved (on average patient over one week)</th>
<th>Time saved for an average caseload of 20 patients in one week attending one NMP</th>
<th>Time saved for an average caseload of 20 patients per week in one year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Estimate of delay in access for patient</td>
<td>Shortest estimate (hours)</td>
<td>Longest estimate (hours)</td>
<td>Median</td>
</tr>
<tr>
<td></td>
<td>3.17 (SD 17.3)</td>
<td>28.7 (SD 95.5)</td>
<td>15.89</td>
</tr>
<tr>
<td>Estimate of time saved for NMP</td>
<td>3.8 (SD 40.3)</td>
<td>75.9 (3.16 days)</td>
<td>3037 (126 days) of NMP time</td>
</tr>
<tr>
<td></td>
<td>317 hours (13.2 days)</td>
<td>12,710 hours (529 days) for patients Per NMP</td>
<td></td>
</tr>
</tbody>
</table>

Of course while these statistics can represent a real saving of patient time and access to medication, this exercise is not intended to represent a real situation for staff since staff would be occupied with other activities and waiting would not actually consume consecutive working time as such.

Q18c Time saved for the NMP

In asking NMPs either about time saved for them, 364 NMPs responded to the questions with an average estimated time saved on attending an average patient of 3.8 hours a week. Shortest estimates were no time and longest, 40 hours. Extrapolating as before, to the average 20 patients a week, 75 hours or so might be saved and over 40 weeks activity potentially approximately 126 or so days of NMP time could be saved per annum, approximately 46,071 days (1105,706 hours) of time between the 364 NMPs in this sample were potentially saved.

---

13 This estimate was derived from our question 13 (How many patients do you usually see in an average week in the part of your job that deals with prescribing related clinical contact?)

14 15.89 hours/24 x 40 weeks x 20 patients per week; NMPs = 3.8 hours/24 x 20 patients x 40 weeks = days of waiting for patients saved annually.