**NURSE INDEPENDENT PRESCRIBING AND NURSE SUPPLEMENTARY
PRESCRIBING PRACTICE: FINDINGS FROM A NATIONAL
QUESTIONNAIRE SURVEY**

Molly Courtenay, PhD, MSc, BSc, Cert. Ed., Professor of Prescribing and Medicines
Management, University of Reading. Email: M.Courtenay@Reading.ac.uk.

Nicola Carey, MPH, BSc. (Hons), Senior Research Fellow, University of Reading,
UK. Email: n.j.carey@reading.ac.uk

Short Title: Nurse Independent and Nurse Supplementary Prescribing

Address for correspondence: School of Health and Social Care, University of
Reading, Bulmershe Campus, Reading, RG6 1HY. UK.

Email: M.Courtenay@Reading.ac.uk

Aim

To provide an overview of Nurse Independent Prescribing and Nurse Supplementary Prescribing across the UK.

Background

Evidence examining the frequency of prescribing by nurses is conflicting, and it is evident that several factors hamper prescribing practice. As of May 2006, legislative changes provided appropriately qualified nurses with virtually the same independent prescribing right as doctors. However, there is no evidence available with regards to the prescribing practices of these nurses.

Method

A random sample of 1992 qualified Nurse Independent/Nurse Supplementary Prescribers registered with the Nursing and Midwifery Council were sent a postal questionnaire. One thousand four hundred (70%) questionnaires were returned, of which 1377 were completed.

Findings

Eight hundred and ninety one (65%) respondents worked in primary care, and 333 (24.3%) worked in secondary care. Most respondents were a Grade H (Band 7). Three quarters of the sample had more than 5 years clinical experience in the area in which they prescribed prior to entering the prescribing programme. One thousand one hundred and seven (87%) participants used Nurse Independent Prescribing and 568 (44.6%) used Nurse Supplementary Prescribing. Restriction of local arrangements, implementation of the Clinical Management Plan, and access to doctors hampered or prevented prescribing.

Conclusion

Nurses in the UK working in a variety of roles, across both primary and secondary care, use independent and supplementary prescribing. The adoption of prescribing by nurses has therefore increased patient choice with regards to access to medicines. A number of factors exist which hamper or prevent prescribing that require further exploration.

Keywords: Medicines management, Nurse Independent Prescribing, Nurse Supplementary Prescribing, national survey

SUMMARY

What is already known about this topic

- Prescribing by health visitors and district nurses is infrequent.
- Qualified independent extended/supplementary nurse prescribers work predominantly in general practice and report that they frequently use independent prescribing. Supplementary prescribing is used to a much lesser extent.
- The limited choice of medicines available to nurses, inter-professional relationships, restriction of local arrangements, and implementing the Clinical Management Plan are factors that hamper prescribing practice.

What this paper adds

- The majority of Nurse Independent Prescribers/Nurse Supplementary Prescribers work in general practice, however, the number of specialist nurses, community nurses, and nurses working in secondary care, undertaking the prescribing programme is increasing.
- Nearly all Nurse Independent Prescribers/Nurse Supplementary Prescribers prescribe medicine independently and just under half use Nurse Supplementary Prescribing. Therefore, despite the legislative changes enabling nurses to independently prescribe practically any licensed medicine, there is still a need for Nurse Supplementary Prescribing.
- Restriction of local arrangement, and an inability to computer generate prescriptions are the main factors hampering independent prescribing.

Implementing the Clinical Management Plan and accessing a doctor are the main problems hampering supplementary prescribing.

INTRODUCTION

Nurses in several countries have the authority to prescribe medicines. The development of this role for nurses has come about for several reasons. This includes the need to increase patients access to medicines, to make more effective use of resources and time, to legitimisation work that nurses are already undertaking, to improve relationships between healthcare professionals, and to reduce the work of doctors (DoH 1999, Cornwall & Chiverton 1997, David & Brown 1995).

In Sweden, for example, prescribing was introduced for nurses in the early 1990's in order to improve services to patients, reduce the workload of doctors, and to ensure that care in the community was provided by an appropriate mix of healthcare professionals (David & Brown 1995). Nurses in Sweden are able to prescribe from a restricted list of medicines and conditions. Support for nurse prescribing in Canada and several states in Australia, has been primarily in rural areas where there is a shortage of doctors and nurses work independently. Prescribing is restricted to Nurse Practitioners and these nurses have very limited prescribing rights. In the United States of America (US), by contrast, nurse prescribing has closely followed the development of the Advanced Practice Registered Nurse (APRN). However, nurses' prescriptive authority, across the 50 states varies with regards to requirements, standards and practices (Buchan & Calman 2004). There is very little evidence evaluating nurse prescribing in these countries, however, some evaluative work has been undertaken in America. It is evident that the care provided by APRNs is well received by patients (Brooten *et al.* 2002, Talley & Brooke 1992), that nurses

prescribing safely and effectively, patient outcomes are improved, and health care costs can be reduced (Brooten *et al.* 2002).

There have been rapid changes, over recent years, in the development of policy surrounding the prescription of medicines by nurses in the United Kingdom (UK).

Primary legislation permitting nurses to prescribe a limited range of drugs was passed in 1992 (Medicinal Products: Prescribing by Nurses Act 1992) and since then, over 30, 000 district nurses (DNs) and health visitors (HVs) have become qualified to prescribe independently from a limited list of medicines, appliances, and dressings, included in the Nurse Prescribers' Formulary (NPF) for Community Practitioners (British Medical Association and the Royal Pharmaceutical Society of Great Britain (2005).

.

More recently, the introduction of Nurse Independent Prescribing (previously known as independent extended prescribing) in 2002 (Department of Health (DoH) 2002) and Nurse Supplementary Prescribing in 2003 (DoH 2003) has expanded the prescribing powers of nurses yet further to include any first level registered nurse. As of May 2006, qualified Nurse Independent Prescribers (NIPs), in contrast to those nurses qualified to prescribe from the NPF for Community Practitioners, have been able to assess, diagnose and prescribe independently any licensed medicine (including some controlled drugs (CDs) provided that it is within their area of competence (DoH 2005). Nurse Supplementary Prescribing, by comparison, takes place after an assessment and diagnosis of a patients condition has been made by a doctor, and a Clinical Management Plan (CMP) has been drawn up for the patient. The CMP, agreed by the patient, nurse (supplementary prescriber (SP)) and doctor (independent

prescriber (IP)), includes a list of medicines (within the Nurse Supplementary Prescribers (NSPs) area of competence) from which the supplementary prescriber is able to prescribe. NSPs are able to prescribe any medicine (including CDs and unlicensed medicines). This mode of prescribing is best suited to patients with long-term medical conditions or health needs.

Training for Nurse Independent and Nurse Supplementary Prescribing is combined i.e. nurses successfully completing the prescribing programme are awarded the dual qualification of NIP/NSP. There are now over 10,000 nurses across the UK able to prescribe both as NIPs and NSPs (Nursing and Midwifery Council (NMC) 2007).

Given the rate at which nurse prescribing has developed over recent years in the UK, it is important to evaluate the success or otherwise of these developments and also to identify key issues that are likely to arise. Although there is some evidence available that has examined the prescribing practices DNs and HVs and early independent extended/supplementary nurse prescribers, there is currently no research evidence available that has looked at the extent to which NIPs and NSPs prescribe medicines, or the barriers to these modes of prescribing.

BACKGROUND

The evidence that is available that has examined the extent to which nurses prescribe medicine is conflicting. It is evident from work examining HV and DN prescribing that these nurses prescribe infrequently (Luker *et al.* 1997, Luker *et al.* 1998, While & Biggs 2004, Luker & McHugh 2002, Hall *et al.* 2006). Luker *et al.* 1997, 1998 for

example, in a national evaluation of the first eight DN / HV prescribing pilot sites, interviewed 49 nurses on four separate occasions. Although nurses were prescribing medicines, this was often reported to be for a small number of items, and there was a wide variation in the numbers of these items across the sites. In support of this finding, Luker and McHugh (2002), reported that approximately a quarter of the 164 DN/HV prescribers they surveyed were not prescribing medicines. Similarly, While and Biggs (2004), who surveyed over 90 HV/DN prescribers across three trusts, found that the majority of DNs in their sample prescribed less than 3 times a week. More recently, findings by Hall *et al.* (2006), involving the collection of semi structured interview data (from 23 HV and DN prescribers and 5 prescribing leads) and questionnaire data (from 44 DNs, HVs) across 3 Strategic Health Authorities, identified that many of these nurses were prescribing less than once per week.

Three studies (Larsen 2004, Latter *et al.* 2005, Courtenay *et al.* 2006) have examined the prescribing patterns of independent extended nurse prescribers. In line with the low prescribing rates of DN/HV prescribers, Larsen (2004) in a survey of 307 nurse managers (working in accident and emergency departments, minor injury units, and walk-in-centres) reports that only 27 out of 55 nurses who had undergone independent extended prescribing training were prescribing medicines. In contrast, Latter *et al.* (2005) reported that over 90% of the 246 independent extended nurse prescribers they surveyed (the majority of who worked in general practice in primary care) used independent extended prescribing. Although findings by Courtenay *et al.* (2006) from a survey of 868 independent extended/supplementary prescribers (also mostly working in general practice in primary care) similarly found that independent

prescribing was used by 87% of their sample, only 35% of these nurses used supplementary prescribing.

It is evident that a number of benefits are to be gained by nurses adopting the role of prescriber. Reported benefits include time savings and convenience, an increased sense of satisfaction, status and autonomy and an enhanced holistic approach to care (Luker *et al.* 1997, Luker *et al.* 1998, While & Biggs 2004, Latter *et al.* 2005). However, a number of factors have been identified that have an influence on the extent to which nurses prescribe medicines. Luker *et al.* (1997, 1998), for example, found that the size and make up of the practice population and nurses' role each affected the rate at which nurses prescribed. DNs were found to prescribe more frequently than HVs. These findings are supported by Rodden (2001), Otway (2001) and While and Biggs (2004). Rodden (2001) used a questionnaire survey to explore the changes in HVs and DNs prescribers perceived autonomy and independence. Questionnaires were completed by 90 out of 127 prescribing nurses in one National Health Service (NHS) trust. It was evident from the findings that the majority of prescribing was undertaken by DNs, HVs prescribing to a much lesser extent. Similarly, Otway (2001), in a survey of over 200 HVs/DNs prescribers, and While and Biggs (2004), reported that DNs prescribed significantly more frequently than HV.

Inter-professional relationships, team working and support in practice are other factors which have been identified as having an influence on prescribing practice. Humphries and Green (2000) undertook 12 focus group discussions using a convenience sample of 146 students (DNs and HVs) on a nurse prescribing

programme. Ten key areas were identified as those necessary to support prescribing practice and included: protocols; keeping updated; peer support; patient records; project management/managerial support; clinical supervision; awareness of general practitioner (GP) and other colleagues; contact with pharmaceutical representatives; safety of prescription pads; mechanisms for patients without a GP. Although nurses in this study were still training to be prescribers, and so views may have changed upon gaining prescribing experience, some of these findings were later confirmed in the work by Otway (2002). Otway's (2002) study identified informal peer support, gained through working in teams, as a major source of support. By contrast, working in isolation impacted on confidence and had a negative influence on prescribing. As in Humphries and Green's (2000) work, awareness by GPs of nurses prescribing role was another factor that influenced prescribing practice.

More recently Hay *et al.* (2004) provide further evidence confirming the importance of good interprofessional relationships. These researchers used focus group interviews with a range of forty six healthcare professionals to elicit views on supplementary prescribing. In order to use the prescribing role to its full extent, respondents considered support from team members as vital.

Restriction of local arrangements has recently been identified as a further factor that influences the prescription of medicines by nurses. It is evident from Hall *et al.*'s (2006) findings that some nurses had to wait several months to receive their prescription pad and so were unable to prescribe once qualified. Nurses sampled by these researchers also identified a lack of access to the patient's medical records as a further barrier to prescribing. Additionally, the paperwork involved in writing a

prescription, arranging delivery and issuing repeat supplies of an item, were identified by respondents as reasons to send the patient to the GP for a prescription. This finding is supported by Fisher (2005) who undertook semi-structured interviews with 6 DNs. Respondents in this study were unhappy with the administrative aspects of prescribing and so reverted back to the GP writing the prescription. Restrictions at a local level, including lack of prescribing pads and absence of prescribing budgets, were also identified by the 868 participants surveyed by Courtenay *et al.* (2006) as factors which prevented the prescription of medicines by independent extended/supplementary prescribers.

One consistent finding related to independent prescribing that has clearly influenced prescribing rates is the limited choice of medicines available to nurse prescribers (Latter *et al.* 2005, Larsen 2004, While and Biggs 2004, Otway 2002, Luker *et al.* 1997 & 1998, Courtenay *et al.* 2006), nurses claiming that they are unable to prescribe treatments that they consider essential to their nursing practice.

It is evident from the literature that independent prescribing by HVs and DNs is infrequent. Similarly supplementary prescribing is used infrequently. However, high prescribing rates have been reported by independent extended nurse prescribers. The majority of these nurses work in general practice in primary care. The rate at which nurses prescribe is affected by a number of factors including the limited choice of medicines available, nurses' role, inter-professional relationships, and restriction of local arrangements. There is no research evidence available with regards to the prescribing practices of NIPs/NSPs.

THE STUDY

Aim

To provide an overview of Nurse Independent Prescribing and Nurse Supplementary Prescribing across the UK.

Objectives

To identify:

- 1) Which nurses are prescribing medicines i.e. whether they work in primary and/or secondary care, their clinical experience and qualifications.
- 2) The mode of prescribing used by these nurses and the frequency with which they prescribe
- 3) Factors that hamper prescribing.

Design

A survey design was adopted. All questions were 'closed' in nature.

Participants

The participants were 1377 qualified NIPs/NSPs (who returned completed questionnaires) out of a randomly selected sample of NIPs/NSPs (n=1992) registered on the NMC database and located throughout the UK.

Questionnaire

Participants were asked to self-complete a postal questionnaire. A questionnaire booklet was developed for the purpose of the study. Simple instructions with regards to how to complete the questions were provided on the first page of the booklet. Respondents were asked to complete 14 questions in total. The first questions collected some general demographic information. This included job title, participants Grade/Band, whether they worked full time or part time, if they worked in primary and/or secondary care, their age, highest academic qualification, and the number of specialist qualifications they held. The sample were then asked to identify the length of time they had been qualified as a NIPs/NSPs and how much experience they had acquired in their main area of practice before undertaking the prescribing programme. Several questions then asked about participants prescribing practice. They were asked to identify the methods they had used to deliver medicines to patients since they had qualified as a prescriber, and the factors that had hampered or prevented them from prescribing medicines either as a NIP, or a NSP. They were then asked how many items they prescribed in a typical week as a NIP and as a NSP and if they would be confident to act as the independent prescriber in the NSP prescribing partnership (currently this role is undertaken by a doctor). Tick boxes were provided throughout each section of the questionnaire to indicate responses.

Reliability and Validity

Respondents were randomly sampled from a national database. In addition, the number of completed questionnaires that were returned was high. These factors provide confidence with regards to the generalisability of our findings. In order to support content validity, the questionnaire was informed from previous national surveys involving independent extended and supplementary nurse prescribers (Latter

et al. 2005, Courtenay *et al.* 2006). Further confirmation of face and content validity was achieved through pilot work. The questionnaire was piloted on 20 qualified NIPs/NSPs. After completing the questionnaire, respondents in the pilot sample were asked to comment on its ease of completion, and if they experienced any difficulties understanding what was required of them at any point throughout the questionnaire. It was evident from the completed questionnaires that both the format and content of the questions were appropriate. Only minor refinements and amendments were made. Following data entry of the completed questionnaires 10% were reviewed by one of the authors (NC). There was agreement between the data that had been entered and NC.

Data collection

One thousand nine hundred and ninety two nurses were selected at random from all (n=7968) nurses registered on the NMC database of NIPs/NSPs i.e. 25% of all Nurse Independent/Nurse Supplementary Prescribers across the UK. Based on the findings and response rates of previous national surveys undertaken by the researchers (Courtenay *et al.* 2006, Latter *et al.* 2005), it was estimated that a 70% response rate would be achieved. This large sample was required to ensure that each one of the broad range of settings in which nurses prescribe medicines for patients was represented. After one follow up reminder questionnaire, 1400 (70%) questionnaires were returned, of which 1377 were completed. Twenty three were not completed as participants were no longer working in practice or were working abroad. This paper reports on the findings of these 1377 nurses. Data was collected between October and December 2006.

Ethical approval

A full research proposal was submitted for scrutiny by the Berkshire Research Ethics Committee and the University of Reading Ethics Committee. The study met the research governance criteria of these committees. Approval to undertake the study was therefore granted. Each questionnaire was coded with a unique identifier number (which corresponded to each of the names of the NIPs/NSPs selected at random from the NMC database) and distributed via the NMC to the home address of participants. The SAE in which respondents returned completed questionnaires was addressed to Reading University. Reading University supplied the NMC with the numbers that were not returned; the NMC in turn matched the number to the corresponding name and distributed a reminder questionnaire. At no time did Reading University have the list of names of nurses registered as NIPs/NSPs on the NMC database.

Participants were sent a letter outlining the purpose of the study, an information sheet, and a copy of the questionnaire. The information sheet outlined the study aims, and what participants would be required to do. It also informed participants that the study was completely voluntary (and emphasised that individuals could withdraw at any point if they wished to do so), that responses were strictly confidential, that information collected from the questionnaire would be made anonymous, and that no identifying information would emanate from the research. Return of a completed questionnaire was taken as consent to participate.

Data analysis

Microsoft Excel and SPSS version 14 were used for data entry and analysis. Descriptive statistics were used to describe data collected by the questionnaire. Themes in qualitative data were identified, coded and analysed using content analysis.

RESULTS

The demographic data of the sample including job title, grade/band, part/full time work, area of work, age, academic qualification, time since qualified as NIP/NSP, years of experience in area of practice before undertaking the prescribing course, specialist qualifications, and methods used to deliver medicines to patients are presented in Table 1.

Problems hampering/preventing Nurse Independent Prescribing

Nine hundred and thirty eight (68.0%) respondents reported that they had faced one or more problems at some point in time that had either hampered or prevented independent prescribing (see Table 2). This figure also includes nurses who were unable to use NIP due to the problems they had encountered. The greatest problems involved the restriction of local arrangements (e.g. waiting for prescription pads/budgets) and the inability to computer generate prescriptions. Approximately 15% reported problems with regards to a lack of clinical expertise, lack of peer support, and objection by medical staff or pharmacists. Restriction of local arrangements, inability to computer generate prescriptions, objection by medical staff or pharmacists, and problems accessing a doctor, were identified as factors hampering or preventing prescribing by a smaller number of nurses who had qualified in the last 6 months as compared to those who had been qualified 6 months or longer.

Problems hampering/preventing Nurse Supplementary Prescribing

Six hundred and forty nine (47.0%) respondents reported that they had faced one or more problems at some point in time that had either hampered or prevented supplementary prescribing (see Table 3). This figure is higher than the numbers who reported using NSP as a method, as it includes nurses who were unable to use NSP due to the problems they had encountered. The greatest difficulty faced by over 50% of the sample was in implementing the CMP. The main reasons for these difficulties were hospital policy, time for CMP and/or difficulties with access to records. Lack of peer support, objection by medical staff and pharmacists, problems accessing a doctor, problems implementing the CMP (and deciding who the independent prescriber should be), were identified as factors hampering or preventing prescribing by a smaller number of nurses who had qualified in the last 6 months, as compared to those who had been qualified 6 months or longer.

The number of items prescribed in a typical week by a NIP/NSP

The number of items prescribed in a typical week for NIPs and NSPs are presented in Tables 4 & 5. The mean numbers prescribed by NIPs and NSPs respectively are 17.5 (std error =0.503) and 6.0 (std error=0.480).

Confidence to adopt the role of Independent Prescriber in the Nurse Supplementary Prescribing partnership

Respondents were asked to indicate if they would be confident to adopt the role of independent prescriber in the Nurse Supplementary prescribing partnership. Six

hundred and ninety nine (53.0%) respondents indicated that they would be confident to adopt this role.

Discussion

Before summarising the key findings and drawing conclusions, a potential limitation of our study must be taken into account. Respondents were asked to report on the methods they had used to deliver medicines to patients since qualifying, along with the factors that had hampered or prevented prescribing. It would have been helpful to have also asked respondents to indicate the methods used, and the factors that had hampered or prevented prescribing within the last 6 months. The majority of respondents had been qualified in excess of 2 years. Factors that had originally hampered or prevented prescribing may now not exist. Additionally, nurses may have used other methods of delivering medicines to patients (such as Patient Group Directions (PGDs)) upon qualification because local arrangement (such as prescription pads and prescribing budgets) were not in place. This additional data would have provided a fuller picture of current practice.

Overall our findings are positive and confirm that most of the NIPs/NSPs prescribed medicines. The majority of these nurses are highly qualified, have a wealth of clinical experience, work full-time, are based in primary care and work in general practice. These findings are consistent with those reported by Courtenay *et al.* (2006) and Latter *et al.* (2005). More than 80% of the nurses sampled in these two studies reported they used independent extended prescribing, that their highest academic qualification was at degree level or above, and they worked in general practice.

However, 31.9% of our sample reported that they were specialist nurses, 19.2% were community nurses, 65% were based in primary care, and 24% were from secondary care. This is in contrast to findings by Courtenay et al 2006. Eighty two percent of the nurses in this study reported that they worked in primary care, 10% in secondary care, 29.5% were specialist nurses, and 9.4% reported they were community nurses.

Nearly all respondents in our study prescribed independently (mean number of items prescribed per week = 17.5). These findings are in contrast to the low prescribing rates among DNs and HVs reported by Luker and McHugh (2002) (i.e. a quarter of the 164 nurses these researchers sampled were not prescribing), and the independent extended prescribers examined by Larsen (2004), 27 out of the 55 independent extended prescribers in this study reported that they did not prescribe medicines. Forty four percent of our sample used supplementary prescribing (mean number of items prescribed per week = 6.9). This is higher than that reported by Courtenay *et al.* (2006) who identified that just over a third of their sample used this mode of prescribing.

Our findings are consistent with policy literature (DoH 1998, DoH 2005). Although conditions and treatments, originally identified in the independent extended formulary, were those for the delivery of one-off episodes of care (such as nurses working in general practice), the implementation of legislation permitting nurses to prescribe any licensed medicines (and some CDs) has provided all appropriately qualified nurses with the opportunity to prescribe. Data was collected from our sample 6 months after this legislation was implemented. The higher numbers of

nurses in secondary care, the slightly greater numbers of specialist and community nurses (than that identified in previous work), provides some evidence that nurses, other than those involved in providing one-off episodes of care, are undertaking the prescribing programme.

The fact that our findings show that quite a high percentage of nurses are using supplementary prescribing, despite the evidence that there have been implementation problems surrounding this mode of prescribing (Courtenay *et al.* 2006) and nurses are now able to independently prescribe practically any licensed medicine, demonstrates that there is a need for Nurse Supplementary Prescribing. This might be because nurses are using supplementary prescribing to gain confidence in their prescribing role prior to prescribing independently. Additionally, it could be that nurses treating complex patients with multiple pathologies would prefer to do so using supplementary prescribing. This requires further exploration. The use of PGDs by nurse prescribers is surprising and also requires further exploration. However, it must be borne in mind that respondents were asked to indicate the methods they had used to deliver medicines to patients since qualifying. Some newly qualified nurse prescribers may have had no alternative but to use PGDs until local arrangements (such as receiving prescription pads and sorting out prescribing budgets) were in place.

As in previous work, the academic qualifications of nurses in our sample, and the number of years nursing experience, are far beyond training guidance laid down by the NMC (NMC 2001) for candidates for the prescribing programme (i.e. candidates

must have the ability to study at level 3 and have a minimum of 3 years post registration nursing experience). It is also evident from our findings that the majority of nurse prescribers are Grade H or Band 7. This further confirms that the majority of nurses who adopt the role of prescriber are very experienced nurses and are working at a senior level. This is reassuring bearing in mind nurses now have practically the same prescribing rights as doctors.

A number of factors hampered or prevented prescribing by NIPs. The main reasons included restriction of local arrangement, and an inability to computer generate prescriptions. Although the software to generate computer prescriptions is now available, and restriction of local arrangement may have been resolved shortly after the nurses in our sample had qualified as prescribers, such restriction have been identified as a barrier to prescribing by other researchers (Hall *et al.* 2006, Fisher 2005, Courtenay *et al.* 2006). This requires further exploration.

A number of factors were reported as hampering or preventing supplementary prescribing. Implementing the CMP was the factor most frequently cited. Accessing a doctor was another factor reported by participants. This is in line with those findings reported by Courtenay et al (2006). These researchers reported that nearly 20% of the nurses in their study had difficulties implementing the CMP. Over 50% of our respondents reported that they would be happy to be the IP in the SP/IP partnership. Given that implementing the CMP and accessing a doctor were major factors hampering or preventing Nurse Supplementary Prescribing, policy makers might consider specialist nurses adopting the role of the Independent Prescriber in the Independent Prescriber/Supplementary Prescriber partnership. For example, specialist

nurses may be better placed to work in partnership with non specialist nurses such as practice nurses in primary care. This may help to overcome some of the implementation problems surrounding Nurse Supplementary Prescribing

Conclusions

Nurses in the UK working in a variety of roles, across both primary and secondary care, use independent and supplementary prescribing to prescribe medicines. The adoption of prescribing by nurses has therefore increased patient choice with regards to access to medicine. A number of factors exist which hamper or prevent prescribing. This includes restriction of local arrangement and implementing the clinical management plan. These factors require further exploration. Nurse prescribing differs world wide, however, our findings may be of interest to policy makes, practitioners, and educationalist involved in this area of practice.

Acknowledgement

This study was undertaken by the help of a research grant provided by Sanofi-aventis.

We are grateful to Karen Stenner and Beba Bersellini for their help with data input.

We would also like to thank Savitri Wilson, Principal Statistician, Reading

University, for producing the statistical analysis reports.

References

- British Medical Association and the Royal Pharmaceutical Society of Great Britain (2005) in association with Community Practitioners' and health Visitors' Association and the Royal College of Nursing. Nurse Prescribers' Formulary for Community Practitioners. London: BMJ Publishing Group
- Brooten, D., Naylor, M. D., York, R., Brown, L. P., Munro, B. H., Hollingsworth, A. O., Cohen, S., Finkler, S., Deatrick, J., Youngblunt, J. M. (2002) Lessons Learned from testing the Quality Cost Model of Advanced Practice (APN) Transitional Care, *Journal of Nursing Scholarship*, **34**, (4), 369-375.
- Buchan, J., Calman, L. (2004) *Implementing Nurse Prescribing*, International Council of Nurses, Geneva.
- Cornwall, C., Chiverton, P. (1997) The Psychiatric advanced practice nurse with prescriptive authority: Role development, practice issues and outcome measurements, *Archives of Psychiatric Nursing*, **11**, (2), 340-341.
- Courtenay, M., Carey, N., Burke, J. (2006) Independent Extended and Supplementary Nurse Prescribing Practice in the UK: A National Questionnaire Survey, *International Journal of Nursing Studies*, available online June 5.
- David, A., Brown, E. (1995) How Swedish nurses are tackling nurse prescribing, *Nursing Times*, **91**, (50), 23-24.
- DoH (1998) A first class service: quality in the new NHS, *Health Service Circular*, HSC[98]:113.
- DoH (1999) *Making a Difference. Strengthening the Nursing, Midwifery and Health Visiting Contribution to Healthcare*, Department of Health, London.
- DoH (2002) *Extending Independent Nurse Prescribing within the NHS in England: A guide for Implementation*, Department of Health, London.
- DoH (2003) *Supplementary Prescribing for Nurses and Pharmacists within the NHS in England*, Department of Health, London.
- DoH (2005) *Written Ministerial Statement on the expansion of independent nurse prescribing and introduction of pharmacists independent prescribing*, DoH, London.
- Fisher, R. (2005) Relationships in nurse prescribing in district nursing practice in England: A preliminary investigation, *International Journal of Nursing Practice*, **11**, 102-107.
- Hall, J., Cantrill, J., Noyce, P. (2006) Why don't trained community nurse prescribers prescribe? *Journal of Clinical Nursing*, **15**, (4), 403-412.
- Hay, A., Bradley, E., Nolan, P. (2004) Supplementary Nurse Prescribing, *Nursing Standard*, **18**, (41), 33-39.
- Humphries, J. L., Green, E. (2000) Nurse Prescribers: infrastructures required to support their role, *Nursing Standard*, **14**, (48), 35-39.
- Larsen, D. (2004) Issues affecting the growth of independent prescribing, *Nursing Standard*, **19**, (2), 33-39.
- Latter, S., Maben, J., Myall, M., Courtenay, M., Young, A., Dunn, N. (2005) *An evaluation of extended formulary independent nurse prescribing. Final Report*, Policy Research Programme Department of Health & University of Southampton
- Luker, K., McHugh, G. A. (2002) Nurse prescribing from the community nurse's perspective, *International Journal of Pharmacy Practice*, (December), 273-280.

- Luker, K. A., Austin, L., Hogg, C., Ferguson, B., Smith, K. (1997) Patients Views on Nurse Prescribing, *Nursing Times*, **93**, (17), 51-4.
- Luker, K. A., Austin, L., Hogg, C., Ferguson, B., Smith, K. (1998) Nurse-patient relationships: the context of nurse prescribing, *Journal of Advanced Nursing*, **28**, (2), 235-242.
- Medicinal Products: Prescription by Nurses etc. Act 1992 (c. 28). The Stationery Office Limited: London (ISBN 0105428922).
- NMC (2001) *Nurse Prescribing-ENB Policy*, www.nmc.org-uk, (June 2005)
- NMC (2007) *Number of Independent Extended Nurse Prescribers*, Personal Communication with NMC February 2007.
- Otway, C. (2001) Informal peer support: a key to success for nurse prescribers, *British Journal of Community Nursing*, **6**, (11), 586-591.
- Otway, C. (2002) The development needs of nurse prescribers, *Nursing Standard*, **16**, (18), 33-38.
- Rodden, C. (2001) Nurse prescribing: views on autonomy and independence, *British Journal of Community Nursing*, **6**, (7), 350-354.
- Talley, S., Brooke, P. S. (1992) Prescriptive authority for psychiatric clinical specialists: framing the issues, *Archives of psychiatric nursing*, **6**, (2), 71-82.
- While, A. E., Biggs, K. S. M. (2004) Benefits and challenges of nurse prescribing, *Journal of Advanced Nursing*, **45**, (6), 559-567.

Table 1: Demographic characteristics

	<i>n=number of responses</i>	<i>% of total sample</i>
Job Title		
General practice (practice nurses and nurse practitioners)	498	36.8
Specialist nurses (clinical nurse specialists, specialist nurse practitioners, nurse clinicians, children's nurses and midwives)	435	31.9
Community Nurses (community/modern matron, HV, DN, community children's nurse specialist, community psychiatric nurses and learning disabilities)	262	19.2
Senior Nurses (nurse consultants, senior nurses, charge nurses, sisters, manager)	169	12.4
Grade/Band		
Grade E or Band 5	24	1.8
Grade F/G or Band 6	367	26.7
Grade H or Band 7	657	47.9
Grade I or Band 8/9 or Nurse Partner	279	20.3
Part time/full time		
<20 hrs per week	77	5.6
21-30 per week	377	27.5
Full time i.e. >30 hrs per week	918	66.9
Primary/and or Secondary Care		
Primary care	819	65.0
Secondary Care	333	24.3
Primary and Secondary Care	146	10.7
Age		
<35 years	100	7.3
36-45 years	564	41
46-55 years	594	43.1
55-65 years	119	8.6
Academic Qualification		
Certificate level	87	6.3
Diploma level	203	16.3
Degree level	750	54.7
Master/PhD level	311	22.7
Time since Qualified as NIP/NSP		
< 6 months	66	4.9
6-12 months	203	15
1-2 years	505	37.4
> 2 years	576	42.7
Experience in area of practice before NIP/NSP		
< 1 year	34	2.5
1-2 years	77	5.7
2-5 years	236	17.5
> 5 years	1002	74.3
Specialist Qualifications		
None	490	35.5
1	235	24.3
2	262	19.0
3 or more	292	21.2
Methods Used to Deliver Medicines (participants could indicate more than one response in this question)		
Independent Prescribing	1117	87.0
Supplementary Prescribing	568	44.6
Patient Group Direction	561	44.1
Patient Specific Direction	75	5.9
<i>Percents do not add to 100% in each category as some participants did not complete every question</i>		

Table 2: Problems hampering/preventing prescribing as a Nurse Independent Prescriber

	Number	% of respondents reporting a problem
Restriction of local arrangement	619	66.0
Unable to generate computer prescriptions	575	61.3
Level of clinical expertise	157	16.7
Lack of peer support	126	13.4
Objections by med staff or pharmacists	153	16.3
Organisation/national restriction/policy implementation issues	87	9.3
Problems accessing a doctor	74	7.9
Lack of PCT/Dr knowledge/access to medical records	26	2.8
Total number reporting NIP prescribing problems		938

Note: Percents do not add to 100% since respondents reported more than one problem.

Table 3: Problems hampering/preventing prescribing as a Nurse Supplementary Prescriber

	Number	% of respondents reporting a problem
Problems implementing CMP	349	53.8
Restriction of local arrangement	303	46.7
Unable to generate computer prescriptions	277	42.7
Problems accessing a doctor	106	16.3
Lack of peer support	92	14.2
Objections by med staff or pharmacist	88	13.6
Level of clinical expertise	48	7.4
Deciding who independent prescriber would be	30	4.6
Lack of time/lack of access to records	23	3.5
Hospital policy/restrictions, not allowed by trust/team	16	2.5
Total number reporting NSP prescribing problems		649

Note: Percents do not add to 100% since respondents reported more than one problem

Table 4. Items prescribed as a Nurse Independent Prescriber

Items prescribed	Number	Percent
0 items	116	10.0
1-5 items	274	23.5
6-10 items	186	16.0
11-20 items	208	17.9
21-30 items	134	11.5
>30 items	247	21.2
Total	1165	100.0
Missing	214	15.5

Table 5. Items prescribed as a Nurse Supplementary Prescriber

Items prescribed	Number	Percent
0 items	248	42.2
1-5 items	155	26.4
6-10 items	69	11.7
11-20 items	56	9.5
21-30 items	29	4.9
>30 items	31	5.3
Total	588	100.0
Missing	791	57.4