An exploratory qualitative study of pharmacists as supplementary prescribers.

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Acknowledgements

Abstract

Pharmacist supplementary prescribing was first suggested in the Crown Report in 1999, subject to the satisfactory completion of an accredited training course. The aim of this study was to conduct research on the training, implementation and development of pharmacist supplementary prescribing in the principality since training courses were established in 2004.

A number of stages were carried out within a case study approach which included semi-structured interviews, non-participant observation and the diary:diary follow-up interview method. Seven pharmacists from the first and seven from the second cohorts were recruited from three higher education institutions via their course leaders (gatekeepers).

The participants were supportive of the expanding role of pharmacists, which was to be practised in primary and secondary care for conditions such as mental health and hypertension. The role was thought to benefit patient care, utilise the pharmacist's knowledge to a greater extent and a 'stepping stone' to independent prescribing. Barriers to implementation were identified such as funding, time and access to patient medical records. The pharmacists also believed that the working relationship with their independent prescriber had improved such as an increased input into patient care and treatment decisions. Suggestions were provided to improve the training programmes; such as more training on aspects such as consultation and monitoring skills. Each pharmacist believed that the time and commitment to undertake such a course was great but worthwhile to extend practice. Three of the pharmacists had started prescribing by the end of this study.

Supplementary prescribing has already been implemented in a number of settings, will benefit patient care and empower pharmacists to take ownership of their prescribing decisions. Independent prescribing by pharmacists has also been approved from spring 2006. These are exciting times for pharmacy with the pharmacists in this study pioneering the new role in Wales.

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Glossary

CA	-	Conversation Analysis
CMP	-	Clinical Management Plan
COREC	-	Central Office for Research Ethics Committee
DA	-	Discourse Analysis
DoH	-	Department of Health
DSMP	-	Designated Supervising Medical Practitioner
GMC	-	General Medical Council
GP	-	General Practitioner
GSL	-	General Sales List
HCP	-	Health Care Professional
HEI	-	Higher Education Institution
IP	-	Independent Prescriber
LREC	-	Local Research Ethics Committee
MCA	-	Medicines Control Agency
MHRA	-	Medicines and Healthcare Products Regulatory Agency
MREC	-	Multi-centre Research Ethics Committee
MUR	-	Medicines Use Review
NHS	-	National Health Service
NPC	-	National Prescribing Centre
OSCE	-	Objective Structured Clinical Examination
OTC	-	Over-the-Counter
PCT	-	Primary Care Trust
PGD	-	Patient Group Direction
POM	-	Prescription-Only-Medicine
PPR	-	Pharmacy Practice Research
R & D	-	Research and Development
RPSGB	-	Royal Pharmaceutical Society of Great Britain
SP	-	Supplementary Prescriber
WAG	-	Welsh Assembly Government

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Chapter One – General introduction

1.1 The historical development of supplementary prescribing

Supplementary prescribing (initially known as dependent prescribing) was suggested in the 'Review of Prescribing, Supply and Administration of Medicines' (Department of Health (DoH), 1999), a report commissioned by the DoH. The review team was chaired by Dr June Crown and hence was known as the Crown Report. This was the second and final report, the first being published in 1998 which concentrated on the supply and administration of medicines via Group Protocols (DoH, 1998).

The aim of the second Crown Report was to identify where health care professionals (HCPs) could undertake additional roles with respect to the prescribing, supply and administration of medicines. The review stated clearly that any recommended changes to existing roles must at the least maintain patient safety, be beneficial to patient care and cost effective (DoH, 1999). The Crown Report defines prescribing in the same way as the Medicines Act 1968 as 'ordering in writing the supply of a prescription only medicine for a named patient' and to 'authorise by means of an National Health Service (NHS) prescription the supply of any medicine (not just prescription only medicines) at public expense' and 'to advise a patient on suitable care or medication including medicine which may be purchased over-the-counter' (p11).

Traditionally the only professionals who could prescribe medicines for human use were doctors and dentists. Nurse prescribing was first suggested in a DoH report in 1986 (DOH and Social Security, 1986), known as the Cumberlege Report. An advisory group working in 1989 then recommended that nurses working in the community (district nurses and health visitors) could prescribe from a limited formulary (DoH, 1989). Limited formulary nurse prescribing was first introduced in eight pilot sites in 1994 and then put into practice nationally in 1998 in England. Since that time extended formulary nurse prescribing was introduced in 2002. Both the limited and extended nurse prescribers' formulary are published monthly in the Drug Tariff (Drug Tariff, 2005a; 2005b) and bi-annually in the British National Formulary (BNF) (British Medical Association and Royal Pharmaceutical Society of Great Britain, 2005). The extended nurse prescribers' role has since been extended further, including being able to prescribe any licensed medicine for any condition, which also includes some controlled drugs (MHRA and DoH, 2005a; DoH 2006).

In 2003 there were approximately 21,700 nurses in England trained to prescribe from the Nurse Prescribers Formulary and 400 from the Nurse Prescribers Extended Formulary. However, in October 2002 the number of actively prescribing nurses in England was 11,100 (Granby, 2003). Many reasons have been provided concerning this shortfall including that service need was not considered when identifying the nurses to be trained. Nurses were therefore trained who were not working in an environment where their prescribing qualification would be put to use (Granby, 2003).

In the long-established relationship between the health professions, doctors assessed and diagnosed the patients' complaint and, if appropriate, prescribed a medication. A pharmacist then dispensed the prescription and the nurse supplied or administered the medication. However, the Crown Report stated that the traditional relationship between a doctor, nurse and a pharmacist no longer 'fully reflects the needs of modern clinical practice' (DoH, 1999 p18). Some nurses have already undertaken a prescribing role, a number of doctors dispense as well as prescribe and pharmacists are able to 'prescribe' increasing numbers of pharmacy medicines. In addition, patients are now more involved in their care; the time of the passive, all accepting patient has passed with patients' knowledge of their conditions increasing and with the advent of concordance (DoH, 1999; DoH 2001). There is an increasing number of patients with long term chronic conditions in the United Kingdom and the expert patient plan aims to encourage and empower these patients to self manage their illness to a certain degree (DoH, 2001).

The Crown Report recommended that the right to prescribe should be extended to an increasing number of HCPs other than those allowed at the time of the report (doctors, dentists and nurses). However, prescribing should be limited to certain therapeutic areas based on the competence of the HCP. There should also be a distinction between two types of prescriber – an independent and a supplementary prescriber (SP). The independent prescriber (IP), at present are doctors and dentists who are responsible for the diagnosis of the patient's condition (Medicines Control Agency (MCA) and DoH, 2002). Following diagnosis, the SP can then take over responsibility for the clinical care of the patient. Pharmacists were included in the early candidate list for supplementary prescribing in the Crown Report, specifically pharmacists in specialist areas and pharmacists who conduct medication reviews (DoH, 1999).

Following publication of the Crown Report a consultation document on supplementary prescribing was published jointly by the DoH and the Medicines Control Agency (MCA, now

the Medicines and Healthcare products Regulatory Agency (MHRA)) in April 2002 (MCA and DoH, 2002). The then Health Minister, Lord Hunt, announced the proposal on the same day stating that 'pharmacists are an untapped resource for the NHS' (DoH, 2002a). This consultation paper was known as the MLX 284 document. The aim was to have wide consultation with the medical, nursing and pharmacy professions on the proposed amendments to the Prescription Only Medicines (Human Use) Order 1997 to allow SPs to prescribe POMs and on the general issues of supplementary prescribing.

Supplementary prescribing was initially 'offered' to registered pharmacists, registered nurses and registered midwives and was to only be implemented where there is a benefit to the patient and NHS (MCA and DoH, 2002). The consultation document MLX 284 listed the responsibilities that the IP and SP must undertake. Of the 765 responses received on the proposals set out in MLX 284, 678 were supportive of supplementary prescribing. There were 78 objections and nine had no comments either way (MCA, 2002). Comments were received from medical, nursing and pharmacy bodies among others including support from the Royal Pharmaceutical Society of Great Britain (RPSGB) (MCA, 2002). On the 21st of November 2002 it was announced by the former Health Minister Lord Hunt that supplementary prescribing would go ahead (DoH, 2002b).

In order for prescribing rights to be extended, amendments were required in primary legislation. The Health and Social Care Act 2001 (section 63) in England was therefore amended in order to assign new types of prescribers in certain circumstances (HMSO, 2001) as was the Medicines Act 1968. Amendments to NHS regulations are devolved to each country in the United Kingdom therefore in Wales this was the responsibility of the Welsh Assembly Government (WAG). An amendment was also required to the Prescription Only Medicines (Human Use) Order 1997 (the POM Order) (HMSO, 2003a) in order for POMs to be prescribed by a SP, to the Medicines (Sale or Supply) Regulations 2003 (HMSO, 2003b) and to NHS regulations (HMSO, 2003c; 2003d). Supplementary prescribing was made legal on 4th of April 2003.

The definition of supplementary prescribing is :-

> 'a **voluntary partnership between the independent prescriber and a supplementary prescriber, to implement an agreed patient-specific clinical management plan (CMP) with the patient's agreement'** (RPSGB, 2002a).

A CMP, which is central to the supplementary prescribing model, must be produced as an agreement between the three parties, the IP, the SP and the patient. A partnership must therefore be formed between the IP and SP. This partnership is voluntary with each individual being accountable for their professional actions. The plan, which is patient-specific and condition-specific, documents the responsibility of the SP and includes the patient's name, the condition that is to be managed, patient specific information for example medication allergies, medicines that may be prescribed, the medicines that may be stopped or have their doses adjusted and in what circumstances, when the patient should be referred back to the IP, the date when care was passed over to a SP and when a clinical review with the IP should take place (no longer than every 12 months) (RPSGB, 2004a; DoH 2005a). The CMP can be written or be in an electronic format which should then be entered in patient notes. It is also essential that shared patient medication records are in place for the IP and SP to use and record their actions (Mullan, 2003). Templates of the CMP are available from the DoH (DoH, 2005a). Examples of templates are also available to guide their production, for example at Drug Info Zone (2005). Template patient information leaflets have also been produced by the College of Pharmacy Practice (Faculty of Prescribing and Medicines Management, 2003) and the WAG (WAG, 2004a) as a guide of what information should be provided to patients.

The patients most likely to benefit from supplementary prescribing are those that have non-acute medical conditions such as asthma, diabetes and coronary heart disease (MCA and DoH, 2002). The majority of medicines will also be available for SPs to prescribe. Medicines include black triangle drugs (these are medicines that are monitored closely by the Committee on safety of Medicines and Medicines Control Agency) and medicines deemed "less suitable for prescribing" by the British National Formulary. Initial exceptions to supplementary prescribing included Controlled Drugs and those without a product licence (unless they are part of a clinical trial and have a clinical trial certificate or exemption or if they were for paediatric use) (MCA and DoH, 2002). However, a consultation document was proposed an amendment to the Misuse of Drugs Regulations 2001 in order to allow SPs to prescribe Controlled Drugs (except for those in Schedule One) (Anon, 2003a). The consultation was published in July 2003 by the Home Office and lasted until mid September 2003 (Home Office, 2003). A consultation was also published in December 2003 on the 'Use of unlicensed medicines, reformulation of licensed products and preparations made from active pharmaceutical ingredients and excipients' by supplementary prescribers (MHRA and DoH, 2003). The necessary amendments to allow SPs to prescribe both unlicensed medicines and Controlled Drugs came into effect on the 14th of April 2005 (DoH, 2005b).

1.2 Predicted benefits of supplementary prescribing

Supplementary prescribing was one strategy employed by the Government to modernise the NHS. The changes to the provision of healthcare suggested in the Crown Report were aimed to maintain or to increase patient safety (DoH, 1999 p61). Benefits were predicted in several areas which included (DoH, 1999; MCA and DoH 2002):

- There will be more effective use of HCPs' skills and knowledge when they can prescribe so that they will be valued to a greater extent
- Patients will have enhanced access, choice of treatment and health care advice
- There will be an improved management of patients' medication
- Patient care will gain increased continuity with patients not having to see both the doctor and pharmacist for a prescription
- Patients will be more involved in their care
- There will be an improved working relationship between HCPs
- The job satisfaction of HCPs will be improved.

The pharmacist prescribing task group of the RSPGB (2002a) also stated that there will be benefits seen by patients, the healthcare system and pharmacists themselves. Prescribing by pharmacists has the potential to increase motivation, to improve the retention of newly-qualified pharmacists and provide financial security (Anon, 1997).

1.3 Supplementary prescribing within national policy

How to manage chronic diseases is becoming an increasing challenge to the NHS with approximately 17.5 million adults having a chronic disease within Great Britain. Individuals with chronic diseases are reported to take up to 80% of GP consultations and 60% of hospital beds (DoH, 2004a). The DoH (2004a) recognises that making use of multi-disciplinary teams is one way to effectively manage these conditions which includes non-medical prescribing and hence supplementary prescribing.

Supplementary prescribing has been supported by all of the devolved administrations within the United Kingdom. A new role for pharmacists has been supported in several strategy documents in England including The NHS Plan (DoH, 2000a), Pharmacy in the Future – Implementing the NHS Plan (DoH, 2000b) and a Vision for Pharmacy in the New NHS (DoH, 2003a) where prescribing medicines is included in the Chief Pharmaceutical Officers' 10 key roles for pharmacy'. Both Wales (WAG, 2000; 2001; 2002) and Scotland (Scottish Executive, 2002) also

support supplementary prescribing. Wales aimed to have supplementary prescribing in place by 2004 and then to have pharmacists independently prescribing as soon as possible (WAG, 2002). The WAG did not see supplementary prescribing as being significantly different from what pharmacists were already doing since they are already using clinical knowledge in their current position (WAG, 2002). The All Wales Medicines Strategy Group in Wales also supported the development of supplementary prescribing including the formation of a Task and Finish Group on Supplementary Prescribing in August 2003 to oversee the implementation of supplementary prescribing in Wales (Hinchliffe, 2005).

The need for an increased role for pharmacists was identified in the Nuffield Report (DoH, 1986) along with the desire for enhanced collaboration with other HCPs. The Chief Pharmaceutical Officer's list of key roles for pharmacy listed in the document 'A Vision for Pharmacy in the New NHS' included being able to prescribe and monitor clinical outcomes with pharmacists being perhaps the 'biggest untapped resource for health improvement' (DoH, 2003a p7). In addition, a third of the responses to 'A Vision for Pharmacy in the New NHS' stated that supplementary prescribing was seen as beneficial to patients, that it would improve patient access to care and utilise pharmacists' skills and knowledge (DoH, 2004b). The Audit Commission's report 'A Spoonful of Sugar' (2001) in England also supported supplementary prescribing in order to move pharmacists in hospital from a traditional re-active role to a more proactive position and acknowledged that the important role of pharmacy must be recognised by other HCPs.

As stated above the RPSGB supported the extension of the pharmacist's role. Indeed, the development of prescribing by pharmacists and the management of chronic medical conditions was foreseen in the document 'Building the future. A Strategy for a 21st Century Pharmaceutical Service' (RPSGB, 1997a). The RPSGB also formulated a Pharmacist Prescribing Task Group in 2001 to set out policies on the roles of pharmacists with respect to the NHS Plan (DoH, 2000a), in particular pharmacist prescribing. The two reports produced by the Task Group (RPSGB, 2002a; 2003a) stated their position on the prescribing role and their recommendations to the DoH, RPSGB, NHS and educational establishments. The final report of the Task Group (RPSGB, 2003a) also advocated the possibility of pharmacists being able to independently prescribe which would lead to an enhanced recognition of pharmacists' skills and an increased contribution in the acute management of patients. A briefing paper was also published by the RPSBG in 2004 (RPSGB, 2004a) which described the development of supplementary

prescribing and its potential benefits to patients, doctors, pharmacists and primary care organisations.

Several strategy documents have been released in order to assist in the implementation of supplementary prescribing. The National Prescribing Centre (NPC) produced a set of competency frameworks related to prescribing pharmacists (NPC, 2003a; 2003b). The competency frameworks allow pharmacists to identify their training needs in three areas, the consultation, prescribing effectively and prescribing in context. The competency framework for pharmacists (NPC, 2003a) was based on a framework that had been previously produced by the NPC for nurse prescribers (NPC, 2001). An updated guide has been released for nurse prescribers to fulfil the additional competencies required of supplementary prescribing (NPC, 2003c). A guide for supplementary prescribing implementation was also produced in England in 2003 (DoH, 2003b) and in Wales in 2004 (WAG, 2004b) in order to assist individuals and organisations to put supplementary prescribing into practice.

1.4 Training for supplementary prescribing

Before undertaking the role of a SP a nurse or pharmacist must complete specified training (MCA and DoH, 2002) in order to achieve a Practice Certificate in Supplementary Prescribing. The training programmes for pharmacists are based on the curriculum set by the RPSGB (2002b). Each pharmacist candidate must:

- be registered with the RPSGB and have at least two years experience after their pre-registration year,
- demonstrate a service need for supplementary prescribing, where they will be in a position to utilise their prescribing role once trained,
- have support from their organisation,
- have access to a budget to pay for the cost of their prescribing,
- have a specified IP who is willing to work in partnership with them as a mentor (RPSGB, 2002b). These IPs are known as a Designated Supervising Medical Practitioner (DSMP) in Wales or a Designated Medical Practitioner (DMP) in England.

The number of pharmacists and nurses to undertake the training will therefore depend on local service need. The NPC carried out a survey in England in 2002 to attempt to identify how many Primary Care Trusts (PCTs) wanted their pharmacists to be trained as supplementary prescribers (Jackson, 2003). Seventy-one per cent of PCTs stated that they would be putting pharmacists

forward for training with 78% stating that nurses would be put forward. The PCTs estimated that they would put more nurses forward compared to pharmacists with a ratio of 3:1 (2,407:770) quoted. Practice-based pharmacists working at General Practitioner (GP) surgeries and hospital pharmacists accounted for the greatest number of pharmacists estimated to be put forward for training (Jackson, 2003).

Training takes approximately 25 days of face to face learning and 12 days of supervised practice by the DSMP (RPSGB, 2002b). However, the specific training schedule will depend on the Higher Education Institution (HEI) that is providing the course. It was envisaged that training would take up to six months to complete (Wilson, 2003). The RPSGB has undertaken the role of maintaining the list of pharmacists who have undergone training to become a SP (RPSGB, 2002a) where their entry on the register will be annotated with 'SP' when they qualify. The RPSGB byelaws have therefore been amended to accommodate this registration.

HEIs are required to apply for accreditation of their course from the RPSGB in order to train pharmacists and from Health Professions Wales (in Wales) or the Nursing and Midwifery Council (in England) to train nurses. As of 21st January 2005 some 27 HEIs are providing courses (RPSGB 2005a). The first course to be accredited was at Keele University in June 2003. However, Jackson (2003) stated that the development of the training programme for supplementary prescribing was the 'rate limiting step' to the implementation of this new role. The initial aim was to have up to 1,000 pharmacists and 10,000 nurses trained as SPs by the end of 2004 (DoH, 2002b), a target which was not met.

1.4.1 Supplementary prescribing training in Wales

In November 2002 the WAG Minister for Health and Social Services announced that £500,000 had been provided to fund 250 places to train pharmacists and nurses in the first cohort of SPs. In Wales training has been provided on an 'All Wales' basis from five nursing and pharmacy HEIs. Each course was approved by Health Professions Wales and the RPSGB in early 2004. These were some of the first multi-professional courses, where nurses and pharmacists were trained together, to be approved in the United Kingdom. The Welsh courses consisted of up to (a) 15 days of face-to-face training, (b) self study distance learning packages produced by the University of Glamorgan and the Welsh Medicines Partnership and (c) the compulsory 12 days supervised in practice with the DSMP. The required assessments in Wales consisted of an Objective Structured Clinical Examination (OSCE), a practice portfolio and a numeracy

competency test (this third requirement was unique to Wales). On completion of the Welsh programmes the students were awarded 40 Credit Accumulation and Transfer Scheme (CATS) points at degree level (Hinchliffe, 2005).

As stated above, the Task and Finish Group on supplementary prescribing in Wales was given the task of managing the implementation of the role. They, in turn formed a Curricular and Education Sub-Group in September 2003 to discuss and formulate an All Wales curriculum to be adopted in all five HEIs. A second sub-group, the implementation group was also formed in January 2004 to oversee and deal with implementation in Wales (Hinchliffe, 2005).

The HEIs providing the supplementary prescribing training programmes in Wales were:
- University of Glamorgan
- University of Wales, Bangor
- University of Wales, Cardiff, Welsh School of Pharmacy joint with the College of Medicine School of Nursing
- University of Wales, Swansea
- North East Wales Institute

Each HEI in Wales had a 30 student capacity except for the course held jointly by the Welsh School of Pharmacy and College of Medicine School of Nursing which had a 60 student capacity due to the two HEIs working together. A total of 180 places were therefore available for the first cohort. The applications for the first cohort were received by February 2004 and the first cohorts began training in March 2004 with 165 enrolled students (Hinchliffe, 2005). As the target recruitment of 250 for the first cohort was not reached the remaining WAG money was used to fund a further 90 students in a second cohort. Applications were received by September 2004 and the second cohorts began in January 2005 with 80 enrolled students (Hinchliffe, 2005).

MCA and DoH (2002) also specified that the IPs would also need to complete brief training to prepare them for the 12 days in practice. The IPs in Wales were required to attend a one day training event hosted by the School of Medicine, Cardiff University and the Welsh Medicines Partnership in order to discuss role as a mentor. Training days were held in North, South and Mid / West Wales. A guideline to aid DSMPs in undertaking their mentoring role has also been published by the NPC in England (NPC, 2005a).

Supplementary prescribing by nurses and pharmacists was promoted in Wales with a series of road shows in North, West and South Wales in autumn 2003, evening presentations held by the Welsh Centre for Post-graduate Pharmaceutical Education and the distribution of a supplementary prescribing newsletter in December 2003. Supplementary prescribing in Wales was officially launched on the 17th of November 2004 by the Minister for Health and Social Services Jane Hutt.

1.5 Recent developments in supplementary prescribing

The first pharmacist in the United Kingdom to be registered as a SP took place in England in February 2004 (Anon, 2004a). The first hospital pharmacist SP signed a prescription in March 2004 (Anon, 2004b) and the first primary care and community pharmacist SP in May 2004 (Anon, 2004c; 2004d). As of 23rd of November 2005 a total of 715 pharmacists had registered as SPs (Craddock, 2005).

A consultation was undertaken by the MHRA in order to extend the number of HCPs who may undertake the role of a SP. These included chiropodists, physiotherapists, radiographers and optometrists (MHRA and DoH, 2004). Both radiographers and physiotherapists had already expressed concern that the initial supplementary prescribing cohorts would only consist of nurses and pharmacists (MCA, 2002). In April 2005 (DoH, 2005b; 2005c) amendments to regulations to allow these professions to prescribe came into effect. A curriculum to train the allied to medicine professions has also been formulated (DoH 2004c).

The most recent document specifying the current mechanisms in place to prescribe, supply and administer medicines was published by the DoH in March 2005 (DoH, 2005d) and includes information on the current progress in non-medical prescribing.

1.6 The roles of the pharmacist with respect to other HCPs' roles

Traditionally the roles of the pharmacist and the doctor have been distinctive, the doctor prescribed and the pharmacist dispensed the medicines. However, these boundaries have become less well-defined with the two professions collaborating to a greater extent and pharmacists aiming to have an increased impact on the prescribing process through the practice of clinical pharmacy and some doctors undertaking a dispensing role. Clinical pharmacy 'involves collaboration with medical staff, nurses and patients to promote rational drug usage based on considerations of efficacy, safety and cost' (Davies et al., 1994 p167). Several problems

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concerning the prescribing process in the hospital setting have been identified by Davies *et al.* (1994). These problems included the fact that pharmacy influence was retrospective (the prescription had already been issued before the pharmacist had any input). The best time to advise on medication is therefore at the time when the prescription is being written. It was also suggested that many senior medical staff did not recognise the knowledge of the clinical pharmacist. Pharmacists must therefore be more pro-active to make known their skills and expertise and to promote their clinical role. The prescribing decision making should also be seen as a joint process between pharmacist and medical staff.

Farrar *et al.* (1998) reported similar results to Davies *et al.* (1994) when they conducted a study demonstrating the retrospective ways in which clinical pharmacists work. This study which looked at the timing of prescription reviews by pharmacists was carried out in only one hospital but concluded that retrospective reviews of prescriptions by pharmacists did not meet the needs of pharmaceutical care. Any interventions should be carried out before the patient receives their first dose. Farrar *et al.* (1998) concluded that the delivery of clinical pharmacy services should be amended to optimise patient care. They too advocated the place of the pharmacist with increased responsibility for prescribing medicines. It can be seen from the two papers presented here that the provision of reactive clinical pharmacy is insufficient to deliver the required standards of care. In contrast supplementary prescribing is a pro-active role which is aimed to enhance patient care.

1.7 Small scale pilot studies on pharmacist prescribing

Several pilot studies have previously been conducted on pharmacist prescribing, a number of which are described below. One study evaluated the piloting of pharmacist prescribing in 1998 in one Scottish hospital (Hughes *et al.*, 1999). The two participating pharmacists were authorised, in specific circumstances to change medication therapy after a diagnosis had been carried out by a doctor (in a similar manner to supplementary prescribing). This included a variety of tasks including altering the timing of doses and prescribing the most suitable medicine formulation for a patient and reviewing analgesic use. This small scale study was deemed to be a success and claimed that pharmacist prescribing had beneficial effects on patient outcomes. Other benefits included that the pharmacists were able to use their knowledge to a greater extent and more effectively through performing their prescribing role therefore enhancing their job satisfaction. The researchers also stated that doctor prescribing was positively affected as they amended their prescribing practice as they learnt from the pharmacists' prescribing practice.

Another small scale pilot study on pharmacist prescribing has been carried out in a single general hospital in Northumberland (Woolfrey *et al.*, 2000) where pharmacists and medical staff were to work as a collaborative prescribing partnership. The views of medical staff, pharmacists and nurses were also obtained via semi-structured interviews. Two pharmacists took part in the pilot. The results demonstrated that doctors' prescribing had improved and members of the hospital staff were supportive of the initiative. Multiple benefits were cited including those for the patients (for example receiving the most appropriate therapy), pharmacists (more contact with patients), doctors (released to undertake other duties) and nurses (less time asking doctors to write prescriptions). The pharmacists also felt 'empowered' by undertaking the prescribing role since they were utilising their clinical skills to a greater extent.

McFadzean *et al.* (2003) demonstrated in a small scale study in 2001 a role for pharmacists in a medical admissions ward and their competence in taking drug histories and writing drug charts. Where the patient consultation was undertaken by a pharmacist only five per cent of drug histories contained an error compared to 65% by junior doctors. Hence, the pharmacists improved drug history taking and the writing of drug charts. The researchers stated that by providing the pharmacists with the ability to independently prescribe on the medical admissions unit, more use was made of the pharmacist's skills and patient outcomes were improved.

1.8 Small-scale studies on supplementary prescribing

Since supplementary prescribing has become a reality a number of researchers have started investigating different aspects of the role and its implementation within the United Kingdom. Research has been conducted on a number of settings, HCPs and through a number of methodologies. A pilot study involving the use of the template CMP suggested by the DoH has been reported by Bellingham (2003). However, only one pharmacist and five patients were involved in this small-scale project using the plan in a menopause and osteoporosis clinic setting. The results demonstrated that the plan was 'user-friendly and comprehensive' (p143).

A number of small-scale studies have been conducted within the supplementary prescribing field of research. Dawoud *et al.* (2004) investigated the perceptions of pharmacists on the first cohort at King's College, London and Homerton College, Cambridge on their competence to undertake supplementary prescribing via a self-completion questionnaire. Cassidy *et al.* (2004) conducted focus groups with the pharmacists in the first cohort to be trained in Northern Ireland and individual interviews with their medical mentors in order to investigate their views on

supplementary prescribing training and its implementation. Latif *et al.* (2005) conducted semi-structured interviews with eight pharmacists during, and then after, their supplementary prescribing training in the North of England. The researchers explored how the pharmacists' views on different aspects of supplementary prescribing had changed between the interviews including how the participant's role may change with implementation, the increased responsibility that comes with supplementary prescribing and the barriers to implementation.

While and colleagues (2004) explored the views of 127 community pharmacists from seven PCTs in England on a number of aspects of supplementary prescribing via a postal questionnaire. The views of community pharmacists on independent prescribing were also explored by Pfleger *et al.* (2005), likewise using a questionnaire.

Buckley *et al.* (2005) conducted a quantitative study with a self-completion questionnaire to explore the opinion of a sample of doctors, nurses and pharmacists from one NHS Trust in England on supplementary prescribing by nurses and pharmacists. The views of nurses and doctors from 11 hospitals in Northern Ireland on supplementary prescribing have also been examined (Lloyd *et al.*, 2005a; 2005b).

Nicholls *et al.* (2005) requested feedback from qualified SPs on their implementation of SP, the challenges that they faced and the factors that aided successful implementation via questionnaires, individual feedback, group discussions and meetings. Man *et al.* (2005) investigated the education of SPs with regards the use of an OSCE to assess competence to manage oral anticoagulant treatment whilst Edwards *et al.* (2004) studied the reflective portfolios of the pharmacists in the first cohort at The Robert Gordon University in Aberdeen through content analysis. Research is also being conducted at the University of Bath on supplementary prescribing in order to describe the role in practice and to investigate the reasons behind either successful or unsuccessful practices via interviews and case studies (Weiss, 2005).

1.9 Roles already undertaken by pharmacists

1.9.1 Management of minor ailments

Over the past 30 years, with the development of pharmaceutical care the role of the pharmacist has changed from a product focus to a patient focus. A large number of roles are already being performed by pharmacists. The NHS Plan (DoH, 2000a) stated that patient access to a HCP should be increased. A minor ailment scheme is one way to achieve this target.

In Scotland a scheme was implemented in 2001 which allows pharmacists to supply medicines for minor ailments, known as the 'Direct supply of medicines' pilot. A number of community pharmacists were provided with their own prescription forms and given permission to 'prescribe' a limited list of medicines from a pre-set formulary of over-the-counter medicines (OTCs) and Patient Group Directions (PGDs) in order to supply POMs (Duff, 2003). The scheme allowed the pharmacists to make more effective use of their skills and provided easier access for the patients. In Wales a scheme called 'Care at the pharmacy' was implemented and evaluated which allowed pharmacists to provide medicines to patients free of charge (if they were exempt from prescription charges) after they had been triaged by the GP surgery and randomised to the pharmacy group (Walker, 2003). The 'Care at the pharmacy' scheme was taken up by patients and the number of calls to the GP surgery reduced. The RPSBG published a briefing paper in 2003 on utilising pharmacists in managing minor ailments (RPSGB, 2003b). This document advocated the use of pharmacists in treating a number of patients who present with minor ailments. Several examples of such were provided from around the United Kingdom which demonstrated that pharmacists prove beneficial in this area of practice.

Whittington et al. (2001) reported on another scheme known as 'Care at the Chemist' in 1999 where one surgery in Merseyside implemented a system whereby patients with specific minor conditions (such as upper respiratory tract infections and head lice) were referred to a participating pharmacy. The pharmacist could then, if appropriate, 'prescribe' a medicine from an agreed limited formulary 'under the same terms as an NHS prescription'. This scheme proved to be very successful in transferring workload from the GP surgery to the community pharmacy and the pharmacists were also able to manage the conditions effectively.

1.9.2 Pharmacist-led medication clinics

Studies conducted as long as over twenty years ago investigated the effectiveness of a pharmacist and doctor prescribing. In 1982 a small scale study on the prescribing for psychiatric inpatients held in California demonstrated that the small number of prescribing pharmacists could prescribe as well, if not better and more appropriately than the study physicians (Stimmel et al., 1982).

Pharmacists have been successful in running a number of clinics to manage various conditions. The following studies describe the work of pharmacists in America. These include the control of anti-emetic therapy in an oncology clinic (Martin et al., 1988) through protocol guidance,

management of patients with thyroid disorders through agreed protocols (Dong, 1990) and a hyperlipidaemia clinic (Furmaga, 1993) where the interventions were decided upon through the pharmacist's clinical judgement rather than via a protocol. The pharmacist also provided counselling and monitoring of therapies. Furmaga (1993) provided a description of the pharmacist's role in the hyperlipidaemia clinic but no evaluation was performed on its effectiveness. Morreale (1995) described a *Helicobacter pylori* clinic run by a pharmacist. This was only a very small scale study with only 20 patients being evaluated however it does demonstrate another potential successful treatment role for the pharmacist. It should be noted that many of the studies listed above only involved the use of a small number of pharmacists therefore the results cannot be extrapolated to other pharmacists in similar situations or to other clinics.

There are also examples of pharmacists successfully running medication clinics in the United Kingdom both in primary and secondary care. Examples include anticoagulation clinics (Radley and Hall, 1994; Macgregor *et al.* 1996; Holden and Holden, 2000), lithium clinics (Dean and Acomb, 1995), hypertension drug reviews (Braybrook *et al.*, 2002), hospital pre-admission clinics (McIntyre and Manson, 2004), dermatology clinics (Tucker, 2004) and osteoporosis clinics (Tanna, 2004). Pharmacists are able to manage medicines within a narrow therapeutic range, improve patient care and provide medication counselling as well effectively as doctors. Pharmacists also undertake transcribing activities within some NHS trusts (Hobson and Sewell, 2003) such as amending prescriptions, rewriting drug charts and prescribing in admission clinics.

Bhalla *et al.* (2003) have identified that admissions associated with drug related problems in their hospital is an important issue. An extended role for pharmacists in medicines management and reducing errors was therefore noted to be a significant development in order to reduce this problem. The use of a pharmacist in an admissions ward round in one London hospital has also proved very successful over the three year study period. The clinical pharmacist was able to make recommendations and to make a contribution to patient care (Bednall, 2003).

1.9.3 Deregulation of medicines

The deregulation of more POM to P medicines has given pharmacists the ability to recommend an increasing number of treatments OTC (Bellingham, 2002a). For example, emergency hormonal oral contraception, simvastatin for cholesterol and chloramphenicol for acute bacterial conjunctivitis. It can therefore be argued that pharmacists are already performing an independent

prescribing role as they advise patient on OTC products. The deregulation process recognises that pharmacists have a clinical role in the management of patients with chronic conditions and can act as a 'stepping stone towards introduction of pharmacist prescribing' (Bellingham, 2002b p132). Concerns have been expressed on the proposed increase of deregulation of medicines (Bellingham, 2002b) including the lack of monitoring after the medication has been bought OTC. However, supplementary prescribing has been seen as a way to alleviate these worries so that patients may be monitored to a greater extent (Bellingham, 2002b).

1.9.4 PGDs

A PGD is defined as 'a written direction relating to supply and administration of a POM, to persons generally, (subject to specified exclusions) and is signed by a doctor or dentist and by a pharmacist' (RPSGB, 2004b p1). Pharmacists are permitted to utilise PGDs as a means of supplying POMs to appropriate groups of patients. For example, PGDs can be used to supply emergency hormonal oral contraception, trimethoprim for urinary tract infections or mebendazole for thread worm infections (RPSGB, 2004b).

1.9.5 Medicines use review (MUR)

MUR involves a pharmacist conducting a medication review with patients to identify any medicine related problems they may have and to tackle these problems. The reviews are part of the new pharmacy contract in 2005 as an advanced service. MURs will also be used to assist patients in gaining knowledge about their treatment and to feedback any issues to their GP (Bellingham, 2004a).

However, medication reviews is not a new concept to pharmacy. Studies carried out on the ability of pharmacists to conduct medication reviews with patients have demonstrated that it is possible for pharmacists to carry out reviews effectively. A randomised controlled study in 2001 investigated the review of elderly patient repeat prescriptions by pharmacists compared to doctors (Zermansky *et al.*, 2001). This study and that of Krska *et al.* (2001) concluded that pharmacists were able to conduct medication reviews with the elderly patients with positive outcomes such as cost savings and the resolution of 'pharmaceutical care issues'. The pharmacist patients received more amendments to their treatment compared to those reviewed by the doctor. Petty *et al.* (2001) suggested, in the light of previous successful medication reviews by pharmacists that this represents 'the way forward'. As pharmacists undertake their prescribing role it is a key opportunity for reviews to take place as a date for review must be set into the

CMP therefore ensuring it does take place. Lowe *et al.* (2000) recognised the development of supplementary prescribing and acknowledged that the process of reviewing a patient's medicine would be part of supplementary prescribing practice.

1.9.6 Repeat prescribing

Repeat prescribing from community pharmacy is included as an essential service in the new pharmacy contract (Bellingham, 2004a) for 2005 and was advocated in the Pharmacy in the Future (DoH, 2000b) document.

A large number of prescriptions are provided in the form of repeats for chronic conditions. In England in 1993, using the prescribing data of 140 medical practices' Harris and Dajda (1996) stated that 75 per cent of all items prescribed were repeats, accounting for 81 per cent of the prescribing costs. Forty-eight per cent of the population were found to have received repeat prescriptions.

Zermansky (1996) investigated the control of repeat prescriptions in Leeds and found that many general practices inadequately control such prescriptions. This resulted in many prescriptions being issued without authorisation, with poor compliance control and a poor system of identifying those patients in need of medication review (Zermansky, 1996). Goldstein *et al.* (1998) showed that community pharmacists, working with GPs were valuable as they were able to rationalise prescribing and assist in avoiding adverse drug reactions and drug interactions. This study was only conducted in two health authorities in England.

Jones *et al.* (2000) and Hughes *et al.* (2000) demonstrated that if patients were randomised to having their repeat prescriptions managed by a pharmacist rather than the traditional GP system they were more satisfied. Reasons included increased convenience and time saving.

1.10 The opinions of others on the developing role of the pharmacist

As well as the small scale piloting studies described above research has also been conducted on the views of other HCPs on the possibility of pharmacists prescribing. Reebye *et al.* (2002) discussed the issue of territoriality in primary care. Pharmacists are at present providing an increasing number of services that were traditionally the domain of the GP. These include running medication clinics, smoking cessation services and providing emergency hormonal contraception. Questions have therefore arisen as to how this development is accepted by other

HCPs (Reebye *et al.*, 2002) and how it may encroach on their professional territory. Annandale (1998) discusses the power differences between pharmacists, nurses and doctors and their ability to keep a hold on their clinical roles and the complex relationships between the professions as each of their roles develop and change. Reebye *et al.* (2002) sees the physicians' traditional role as 'diagnosing, prescribing and counselling' (p70) and the pharmacists' as 'dispensing, counselling and selling OTC medicines' (p70). If pharmacy now attempts to change these boundaries by, for example, prescribing there may be an opposition off the doctors who may see it as a threat. Supplementary prescribing is noted by Reebye *et al.* (2002) as an event where this territorial action may be evident. Nurse prescribing has also meant that they are encroaching on a traditionally medically dominated role (Rashid and Bentley, 2001).

For supplementary prescribing to be successful an effective partnership between the pharmacist, doctor and patient is essential. Several studies have been carried out in order to ascertain the opinions of other HCPs and patients on the services that pharmacists have to offer and future plans to extend their role. GPs' opinions on extending the role of the pharmacist have varied between studies. Spencer and Edwards (1992) showed that the majority of a sample of GPs supported roles such as reporting adverse drug reactions and managing minor illnesses but most did not agree with a screening role for example, for hypertension. Approximately one third agreed with the statement that 'pharmacists should stick to dispensing and not venture into other areas of medicine'. Doctors supported an extension of the role but only to a limited extent and when it did not encroach on their role (Spencer and Edwards, 1992). However, since this study was carried out a screening role for pharmacists has developed with cholesterol testing and diabetes screening taking place in community pharmacy.

A similar study carried out in 1998 (Bleiker and Lewis, 1998) discovered that, in contrast to the study by Spencer and Edwards (1992) most GPs disagreed that pharmacists should stick to dispensing (81%). Eighty one per cent agreed that pharmacists could monitor repeat prescriptions compared to 36 per cent in 1992. Authors came to the conclusion that there was a general agreement to the extension of the role but not for screening and clinics. The differences in the responses of the GPs found in these two studies (Bleiker and Lewis, 1998; Spencer and Edwards, 1992) may demonstrate a move to an increased acceptance by GPs of the extension of the community pharmacists' role. However, the same GP population was not surveyed in both studies.

Bond et al. (1995) also surveyed the opinions of GPs regarding an extended role for community pharmacists. GPs in Grampian were provided with a list of proposed roles for pharmacists and their opinion sought. The majority favoured an increase in general pharmaceutical tasks but not such a high level of support was seen for designated prescribing tasks such as deciding on medication and dosage in agreement with a set protocol. Holden and Wolfson (1996) also carried out a survey on issues related to prescribing which compared the views of community pharmacists and GPs. GPs were more reserved in their agreement of wider roles for pharmacists. In contrast the pharmacists were supportive of a wider role such as in the management of chronic conditions. Bleiker and Lewis (1998) also demonstrated that GPs in Devon were not very supportive of pharmacists extending their role to include the management of medication clinics. However, for the role of the pharmacist to extend it is imperative that GPs support the development because without this agreement there is little chance of it further roles becoming a reality (Bleiker and Lewis, 1998).

Two studies (Child et al., 1998; Child and Cantrill, 1999) reported on the views of HCPs concerning the possibility of pharmacists being able to prescribe. The results of the surveys demonstrate that those doctors and nurses who had experience of prescriptions written by pharmacists did find them helpful (Child et al., 1998). The general support for pharmacist prescribing varied considerably depending on the scenario described but it was generally seen as being useful. Most doctors (67%) and nurses (79%) believed that only those pharmacists who have had additional postgraduate training should be able to prescribe. Barriers identified included the need for training, the willingness of the pharmacist to take on the role (the majority of pharmacists in this study were willing to do so), communication between the HCPs and the accountability of the pharmacist. The authors believed that these barriers could be overcome so that implementation of pharmacist prescribing would occur.

Child and Cantrill (1999) also investigated the perceived barriers of hospital doctors to pharmacist prescribing through the use of a questionnaire. Potential barriers were identified by those who did and did not support pharmacist prescribing. The five major themes generated were that (a) pharmacists may not have all of the relevant patient clinical details, (b) communication between HCPs may pose a difficulty, (c) the initial in-patient chart should be written by a doctor, (d) a problem of how responsibility should be divided and (e) that doctors may then have reduced opportunities to review patients' medicines. Additional barriers included the lack of

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diagnostic skills held by the pharmacist and that the role of the doctor may be reduced (Child and Cantrill, 1999).

Rutter *et al.* (2000) conducted a focus group study investigating the views of community pharmacists on their role and how they see their role in the future. Consensus was seen for the need to develop new services, to move away from the sole dispensing role and having more contact with patients. Barriers to developing the community pharmacist's role were identified and included little awareness of other HCPs and the public regarding the skills of pharmacists and the amount of time required to extend the role outside of the busy dispensary.

Qualitative methodology was used to investigate barriers to community pharmacists and GPs working together in Northern Ireland (Hughes and McCann, 2003). Themes generated during focus group meetings were the perceived impression of GPs that community pharmacists are 'glorified shopkeepers', the available access to the respective professions, the power status of the doctors and the knowledge held by the pharmacists with GPs stating that they thought pharmacists were attempting to be doctors. Despite the negative results demonstrated by these studies, junior doctors are said to see pharmacists as holding an important role in the care of patients (Cheung *et al.*, 2003). Most of the 22 doctors interviewed wanted more contact with pharmacists in order to improve their prescribing practice. All of the doctors appreciated the pharmacist being present on their ward as a source of knowledge; pharmacists were seen as the 'drug expert'.

1.11 Prescribing by HCPs in countries other than the United Kingdom

Prescribing by HCPs other than doctors or dentists has already been implemented in countries outside of the United Kingdom such as the United States of America (USA) and Sweden. Most information relates to nurses and pharmacists as additional prescribers (DoH, 1999). However, the experiences of non-medical prescribers in other countries cannot be assumed to be the same as that experienced in the United Kingdom due to the varying and incomparable health care systems.

Work towards pharmacist prescribing in the USA began as early as the 1960s. However, it was not until the 1970s that prescribing began to be a reality (Farrell *et al.*, 1997). In 2001, pharmacists had prescribing rights in 25 states (RPSGB, 2003a) including Washington, New Mexico, California and Nevada (Anderson, 1994). This means that the pharmacist is able to

choose medicines and doses in accordance with an agreed protocol. In the USA it is only in Florida that pharmacists can prescribe independently from a limited formulary (RPSGB, 2003a). Carmichael *et al.* (1995) stated that the prescribing role has been shown to improve patient outcomes and therefore patient care.

Experience after implementing pharmacist prescribing in the USA demonstrated that pharmacy groups must work and support each other in order to give pharmacy more power, goodwill must be maintained with other potential professions that may prescribe and support from consumer groups is worthwhile (Wittenburg, 1995). Nurses have also been able to prescribe in the USA for over 30 years and also in Sweden (Luker and McHugh, 2002).

1.12 Summary

This chapter has provided a brief background into the development of supplementary prescribing in order to explain its origins and to place this present study within the wider context of the pharmacy practice research (PPR) literature. The next section of the thesis will explain the aims of the study with the following chapters describing in detail the methodology adopted, the recruitment procedure and the results obtained in each stage of the study.

Aims and objectives of the study

The aim of this study was to firstly explore the views of those involved in the implementation and training of SP on the new role for pharmacists, the key informant interviewees. The study then aimed to describe the implementation and development of SP within a small sample of the pharmacy profession in Wales.

The objectives of the study were as follows:

- To explore the views of a number of key informant interviewees on supplementary prescribing and their role in its implementation and training.

- To explore the views of a sample of pharmacists in the first and second cohort to be trained as SPs in Wales and their motivation for undertaking supplementary prescribing, and their pre-conceived ideas and views on the new role.

- To describe where the pharmacists aimed to implement supplementary prescribing in their practice and the conditions that they envisaged managing.

- To determine what barriers if any, the pharmacists encountered in order to implement supplementary prescribing into their practice.

- To identify any recommendations that the pharmacists could suggest to improve their supplementary prescribing training course.

- To explore the day-to-day activities of the trainee SPs through the use of diaries and follow-up interviews.

- To describe what was involved in a pharmacist supplementary prescribing consultation through the use of non-participant observation.

- To investigate the views of the DSMPs and patients of the recruited pharmacists on supplementary prescribing.

Thesis structure

Chapter One provides a general introduction to the background and development of supplementary prescribing. An overview is provided of a number of small scale studies that have already been carried out on pharmacist prescribing and a number of other pharmacist roles such as the management of minor ailments.

Chapter Two contains an overview of the study design including a description of the methodology and obtaining ethics committee approval. The semi-structured interview method to be used in a number of stages is described along with the process of obtaining informed consent, tape recording and transcription and finally the process used to analyse the data collected.

Chapter three concentrates on the initial stage of the study, the key informant interviews. The process of snowball sampling is described along with the results obtained from the interviews and how these were used to inform further stages.

Chapter four begins the journey of the pharmacists in the first cohort in Wales to undertake supplementary prescribing training from a number of training sites. This stage involves conducting semi-structured interviews during the pharmacists' supplementary prescribing training. The issues of arranging focus groups and the use of gatekeepers are described.

Chapter five describes the diary: diary follow-up interview methodology and its use during the supplementary prescribing training period.

Chapter six provides a description of the results obtained from the interviews conducted after supplementary prescribing training by the first cohort had been completed. How the views of the pharmacists may have changed since their interviews during their training is also discussed.

Chapter seven provides a background to the medical consultation and non-participant observation literature. The process undertaken to recruit and obtain consent from the SPs and IPs and patients in order to perform non-participant observation of the pharmacist-patient consultation is also described. The data generated from the observations is presented here.

Chapter eight completes the research conducted with the first cohort of pharmacists to be trained as SPs in Wales. This includes interviews with the SPs and a number of their independent prescribers and patients.

Chapter nine concentrates on the second cohort of pharmacists to be trained as SPs in Wales. The method of recruitment is described along with the results obtained from interviews conducted during and then after their training had been completed.

Chapter ten provides a general discussion of the study, an overview of the findings presented in the earlier chapters, the methods employed, and the limitations of the study as well as identifying potential further research.

The next chapter moves on from the aims of the study to describe an overview of the methodology employed, more specifically semi-structured interviews and how ethics committee approval was obtained in order for the project to proceed.

Chapter Two – Methods

2.1 Introduction

Following on from the general introduction and the aims and objectives, this chapter will provide an overview of this present study. The chapter will describe how ethics committee approval was obtained and detail the case study and semi-structured interview methodology utilised. General study principles of informed consent will also be considered.

2.2 Research questions

Research questions are used as a means of directing the study to address a gap in the literature. Before the research questions for each stage of the study were generated a literature review was undertaken in order to discover the breadth of information available, to become familiar with the field and to inform the specific area of inquiry within supplementary prescribing. The literature review is described in Chapter One which informed the aims and objectives specified. As supplementary prescribing was a new development within the pharmacy profession then the questions were exploratory in nature. This is therefore an exploratory study into a new area, an approach which is often used when a new topic is being researched in order to 'break new ground' (Babbie, 2001 p93). The research questions to be addressed for each stage are presented in the appropriate chapters.

2.3 Qualitative research methodology

The majority of PPR is quantitative in nature with the use of qualitative methods increasing (Smith, 2002a). However, there is support for the use of qualitative methods and its increasing use within PPR (Strong, 1992) as well as health services research (Pope and Mays, 1995). Qualitative methods are subjective in nature, seek to explore the 'what', 'how' and 'why' questions and place attention on the meanings, views and understandings of the participants. This is in contrast to the objective quantitative approach that aims to generate statistical (to answer the 'how many'? questions) results that can be generalised to wider populations (Smith, 2002b). As a result qualitative as opposed to quantitative methodology was deemed most appropriate for this present exploratory study in order the views and perceptions of the participants on the role of the SP.

2.4 Which qualitative research methods were utilised?

The qualitative research methods in this present study were semi-structured interviews, focus groups, diaries and non-participant observation. The first stage consisted of key informant interviews with a sample of individuals who were involved in the implementation and training of supplementary prescribing. This initial stage was used to explore the participants views on the role of a SP and the themes generated would then be used to inform further stages. The next phase of the study then involved recruiting a sample of pharmacists in the first cohort to be trained as SPs in Wales. The pharmacists' views on supplementary prescribing were to be investigated before they started training (initially intended through focus groups to facilitate a group interaction) (Stage One), their day-to-day activities during training were to be explored through diaries and follow-up interviews (Stage Two and Three) and then their views after training had been completed on the training programme and their role as a SP were discussed (initially intended to be conducted through focus groups) (Stage Four).

The next phase of the study would then concentrate on the recruited pharmacists from the first cohort as they practice as a SP. Non-participant observation of pharmacist SP-patient consultations would be conducted to describe what occurs in such a meeting (Stage Five) and also interviews with the SPs' IPs and patients to investigate their views on the role (Stage Six). The final phase involved recruiting the second cohort of trainee SPs in Wales to conduct interviews before and after their training (Stage Seven (a) and (b)) in the same manner as the interviews with the first cohort. A multiple method strategy was therefore adopted within a case study approach.

2.5 Case study strategy

A fundamental feature of case study research is that a number of different research methods are adopted, a number of which are utilised in this present study as described above. The case study is therefore the 'main method' with the interviews, observation etc. being the 'sub-methods' in order to adopt a 'multi-method' strategy, what is known as triangulation (Gillham, 2000). The most important interviewing technique in case study research is the semi-structured interview. Case studies adopt a subjective, primarily qualitative (Hammersley and Gomm, 2000), 'naturalistic' approach which Gillham (2000) argues is appropriate to study 'human phenomena'. Case studies are presented as a narrative – a story of what has occurred, and can be descriptive in nature (Babbie, 2001) and as such have been classed by some researchers as being a separate 'research paradigm' (Hammersley and Gomm, 2000 p5).

The case study is a popular approach to qualitative research (Stake, 2000). Gillham (2000 p1) describes a case as 'a unit of human activity embedded in the real world, which can only be studied or understood in context, which exists in the here and now and that merges in with its context so that precise boundaries are difficult to draw'. A single case may take a multitude of forms (Stake, 2000). A case can be an individual, a group of people, an institution or even a community. Several cases may also be researched, for example investigating several individuals or a population, what Stake (2000 p437) calls 'collective case study'. A 'case study' therefore researches into the 'cases' to answer specified research questions through collecting a variety of data. Within the context of this present study multiple cases are being researched, each case (or unit of analysis (Babbie, 2001)) being a pharmacist undertaking supplementary prescribing. An example of where a number of cases have been studied is research into practice settings by Crabtree and Miller (1999) who also utilised semi-structured interviews, key informant interviews and observation.

2.6 Obtaining ethics committee approval

As potential participants for the project included trainee SPs, IPs (both of whom could be NHS employees) and patients, ethics committee approval was required (Central Office for Research Ethics Committee (COREC), 2004). An initial research proposal was submitted to a Multi-centre Research Ethics Committee (MREC) in August 2003. It was decided to submit to a MREC as opposed to a Local Research Ethics Committee (LREC) so as to maintain some flexibility in the project and therefore not to be restricted to a limited number of research sites. Approval from an MREC would mean that the project could be conducted in any area within the United Kingdom. As one of the study academic supervisors was a member of the MREC for Wales the project was unable to be reviewed by this particular committee. The project was therefore reviewed by the South East of England MREC in September 2003. The initial proposal consisted of the first five stages of the study which were the key informant interviews and the first four stages with the first cohort of pharmacists to be trained as SPs in Wales. However, this proposal was rejected. The reasons given for this decision along with the researcher's comments regarding each point were as follows:

i.   The important role of the clinician and patients who were to be managed by a SP had been omitted. *Comment*: It was the intention of the researcher to recruit clinicians and patients into the study and to apply for ethics approval at a later date along with the preliminary findings from the stages in the initial application.

ii. Supplementary prescribing training had already begun at the time of submission to the MREC. Clarification was therefore sought as to how the diaries would be utilised. *Comment*: Training had not yet commenced in Wales therefore data from the study sites would not be missed. Clarification was provided.

iii. More information was required to detail what the focus group participants before training (pharmacists in the first cohort to be trained) would discuss. *Comment*: Due to the nature of the focus group discussion only initial guidelines could be submitted as the guide would be informed by the results obtained from the key informant interviews.

iv. Participants should be assured on the information sheets provided that by not agreeing to participate or by withdrawing that their current or future employment would not be affected. *Comment*: The researcher amended the information sheets to include this information.

After addressing the feedback from the initial submission an application for a second review was submitted and reviewed in November 2003, again by the South East of England MREC. Additional stages to those in the initial submission were included in order to satisfy the initial recommendations of inclusion of the IP and patient in the study. Hence non-participant observation of SP-patient consultations (Stage Five), interviews with patients and IPs (Stage Six) and interviews before and after training with pharmacists in the second training cohort (Stage Seven) were included. The Ethics Committee approved this second application subject to submission of a specified list of amendments and information. Only after receiving the changes requested and a response to the recommendations a formal approval letter would be issued.

As the second submission was held in November 2003 and the first supplementary prescribing courses in Wales due to start in early 2004 it was imperative that approval was sought as soon as possible. Therefore, due to time constraints and the amount of work required to meet the recommendations of the South East of England MREC it was decided not to submit the required amendments. As an alternative a proposal was submitted to the South East of Wales and North East of Wales LRECs to obtain approval and feedback. These two LRECs were chosen due to their convenient location, supplementary prescribing training programmes were to be held within their areas (including a total of three out of the five courses in Wales) and the researcher already had prior contact with the HEIs in these particular areas.

The stages submitted were the same as the MREC initial submission in September 2003. The South East and North East of Wales LRECs therefore reviewed the following stages:

- Key informant interviews
- Focus groups with pharmacist in the first cohorts to be trained in Wales as SPs at the beginning of the course (Stage One)
- Diaries and follow-up interviews with the pharmacists in the first cohort as they train as SPs (Stages Two and Three) and
- Focus groups after the first cohort training programmes had completed (Stage Four).

The South East of Wales LREC reviewed and approved the proposal in December 2003. The only amendments requested by the committee were to receive the letters inviting participation, information sheets and consent forms on the Welsh School of Pharmacy headed paper. In addition the consent forms required the corresponding version number and date of the information sheets stated on them for audit purposes. The North East Wales LREC reviewed and approved the proposal subject to amendments in January 2004. The amendments required by the committee required that the letters inviting participation, information sheets and consent forms for Stages One to Four of the project be combined into one instead of four separate information packs. The amendments were made and formal approval granted in February 2004. An additional requirement of the committee was that the researcher requested an official letter of support from the chief pharmacist of the North East Wales NHS Trust, which was provided.

For the study to progress approval was also sought from the Research and Development (R & D) Offices of the NHS Trusts in which the project would take place. The R & D Offices for the Cardiff and Vale NHS Trust, Velindre NHS Trust and North Glamorgan NHS Trust in South Wales and the North East Wales NHS Trust was therefore approached and approval granted.

In summary, participants could be recruited from the following areas:

1) NHS staff working within the Cardiff and Vale NHS Trust
2) NHS staff working within the Velindre NHS Trust
3) NHS staff working within the North Glamorgan NHS Trust
4) NHS staff working within the North East Wales NHS Trust
5) Community pharmacists either working part-time or full-time

2.6.1 LREC amendment number one

A protocol amendment was submitted to both North East Wales LREC and South East Wales LREC in May 2004. The amendment requested that either individual or group interviews be conducted as an alternative to the focus groups with the pharmacists in the first cohort at the beginning and after their training (Stages One and Four). The amendment was necessary to aid in the recruitment of pharmacists in the first cohorts and to reduce the inconvenience that participating in a focus group may cause such as agreeing a time and place to meet. North East Wales LREC reviewed the amendments in May 2004 and South East Wales LREC reviewed in June 2004, both approved without any amendments. The relevant R & D Offices also reviewed the amendments and provided their approval.

2.6.2 LREC amendment number two

Initial ethics approval and amendment number one allowed key informant interviews, during and after training interviews and diaries to be utilised with the first cohort of trainee SPs (Stages One to Four). In order to recruit the IPs and patients involved in supplementary prescribing into the study a protocol amendment was submitted to the North and South East Wales LRECs in July 2004. The second protocol amendment requested approval for a further three stages:

Stage Five – Non-participant observation of pharmacist SP and patient consultations

Stage Six – Interviews with the IPs, pharmacist SPs and their patients

Stage Seven – Focus groups or interviews with the second cohort of pharmacists to undergo training at the specified HEIs (a) before and (b) after training

Both LRECs approved the projects without amendments. Each R & D Office was also provided with details of the amendment and their approval granted.

2.6.3 LREC amendment number three

Due to the small number of individuals recruited into the study, a third protocol amendment was submitted to both North and South Wales LRECs. The aim of the third amendment was to aid the recruitment of more DSMPs who mentored pharmacists in the first and second cohorts of the training programme and to conduct further research with those pharmacists in the second cohort. An amendment was submitted and approved by both LRECs in June 2005. The R & D Offices of Velindre, Cardiff and Vale and the North East of Wales NHS Trust approved the

amendments in July and August 2005. The stages approved in amendment number three were as follows:

Stage Six (a) – Interviews with the IPs of pharmacists in the first cohort to be trained as supplementary prescribers (a new recruitment strategy to enhance participation)

Stage Eight – Non-participant observation of pharmacist SP and patient consultations (with those pharmacists in the second cohort)

Stage Nine – Interviews with the IPs and patients of the pharmacists in the second cohort

The study was required to adhere to the protocols submitted and approved by each ethics committee. In order to also adhere to the Data Protection Act 1998 a Data Protection Survey Sheet was submitted to the relevant officer at the Welsh School of Pharmacy detailing the type of information recorded, source of the information, the individuals having access to the information, duration the information collected was to be kept and security arrangements set in place.

2.7 Research design – an overview

In summary, this present study consisted of a number of distinct stages, each utilising qualitative research methods. Stages One to Six involved the first cohort and Stages Seven to Nine involved the second cohort of pharmacists to be trained as SPs. Figure 2.1 illustrates the project design and Figure 2.2 demonstrates a research time line.

Key informant interviews
↓
Stage 1 – Focus groups or interviews with pharmacists in the first cohort to be trained as SPs in Wales during their training
↓
Stage 2 and 3 – Diary entries completed by pharmacists during their supplementary prescribing training period and follow-up interviews
↓
Stage 4 – Focus groups or interviews with pharmacists in the first cohort after their training had been completed
↓
Stage 5 and 8 – Non-participant observation of pharmacist SP and patient consultations
↓
Stage 6, 6(a) and 9 – Interviews with IPs, pharmacist SPs and their patients
↓
Stage 7(a) and 7(b) – Focus groups or interviews with the second cohort of pharmacists to undergo supplementary prescribing training (a) during and (b) after their training

Figure 2.1. Summary of the research design.

Figure 2.2. Research time line. Below is a time line of when the data was collected for each stage of the research project in relation to the first and second cohorts of the supplementary prescribing training programmes in Wales.

	2003				2004												2005							
Stage	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug
Ethics approval	■	■	■	■	■	■			A 1	A1	A2											A3	A3	A3
Cohort One								■	■	■	■	■	■	■										
Cohort Two																	■	■	■	■	■	■		
KII			■	■	■	■	■	■	■	■	■	■	■	■	■									■
S1										■	■	■												
S2										■	■	■	■	■										
S3																		■						
S4																	■	■	■					
S5																					■	■	■	
S6																					■	■	■	
S7 (a)																	■	■	■					
S7 (b)																							■	■
S8																							■	■
S9																							■	■

KII – Key Informant Interviews
S – Stage number
A1, A2 and A3 – Ethics committee amendments one, two and three respectively.

2.8 Informed consent

In order to obtain informed consent participants were provided with information to allow them to make a decision whether they wanted to participate. Information packs were provided for each stage which contained the following documents on Welsh School of Pharmacy headed paper:

1) A letter inviting participation signed by the researcher

2) An information sheet

3) Two copies of the consent form

4) A freepost envelope in order to return a signed consent form

When reference is made to an information pack in the remainder of the thesis it refers to the contents listed above. The information sheets and consent forms were produced in accordance with the guidelines set by the COREC (2003). Informed consent and voluntary participation is an important aspect of social research (Babbie, 2001), which is also required by the British Sociological Association (2002). All of the information sheets followed a similar template and included the following questions and answers:

1) What is the purpose of the study?
2) At what stage of the research will I be participating?
3) What is an interview / group interview / focus group / diary / non-participant observation?
4) Why have I been chosen?
5) Do I have to take part?
6) What will happen if I decide to take part?
7) What will happen at the interview / focus group?
8) How will my views / information collected be used?
9) Will my views be kept confidential?
10) Who can I contact for more information?

The section of the information sheet detailing how the information collected will be used was important. The potential participants were made aware that should any unethical or unlawful practice by a pharmacist be disclosed during the interview that the researcher (who is also a pharmacist) is bound by the RPSGB Code of Ethics (RPSGB, 2005b) as stated below:

Part 2: Standards of professional performance
A.1 Pharmacists providing professional services. 'Pharmacists must ensure that -
(m) they act quickly to protect patients and the public from risk by reporting the matter to an appropriate person, authority or regulatory body if they have good reason to believe that they or a colleague from their own or another profession may not be fit to practise for reasons of health, conduct or competence. The safety of patients and the public must be the prime consideration, over-riding any personal, professional or commercial loyalties.'
(p86)

The General Medical Council's (GMC) guidance on fitness to practice was also to be adhered to should any information be revealed regarding any unlawful or unethical practice by a doctor that may have emerged during the study (GMC, 2003).

Should any unethical or unlawful information be disclosed then the participants were made aware that the disclosure would be discussed by the researcher and their academic supervisor in order to determine the appropriate course of action. This event was considered highly unlikely to occur and no information of this kind was revealed during the study. However, this was an important issue to acknowledge before the study began.

In order for an individual to provide their consent to participate in the study a signed copy of the consent form had to be returned to the researcher in the freepost envelope provided. The information sheet and the second copy of the consent form were retained by the participant for their records. The information packs were similar for both North and South Wales, the only difference being that on the letter inviting participation in North Wales the following phrase was present at the end of the letter as a requirement of the LREC to comply with the Welsh Language Act 1993:

> *'Mae'r gwybodaeth sydd wedi cael ei ddarparu ar gael yn Gymraeg hefyd. Os well gennych chi dderbyn y gwybodaeth yn Gymraeg cysylltwch â cyfeiriad sydd ar gychwyn y llythyr hon.'*

The statement meant that 'The information provided is also available in Welsh. Should the participants prefer to receive the information in Welsh then they can contact the researcher to request it via the address at the beginning of the letter.' However, in this present study no participants requested any of the information packs in Welsh.

The participants were given a period of two weeks to sign and return a signed copy of the consent form. If no form had been received in this time a duplicate reminder information pack was provided in accordance with ethics committee approval. If no form was received after the reminder information pack had been provided it was assumed that the individual did not wish to participate. It was important that potential interviewees had the time to decide whether to participate and to know that they could terminate their participation at any time should they wish to do so. Once a copy of the consent form had been received the researcher contacted the participant via the contact details that they had provided (telephone or email) to arrange a convenient time and place to meet.

2.9 Methods

A multi-method strategy was utilised in this present study, as described above. Interviews, more specifically semi-structured interviews were conducted in several stages of the study. As such, they will be described in detail in this chapter and the information provided will be relevant to all stages which include interviews, in order to avoid repetition. The other methods used, non-participant observation, focus group and diaries will be discussed in the chapters related to the particular stage where they were utilised.

2.10 Semi-structured interviews

As described above interviews were an integral part of this present study as they were conducted in several stages:

- Key informant interviews
- Interviews with trainee SP pharmacists at the beginning and after the first cohort training programmes in Wales (Stages One and Four)
- Diary follow-up interviews during training (Stage Three)
- Interviews with SPs, IPs and patients (Stages Six, Six (a) and Nine)
- Interviews with trainee SP pharmacists at the beginning and after the second cohort training programmes in Wales (Stage Seven)

Interviews are the most commonly used qualitative method in PPR (Smith, 2002b) and qualitative research (Bryman, 2001) in general. Kvale (1996 p1) defines the use of the qualitative interview as attempting 'to understand the world from the subjects' point of view, to unfold the meaning of people's experiences, to uncover their lived world prior to scientific explanations.' He sees the interview as being a 'construction site of knowledge' (Kvale, 1996 p2). An interview is therefore an 'inter view' where there is an exchange of views between two people on a topic of mutual interest. Wengraf (2001 p3) and Silverman (2001) explain that the interview is a 'joint production', a social interaction between the interviewer and interviewee. The interviewees are partners in the research helping to guide the interview (Rubin and Rubin, 1995).

The qualitative interview has similar characteristics to normal conversation in everyday life. Conversation is a basic form of interaction. The interview is therefore a professional conversation, a conversation with a purpose (Kvale, 1996). The skills used in normal conversation such as turn taking and asking and answering questions are built on in the interview. It allows the researcher to look into the experiences of people, to explore participant's

opinions and how they feel about their world. The flow and topics of the interview therefore changes depending on what the interviewee knows and feels (Rubin and Rubin, 1995). The questions used during an interview therefore vary with respect to the answers given; it is unpredictable and allows the participant to explore aspects of a topic which is important to them.

An interview differs from normal conversation as the interview is a research tool. The topics to be discussed are also determined by the researcher in advance (Rubin and Rubin, 1995). This is opposed to the spontaneous nature of the everyday conversation, as the interview is not between equal partners (Kvale, 1996). The researcher is questioning the interviewee, which results in an asymmetry of power (Kvale, 1996) with the researcher listening to pick up on new and interesting topics (Rubin and Rubin, 1995).

The interviews conducted in this study were semi-structured in nature. Semi-structured interviews are widely used within social research (Flick, 2002; Stroh, 2000). In this form of interview open questions are used in order to encourage the interviewee to express their views and opinions freely on the topic of interest. Open questions do not influence the interviewees' answers and therefore allows them to speak in their own words (Foddy, 1993). It is believed that individuals are more likely to convey their views in this open format as opposed to a structured interview (Flick, 2002). The freedom to answer the questions in this way allows the interviewee to discuss and make clear the issues that are important to them (Bryman, 2001). The interview is therefore 'respondent-led' (Smith, 2002b).

2.10.1 The interview schedule

An interview schedule was used during the semi-structured interviews. Each individual will respond differently to the researcher (Rubin and Rubin, 1995) and will be in a position to provide information on different aspects of the research project. Each interview schedule was therefore individualised for each interviewee. This is an inherent characteristic of semi-structured interviews.

The schedule contained a number of topics and questions to discuss (Kvale, 1996) which were open in nature to allow the interviewee to answer freely and openly. Unlike structured interviews, the questions used in the semi-structured interview may be altered during the course of the interview which also acts as a means of 'illuminating' the interviewee's views (Flick, 2002 p92; Bryman, 2001). Exploratory interviews are also open with very little structure (Kvale,

1996). The researcher is able to move away from the schedule during the course of the interview. The wording and order of the questions may be changed, the researcher may ask more questions of the interviewee and may also follow-up on new or interesting issues or topics that may be divulged (Bryman, 2001). Comments provided by the interviewee which the researcher may not understand can also be explored further in order to determine their true meaning (Rubin and Rubin, 1995).

2.10.2 Types of questions utilised

The interviews were initiated with an introducing question (Kvale, 1996). An example of an introducing question is:

'If I can just start by asking you to describe your role in the implementation of supplementary prescribing by pharmacists?'

The questions in the interview schedule were short and easy to understand as recommended by Kvale (1996) and in a language and style that the interviewees would be comfortable with (Wengraf, 2001). Each research question may be investigated by several interview questions. This is in order to obtain the views of the interviewee from several angles on the same topic (Kvale, 1996). An example of a research question during the key informant interviews was:

'What are the views and opinions of the interviewee on the role of the supplementary prescriber?'

This research question was operationalised by asking a number of questions during the interview including:

1) What is your opinion of pharmacists' role being extended in order to allow them to prescribe?
2) Which sector of pharmacy do you think would benefit more through supplementary prescribing? Why?
3) What do you think of the idea of pharmacists taking on more responsibility patient care?

These open type questions were used to ask for detailed descriptions which could later be followed up by 'follow-up' questions. A nod or a 'mm mm' also encourages the interviewee to elaborate further. Probing questions such as 'can you tell me a little more about that?' were also used for example, to encourage more information to be divulged (Kvale, 1996). Rubin and Rubin (1995) state that probes have three functions. They let the interviewee know that more detailed, longer answers are required; they encourage the interviewee to elaborate and to discuss the statement further. They also show that the interviewer is paying attention to what is being said and finally they ask the interviewee to finish the answer that they have started, to either clarify or

provide missing information. A laminated prompt card was therefore used during the interview listing the prompts to be used as a reminder to the researcher.

The prompts used were:

> *Can you tell me a little more about that?*
> *Can you give me an example of...........?*
> *What do you think about.........?*
> *I don't quite understand that, could you explain a little further?*
> *What makes you say that?*
> *What do you mean by............?*

Kvale (1996) recommends the use of pauses by the researcher during the interview. Instead of asking one question straight after another a pause in the conversation will allow the interviewee to reflect on their answers and encourage them to fill the gap. A conscious effort was therefore made during the interviews to allow the interviewee time to finish and reflect on their answers before the next question was asked.

The researcher was also aware of the influence of leading questions on the responses that the interviewee provides (Kvale, 1996; Smith, 2002b). Wengraf (2001) acknowledges that if an interviewee is given an idea of the answer that the researcher is looking for they may 'tailor' the answer to what they think the researcher wants to hear. It was very important in the preparation and conduct of the interview that the researcher was aware of the impact of this type of question and aimed to avoid them. Closed questions could also lead the interview onto topics of conversation that are important to the researcher but not to the interviewee (Foddy, 1993). However, closed questions could be utilised as a way of focusing discussion should an interviewee deviate away from the topic at hand and as a means of obtaining specific information, for example, 'where are the supplementary prescribing training programmes to be held in Wales?'. Closed questions are also seen as being easier to answer (Bryman, 2001)

2.10.3 Interview format

Before the interviews began the interviewee was provided with a brief explanation of the study by the researcher. This was in order to 'define the situation' (Kvale, 1996 p128) so that the interviewees were aware of the research being conducted and at what stage the interview was in the overall study. The use of the audio recorder had previously been explained in the information sheet provided and consent sought. At this time the reason behind recording was explained again i.e. so that a record of the interview could be kept and in order to transcribe. Before the tape was

started the interviewee was asked if they were happy with the machine being switched on in order to clarify their permission to be recorded. The questions and topics listed on the interview schedule were used during the main body of the interview as described above.

At the end of the interview the interviewee was asked the following question:

'Are there any other issues that you would like to talk about before we finish the interview?'

Kvale (1996) advocates this approach in order to allow the interviewee to raise additional issues and thoughts that they may not have had the opportunity to discuss during the main body of the interview. Stroh (2000) also stated that the 'closing' question will allow the interviewee a sense of closure, to bring the interview to an end.

Rubin and Rubin (1995) suggest 'keeping the door open' (p138) at the end of the interview. The interviewee was therefore asked:

'Would it be OK if I contact you during future stages of the study if further information is required?'

This was used as a means to ensure that consent was obtained for future contact with the interviewee. Every interviewee, at each stage agreed to be contacted further if necessary.

Kvale (1996) and Bryman (2001) recommend taking some time at the end of the interview to record information on the interpersonal interaction between the interviewee and researcher. This includes the body language used by the interviewee and gives the opportunity for the researcher to reflect on what was discussed and learned during the interview. A note was therefore made immediately or as soon as possible after the interview of details such as the seating plan, how the interviewee responded during the interview and general feelings of how the interview progressed in the form of a reflective notebook. The researcher could then reflect on the interviews and how they had progressed in order to amend the interview schedules for future interviews. Amendments included question format and additional topics to explore that previous interviewees had alluded to.

2.10.4 Listening

In order to realise the full potential of the research interview it was paramount that the interviewer actively listened to the answers provided by the interviewee. However, the interviewer must also not be intrusive (Bryman, 2001; Kvale, 1996). As most communication is

non-verbal (Wengraf, 2001) a listening posture, maintaining a degree of eye contact and making some non-verbal sounds such as 'hmm' were used. It was also important to allow the interviewee to have the pauses and time that they need during the interview to consider their views before expressing them.

Negative forms of listening include interrupting interviewee responses and suggesting what the interviewee may want to talk about (Wengraf, 2001). It was very important during the interview to avoid this type of negative response and to allow the interviewee to speak.

2.10.5 Seating plans

As noted above a record was made of the seating arrangements for the face-to-face interviews after the interviews were completed. This was in order to record the proxemics of the meeting. Space is an important aspect of the face-to-face interview, which is not relevant for a telephone interview. It was therefore necessary to ensure that the interviewee's space was respected with non-oppositional seating in order to be non-threatening. Figure 2.3 displays the seating arrangement for the interviews where the researcher was able to position the seats. However, when the participants had arranged the seating, for example, when an interview was held in their place of work the seating arrangements were not under the control of the researcher. Hence, it was not always possible to conduct the interviews in this manner.
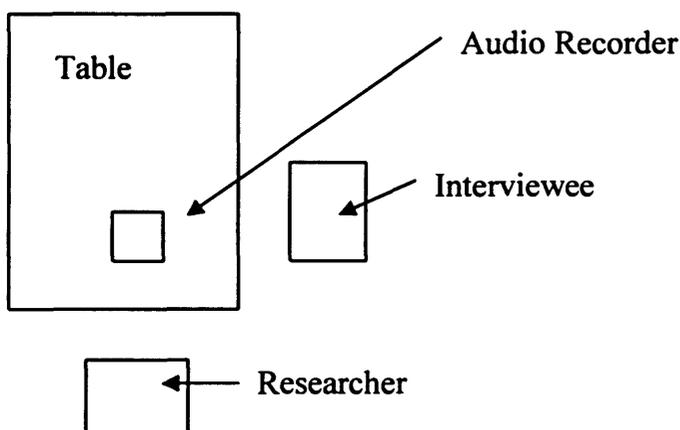
Figure 2.3. The interviewee and researcher seating arrangements for the semi-structured interviews.

2.10.6 Audio recording and transcribing

The majority of interviews and each period of non-participant observation were audio recorded during the study, which is recognised practice (Bryman, 2001). Only one key informant interviewee did not agree to have their interview recorded. The recording ensured that the researcher was free from having to write down the interview in detail and could therefore

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concentrate on the interviewee's responses and when they should probe further so that information was not missed (Bryman, 2001). However, some notes were also made during the interview in order to list additional topics or points to clarify as a reminder to the researcher.

The face-to-face interviews and consultations were recorded on a Sanyo TRC-6300 micro-cassette recorder. During a face-to-face interview the micro-cassette dictaphone connection was placed between the researcher and interviewee with the machine placed on the 'microphone' and 'conference' settings. In contrast, the telephone interviews were recorded on a Sony MZ-R30 mini disc recorder where the machine was connected via the telephone wall socket. The mini disc device was used in preference for the telephone recording due to the superior recording quality. However, the researcher found the transcription process to be more efficient with the micro-cassette pedal device, which was used on all other occasions. Both machines were connected to the main power source during recording. Even though the mini disc had the capacity to work with batteries only it was decided to use the main power source to avoid the potential for the batteries running out during recording.

Easton *et al.* (2000) lists failure of the recording machine as a common problem with qualitative research. The equipment was therefore checked before each participant interaction to ensure all the settings were in place and it was working correctly. Another problem includes background noises which may hinder the recording and later transcribing (Easton *et al.*, 2000). The interviews were therefore arranged, to the best of the researcher's knowledge in quiet locations. This meant changing location on one occasion where it came to light that an interviewee shared an office to a quieter environment. However, interruptions to the interviews were unavoidable on some instances for example, where the interview was conducted in a consultation room in a community pharmacy and a prescription needed checking.

The recorded interviews / consultations were transcribed verbatim as soon as possible after the event. On most instances the recordings were transcribed as soon as the researcher returned to their office after each interview (approximately one hour later). However, on some occasions a longer time period elapsed before transcription due to delays such as travelling time from the meetings, up to a maximum delay of a day. Transcribing the recordings as soon as possible ensured that the interview was 'fresh' in the researcher's mind to recall what had taken place. Smith (2002b p126) states that 'accurate verbatim transcriptions are essential for detailed and

valid qualitative data analysis'. Transcripts are a core feature of the analysis procedure as it 'represents what the researcher preserve from the taped speech' (MacLean *et al.*, 2004 p113).

It took approximately two and a half to three hours to type up and transcribe a half hour interview. This is similar to the time stated by Bryman (2001), Kvale (1996) and Rubin and Rubin (1995) to transcribe an interview (five to six hours for an hour long interview). After transcribing the researcher also listened to and checked the interview tapes against the transcript in order to ensure that no information had been omitted or misrepresented, as recommended by MacLean *et al.* (2004). After this stage the interview or consultation length was determined.

MacLean *et al.* (2004) state that no verbatim transcription can be error free, what they call the 'transcriptionist effect'. Although MacLean *et al.* (2004) refer to using a separate transcriptionist it must be recognised that errors may still be possible if the researcher themselves undertake the transcribing. By checking the tapes against the transcript it was hoped that the potential for error could be minimised. Potential transcribing errors may also be increased if the researcher is unfamiliar with the jargon or words used within the context of the research (Easton *et al.*, 2000). For example, drug names. As the researcher is a pharmacist and was aware of the supplementary prescribing literature then it was hoped this would not be an issue. Interview transcription is also only one interpretation of the event as only the inclusion of spoken words in the document will miss wider context, the non-verbal body language and the 'feel' of the interview (Arksey and Knight, 1999).

The transcribed material was anonymised during the transcription process so that no individuals or places could be identified from the transcript. This was necessary in order to perform ethical research and to maintain confidentiality and the privacy of the participants (Grinyer, 2002). The British Sociological Association (2002) also advocates the maintenance of anonymity and confidentiality of research participants. A coding sheet was produced which listed the participant's real name, their pseudonym and the pseudonyms given to the names and places mentioned during the interview. If two participants mentioned the same individual in their respective interviews then a different pseudonym was given for each occurrence. This was to ensure that no connection could be made between interviews and hence individuals could not be identified. If sections of the interviews were unable to be transcribed due to poor recording quality then the following notation [???] was typed in the place of each incoherent word. All of the names used in this thesis are pseudonyms.

All the tapes, transcribed material and coding sheets were kept on the researcher's password secure computer or in a locked office. Only the researcher and their academic supervisors had access to the information. The tapes will be destroyed six months after the publication of the final research paper.

2.10.7 Data analysis – coding and emerging themes

The first stage of interview analysis involved printing the transcripts so that they could be read and re-read by the researcher and notes made on the overall themes and issues that had emerged. The next stage of analysis involved the researcher identifying themes via the code and retrieve method of analysis, the main form of qualitative data analysis (Babbie, 2001). Code and retrieve is a form of data reduction. In order to assist with data management and storage the Computer Assisted Qualitative Data Analysis Software N6 was used which allowed sections of the interviews to be labelled with and hierarchies of codes to be saved electronically. The use of computer software to aid in the management of interview data has been discussed in the literature. Kvale (1996) states that computer programmes are very useful in aiding the management of interview data analysis but it must be recognised that the interpretation of the data still falls with the researcher, the computer does not actually do the qualitative analysis, it is only the assistant. However, the computer can add benefits such as increasing the speed of analysis, ensure consistency and aid in the consistency of analysis (Weitzman, 1999). It was also very important to always go back and check with the transcript that the interpretations of the themes or quotes had not been lost from their original context (Weitzman, 1999).

The typed transcripts were therefore imported into the computer software. The data was organised into sections or 'manageable chunks' as Stroh (2000 p210) describes it and then sorted. This is done by coding or labelling pieces of text with common themes so that the commonalities, differences and patterns of the interviews can be viewed. The themes were therefore developed inductively as they emerged from the data in a hierarchical structure. Coding is recognised as being at the beginning of qualitative data analysis (Bryman, 2001). The data is first broken down into its constituent parts, de-contextualised and then re-contextualised when it is put back together. Initially, broad themes were identified which were later re-categorised into several smaller themes. For example, the theme of 'barriers to implementation' was identified initially which was later divided into each individual barrier. The analysis in this present study was based on a grounded theory approach. Grounded theory is 'the attempt to derive theories

from an analysis of the patterns, themes and common categories discovered' (Babbie, 2001 p284) and is the most commonly used approach to qualitative data analysis (Bryman, 2001).

The analysis was carried out on a cyclical process, as it is not a distinctive phase of the research process. The analysis therefore began at the beginning of the study and was not complete until the end, an ongoing process. Each interview was analysed, if possible before the next arranged interview in order to identify further issues and themes to be adopted. Rubin and Rubin (1995) recognise that questions can change during an interview project as new issues are brought to light. Adjustment of the design is a 'normal, expected part of the qualitative research process.' (p44). For example, one of the key informants raised the issue of pharmacists not being of fey with the use of reflection, an important element of the training programme. Following interview schedules were then amended in order to explore other participant's views or experiences of undertaking reflection.

2.10.8 Piloting of the interview schedules

Van Teijlingen and Hundley (2001) state that 'qualitative data collection and analysis is often progressive, in that a second or subsequent interview in a series should be 'better' than the previous one as the interviewer may have gained insights from previous interviews which are used to improve interview schedules and specific questions'. Each interview transcript was therefore analysed and the themes generated used to inform the schedule for the next interview as described above. The data produced in pilot studies in qualitative research are often used in the main study (Van Teijlingen and Hundley, 2001). The results from all interviews are therefore included in this thesis.

2.11 Summary

This present chapter has provided an introduction to the research strategy, how ethics committee approval was obtained in order for the study to proceed and the method of semi-structured interviews. Chapter Three will describe the first phase of the research, the key informant interviews. More specifically the use of key informants in research, how the participants were recruited and the themes generated from the interviews.

Chapter Three – Key informant interviews

3.1 Introduction

Chapter Two described the qualitative research strategy to be adopted along with details of the semi-structured interview methodology to be utilised. This present chapter describes the first stage of this multi-stage study into the development of supplementary prescribing by pharmacists in Wales. The key informant interviews were used as a means of gaining an insight into the training and predicted implementation of supplementary prescribing. The views and perceptions of a sample of those individuals involved in supplementary prescribing training and policy development in the United Kingdom were therefore sought. The key informant interviews were conducted before any of the supplementary prescribing training programmes in Wales had begun.

3.2 Research questions

The research questions to be addressed in this first stage of the project were informed by the objectives described at the end of Chapter One and are as follows:

i) What was the interviewee's role in the implementation and training of supplementary prescribing?

ii) Where were the training programmes for pharmacist SPs in Wales to be held and how were the courses to be structured?

iii) How many pharmacists were to undertake supplementary prescribing training in Wales and from which sector of practice?

iv) How was supplementary prescribing envisaged to work in practice?

v) Which patients and conditions were envisaged to be managed in practice by supplementary prescribing pharmacists?

vi) What issues / barriers to implementation of supplementary prescribing did the participants identify?

vii) What were the views and opinions of the interviewee on the role of the SP?

3.3 The use of key informants

Gilchrist and Williams (1999) state that key informants are 'information-rich' (p73); they are the experts in providing more information and 'deeper insights' to the researcher (Marshall, 1996 p92). Key informants are therefore 'key to the researcher's understanding of the culture' (Gilchrist and Williams, 1999 p73) that is being studied. They are individuals who possess

knowledge that they can share with the researcher due to their position within society. Tremblay (1982) describes the important characteristics that an 'ideal' key informant should possess. The criteria include the following:

- They should have a role within the community that is being researched which allows them access to the type of information that the researcher is collecting.
- The informant should have 'absorbed the information' that they have access to.
- They should be willing to share the information that they possess with the researcher.
- They should be able to communicate the information that they have in a way that is understandable by the researcher.
- The key informant should be impartial and objective.

Marshall (1996), who conducted key informant interviews to explore the professional relationship between specialists and GPs stated that the value of the informant is decided by how they 'measure up' to Tremblay's (1982) criteria (Marshall, 1996). However, Burgess (1984) advocates selecting a number of key informants from diverse aspects of the social situation under scrutiny as each participant may have different knowledge. Individuals are chosen with respect to particular aspects of the setting in order to 'avoid partial accounts of a social situation', to selectively sample (Burgess, 1984 p75). In this particular study participants were recruited from a variety of roles involved in supplementary prescribing. For example, those pharmacists who were undertaking the training programme in Scotland, supplementary prescribing course leaders from Scotland, England and Wales and individuals from Wales who were involved in supplementary prescribing policy development. Due to the professional position of the participants it was hoped that they were in possession of the type of information the researcher was after in order to meet the criteria set by Tremblay (1982). Their responses and the themes emerging from their interviews could then be used to inform further stages of the study in the same manner as Marshall's study (1996).

The use of key informants is described in many research fields including anthropology, sociology and psychology as a stand alone method or in combination with other methodologies. However, their use has increased within the 'professions allied to medicine' and in research on health care (Marshall, 1996).

3.4 Methodology

Semi-structured interviews were performed with the key informants recruited in this stage in accordance with the methodology described in Chapter Two.

3.4.1 Recruitment and sampling – non-probability and snowball sampling

In the past, many qualitative studies have been criticised for not making explicit the sampling strategy used or the characteristics of the sampling frame (Coyne, 1997). Coyne (1997) also states that the sampling and selection of participants in a qualitative study has great implications for its 'quality'. The method of sampling is therefore important and is detailed below.

Non-probability sampling is defined as 'a sample that has not been selected using a random selection method' (Bryman, 2001 p85). This is in contrast to the probability sampling utilised in quantitative research. In convenience sampling the researcher selects a number of individuals to participate who are easily accessible (Smith, 2002b). Purposive or selective sampling (Coyne, 1997) is often used within qualitative research and involves the researcher identifying individuals who are deemed suitable or who are 'information-rich' through prior knowledge of their characteristics (Babbie, 2001; Smith, 2002b). The sample is therefore informed. Coyne (1997) believes that purposeful sampling is seen to a degree in all qualitative research.

Snowball sampling, also known as respondent-driven sampling (Salganik and Heckathorn, 2004) has been extensively used in sociological research (Biernacki and Waldorf, 1981). It is mostly utilised in exploratory research (Babbie, 2001) and when qualitative interviews are to be conducted (Atkinson and Flint, 2001). It is a form of convenience sampling (Bryman, 2001). In this sampling method the researcher first of all makes contact with a group of individuals who are suitable for the study. These initial individuals are then used as a means to identify further participants with characteristics required by the research via chain referral (Salganik and Heckathorn, 2004) to extend the sample. This strategy therefore makes use of the participants' 'social networks' (Atkinson and Flint, 2001). Snowball sampling is also suitable for theoretical sampling where each interviewee is chosen in order to test and develop a theory (Bryman, 2001). This form of sampling has been successfully utilised in recruiting hard to reach (or hidden) or deviant populations such as when sensitive issues are being investigated and those involving drug misuse, prostitution, Human Immunodeficiency Virus patients (Faugier and Sargeant, 1997) and the homeless as well as the elite (individuals who are in a position of power) (Atkinson and

Flint, 2001). Snowball sampling is seen as a means of overcoming the problem of an unidentified sampling frame in these hidden populations (Salganik and Heckathorn, 2004).

3.4.2 Method of recruiting the key informants in this present study

The key informants for this present study were chosen based on their involvement and knowledge of supplementary prescribing rather than being from a random sample (Tremblay, 1982), that is non-probability sampling.

Initial potential interviewees were identified as individuals already known to the researcher or their supervisors and who, in their professional capacity were involved with the development of supplementary prescribing (their role in accordance with Tremblay's key informant characteristics (1982)), i.e. the selective sampling of key informants described above. Purposive sampling was adopted as those identified by the researcher were believed to be informative to the research and were easily accessible due to prior contact or their contact details being readily available. The geographical location of many of the interviewees also made it possible to conduct face-to-face interviews.

Further potential interviewees were identified via snowball sampling, the mechanism of which is displayed in Figure 3.1. Each participant was asked during their interview if they could identify any further individuals who could provide information on, or who were involved with the implementation or training of supplementary prescribing (the inclusion criteria). To comply with the requirements of the Data Protection Act 1998 the participant was requested to ask the individuals they had identified for their permission to forward their contact details onto the researcher. When the identified individuals agreed the researcher received their contact details and was then able to approach them directly to ask if they would consent to an interview. Approaching an individual after a peer had recommended them was intended to increase the credibility of the researcher.
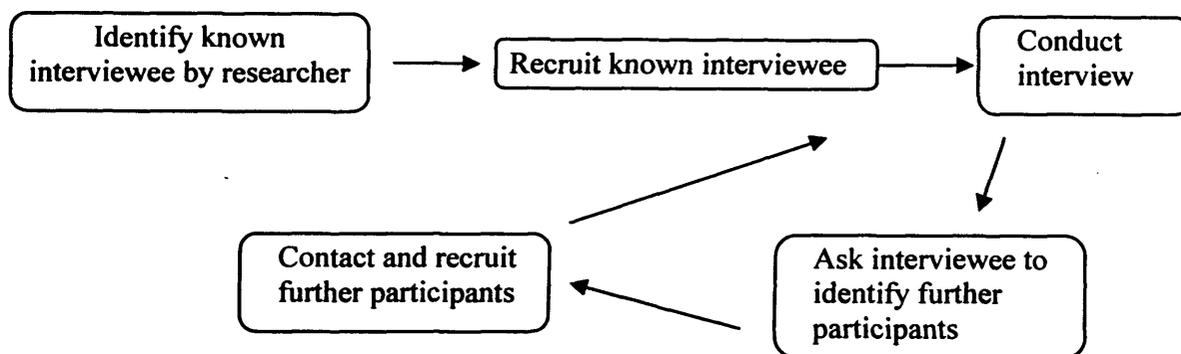
Figure 3.1. The snowball sampling method of recruitment adopted in the Key Informant Interviews

The interviewees were contacted via e-mail, face-to-face contact or telephone dependent on the details held by the researcher or that had been passed on by their identifiers. The individuals were provided with an information pack (which included a letter inviting participation (Appendix 1.1), an information sheet (Appendix 1.2) and two copies of a consent form (Appendix 1.3)) either via the post or electronically. A signed copy of the consent form had to be returned to the researcher before the individual could participate as described in Chapter Two.

3.4.3 Interview location

If the interviewee resided in the Cardiff area then it was possible to either travel to the participant's place of work to meet face-to-face or conduct the interview at the Welsh School of Pharmacy. However, if the interviewee was located further away in London, North Wales or Scotland the interviews were conducted by telephone in order to make the most effective use of the resources available. Telephone interviews have been used more extensively within social research (Arksey and Knight, 1999). A date and time was therefore arranged to telephone the interviewee on a number that was convenient for them, either at work or at home.

3.4.4 Semi-structured interview

The interviews were conducted and analysed in accordance with the method and interview schedule format described in Chapter Two. The questions utilised in the interviews were designed in relation to the aims and objectives specified in Chapter One in order to explore a number of aspects of supplementary prescribing. These included the participant's role in supplementary prescribing training or implementation, the supplementary prescribing training programme format, how the role was anticipated to work in practice and the conditions to be managed, the personal opinions of the participants on the new role and what skills and knowledge they believed pharmacists need to become a SP.

Each interview schedule produced was informed by the issues brought to light in previous interviews. The initial, pilot schedule was therefore amended in light of those topics. For example, the use of reflection as a learning tool by pharmacists was not included in the pilot schedule but was raised by the participants. The topic therefore was added into following interview schedules in order to explore the participants' views on this method of learning for pharmacists. Each interviewee was asked questions regarding their views on the development and role of supplementary prescribing in general. However, more specifically, due to the interviewees being in varying professional capacities and therefore in a position to provide different types of information the schedules were amended in accordance to the interviewee's role. An example to illustrate this would be that of an education provider who would be questioned regarding their supplementary prescribing training programme whereas a chief pharmacist would be questioned regarding envisaged implementation of the supplementary prescribing role within their NHS Trust. An example of an interview schedule can be seen in Appendix 1.4. Each interviewee was also asked during the interview if they could suggest any potentially interesting or important questions to ask pharmacists in the first cohort to undertake supplementary prescribing training in Wales. This was used as a means to inform the next stage of the research.

The course leaders of the training programmes in Wales which were used as recruitment sites, were asked for two follow-up interviews after their first and second cohorts had completed training. By their third interview recommendations from both the first and second cohort of pharmacists of how they would like the courses to be amended and their views on other aspects such as multi-disciplinary training and reflection had been sought. A number of quotes expressing these views were shown to the three interviewees at the beginning of their third interview (Appendix 1.5) as a means of feedback and to explore their responses to such comments. The origins of these comments will be explained in Chapters Four and Six.

3.5 Interviewees recruited

Out of the 25 individuals contacted and provided with information packs 21 returned a signed consent. The four who did not agree to participate consisted of two supplementary prescribing education providers, one who worked in the implementation of supplementary prescribing in England and one who was involved in researching the role. It was only possible to arrange a convenient time to hold an interview with 20 out of the 21. Several attempts were made to contact this one additional individual in order to arrange a time to hold the interview with no

success. One further participant consented to an interview via e-mail but did not agree to sign a consent form. As written consent had been received in their accepting e-mail then it was agreed to go ahead with the interview. This resulted in a total of 21 recruited participants.

All of the interviews were recorded except for one. The participant who did not sign a consent form agreed to the interview but not for it to be recorded. The interview still took place as a valuable learning experience. Notes were made during the interview and then immediately after, in order to record the main themes.

3.5.1 Interviewee information

Interviews were conducted between November 2003 and August 2005. Table 3.1 denotes the characteristics of the key informants. These include the pseudonyms of the interviewees, the duration of the interviews and how the participants were contacted. The interviewees included members of the Faculty of Prescribing and Medicines Management of The College of Pharmacy Practice (an educational charity whose policy is to promote continuing professional development for pharmacists), education providers of supplementary prescribing training programmes at HEIs in the United Kingdom, those involved in the implementation of supplementary prescribing in Wales (such as members of the Task and Finish Group on Supplementary Prescribing in Wales), pharmacists who were undertaking the supplementary prescribing training programme outside of Wales (as some courses had already started), chief pharmacists of NHS trusts and managers within the NHS in Wales. The interviews lasted between approximately nine and 51 minutes with a mean of 34 minutes for the face-to-face interviews and 22 minutes for the telephone interviews. As described in Chapter Two the interviews were analysed through identifying common themes in a cyclical manner. At the point in the analysis procedure where no additional new themes were identified through coding, at the point of saturation (as in the technique of grounded theory (Glaser and Strauss, 1967)) no further interviews were conducted.

Follow-up interviews were conducted with a number of the education providers (those acting as gatekeepers in order to recruit pharmacists in the first and second cohorts in Wales) to explore how their respective first and second courses had progressed and if their views had changed. Participant numbers 11.2, 12.2, 14.2 and 18.2 in Table 3.1 denote the second interviews and 11.3, 12.3 and 18.3 denotes the third interviews with the respective participants.

Table 3.1. Interviewee recruitment and interview details

Pseudonym	Professional role	Method of contact	Duration of interview	Telephone (T) / Face-to-face (F) interview	Direct (D) / Snowball (S) recruitment
1.Ken	FPMM	E-mail / Face-to-face	20m 49s	T	D
2.Isobel	FPMM	E-mail	9m 10s	T	S
3.Sarah	EP	E-mail	28m 18s	T	D
4.Belinda	T&FG	E-mail / Face-to-face	19m 7s	F	D
5.Bernadette	T&FG	E-mail	17m 57s	F	D
6.Norman	Student SP	E-mail	11m 59s	T	S
7.Cerys	EP	E-mail	17m 3s	T	S
8.Freya	Student SP	E-mail	28m 45s	T	S
9.Kath	EP	E-mail	22m 9s	T	S
10.Nathan	Chief P	E-mail	35m 53s	T	D
11.Lisa	EP	Face-to-face	51m 8s	F	D
12.Tim	EP	E-mail	34m 29s	F	D
13.Vicky	Chief P	E-mail	22m 59s	F	S
14.Edward	Manager	E-mail	46m 23s	F	S
15.Beverley	Manager	E-mail / Telephone	25m 15s	F	S
16.Charles	EP	E-mail / Face-to-face	26m 45s	T	D
17.Diane	T&FG	E-mail / Face-to-face	~40m	F	D
18.Keith	EP	E-mail / Telephone	48m 13s	F	D
19.Sam	RPSGB	Face-to-face	47m 12s	F	D
20.Nora	EP	E-mail / Face-to-face	16m 15s	F	S
21.Euan	EP	E-mail	38m 31s	F	D
11.2 Lisa	EP	Face-to-face	31m 30s	F	D
12.2 Tim	EP	E-mail / Telephone	35m 30s	F	D
14.2Edward	Manager	E-mail	29m 17s	F	S
18.2 Keith	EP	Telephone	32m 27s	F	D
11.3 Lisa	EP	Face-to-face	47m 35s	F	D
12.3 Tim	EP	E-mail	38m 06s	F	D
18.3 Keith	EP	E-mail	43m 51s	F	D

Code for the interviewee's professional role –

FPMM	-	Member of the Faculty of Prescribing and Medicines Management of the College of Pharmacy Practice
T&FG	-	Member of the Task and Finish Group for Supplementary Prescribing in Wales
EP	-	Education provider of a supplementary prescribing training programme
Manager	-	Manager within the NHS in Wales Trust
Chief P	-	Chief pharmacist of a Welsh hospital
RPSGB	-	Member of RPSGB staff
Student SP	-	Pharmacist who was undertaking a supplementary prescribing training course outside of Wales

All interviewees were pharmacists except for Beverley, Keith, Nora and Euan. Keith, Nora and Euan were nurses. Beverley was a manager within an NHS Trust.

3.6 Data analysis and the generation of themes

The interviews were analysed in accordance with the method described in Chapter Two. The interview transcripts were initially read and re-read by the researcher in order to make notes regarding the major themes emerging from the data. The computer software N6 was used to aid in data management. Major common themes were identified by grouping together sections of text which discussed the same issues such as barriers to implementation. These major themes were then later divided into sub-themes on a hierarchical basis via a code and retrieve data analysis strategy. The key themes emerging from the data are discussed below along with a number of quotes to illustrate the theme.

3.6.1 Conditions to be managed by a SP

The interviewees suggested a wide range of conditions that they expected would be managed by a SP either by the pharmacists in the first cohort to be trained or potentially in the future. The treatment areas included oncology, mental health, rheumatology, human immunodeficiency virus, diabetes, asthma, benzodiazepine withdrawal, cardiac rehabilitation, alzheimers, cystic fibrosis, parkinsons disease, chronic obstructive pulmonary disease, anti-coagulation, pain, heart failure, dermatology, dyspepsia, chronic renal failure, total parenteral nutrition and hypertension, many of which were to be implemented in a clinic setting either in secondary or primary care.

Some of the interviewees noted that supplementary prescribing is best placed to manage chronic as opposed to acute conditions, as was stated in the Crown Report (DoH, 1999):

> *ISOBEL: I mean obviously it's [supplementary prescribing] a chronic disease management rather than acute management programme.*

> *BERNADETTE: It's [supplementary prescribing] much more geared towards management of chronic disease.*

3.6.2 Positive views on the development of supplementary prescribing

There was strong positive feedback on the development of supplementary prescribing by pharmacists. Every interviewee, whether they be pharmacists or non-pharmacists expressed a positive view when asked his or her opinion on the development of this role, for example:

> *KEN: I'm fully supportive of that [supplementary prescribing] I think it's an unparalled opportunity and um really I'm looking forward to the time when pharmacists can prescribe independently.*

CHARLES: It's [supplementary prescribing] the best thing that's ever happened, it's the chance for us [pharmacists] to stop being at a crossroads and move forward. Ah, any more? Um, it's definitely the the biggest advance I think I've seen in my career.

ISOBEL: It's [supplementary prescribing] a great opportunity; they [pharmacists] ought to go for it. No, it is I mean, it's fantastic if it takes off, it's good.

CERYS: I am very for it [supplementary prescribing] and I think it's a tremendous opportunity for the profession [pharmacy].

3.6.3 Independent prescribing by pharmacists in the future

Supplementary prescribing was perceived as a 'stepping stone' to independent prescribing by many of the interviewees, a role that has since been under consultation by the MHRA and DoH (MHRA and DoH, 2005b) and approved (DoH, 2005e). A number of the interviewees envisaged independent prescribing as a role that pharmacists should be undertaking:

NATHAN: I think it [supplementary prescribing] is an interim step really towards independent prescribing which is where we [pharmacy] really need to go.

TIM: It [supplementary prescribing] will be a pathway to independent prescribing.

VICKY: It's [supplementary prescribing] a step in the right direction and I would look forward to the day when independent prescribing comes.

BELINDA: I've got a vision for the future that all pharmacists will be prescribers, now I don't know how far down the road that is, and independent prescribers as well, I feel that is inevitably where we have to go.

In contrast, Sam held a different view and did not see independent prescribing being implemented in community pharmacy:

SAM: I don't see any reason to go for independent prescribing. I think that a lot of the politicians in our profession regard it as a badge of honour. I think you can do everything that you want to within the scope of supplementary prescribing and ah PGDs [Patient Group Directions] I I I can't really conceive of more than a tiny number of pharmacists around the country being independent prescribers.

3.6.4 Benefits to patient care

Many of the interviewees believed that supplementary prescribing would benefit patient care. This included improved monitoring of medical conditions and increased convenience and access to HCPs. Many of these benefits had already been cited in published documents relating to supplementary prescribing (DoH, 1999). Edward emphasised that the primary role for supplementary prescribing should be for the benefit of the patient rather than for the individual pharmacist's personal gains:

EDWARD: I think I'm I'm very supportive of the original philosophy that it [supplementary prescribing] needs to be for the benefit of patients rather than something that is a professional or personal aspiration.

Other views to illustrate the benefits are:

ISOBEL: There's obviously advantages in that hopefully they'll [patients] be monitored more closely or shall we say more regularly. Um you know it may be more convenient for them to get to a pharmacist rather than a practice.

BELINDA: So if you've got um patients who it's much more convenient for them to visit the pharmacy and they're going to get a really good level of of monitoring and ongoing care then there's huge benefits to this.

NATHAN: It [supplementary prescribing] actually gives the opportunity for pharmacists I think to actually manage the patients' therapy more effectively both both in an in-patient hospital situation and in an out-patient situation.

TIM: There'll be ah a specific well trained professional who knows a lot about the medication, a lot about the condition and a lot about that patient who has time to spend with that patient and hopefully they'll [patients] feel more confident that their [condition] is being managed equally well as it would be with, if they were speaking to their GP directly and dare I say it perhaps even better.

However, as some pharmacists do not monitor the progression of clinical conditions on a regular basis Nathan proposed that standards will have to but in place to ensure the quality of patient care:

NATHAN: The mechanics of doing a blood pressure is that they [pharmacists] have to be actually monitoring patients and looking for signs and symptoms and using your eyes um and that's a clinical skill that takes time, observation actually takes time to acquire um I think that's where pharmacists actually need the, we need standards for practice for that.

Beverley and Tim suggested that pharmacists might have more time to care for patients as opposed to their GP or hospital doctor:

BEVERLEY: I think, cause um pharmacists will have more time cause at the moment the clinics are so busy that people are rushed through which isn't good for the patient.

TIM: I hope that patients who see supplementary prescribers will see that um people have got more attention, more time and more attention to pay to their particular condition.

Edward indicated that supplementary prescribing might minimise the inconvenience to both patients and pharmacists in certain clinic situations. For example, in an anti-coagulant clinic a patient who required a low molecular weight heparin in order to ensure their International Normalised Ratio (INR) remained in the appropriate range had to wait while the pharmacist asked a doctor to sign a prescription. Supplementary prescribing will mean the pharmacists can sign for themselves:

EDWARD: In those sort of situation the pharmacist in clinic has to chase around trying to find um an SPR [Specialist Registrar] ah from haematology to to write them a prescription so they can actually pass it to the patient.

Another pharmacist believed that there would be benefits to patient care but that it would be difficult to determine if the benefits were due to the SP or because of other factors such as, the doctor would be more aware of his practice because another HCP was involved and that there was a CMP in place.

3.6.5 Barriers to supplementary prescribing implementation

Several potential barriers to the implementation of supplementary prescribing were identified during the interviews, which are described below:

3.6.5.1 'Backfill' and staff release

Problems were identified with regards to releasing staff in order to undertake the training and then to implement supplementary prescribing into practice. This was in addition to the day-to-day duties of the pharmacists embarking on the course which still needed to be fulfilled. Both Nathan (a chief pharmacist) and Edward (a manager within the NHS) identified this as a potential barrier:

> *NATHAN: These people [SPs] are actually now going to be doing some work that was previously done by medical staff. But their existing work is still there. Ok? So that needs to be backfilled in some way.*

> *EDWARD: It's going to be difficult um to release staff [to SPs].*

However, in one pharmacy department the issue of staff release was not so great due to the pharmacists' commitment to their wards already:

> *VICKY: In a way I don't think it [supplementary prescribing] will make an awful lot of difference to us here because the pharmacists that are doing it are already committed to the ward rounds that they do.*

In another trust the demand on the small number of SPs was the biggest issue with the demand outgrowing the supply:

> *BEVERLEY: I think the biggest problem is just going to be able to be in a position to release these people to go on the training and as I said the biggest problem for us will be you know the demand I think will outgrow the one, you know the one or two people that we've got trained.*

3.6.5.2 Access to information

It is crucial that SPs have shared access to patient records in order to be fully informed of the patient's condition and medication history and to record the interventions that they undertake. However, gaining access to patient records may prove difficult:

> *TIM: Um, and also obviously there's problems ......and access to notes and records.*

> *ISOBEL: I think community pharmacy is a great place to do it [supplementary prescribing] but obviously there's the issue with IT [information technology] and thinking in terms of records and that type of thing which is um a bit of an issue.*

In contrast, one pharmacist who was already undertaking the supplementary prescribing training programme had overcome this problem by forming an agreement with her GP to collect and return the patient's notes to the surgery within 48 hours of their consultation.

3.6.5.3 Communication

The issue of communication was mentioned in the interviews in two distinct ways. Firstly, the need for pharmacists to be trained in communication was expressed by some of the course leaders:

> *SARAH: They [pharmacists] thought that they were good communicators but hadn't really analysed their own communication skills and had realised afterwards [on the supplementary prescribing training] there were things that they could improve on or they could do differently.*

> *LISA: I always think with communications lots of people think they can communicate very well when in fact perhaps they haven't really identified that they do actually need training on it.*

Secondly, the professional relationship between the pharmacist and other HCPs was not in place, as Belinda explains below in relation to community pharmacy:

> *BELINDA: I think the professional relationships aren't there; um pharmacists do work in isolation. There are some fantastic examples of GPs and pharmacists working closely together but there's also a lot more situations where they work in blissful isolation, the only communication between them is a prescription form and the occasional phone call.*

3.6.5.4 Support

It would appear that there are contrasting views regarding the amount of support that pharmacists' employing organisations provide for them to do the supplementary prescribing course and then to develop their role. On one hand Beverley believed that her organisation was supporting their pharmacists:

> *BEVERLEY: We [NHS trust] give them [pharmacists] a lot [of support] at the beginning and we need to make sure that we carry on giving them support.*

On the other hand Kath believed other organisations were not so supportive:

KATH: I think it's just an unknown really um I think that trusts, acute trusts and primary care trusts have still got to get their infrastructures in place so that they've got good systems of governance and that manage the process of people applying for supplementary prescribing and also implementing it as well and that concerns me because I don't think that a lot of trusts are ready yet.

KATH: The feedback that we've had from the supplementary prescribers that have trained in [HEI] so far are that their organisations haven't got a clue. You know they're having to do all the implementation, they're having to explain to all the groups in the hospital what they're doing, there isn't an awareness already that exists.

3.6.5.5 Finding a mentor

Kath believed that pharmacists might find it difficult to find a DSMP in the future. However, it is

unclear if this will be the case in all sectors of practice:

KATH: There may be a problem with um doctors, mentor availability um, the supervising side of things um because I think um if you've got a lot of people wanting to do supplementary prescribing training um the good doctors and the keen doctors will get used up.

3.6.5.6 Remuneration in community pharmacy

It was uncertain at the time of the interviews how pharmacists working in community pharmacy

would be paid for providing their supplementary prescribing service:

SARAH: The payment issue, you know the remuneration is not in place yet for that [supplementary prescribing] to happen, [in community pharmacy].

BERNADETTE: [Community pharmacists] want to receive payment for providing an additional service, you've got all the issues about how do you decide how you make payments for additional services and how do additional services get funded.

CERYS: On the community side there's um, big issues around how are community pharmacists who do this actually going to be paid for it?

3.6.6 Motivation for undertaking SP

Possible reasons for pharmacists wanting to undertake the supplementary prescribing role were

expressed during the interviews, and whether the decision to do the course was made by the

pharmacists or by their employers:

NATHAN: I feel that whilst there's no question what they're [pharmacists] doing is extremely beneficial there is also a sticking plaster on the ahhh state of quality or lack of quality in some of the GP follow up that they actually get from the hospital.

LISA: I think that'll be quite interesting to see whether or not it's them [pharmacists] who initiated it or whether or not whoever they work for decided [for them to do the course].

CERYS: We [HEI] have had a few people who've perhaps have been you know had their arms twisted to go [on the course] and haven't quite understood what the whole thing was.

Norman believed that community pharmacists have a good basis to prescribing due to their grounding in OTC medicine sales:

> NORMAN: I suppose all community pharmacists prescribe in a sense that they provide OTC treatment um, you know consultation and prescribing situations so I think all community pharmacists have that backbench to a degree.

3.6.7 Legalising an existing role

Supplementary prescribing was perceived as a way of legalising some of the work that pharmacists already do in some settings, for example in running out-patient clinics such as those described in Chapter One:

> NATHAN: It's [supplementary prescribing] a means of actually I think legalising lots of the things we [pharmacists] actually wish to do and actually making the system easier.

> LISA: I think it's really exciting. I think um, I think it's [supplementary prescribing] going to utilise the skills that as pharmacists we've had for a long period of time and which, um in a way um legalise some of the things that perhaps we [pharmacists] do as well.

> VICKY: I think in a way it's sort of legitimising a lot of the stuff that we [pharmacists] already do if if you've got, if you work well within a team.

> BELINDA: Maybe the first cohort is likely to be people who already provide to what is in all intents and purposes supplementary prescribing, so it's legitimising practice that's that's probably um, developing under protocol anyway.

> BERNADETTE: I think there's quite a lot of examples of where people are doing things that are quite similar [to supplementary prescribing] already where I think it would firm up some of the, firm up the legal position and I think it would just um make it easier actually for the nurses and the pharmacists who work in them.

3.6.8 The increased responsibility of a prescribing role

Pharmacists will take on an increased responsibility when practising as a SP. How pharmacists accept this responsibility may depend on the individual and whether they have been prescribing to a certain extent before:

> TIM: I think it's a very positive thing I think for, for a lot of pharmacists who already take these [prescribing] responsibilities the transition is going to be quite easy and it'll it'll be um, it'll be ahhh a privilege for them and it'll be a professional responsibility for them which I'm sure they'll they'll lap up, they'll enjoy it. For others the the transition won't be so easy.

> VICKY: Well I think we should be doing it [prescribing] anyway. And I know a lot of pharmacists I've spoken to said well you know, I don't want to take on that extra responsibility...And I think maybe it makes us realise how difficult the doctor's role is............it's interesting that once we come to have the opportunity to do the writing a lot of people are sort of back pedalling and saying oh no no I can't take that responsibility.

> BELINDA: [As] pharmacists we already accept professional liability for what we do so accepting liability for prescribing isn't such a big um transition for us.

3.6.9 Sectors of pharmacy practice

The implementation of supplementary prescribing in both primary and secondary care was discussed during the interviews. Charles, Sarah, Freya and Sam identified community pharmacy as a difficult area to implement the new role:

> *CHARLES: At the minute I I feel it quite difficult ah to see it [supplementary prescribing] working in community pharmacy well. But I'm I'm willing to be convinced, I'm not trying to write it off, I just think it's very difficult.*

> *SARAH: I think my feeling at the moment is that the public's perception at the moment is not, is not ready for these kind of services happening from a community pharmacy.*

> *FREYA: I would say that community pharmacists seemed to have less of a clear idea of how it's [supplementary prescribing] going to role out and how they are going to utilise it compared to the primary care pharmacists who already may be already managing clinics or hospital pharmacists.*

> *SAM: I just think um um there are some barriers in the way to it really taking off. Um, that's you know particularly in the community sector, amazingly some other health professionals still see pharmacists as shop keepers and commercially as commercially um motivated.*

However, in contrast to Sarah (above) Beverley believed that patients are happy to be seen by any HCP as long as they are competent:

> *BEVERLEY: I don't think patients worry about who they see. It's about the level of care they get. And as long as they're confident that, that you know person is professional I don't think they [patients] worry too much.*

Several clinics are already operating under protocol within secondary care. The anticipated changes and issues of implementation may therefore not be as great as those expected in primary care:

> *TIM: In terms of looking at our anti-coagulant pharmacist, I would imagine when he [pharmacist] goes back to his [hospital] clinic the only difference he will, he will see is that he will actually sign his own prescriptions instead of having somebody else to to sign them.*

> *BELINDA: In the initial stages the models of practice exist in secondary care to a greater extent than they do in primary care so they [pharmacists] can adopt it in the short term much more quickly.*

3.6.10 Fitness to practise as a SP

Two interviewees (Ken and Belinda) commented that one of the most important tasks during training is to ensure that the pharmacists are competent and fit to practise in the field in which they are going to prescribe:

KEN: The more challenging thing is actually providing them [SPs] with the skills which will make them not just fit to practice as pharmacists but basically professional leaders for the future.

BELINDA: At the end of the day you've got to make sure that the training programme that you deliver is going to produce competent professionals.

3.6.11 The position of supplementary prescribing within pharmacy

The opportunity that supplementary prescribing will bring to the development of the pharmacy profession must be seized (Ken). However, both Ken and Norman were cautious of how the new role may divide the profession, to those who can and cannot prescribe:

KEN: We have to make this [supplementary prescribing] work because we won't get a second chance and I think that we need to do everything that we possibly can to support individual supplementary prescribers...... I suppose what I'm cautious of is that there is an elitism set up and that would be that would be a loss to the profession.

NORMAN: I do think there's danger there of the profession being split particularly as we're moving to independent prescribing and we end up with a barefoot doctor.

Kath believed that the supplementary prescribing role should be undertaken only to benefit the pharmacy profession:

KATH: It is important that the pharmacists undertake the course for the benefit for the profession and patients and not just a way of fulfilling continuing professional development requirements.

3.6.12 Supplementary prescribing will best utilise pharmacist skills

Both Nathan and Lisa recognise the knowledge that pharmacists posses. Supplementary prescribing is a means of utilising these skills and maximising the pharmacist's potential:

NATHAN: I'm all in favour of it [supplementary prescribing], um it's only when you actually closely observe ah other professions in action do you actually realise the massive contribution that pharmacists can actually make to a patient's care.

LISA: I think it's [supplementary prescribing] really exciting. I think um, I think it's going to utilise the skills that as pharmacists we've had for a long period of time.

3.6.13 Awareness of supplementary prescribing

Two of the interviewees believed that some pharmacists who were either already undertaking or going to be on the supplementary prescribing training programme, and their supporting organisations, did not have a full understanding of what supplementary prescribing is:

LISA: the first study day where it's an introductory, getting them [pharmacists] to do self needs analysis, just getting them up to speed of what supplementary prescribing is about cause I think they know the concept but I don't know if they know the knitty gritty.

When asked during the interview if she could think of interesting questions to ask pharmacists during a focus group at the beginning of their training Cerys suggested:

CERYS: One is that um I think it would be interesting to test their [pharmacists] understanding of what supplementary prescribing actually is cause we've got some evidence that people are only really understanding it once they're on the course.

3.6.14 Recruitment and retention of pharmacists

Both managers of NHS Trusts stated that supplementary prescribing would aid in the retention and recruitment of staff in their respective pharmacy departments:

EDWARD: It's undoubted that um the type of pharmacy-led clinics that we run does help us recruiting people in. You know they want to come and work here because they see us as you know ah perhaps an innovative um department who will have a go at doing things and are involved.

BEVERLEY: I like to think that if we're doing new ways of working and people are, people would want to come and work here.

3.6.15 The training course

3.6.15.1 Nurses and pharmacist training together

All of the training courses in Wales were multi-disciplinary, nurses and pharmacists training together as described in Chapter One. Due to their undergraduate training and professional backgrounds nurses and pharmacists have different identified learning needs. For example, generally speaking nurses have more experience of monitoring such as blood pressure measurements and therefore need more training in medication. In contrast, pharmacists have more experience of drug therapy and pharmacology and need more training in physical assessment skills. Both Lisa and Tim (supplementary prescribing course leaders) and Sam support multi-disciplinary courses as a means of learning together and from each other:

LISA: I hope that the course that we're running here at the University with the nurses we can try to complement both professions [nurses and pharmacists] and help both professions and use both professions well in the development of the course and the running of the course.

TIM: I think as a facilitator of learning as I hope to be, I hope I'll be able to use the strengths and weaknesses of two different groups in order that they can um evolve ah ah a good learning experience.

SAM: There are clearly benefits um in mutual respect of one profession for the other. The parts of the course is they come together ah everything I hear indicates that kind of um building of understanding and recognition of what strengths and what the qualities of the other profession are do do do are actually realised.

In contrast, Vicky did not agree with nurses and pharmacists being trained together:

VICKY: I don't see how we can run the course exactly the same for nurses and pharmacists anyway.

Difficulties in assessing each individual on the course's learning outcomes was also a problem as each pharmacist or nurse will come to the course with very different experiences:

LISA: When you're talking about therapeutics in a joint course you know, what's your starting point? Because you can't put it above a certain persons head and you can't patronise other people and so therefore in actually running the course it's really difficult to know what your starting point is and I think that's the difficulty in all aspects of the course really is that everyone is coming in with totally different experience at a totally different level from each other.

3.6.15.2 Reflection

The supplementary prescribing courses advocate the use of reflection as a learning tool. The interviewees identified that generally nurses are more adept at reflecting. In contrast, reflection is a new concept to many pharmacists:

LISA: Pharmacists um struggled with the idea of reflection and what it was and how to write it.

TIM: They're [nurses] quite used to it, the experienced nurses are very used to refl, reflective practice has been, seems to be been around in nursing for a lot longer as a philosophy than it does in pharmacy.

KEITH: They're [pharmacists] not brought up on a diet of reflection.

EUAN: I think that many of our nurses have had previous experience of asking to reflect on practice. Um, I think that the pharmacists have had to get their heads round that concept.

3.6.16 Feedback from the first cohort

Three of the education providers (Keith, Lisa and Tim) were interviewed a second time after their first cohort programmes had completed. The interviews were used to explore the feedback that they had received from their course participants and how the courses were to be modified for the second cohort. As this was the first cohort to undertake the supplementary prescribing course all three HEI had evaluated their respective programmes. As Keith explains the education providers must evaluate their courses:

KEITH: We don't know whether we're doing it right or we're doing it wrong.... So, we want to get as much feedback as we can.

Lisa and Keith explained that the participants on their respective courses had provided generally positive feedback:

LISA: I think overall it [feedback] was positive. Um, it was positive really. Um, there was a few things as in um with regards to quantity of work and time scale.

KEITH: Generally um, generally yes very positive ah despite of the fact that sometimes we didn't know what we doing.

3.6.17 Feedback from the second cohort

Keith, Lisa and Tim were all interviewed for a third and final time after the second cohort on the supplementary prescribing training programme had been completed. All three of the course leaders acknowledged the recommendations received on how to improve the courses in the future (Appendix 1.5) and had previously heard similar comments from the individuals on their courses, especially in light of the difficulties of multi-disciplinary teaching, fulfilling the diverse needs of the individuals on their courses and the reflection elements of the courses. Nurses and pharmacists will still be taught together in future cohorts and all three course leaders believed that the two professions could still benefit from being taught together. Benefits included recognising the other profession's knowledge, skills and networking.

The suggested improvements were taken on-board by all three key informants who were appreciative of being informed of the feedback. They noted that the first cohort of all courses is difficult:

LISA: Whenever you go on a first cohort you know that it might be a little bit rough and ready.

TIM: It was more difficult obviously for the first cohort because even we were finding our feet then.

KEITH: You do the best you can um with the knowledge that you know and I dare say in a sense that as one student said to us from the first cohort um, she said um, the pharmacist you did very well because um we we we were guinea pigs, we we all had to to go down the journey together. And I make no bones that it's a learning experience for all of us.

3.7 Informing Stage One

The themes generated in this key informant stage were utilised to inform further stages of the project, as did Marshall (1996). The key informant interviewees were asked during their interview for suggestions of questions they believed would be interesting or informative to discuss with pharmacists during their training to become prescribers. Not all of the interviewees were able to suggest questions, however, those who did suggested the following (the number in parentheses denotes the participant number of the interviewee who suggested the question):

i) What is the understanding of the pharmacists of what supplementary prescribing is? (7)

ii) What do the pharmacists expect to get out of the SP training programme? (7, 10, 11, 12, 13, 14)

iii) How much work do the pharmacists expect to be involved in doing the SP course? (7)

iv)   How much support are the pharmacists receiving from their organisation? (7, 15, 16)

v)   What is the motivation of the pharmacists behind prescribing and undertaking the course? (7, 11)

vi)   What are the expectations of the pharmacists of how and where they will be prescribing once trained? (7, 11, 14)

vii)   How much previous involvement have the pharmacists had with the organisation they will be prescribing in? For example a GP surgery (8)

viii) How are the pharmacists going to achieve their twelve days in practice with their DSMP? (9)

ix)   What training do the pharmacists think they are going to get in clinical assessment? (9, 10)

x)   What limitations do the pharmacists perceive of the role of a SP? (10, 11, 14)

xi)   Do the pharmacists find the supplementary prescribing training programme useful? What do they feel wasn't useful? (10, 11)

xii)   What do the pharmacists on a training programme being delivered by a nursing school think of the programme? (10)

xiii) Do the pharmacists really know what they're letting themselves in for by doing the training? (11)

xiv)   What are the pharmacists concerns about doing the course? (14)

xv)   Where can the pharmacists see supplementary prescribing developing in the future? (14, 16)

The main questions emerging from the key informants were as follows:

1) What was the pharmacist's motivation behind undertaking the supplementary prescribing training programme?

2) What would the pharmacists like to see on the training programme in order to become a competent SP and to meet the specified learning outcomes?

3) What were the views of the pharmacists on supplementary prescribing and its potential limitations in practice?

4) What were the expectations of the pharmacists on how they believed supplementary prescribing could work in practice?

These questions were used to inform the development of the focus group guide and interview schedules used to explore the views of the pharmacists in the first cohort to be trained in Wales, at the beginning of their training (Stage One), details of which are provided in Chapter Four.

3.8 Discussion

The key informant interviews provided a valuable insight into the potential areas of supplementary prescribing practice in Wales. The views and opinions expressed were sought from those involved in training and policy development in Wales and from those who had already experienced supplementary prescribing training programmes elsewhere in the United Kingdom. The positive views expressed on supplementary prescribing were to be anticipated as the participants were involved with its implementation, education or practice. On the other hand, concern was expressed regarding the number of potential barriers that need to be overcome in order for implementation to be successful, and to achieve maximum benefit to patient care. Implementation was predicted to be more difficult in community pharmacy, where in contrast, supplementary prescribing was seen to be legalising roles that pharmacists have already undertaken in secondary care. However, even though barriers had been identified to start supplementary prescribing the participants were looking to the future to independent prescribing. In a similar manner comments such as "Supplementary prescribing – opportunity of a generation" and "The biggest opportunity of a generation" have been cited (Anon, 2003b). However, in contrast, some not so supportive comments have been seen in the literature such as "Prescribing might not enhance their status as much as pharmacists hope it will" (Brown, 2003) where the status of the pharmacist in relation to the IP and patients is discussed. Supplementary prescribing was believed to decrease the status gap between pharmacists and IPs but widen the gap between pharmacists and patients. The comment "Pharmacists should focus on what they do best, not be dazzled by new ideas" (Jenkins, 2004) was also seen where it was believed that pharmacists should to stick to dispensing medicines, council patients and sell OTC products. The more negative views expressed in some of the literature was therefore not reflected by the key informants' comments.

Supplementary prescribing was also believed to utilise the knowledge that pharmacists have, and benefit patient care in a number of ways including spending more time with patients and increasing convenience and access to HCPs, benefits already included in the Crown Report (DoH, 1999). Supplementary prescribing was also seen as a way in which pharmacy staff could be recruited and retained by NHS Trusts.

The supplementary prescribing training programmes in Wales were discussed with some of the course leaders. The envisaged benefits of multi-disciplinary training and the unfamiliarity of pharmacists with the concept of reflection will be investigated in the following stages of the

study in order to determine if these predictions have borne true. Reflection is an important part of pharmacy continuing professional development (RPSGB, 2005c) and is defined as 'a generic term for those intellectual and affective activities in which individuals engage to explore their experiences in order to lead to new understandings and appreciation' (Boud et al., 1985 p19). Reflection cycles such as the Gibbs' (1988) model can be used to facilitate the reflection process.

The ideas provided by the interviewees regarding research questions to be adopted for the next stage of the research (interviews with pharmacists during their supplementary prescribing training in Wales) were indeed informative as anticipated. Their use will be described in Chapter Four.

A number of issues must be recognised regarding the methodology used in this stage of the project. The biggest advantage of using key informants in research studies is the large amount of data that can be collected in a short amount of time. This was evident by the number of themes generated. However, Marshall (1996) recognised that a disadvantage of key informants is that the views that they reveal may not be representative of the population as a whole. There may also be a power differential between the informant and the researcher due to the role of the informant in society (elite) which may make the interview situation an uncomfortable one (Marshall, 1996). This was experienced in one of the interviews where consent was not provided for the interview to be recorded or for substantial notes to be taken during the interview. Key informants may also only reveal information they feel is suitable to be seen in the public eye, that is, 'politically acceptable'.

The scope and type of information provided by each informant varied greatly. This was primarily a result of their professional role and the level of their involvement in supplementary prescribing, something Houston and Sudman (1975) describe as 'role theory'. For example, an education provider described how the supplementary prescribing training programme was to be organised in their HEI whereas an informant who was a member of the Task and Finish Group for Supplementary Prescribing in Wales would largely describe the national implementation of supplementary prescribing. However, all informants were able to express their general views regarding such a role being undertaken and how they perceived it in practice. The variety of roles also meant that the opinions of a range of individuals were sought rather than just one aspect, for example only education providers. A strategy advocated by Burgess (1984). However, Heckathorn (1997) believes that key informants' responses, in the scope of snowball sampling,

are biased towards their professional role, that is 'institutional bias' (p175). Unfortunately no doctors were recruited into this present stage and none were recommended via snowball sampling. This could have been due to the professional networks of the participants as the recruitment method depends on the participants contacts.

The eligibility of the participants to fulfil Tremblay's (1992) ideal criteria was, in many cases uncertain as Marshall (1996) recognises that it is only the key informant's position within society that can be ascertained before. Due to the snowball sampling method of identification for some, many of the potential participants were not known to the researcher prior to the interview therefore their ability to fulfil the criteria was uncertain. However, all of the interviewees were in a position to provide informed opinions to varying degrees which demonstrated that all potential participants identified through snowballing were appropriate for this present study.

Wengraf (2001) acknowledged the importance of prior relationships with the interviewees as this may impact on the data collected. It has been recognised by others that if the identity of the interviewer was known by the interviewee then a problem could arise (Smith, 2002b). The interviewee, believing that the researcher has already heard their views in the past may not divulge as much information as expected. This issue must be recognised at this stage as many of the interviewees were known to the researcher as it was through this prior knowledge they were initially identified. An example of this issue arose with Ken with whom contact had been made the week before the interview. As a result, the answer to one question was:

> RJ 'Are there any plans set in place already?'
> Ken 'Um what apart from what we discussed on Friday?'

It was only after prompting the interviewee to expand on this information that a more detailed answer was provided. It is sometimes more difficult to elucidate new and interesting information from acquaintances as they do not see the need to tell the researcher what they perceive to be already known (Flick, 2002). In contrast, if the researcher is a stranger then the respondent may divulge more information including the mundane, everyday life detail believing that the researcher has no prior knowledge of their life, work and social position.

Telephone interviews proved at times to be difficult. Unlike the face-to-face contact the two parties were unable to see each other and therefore the non-verbal aspect of the interaction was lost. Smith (2005) states that telephone interviews are limited in their use for in-depth interviews because of the lack of interpersonal interaction. Rubin and Rubin (1995) also recognised that

'conversational cues' (p141) such as body language and physical prompts for example, nodding of the head (Smith, 2005) are lost over the telephone thus making it harder to conduct the interview. As a result doubts have been cast in the literature regarding the quality of the data collected. For example, Thomas and Purdon (1994) state that telephone compared to face-to-face interviews as a whole are quicker and the answers provided in response to open questions are generally shorter whereas answers to only factual questions see little difference. In this present study the mean face-to-face interviews duration was indeed greater than the telephone interviews.

The advantage of the telephone interview is that it allows the researcher to conduct interviews with a range of individuals from diverse geographical locations, which otherwise would not have been possible and, as a result reduced travel costs. As such, telephone interviewing has been widely employed in surveying (Thomas and Purdon, 1994) and in health care research (Smith, 2005). Because a date and time was arranged before the researcher telephoned it ensured that the interviewees had made themselves available and was able to ensure that the call could be taken where they felt comfortable, for example, where they would not be overheard. Smith (2005) recognises there are fewer disturbances to the participant when they are interviewed over the telephone compared to face-to-face. This is of course not the case when 'cold-calling' is utilised in market research. Another advantage was that the researcher could take more notes during the interview and be more able to refer to the interview schedule more easily (Smith, 2005).

All except one interview was recorded and transcribed verbatim. The amount of time to transcribe was similar to other researchers' (Rubin and Rubin, 1995). However, the presence of a tape recorder did have an affect on some of the participants and made them acutely aware that their comments were 'on record'. Warren (2001) also recognised that when a tape recorder is switched on each participant will be affected in different ways. Having their voice recorded may make some interviewees feel nervous (Bryman, 2001). Examples of this can be seen within the present key informant interviews. Some interviewees did not seem phased by the presence of the recorder whilst others commented that they didn't like to hear their own voice recorded:

VICKY: I hate the sound of my voice on the tape, I sound really Welshy.

At which time the researcher reassured the participant that the tapes would only be heard by the research team and confirmed again that the participant was happy to be recorded. Some interviewees frequently looked at, and made reference to, the audio recorder. The atmosphere seemed to change when the recorder was switched on with the interviewees becoming less

relaxed. Rubin and Rubin (1995) acknowledged that recording equipment clearly looks out of place in an informal setting.

Gillham (2000 p63) defines 'elite interviewing as when you interview someone in a position of authority, or especially expert or authoritative, people who are capable of giving answers with insight and a comprehensive grasp of what it is you are researching' within the context of a case study. Rubin and Rubin (1995) recognised that some interviews with elite individuals may not be very long due to the demand on their time. Elites may also not be fully trusting of the interviewer (Rubin and Rubin, 1995). This may go some way to explain why one participant did not wish to have the interview recorded and was unwilling to sign a consent from. However, since consent was provided by e-mail and the interviewee was not a member of the NHS this did not contravene ethics approval. Bryman (2001) supports the view that even when a potential interviewee does not want the interview recorded the interaction should still go ahead. If this opportunity is missed then key information may not be disclosed. It must also be recognised that the notes made during and immediately after the interview were not written in a verbatim format; instead they were based on the researcher's recall and brief notes. The notes from that particular interview have not been included in detailed analysis of this present stage due to the subjective nature of the information obtained.

Even though it was recognised that the 'population' being investigated in this present stage is not 'hidden' and the research topic was not particularly 'sensitive' it was still deemed necessary to utilise the snowball sampling method for some participants. This allowed the researcher to make contact with individuals where otherwise it may not have been possible to obtain their contact details. Heckathorn (1997) and Salganik and Heckathorn (2004) state that a snowball sample will be biased towards those who are eager to participate and who have multiple relationships or an extensive social network with other individuals and hence will be identified as a potential participant ('selection bias'). This was brought to light where many interviewees each identified the same individual as a potential interviewee. Biernacki and Waldorf (1981) noted that the individuals who identify participants and hence promote the 'snowball' are 'de facto research assistants' (p153). The participants' characteristics and their ability to contribute to the snowball method differs. This was evident in the enthusiasm for identifying further individuals between the interviewees in this present study with some suggesting several potential participants and some none, this is knows as 'gatekeeper bias' if the participants are 'protecting' others and not allowing the researcher access (Atkinson and Flint, 2001).

The key informant sample size was 21. It is recognised in qualitative methodology that sample sizes do not limit the research potential as more in-depth work may be carried out on a smaller sample (Smith, 2002b). Due to the nature of convenience sampling it is also not possible to generalise the findings as the population the sample has been taken from is unknown to the researcher (Bryman, 2001). Smith (2002b) recognises that convenience sampling may introduce bias into the study which will be difficult for the researcher to take into account when they are analysing the results. The sampling technique in qualitative research is determined by the area being researched and the methods used, making these strategies appropriate for this present study. The views expressed by the key informants were particularly valuable in defining the research questions and themes to be investigated in the following stage, interviews with the first cohort of pharmacists to be trained in Wales at the beginning of their training (Stage One). Chapter Four will therefore follow-on from the key informants to describe how the suggested research questions were investigated.

3.9 Summary

- Twenty-eight key informant interviews were conducted during this first stage of the study with 21 individuals.

- The interviewees were recruited either directly by the researcher or via a snowball sampling method.

- Face-to-face or telephone interviews were conducted lasting from nine to fifty-one minutes.

- A number of themes emerged from the interviews. The positive view expressed on the role of a SP was anticipated, as the participants were all involved in some aspect of the role, either in its development or through undertaking the training programme.

- A range of conditions were envisaged to be managed by a SP.

- Even though there was support for the role several potential barriers were identified, which included staff release, access to patient medical records, support and remuneration in community pharmacy. Implementation was also seen to be different in each pharmacy sector.

- All of the training programmes in Wales supported multi-disciplinary training and reflection; it remained to be seen if the pharmacists who actually completed the training in Wales felt the same as the education providers.

- Supplementary prescribing was believed to benefit patient care in a number of ways such as improved monitoring and access to HCPs, to utilise pharmacists' knowledge and to be a 'stepping stone' to independent prescribing.

- The themes emerged from the interviews in this stage have provided an insight into the implementation and training issues of supplementary prescribing. The themes and ideas provided by the interviewees have been utilised to inform the research questions and interview schedule to be used in further stages of this present study.

Chapter Four – Interviews with the pharmacists in the first cohort to be trained as SPs in Wales during their training (Stage One)

4.1 Introduction

Chapter Three described the key informant interviews which were conducted and the themes emerging from those interviews. This present chapter follows on by describing how those themes and suggested research questions were to be utilised. This next stage is the first in a series of stages involving pharmacists from the first cohort to be trained as SPs in Wales as participants. This chapter will describe in detail how the pharmacists were recruited, the intended focus groups to be conducted, the semi-structured interviews undertaken and the themes that emerged from these interviews.

4.2 Research questions

The initial research questions for this stage of the research were informed by the main objectives of the research as presented in Chapter One and were identified as:

i) What were the pharmacists' views on undertaking the role of a SP?

ii) Why were the pharmacists undertaking supplementary prescribing?

iii) What previous experience did the pharmacists in the study have of a prescribing (or similar) role?

iv) What expectations did the pharmacists have of supplementary prescribing in practice?

v) How did the pharmacists envisage to be working in practice after training had been completed?

vi) What conditions did the pharmacists envisage managing as SPs?

The questions suggested by the key informant interviewees to be investigated in this stage are listed in Chapter Three. The initial questions (above) were therefore amended in light of the suggestions to form the final research questions for Stage One of the project:

a) What was the motivation behind the pharmacists undertaking the training programme to become a SP?

b) What would the pharmacists like to see on the prescribing course in order to become a competent SP and to meet the learning outcomes set by the RPSGB and the All Wales Curriculum?

c) What were the views of the pharmacists on supplementary prescribing and its limitations?

d) How was supplementary prescribing envisaged to work in practice?

e) What expectations did the pharmacists have of their new role?

4.3 Recruitment procedure

4.3.1 Study sample

The potential participants for this stage of the study were identified as those pharmacists undertaking the first training courses to become SPs in Wales. Purposive sampling was therefore adopted (Coyne, 1997). Due to the restrictions of ethics committee approval to North East and South East Wales, only three of the five HEIs in Wales were approached and utilised as recruitment centres (HEI A, B and C). Nurses on the SP training programmes were not recruited due to time constraints and resources available at the time of the study.

4.3.2 Gatekeepers

Under the requirements of the Data Protection Act 1998 the details of the enrolled pharmacists could not be disclosed until the pharmacists themselves had consented and provided their details to the researcher. In order to gain access to the pharmacists on the training programme it was therefore necessary to negotiate access by the course leaders at the respective HEIs acting as 'gatekeepers' (Bryman, 2001). Gatekeepers 'are those individuals in an organisation that have the power to grant or withhold access to people or situations for the purpose of research' (Burgess, 1984 p48).

The course leader of the supplementary prescribing training programme at HEI A was known to the researcher and was therefore approached in person. The contact details of the course leaders at HEI B and C were obtained from the course leader at HEI A and they were approached via e-mail. All course leaders also acted as key informants (Chapter Three) and the detail of what was involved in being a gatekeeper was discussed at the time of their interviews.

Each of the course leaders were asked if they would agree to forward information packs onto the eligible (those within the ethics committee remit described in Chapter One) pharmacists on their course which they all agreed to do. The course leaders were asked to identify where the pharmacists practised without revealing their identities in order for the researcher to make clear which pharmacists could receive an invite to participate and those who could not. This was to

ensure that only those pharmacists practising within the North East and South East of Wales, i.e. the ethics committee geographical remit, were recruited. It was also important to identify the pharmacists' sector of practice in order to ensure appropriate participants were recruited i.e. those within the NHS Trusts where approval had been sought.

Once it was clear how many pharmacists were eligible for inclusion the course leader was supplied with the relevant number of identical sealed information packs. The packs provided depended on which LREC had approved the study for each HEI area as follows:

- In HEI A the pharmacists were provided with an information pack inviting them to participate in a focus group (which included a letter inviting participation (Appendix 2.1), an information sheet (Appendix 2.2) and two copies of a consent form (Appendix 2.3)).

- In HEI B the pharmacists were provided with an information pack for Stages One to Four inclusive (focus groups during and after training and the use of diaries and follow-up interviews during training). The pack included a letter inviting participation (Appendix 3.1), an information sheet (Appendix 3.2) and two copies of a consent form (Appendix 3.3).

- In HEI C the pharmacists were not approached initially for a focus group due to delays in gaining access to the participants.

4.3.3 Instructions provided to the gatekeepers

The course leaders were provided with verbal instructions from the researcher detailing what they were being asked to do. These were as follows:

i) Provide the eligible pharmacists with one of the supplied information packs either face-to-face (HEI B and C) or via the post (HEI A) (the course leader would attach an address label to the pack before posting).

ii) If the packs were handed face-to-face then the course leaders were asked to explain that the pack was from a researcher from Cardiff University who was undertaking research on supplementary prescribing. The pharmacists were to be told that they were being asked to participate in the research, to read the information pack provided and that there was a consent form to sign and return should the pharmacist wish to participate.

iii) It was explained that it was appropriate to encourage the pharmacists to participate but without coercion.

4.4 Sample size for this present study

The number of pharmacists enrolled on each HEI's supplementary prescribing course is shown in Table 4.1.

Table 4.1. Number of pharmacists per HEI enrolled on the training programme

HEI	Number of enrolled pharmacists
A	16
B	8
C	4

Through the co-operation of the course leaders the number of eligible pharmacists to participate and hence the sample size was determined and is displayed in Table 4.2.

Table 4.2. The number of eligible pharmacists per HEI.

HEI	Number of eligible pharmacists
A	15
B	8
C	4

The one pharmacist not eligible from HEI A practised for an NHS Trust out of the LREC geographical remit, hence could not participate.

4.5 Focus groups at the beginning of training

4.5.1 Focus group methodology

The initial protocol submission to the LRECs in December 2003 and January 2004 requested that pharmacists in the first cohort participate in a focus group at the beginning of their training. The protocol stipulated that the intention was to hold the focus groups at the training establishment as the pharmacists began their course in order to minimise the inconvenience to the participants (Kitzinger and Barbour, 1999). The aim was to hold two to four focus groups, one containing pharmacists from primary care and one with those from secondary care and up to two more. The initial target was to recruit approximately 10 to 12 individuals for each group in order to have between the optimal numbers of five to seven (Krueger, 1994) per group when they were to convene. This was to allow for unforeseen circumstances, non-attendance and for those who did not wish, or were unable, to participate.

Immediately prior to the commencement of the focus groups the pharmacists were to be provided with a brief demographic questionnaire (Appendix 2.4). The questionnaire was to be self-completed and collected before the group commenced. Information to be collected included the participants' age, gender, sector of practice, year of registration and any post-graduate

qualifications that they may have. This information was deemed necessary in order to gain an insight into the background of the participants, which may have impacted on the items discussed during the group interaction.

Morgan (1997 p6) describes focus groups as 'a research technique that collects data through group interaction on a topic determined by the researcher. It is the researcher's interest that provides the focus, whereas the data themselves come from the group interaction'. It is the group processes and interaction that generates the ideas and opinions (Bloor *et al.,* 2001; Bryman, 2001). Data are therefore produced through interaction that may not have been generated through individual interviews. It has been suggested that it is more efficient than multiple individual interviews to generate the equivalent number of ideas (Morgan, 1997).

The researcher was to be present as a moderator to maintain the focus of the group on the topic of discussion. Focusing exercises and a focus group guide were designed in order to maintain the attention of the group on the topic under discussion (Bloor *et al.,* 2001). The focus group guide and exercises were informed by the information and issues that arose from the key informant interviews (Appendix 2.5). The group discussion was to be audio recorded with consent and transcribed. Brief field notes were also to be documented during, where possible and immediately after the group, in order to record a seating plan of the group and any contextual information.

The following describes how it was attempted to recruit the pharmacists from each of the three HEIs for the focus groups.

4.5.2 HEI A – Focus group recruitment

A focus group information pack (Appendices 2.1, 2.2 and 2.3) was posted to the fifteen eligible pharmacists (enrolled onto the first cohort of the supplementary prescribing programme) by the course leader. One pharmacist returned their consent form. Approximately two weeks after the first packs were posted a reminder was sent out to the remaining fourteen pharmacists again via the course leader. A further three consent forms were received making a total of four pharmacists from HEI A.

To encourage participation in the study the researcher was given the opportunity to introduce herself to the pharmacists on the course at HEI A on their first training day in April 2004.

However, as the course leader forgot to ask the pharmacists to stay behind after their lecture many of them had left and the researcher was only able to speak to the remaining individuals in a very informal manner at the front of the lecture theatre. The researcher explained the aim of the research and what would be expected of the pharmacists should they wish to participate. Comments received from the pharmacists indicated that the main reason why the majority (11 out of 15) of the eligible pharmacists had not consented to participate was due to time constraints and that they would participate should this problem be overcome.

The intention at this stage was to hold the focus group at HEI A on a supplementary prescribing training day in order to minimise the inconvenience to the participants. However, some of the pharmacists did not wish to attend a focus group at the end of a training session due to the heavy workload already undertaken during the day. Family commitments also meant that some of the pharmacists were unable to stay on at the end of the day. One pharmacist commented that the researcher would 'not get the best out of people' should the group be held at the end of a day. Lunchtime was also not available as only three quarters of an hour was allowed for lunch, not enough time to hold a focus group. In an ideal situation it seemed that the best time to convene a group would therefore be during one of their training days. However, due to the content of the course all of the training days were full with teaching and lectures therefore it was not possible to hold the group during the day.

It was suggested that the pharmacists who said that they wished to participate if a suitable time could be arranged should return their signed consent forms stating when would be the most convenient time for them to hold the group. For example, at the workplace, after work or in the morning before a training day. The researcher emphasised that returning the consent form did not commit the pharmacists to participate as they were free to withdraw from the study at anytime. A compromise could then be reached with respect to finding a time to meet. However, no more consent forms were returned resulting in only four pharmacists from HEI A agreeing to participate (Thomas, Neil, Helen and Louise).

It was later brought to the researcher's attention by the course leader that one of the training days in June 2004 was to end an hour early at 3:30pm instead of the usual 4:30pm. This meant that the group could potentially be held at the end of the day without the participants having to stay much longer than usual. The researcher approached the four consenting pharmacists and all agreed to take part in a focus group at that time. A meeting room was booked and refreshments purchased.

Unfortunately, on the day of the organised focus group one pharmacist was ill and therefore could not attend and another had family commitments meaning they could not stay behind after the study day. One of the two remaining pharmacists also stated that they had to leave the department at 4.30pm due to prior engagements. In addition, the last session of the day over ran to four o'clock meaning there was only half an hour to hold the group, consisting of two people. Due to lack of time and people the decision was made to cancel the group. The researcher apologised to the two pharmacists present and asked if they would consent to an interview as an alternative at a future date, if ethics approval was obtained, to which they agreed.

4.5.3 HEI B – Focus group recruitment

The pharmacists on the supplementary prescribing training programme at HEI B were asked to consent to Stages One to Four, in accordance with local LREC approval. The course leader at HEI B handed the information pack containing information on all four stages (Appendices 3.1, 3.2 and 3.3) to the eight eligible pharmacists on the first training day of the course. No signed consent forms were received after this first information pack had been distributed. Reminder information packs were posted to the course leader to be handed to the pharmacists approximately two weeks later, again on their training day. Reminders were only given to seven pharmacists as one had informed the course leader that they definitely did not wish to participate.

The reminders resulted in three pharmacists consenting to Stages One to Four of the project (Nicola, Beatrice and Lois). An attempt was therefore made to arrange a time to hold a focus group. The course leader had agreed that a room could be booked at the HEI to hold the group after one of the training days (which ended at one o'clock) to which the participants agreed. However, due to prior commitments and holidays all three pharmacists were not available at any one time to meet.

In addition, one of the three pharmacists (Lois) who had consented left the course due to obtaining a pharmacy post out of the area. The consent to participate in the study was therefore withdrawn. This now left two pharmacists, which is an insufficient number for a focus group.

4.5.4 Protocol amendment number one

Due to the difficulties in recruiting and organising a convenient time to hold a focus group a protocol amendment was submitted to the North East and South East Wales LRECs. The

amendment requested that either individual or group interviews be held as an alternative to the focus groups. Details of the amendment are provided in Chapter Two.

The protocol amendment required that a new information pack be developed in order to request consent for the alternative interviews (which included a letter inviting participation (Appendix 4.1), an information sheet (Appendix 2.2) and two copies of a consent form (Appendix 4.3)). The low focus group recruitment may have been due to the difficulty of arranging a convenient time for several pharmacists to meet. This problem could be overcome by arranging individual or group interviews.

4.5.5 HEI C – Focus group recruitment

Four pharmacists were eligible to be invited to participate in the study from HEI C. However, as access to the pharmacists had been negotiated via the course leader at a later date than at HEI A and B (where problems of recruiting and arranging a time to hold a focus group had been experienced) it was decided to recruit from HEI C for the interviews only.

4.6 Interviews at the beginning of training

4.6.1 HEI A and HEI B – Interview recruitment

Once the amendment to allow interviews instead of focus groups had been approved by the LRECs and the relevant R & D Offices, the pharmacists who had already consented to take part in the focus group from HEI A (four) and HEI B (two) were approached directly by the researcher via the contact details they had provided. The pharmacists were provided with an interview information pack via the post (Appendix 4.1, 4.2 and 4.3) and asked if they would consent to an interview instead of the previously arranged focus group. The remaining eleven pharmacists from HEI A and four pharmacists from HEI B were also provided with an interview information pack via the course leader in the same manner as described above (sections 4.5.2 and 4.5.3). The consent form asked that the pharmacists specify if they would prefer to be interviewed individually, as a group or if they had no preference. The option of interviewing in a group meant that the research was flexible depending on the participants' preferences and still kept the option of exploring the pharmacists' views while interacting with other individuals.

After approximately two weeks no pharmacists from HEI A or B (including those who had previously consented to a focus group) had consented to an interview, therefore a reminder (duplicate information pack) was provided to the pharmacists, in the same manner as the first

interview pack. Three out of the four pharmacists from HEI A, and both the pharmacists from HEI B who had agreed to participate in a focus group agreed to an interview. A further two pharmacists from HEI A also agreed to be interviewed following reminder. All stated that they had no preference as to an individual or group interview. This resulted in a sample of five pharmacists from the possible 15 on the course at HEI A and two out of a possible seven from HEI B.

4.6.2 HEI C – Interview recruitment

The course at HEI C had four enrolled pharmacists, all of which were eligible to participate. The course leader handed interview information packs to the four pharmacists during one of their training days. Reminder information packs were also provided approximately two weeks later. Unfortunately no consent forms were returned from any of the pharmacists on the course.

A summary of the recruitment procedure for this present stage is provided in Figure 4.1.

4.6.3 HEI D and E

In order to include the two remaining HEIs in Wales who were training pharmacists as SPs in the study the course leaders at HEIs D and E were approached via e-mail and invited to participate. The course leader at HEI D participated as a key informant interviewee (details in Chapter Three) and offered to forward information packs onto the community pharmacists on their course to ask if they would participate in an interview. Due to the LREC restrictions those pharmacists working in the NHS outside of the LREC remit could not be approached therefore it was deemed suitable to only contact the community pharmacists. However, no response was received from those pharmacists contacted.

The course leader at HEI E did initially contact the researcher displaying an interest in participating. However, when the researcher replied and attempted to arrange an interview no further response was received. It was therefore assumed they no longer wished to participate.
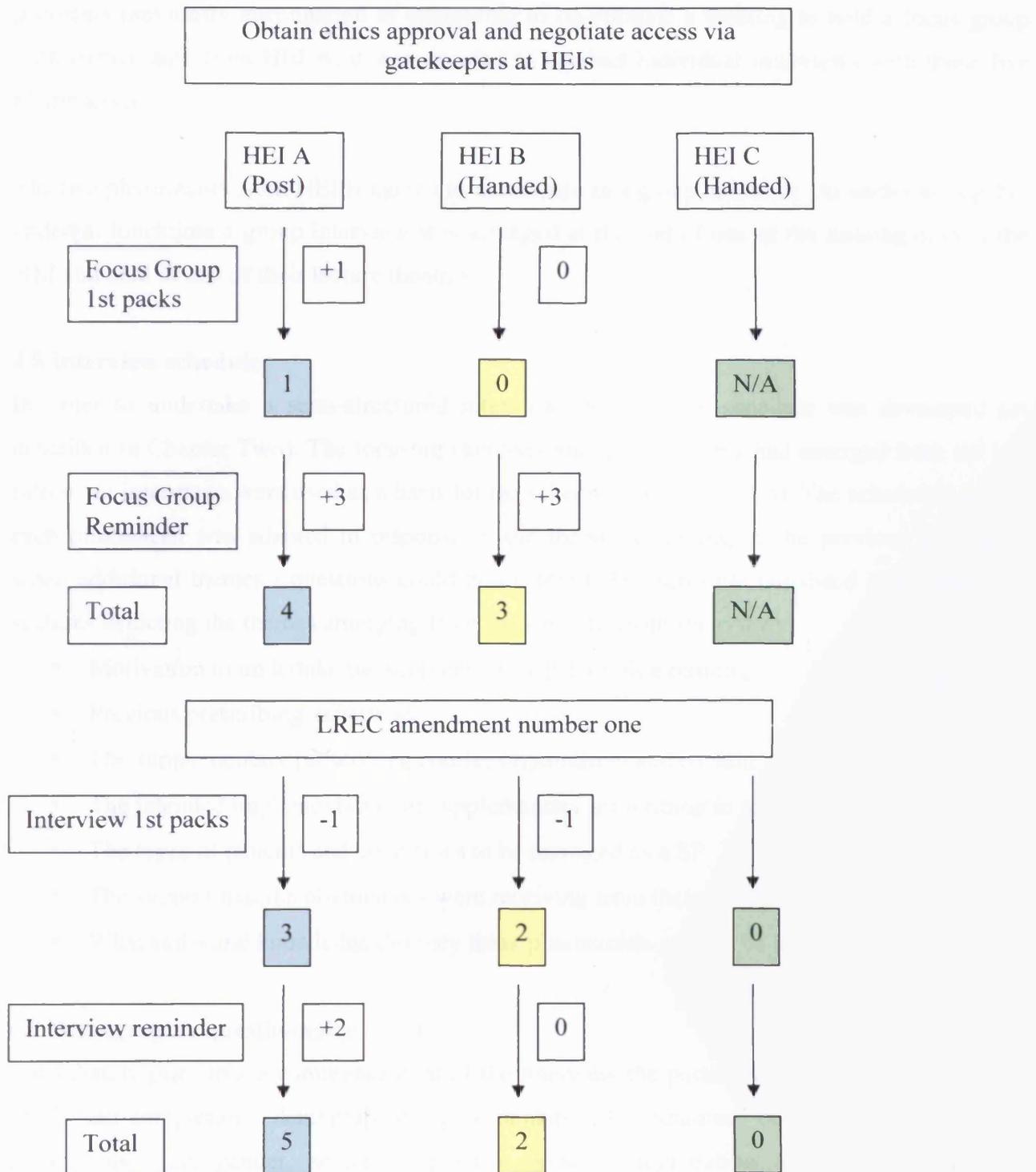
Figure 4.1. A summary of recruitment in Stage One. The numbers denote the number of pharmacists recruited or lost at each recruitment effort.

4.7 Interview arrangements

All seven consenting pharmacists stated on their consent forms that they would participate in either a group or individual interview. All of the pharmacists were contacted via the details they had provided (email or telephone) to arrange a convenient date and time to meet. Due to the

problems previously encountered in attempting to co-ordinate a meeting to hold a focus group with participants from HEI A, it was decided to conduct individual interviews with those five pharmacists.

The two pharmacists from HEI B agreed to participate in a group interview. As each training day ended at lunchtime a group interview was arranged at the end of one of the training days at the HEI and held in one of their lecture theatres.

4.8 Interview schedule

In order to undertake a semi-structured interview an interview schedule was developed (as described in Chapter Two). The focusing exercises and questions that had emerged from the key informant interviews were used as a basis for the schedule (Appendix 4.4). The schedule used for each pharmacist was adapted in response to the themes emerging in the previous interviews when additional themes / questions could be explored. The schedule consisted of a number of sections depicting the themes emerging from the key informant interviews:

- Motivation to undertake the supplementary prescribing training
- Previous prescribing experience
- The supplementary prescribing course, organisation and content
- The intended implementation of supplementary prescribing in practice
- The types of patients and conditions to be managed as a SP
- The support that the pharmacists were receiving from their organisation
- What skills and knowledge did they think pharmacists need to be a SP

4.9 Demographic questionnaire

Immediately prior to the commencement of the interview the participants were provided with a brief self-completion demographic questionnaire. Information collected included the participants' age, gender, sector of practice, year of registration and any post-graduate qualifications that they may have. This was the same questionnaire intended to be used before the focus groups (Appendix 2.4). The information collected from the questionnaire is shown in Table 4.3.

Table 4.3. Information collected from the demographic questionnaire before each interview in Stage One.

Participant Name	Age			Gender		Year of Registration			Sector of practice			Post-graduate qualifications		
	25-34	35-44	45-54	Male	Female	1970-79	1980-89	1990-99	Community	Hospital	Primary care	Diploma	Masters	Other
Nicola			X		X	X			X		X			X
Beatrice		X			X		X			X		X		
Thomas		X		X			X		X					X
Neil		X		X			X		X			X		
Helen	X				X			X		X		X		X
Bob		X		X			X		X					X
Tamsin			X		X	X				X				X

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4.10 Interview information

All of the interviews were conducted in accordance with the semi-structured interview method described in Chapter Two. Table 4.4 describes the type of interview, where the interview was held and duration in this present stage. All interviews were conducted face-to-face and recorded on a mini-cassette.

Table 4.4. Interview characteristics for Stage One.

Participant name	HEI	Type of interview	Location of interview	Duration of interview
Thomas	HEI A	Individual	Place of work	54m 52s
Neil	HEI A	Individual	HEI	28m 47s
Helen	HEI A	Individual	Place of work	39m 34s
Bob	HEI A	Individual	Home	39m 58s
Tamsin	HEI A	Individual	Place of work	28m 48s
Beatrice	HEI B	Group	HEI	34m 22s
Nicola	HEI B	Group	HEI	34m 22s

4.11 Themes emerging from the interview data

A number of key themes emerged from the interviews as outlined below.

4.11.1 Motivation to become a SP

The majority of the pharmacists believed that supplementary prescribing was a means of developing the role of the pharmacist in both primary and secondary care. In contrast, Bob believed that the community pharmacist's role should be in medicines management and undertaking medication reviews rather than prescribing.

The pharmacists provided several reasons as to why they wanted to undertake the role of a SP. All of the pharmacists had themselves decided to undertake the role with the backing of their employer. Motivations to undertake the role of a SP included that it would allow the participants to utilise their skills as a pharmacist to a greater extent (Thomas) and that the pharmacist wanted to make a difference to people's health (Neil):

> *THOMAS: I think that um pharmacists are under utilised in their supply function and I don't think enough use is made of the pharmacist clinical skills....I think this qualification unlocks the barriers to pharmacists being able to use their clinical knowledge more appropriately than it's used at the moment. As far as the course goes then I think it gives pharmacists the skills to be able to do that.*

> *NEIL: I don't want to keep doing the same thing day in day out. I've got a more clinical bent and I want to also make a difference, it sounds very trite but actually make a difference to people's health and well-being.*

Some of the hospital pharmacists (Helen and Tasmin) were already undertaking a pseudo-prescribing role. Supplementary prescribing would therefore 'legalise' their existing role:

HELEN: [The] opportunities for taking part in the patients care, in in-patient setting is huge and often then during ward rounds I would suggest treatments and during the [drug] clinic I do I would suggest treatments, prescribe them but then get the SHO [Senior House Officer] to sign them.... a lot of these things that I'm planning on doing officially I already do but just get the doctor to rubber stamp it.

TAMSIN: We've [pharmacists] been doing the actual prescribing, we haven't been doing patient assessment.......the way that our........ protocols are set up is almost as a clinical management plan.

The community or primary care pharmacists had little experience of prescribing apart from the advice provided to patients over-the counter and to doctors.

4.11.2 The supplementary prescribing training programme

The pharmacists expressed their views on the format and standards of teaching on their respective courses. As this was the first cohort to enrol onto the course it was felt that improvements could be made for the benefit of future students. It was also recognised that there is always improvements to be made after the first cohort of any course and that the course leaders faced difficulties teaching such a diverse range of practitioners and specialities in one group (Neil).

Suggestions for course improvements included:

- The course duration should be increased (Neil, Helen, Bob, Thomas and Tamsin)
- More worked examples of CMPs should be provided (Beatrice)
- More time should be spent on forming supplementary prescribing protocols (Nicola)
- Some of the pharmacists believed that the some lectures were not up to the standards the pharmacists required with respect to structure and preparation (Beatrice, Thomas, Neil and Bob)
- Role playing with actors or patients should be included to facilitate learning (Thomas)
- Time should be spent training with other IPs in addition to the pharmacists' DSMP (Thomas)
- There should be ongoing training and support after the course has been completed (Thomas)

- The course title should be amended from supplementary prescribing to make clear that managing chronic conditions is not all about prescribing and medication but a more holistic approach (Thomas)

- More time should be spent on the clinical assessment appropriate to the conditions that the pharmacists are going to treat instead of a more general approach (Neil)

- More guidance should be provided on course assessments such as clinical logs (Helen)

- The pace of the course was too slow with lots of time wasted having coffee breaks and discussion periods, better organisation was required (Bob and Helen)

- The course manual should be improved to make it more user-friendly (Bob)

Some comments regarding the general views of there course were:

HELEN: I'm disappointed with the organisation of the course. I mean I realise that we are the guinea pigs. .... But I mean things like you don't mind so much because you know it is a new course and you know if you do tend to get a good recommendation [for a lecturer and] it terms out to be horrific then you ca, you know you can't really do anything about it.

NEIL: I think it's a huge amount of work gone on by the University and I think the people involved have worked very hard ... I think ... there's a lot of learning to go forward for the next one [cohort].

The pharmacists were asked if there was any aspect of the training course they felt was either on the course but unnecessary or not included on the course but was felt to be necessary. However, Thomas believed that:

THOMAS: I think that there's always the opportunity to improve your practice and learn even if you think you do something well in the first place. I think you can still always do something better ... for me I think it strengthens and revises existing knowledge.

Each HEI had adopted a different strategy where in one HEI pharmacists who could provide evidence of competence could be exempted from certain study days but in another HEI the pharmacists were required to attend all days. Helen stated that:

HELEN: I think the exemption has worked pretty well actually um, it seems to be pitched right.

4.11.3 Time and commitment to undertake the training course

All seven pharmacists believed that the time to undertake the training programme was immense. The day-to-day duties and responsibilities of the pharmacists still had to be fulfilled on top of the course commitments and hence when they returned to work after the course they had to 'catch up' on all of the issues from the time they were away:

NEIL: Then I go back to work tomorrow [after a training day] and although there'll be a locum pharmacist there the other sort of issues that I deal with wouldn't have been dealt with.

The self-funding community pharmacists also expressed concern regarding the cost and difficulties in finding locums to cover their pharmacies while they were on a study day or with their DSMP (Thomas and Bob). In addition, Helen and Tamsin's, ward rounds and clinics were held on the same day as the study days. They therefore missed them on days when the supplementary prescribing course was held.

In most cases the pharmacists also had to do a proportion of the course work at home due to the lack of time to complete the work within their contracted hours. Some quotes from the participants to illustrate this theme are provided below:

BEATRICE: I'm having to juggle an awful lot to get to this course anyway and you you just don't have the time to do an awful lot of extra written work to be perfectly honest...... and because you have to realise that you have other commitments apart from supplementary prescribing and your times got to be prioritised very very carefully.

THOMAS: I think the workload within the time is immense, I just done the um certificate in management of drug misuse, that started last October, it finishes this October. The workload comparatively speaking has been easy and simple.

NEIL: It's a huge commitment. I mean I've done the diploma here and actually that was a doddle compared to this because with this.

HELEN: I think ... my DSMP and myself have been quite surprised at the amount of work. Um, but I've had I've had to, to do the course I've had to give things up in work.

As well as the amount of time out of practice to actually undertake the training programme the pharmacists also expressed concern about the amount of time required to then practice supplementary prescribing. This also included producing the SP protocols and CMPs (a limitation of supplementary prescribing) along with fulfilling their current duties:

BEATRICE: If they want [a] supplementary prescriber and if you're taking days out of my current role then they've got to get somebody else in to do the work that I would I would do on those days. I don't think you can take a lot of extra work on board because I'm fully occupied, for want of a better word anyway (laugh) to be perfectly honest and um if if you take on supplementary prescribing then something else has got to give.

TAMSIN: Um, backfilling is the, you might it might cure one problem we've got in um overloaded out-patient [medication] clinics which is our problem at the moment but unless they backfill mine um I, some of my duties or the duties of the other, of the nurses or any pharmacist that follow me is gonna be limited. But what's gonna happen is pharmacy is gonna be short of staff and I'm going to be dragged back inevitably.

4.11.4 Multi-disciplinary learning

As described in Chapter One, all of the supplementary prescribing courses in Wales were multi-disciplinary with nurses and pharmacists training together. Different pharmacists had different views as to whether they agreed or disagreed with this approach. Two pharmacists did not agree:

BOB: No, I just can't see it [nurses and pharmacists] working at all. Um, it's too much too too many knowledge gaps on both sides really.

HELEN: I just feel that our [pharmacists and nurses] backgrounds are so different you know it's it's just not practical to run the courses together.

In contrast:

NEIL: I think it's very useful to have ah nurses and pharmacists together.

THOMAS: I think that that's vital really. I think that's very important that um ah we [pharmacists and nurses] should all do training together. I think it would be very useful to train with doctors as well. Um, I think it's interesting to see the different ways that pharmacists approach things maybe to nurses.

The pharmacists acknowledged that nurses and pharmacists have different learning needs due to the professions having different training backgrounds. For example the pharmacology element of the course was revision for the pharmacists whereas the clinical assessment skills (such as taking blood pressure) were repetition for the nurses. A common course may not be appropriate for both professions and some elements may need to be separated:

NICOLA: The course itself I think at the moment, we're struggling to get the balance with having nurses and the pharmacists on the same course. We we have both have clearly identified different needs for learning.

NICOLA: I have concerns that we're [nurses and pharmacists] both on the same course for this length of time. You know it's like one size fits all template and it's not taking into consideration that as professions we're both trained very very differently, we both have very very different skills.

BEATRICE: I think nurses are very very good at talking with patients and um assessing them, I think pharmacists are very good at therapies and we have very good knowledge of pharmacology and how the drugs work but we need more patient contact time I think.

Some of the pharmacists could see the benefit of the multi-disciplinary approach:

THOMAS: I think it's interesting to see the different ways that pharmacists approach things maybe to nurses.

NEIL: We [pharmacists] often don't see the patient, we see the drugs whereas nurses tend to see the more holistic patient but they haven't much learn, understanding of therapeutics and pharmacology and I think actually the two, the two marry together very well.

NICOLA: I think there are definitely benefits to being together for some sort of core parts of it that are relevant to both professions because it's very good to have interaction between professions.

However, pharmacists and nurses approach patients in a different manner:

NICOLA: Well, we approach problems from our point of view, from a drug point of view um but they would, they approach things slightly different, how they deal with things on a day-to-day basis and look at their demands on their time.

THOMAS: It's a big move for pharmacists to to move away from thinking of everything in terms of pharmacokinetics. And to think about patients and problems and everything else that's going on, not just about drug treatment. And for the nurses I think that maybe they're all about treating the patient and perhaps the things that they'll learn is about actually the the drug stuff.

Nurses were also believed to have more experience in the use of reflection, which was promoted as a learning tool on the courses:

NEIL: Nurses seem much more comfortable with it and I think it must be more, much more a part of their end of year practice and degree. Whereas I think in in pharmacy, I mean if you mention the word, or when I did my degree, if you mention the word reflection it didn't it didn't it didn't happen. Didn't exist, and I think maybe it happens more now with CPD being on line but um it's not a natural pharmacist thing.

HELEN: I mean I've never reflected in my life before. Um, I think that's very much a nursing kind of background thing.

Reflection was not such a well-known concept within pharmacy although some pharmacists, may already undertake reflection:

NEIL: Pain in the arse at first [reflection] but actually once you actually realise you know it's actually very very useful. It's basically CPD [Continuing Professional Development] plus if you like. So you you need those abilities to reflect and also the clinical base. Um, plus also the humility to realise that you actually don't know everything.

Some of the pharmacists embraced the concept of reflection more than others. For example Bob did not adopt reflective practice:

BOB: Whereas a lot of this was um this is what you should be doing, let's talk about it and then go away and read about it and and learn about it yourself and then reflect on it. And I just don't like that.

In contrast Thomas felt that he did not find the concept of reflection difficult to grasp:

THOMAS: So maybe before the course I would think person, problem, drug, now I'm tending to reflect more on what the causes of the problem might and what the overall treatment of that person might be without necessarily jumping to drug and missing out the other bits.' ...'it makes me reflect more on the person that I'm treating rather than just um,

rather than just sort of ah perhaps the pharmacist way of doing things which is a bit remote from patients.

Nurses in Helen and Tamsin's work place were able to assist the pharmacists in adopting a reflective approach:

HELEN: I mean my nursing friends here [hospital] they reflect till the cows come home so they know exactly how to reflect so I had books and articles and all kinds of things off them.

TAMSIN: Now I'm into it (reflection), it's it's great, it's a very good way of learning but at first it took quite a bit of thinking about and that's where I've got a lot of help from my nursing colleagues ah on site because they're used to it.

4.11.5 Expectations of how supplementary prescribing will be implemented in practice

The pharmacists intended to utilise supplementary prescribing to manage cardiovascular disease such as hypertension, psychiatric conditions such as schizophrenia and depression, breast cancer and gastrointestinal disease. Tamsin, Neil and Nicola mentioned that they would be managing uncomplicated patients to begin as the role was new to them. Only Tamsin and Helen, both hospital pharmacists had an idea of the number of patients they expected to be managing (eight and thirty respectively). The pharmacists aimed to manage their patients in either hospital out-patient clinics, at the GP surgery or within the community pharmacy.

Some of the pharmacists did not know how they would implement the role, as procedures had not been put in place before they started the course. Two of the community pharmacists (Thomas and Bob) stated that it may not be possible to implement supplementary prescribing into their practice:

THOMAS: If no-one wants to pay for that [supplementary prescribing] to happen or facilitate that in some way then it isn't gonna happen.

BOB: I'm not sure that I will be using it, um the the um I can't I can't see how I can provide a supplementary prescribing service, I just can't see how I can deliver that service.

Thomas believed that the course would improve his practice and Bob stated that he had learned a great deal regardless if they manage to implement supplementary prescribing or not. Barriers to implementation included funding (Thomas), the new pharmacy contract (Thomas and Bob) and gaining access to patient medical records in the community pharmacy where information technology is also a barrier (Bob). Access to records did not appear to be an issue within the GP surgery or hospital.

The pharmacists who worked in the hospital were already undertaking a role similar to supplementary prescribing working in a clinic or in-patient setting:

HELEN: I think it [quality of care for patients] will make it better. Um, it'll be smoother cause as I said a lot of these things that I'm planning on doing officially I already do but just get the doctor to rubber stamp it.

The CMPs were seen as a limitation to supplementary prescribing by Helen, Bob and Tamsin in some respects:

HELEN: It's [CMPs] going to be quite time consuming, you know like thinking of getting cmp for thirty patients on [drug]. It's going to take me a little while.

BOB: I think the the, because we're not independent I think the clinical management plans are very sort of restrictive.

TAMSIN: The need for a clinical management plan does limit it [supplementary prescribing].

For example, the SP can only prescribe for patients within the confinements of a CMP even though they may be competent to undertake the prescribing. CMPs are however, useful so that all members of the prescribing partnership know what their role and responsibilities are (Helen) and it allows the pharmacist to resist patient pressure to prescribe an item that is not on the CMP (Neil).

Additional limitations to supplementary prescribing noted by Thomas was the clinical responsibility the SP will have to undertake and the need for the patient to have to see both the doctor first for a diagnosis and then the pharmacist (Bob):

THOMAS: If I was a prescriber, I would be reluctant to rely on somebody else working under a clinical plan with, clinical management plan with me and having trust in their clinical judgement as an individual without them taking the whole responsibility for it. And I think that's the big issue. Why, I I can't see why any doctor would be happy to take clinical responsibility for my practice and I think that's the the biggest issue I think it's it's about clinical responsibility.

4.11.6 Benefits to patient treatment

If supplementary prescribing is put into practice some benefits cited by the participants include:

- Improving access of patients to a HCP (Neil)
- Pharmacists will have more time to spend with the patients (Tamsin and Nicola)
- Improved monitoring of treatment (Beatrice and Neil)
- Improved consistency of treatment (Helen)
- Improved pharmacy practice as the patient is viewed more holistically rather than just by their medication (Thomas)

- The process of obtaining a repeat prescription will be easier (Helen)
- Treatment will adhere to approved guidelines (Neil)

All except one of the pharmacists believed that supplementary prescribing would benefit patient care:

> *BOB: I can't see really how that's [supplementary prescribing] going to save the patient much time and it's certainly not gonna save the doctor any time. I can't see cause they've already seen them once and made a diagnosis. Um, yeah I I can't see it working to be honest.*

Thomas was concerned that some of the pharmacists who are to undertake supplementary prescribing will continue in practice after the course as they were before. For example, those pharmacists where supplementary prescribing is only going to legalise the role they had previously been performing under protocol. The benefit to patients will therefore be minimal:

> *THOMAS: But if all that's gonna happen is the people are still gonna carry on doing the same jobs that they are now, seeing the same people not treating them in any other way than the fact that they can actually sign their name on the prescription what's what's the benefit? There's there's there's zero benefit, they're not gonna see anymore patients, no more patients are gonna be treated, waiting lists aren't gonna be reduced.*

The response that Neil had already received from his patients during his trainng was positive:

> *NEIL: Patients are absolutely fine if you explain who you are, what you're doing they're absolutely fine and most of them say it's a good idea because you you guys know know about drugs. You know so it's actually been very positive um I think there's been only one patient so far who's asked me not to be um sitting in with the GP.*

4.11.7 Independent prescribing as the future of supplementary prescribing

Supplementary prescribing was viewed as a step in the right direction to independent prescribing:

> *THOMAS: I don't think that supplementary prescribing is necessarily the whole answer to that but I think that supplementary prescribing is a stepping-stone to full independent prescribing.*

> *NICOLA: The other way is to go the whole hog down to the ind independent prescribing route, I really would like to see that.*

In time, the CMP will be removed and the pharmacist given more clinical freedom to manage their patients' conditions:

> *NEIL: I think a year down the line from that then logically it makes sense to actually then take away the the cmp lifeline, umbilical cord and then just say okay you're now independent prescribers.*

4.11.8 Views expressed when quoted the heading 'Pharmacists should focus on what they do best, not be dazzled by new ideas' (Jenkins, 2004)

The quote above was read out to the pharmacists during the interview and their opinions sought. All of the pharmacists disagreed with the statement believing that the pharmacy profession should continue to develop and evolve:

> *NEIL: That sort of comment belongs belongs in the cave, in the Stone Age. Um, we cannot achieve patient, when all said and done we have patient health care, not to fight inter-professional turf wars. If we don't collaborate and use everyone's skills patients suffer.*

> *HELEN: What, that we should stick to the backroom and dispense away like little monkeys? Um, I think there's a huge lack of understanding about what we can potentially do.*

> *THOMAS: I think that pharmacists should be more involved with patients and less involved with technical technical like day-to-day stuff. There's no difference between working in a dispensary and working in McDonalds except we don't smell of chips when we come out of the dispensary.*

4.11.9 The knowledge and skills pharmacists need to be a competent prescriber

The participants were asked during the interview what skills and knowledge they believed a pharmacist needed to be a competent prescriber. Suggestions were:

- Keeping knowledge of the medication and therapies in the field that they're prescribing in up-to-date (Nicola, Helen and Bob)
- Good communication skills (Nicola, Helen, Bob and Tamsin)
- An ability to see the whole patient and not just the medication (Nicola and Thomas)
- To be able to recognise what you don't know, your level of competency (Neil)

4.12 Discussion

The themes generated in this present stage demonstrate that even though the pharmacists were only at the beginning of their supplementary prescribing training, barriers to implementation were already being predicted. The interviews conducted after training had been completed (described in Chapter Six) will investigate to what extent such barriers had, if at all, impeded the development of supplementary prescribing.

The motivation for undertaking supplementary prescribing included that it legalises a role that has already being carried out and that it will utilise pharmacists' skills to a greater extent. A study conducted in Northern Ireland also investigated the implementation of supplementary prescribing through conducting focus groups with hospital pharmacists in the first cohort at the beginning of their training (Cassidy *et al.*, 2004). The themes emerging from a pilot study by

Cassidy *et al.* (2004) also demonstrated that the pharmacists viewed supplementary prescribing as a 'natural progression' (pR87) of their current role.

Anecdotal evidence from one of the participants and from a number of key informants suggested that some pharmacists were expected to attend the supplementary prescribing course as a matter of their NHS Trust policy. Some pharmacists who were already involved in pharmacist-led clinics were therefore told to become a SP in order to formalise their role, not because they personally wished to attend. This was not reported to be case with the participants in this present study, but it does raise an issue of what proportion of pharmacists on supplementary prescribing training programmes were 'forced' to attend by their employees.

A postal questionnaire study by While *et al.* (2004) investigated the views of community pharmacists from a number of PCTs in England on supplementary prescribing. Their results demonstrated that apprehension was felt regarding access to patient medical records by one fifth and consultation time by a quarter, a view also expressed in this present study. While and colleagues (2004) also discovered that pharmacists with post-graduate qualifications were more likely to accept the responsibility of supplementary prescribing more readily, were confident in affecting treatment decisions and welcomed independent prescribing. All pharmacists in this present study had further qualifications and also supported the development to independent prescribing and were welcoming the role of a SP. Two-thirds of While *et al.* (2004) participants wanted independent prescribing and 99% believed that supplementary prescribing would benefit care, themes which also emerged in the interviews in this present stage. For the community pharmacists in the questionnaire study there was a connection between utilising pharmacists' knowledge to a greater extent and a belief that supplementary prescribing would increase job satisfaction with their desire to undertake supplementary prescribing (While *et al.*, 2004).

The recommendations to improve the training course suggested in this Chapter have been investigated after the training programme was completed in order to see if any additional recommendations could be suggested and to feedback to the course leaders (Stage Four). Dawoud *et al.* (2004) conducted a study utilising postal questionnaires with the pharmacists who had completed the first cohort at King's College, London and Homerton College, Cambridge in order to explore their views on the training programme. Their results demonstrated that 51% (of the 41 participants) believed there would be problems in producing CMPs for practice, a feeling reciprocated by the pharmacists in this present study. Training needs were identified as more

time on clinical examination and consultation skills and less time on pharmacology and pharmacokinetics (Dawoud, *et al.*, 2004), as was also the case in this study. However, the pharmacists in this present research cannot be readily compared with those in other studies due to each individual having variable experience and specialities.

A number of clinical areas and conditions were identified by the participants, many of which had previously been acknowledged by the key informant interviewees (Chapter Three). The expectations of how supplementary prescribing will be implemented and the amount of prescribing the pharmacists will be undertaking in practice will be explored in the remaining chapters of this thesis.

The views concerning the amount of time required to undertake the training was expressed by those in all sectors of practice demonstrating that the commitment was a burden to all. There were varied responses on multi-disciplinary learning. However, the hospital pharmacists felt that they benefited from being with nurses from their place of work, not necessarily from the course, access that perhaps community pharmacists do not have.

Finally, the views expressed in response to the quote 'pharmacists should focus on what they do best, not be dazzled by new ideas' (Jenkins, 2004) demonstrated that the pharmacists were supportive of a progressive role for the pharmacy profession. It has been reported that the traditional role of the community pharmacist in compounding medicines has been negated by the advances in technology such as pre-packaging of medicines by the pharmaceutical industry (Harding and Taylor, 1997). This has led to a debate as to the professional status of the pharmacist and 'serves to undermine pharmacists' claims to privileged occupational status' (p547). By assuming additional roles and extending the services the pharmacist can provide this may go some way to 'reprofessionalise' pharmacy (Edmunds and Calnan, 2001).

Semi-structured interviews were utilised in this stage, both individual and joint. Arksey (1996) describes the use of joint interviews primarily in the context of couples and states that the data collected from a joint interview (where one researcher questions two interviewees together) are 'qualitatively different' to the data collected from an individual interview. This is due to the fact that in 'sole' interviews opinions and perceptions are generated from an individual whereas in joint interviews it is created in partnership. Potential problems of joint interviews include that one interviewee may dominate the other or that there may be disagreement between views.

However, in the one joint interview conducted the participants contributed to a similar degree. The participants did not disagree with each other but it is not possible to ascertain whether this was because they agreed entirely or because they felt that they could not disagree. In this present study the two participants (Beatrice and Nicola) did not interact to a large extent and the researcher had to input more than expected to prompt responses. A joint interview was conducted as both participants were available at the end of their training day, making it more convenient for the interviewees.

The location of the interviews varied depending on the convenience of the participants as described above, either at the HEI, at their place of work or at home. As a result only the one interview was conducted at the researcher's HEI and hence was under the researcher's control with respect to the seating arrangements and exclusion of noise. Interruptions to some interviews were to be expected as some were held in a community pharmacy where the pharmacists were taking time out of their daily duties. However, the researcher had stressed to the participants that the interviews were to be held at a time and place that was most convenient for the participants, the location of which, seating arrangements and levels of extraneous noise being therefore out of the control of the researcher. This strategy was used to encourage participation.

The majority of the interviews were therefore held in the pharmacists' place of work. This meant, due to pressure of work that the pharmacists did not have a great deal of time to devote to the interview. Some of the interviews were therefore felt to be a little rushed and possibly not as in-depth as would otherwise have been possible. For example, the interview with Thomas was held at his community pharmacy, in his office off the main dispensary. As he needed to see what was happening in the dispensary the door remained open and the interview was interrupted on more than one occasion when the dispenser asked for a prescription to be checked. There was also only one seat in the dispensary which Thomas insisted the researcher had which meant that there was a height differential, not ideal to conduct an interview. The interview with Bob was held at his home and on the morning the researcher arrived several family members were present who interrupted the interview when they said goodbye. However, if the pharmacists were willing to participate it was their prerogative to decide where was most convenient for them to meet. A balance must therefore be sought in order to have enough, interrupted time to explore the participants' views but to also minimise the inconvenience to those involved.

In addition, due to the number of interviews to be conducted and the location of some participants there was a variable amount of time between each interview. This meant that sometimes there was not a great deal of time for the researcher to reflect completely on what was discussed in the previous interview in order to inform the next. For example, when conducting interviews one day in North Wales then the next in South Wales in order to 'fit-in' with the participants' availability.

Only a small sample of seven (of 27 eligible) pharmacists participated in this stage of the study. The results obtained are deemed to be worthwhile as it was not the researcher's or indeed qualitative research to obtain findings that can be generalised. A possible reason why some pharmacists did not wish to participate include that taking time out of a busy course to contribute may not have been high on the pharmacists' agenda as they tried to grasp their new role. In addition, one of the course leaders expressed a view that a number of their pharmacists did not expect the large amount of work required to complete the course, being approached by a researcher may have not therefore been a welcome addition to the unexpected workload. Another research project that also conducted interviews during and then after supplementary prescribing training had similar participant numbers when recruiting from a HEI in England. Again, the work pressure was a contributing factor for the small number of participants (Tully, 2005). In order to overcome the small numbers of participants a case study approach was adopted which was described in Chapter Two with each pharmacist being an individual case.

In order to gain access to the pharmacists on the relevant training programmes it was necessary to negotiate with gatekeepers (the course leaders). However, this process in itself poses some issues. The researcher has to explain to the gatekeeper the purpose of the research, who they are and what implications it has for the setting. As Burgess (1984) notes access is sometimes required from a hierarchy or 'chain of command' before reaching the study sample. This was seen in HEI B and C where the course leaders had to firstly obtain permission from their superiors and / or colleagues before proceeding to approach their students. Kitzinger and Barbour (1999), while describing the use of gatekeepers in the context of focus groups state that they may 'screen potential participants' (p10). In order to avoid this situation, the course leaders were provided with strict entry requirements, that is those pharmacists where LREC approval had been obtained. The researcher has also since confirmed the number of pharmacists enrolled in Wales through publicly available information from the Task and Finish Group on Supplementary Prescribing in Wales.

Another issue to consider with the use of gatekeepers is if they forward all of the appropriate and requested information onto the potential participants (Kitzinger and Barbour, 1999). The researcher was assured that all of the information packs were forwarded and has no reason to believe otherwise due to the co-operation and enthusiasm of the course leaders. It was also important that the gatekeepers did not coerce their students into participating, to allow them to decide for themselves. However, one of the course leaders informed the researcher that when they handed out the reminder information packs they told the students that they 'should' participate or at least inform the researcher that they did not wish to. The researcher had not asked the course leader to ask the pharmacists in this manner which illustrates that gatekeepers have the potential to affect recruitment. When the researcher was informed of this comment they thanked the course leader for handing out the packs. The researcher also explained that for future cohorts when the course leader was asked again to hand out packs that the phrase 'should' should not be utilised as it may influence the pharmacists' decision to participate.

At the end of each interview the recorder was switched off. A few interviewees continued a 'conversation' with the researcher. Beatrice, for example, because she felt that they didn't have enough worked examples of CMPs asked the researcher where she could obtain additional information, thus utilising the researcher as a source of knowledge. When the tape was switched off many participants continued to speak and mention things that they had not cared to say while being recorded. These comments are recognised by Warren (2001) as 'unrecorded data of this kind are as important as those derived from tape recordings' (p92). It was made clear at this time that many participants were aware of what they were saying on tape and had consciously made the effort to miss some information out. At this time the researcher made notes as to what was said but it was not recorded verbatim. It must therefore be recognised that the validity of the data could be affected as the opinions expressed could have been modified to coincide with what the participants perceived were appropriate to be recorded or noted in a research project of this kind.

The response to being recorded was varied between participants with some actively looking and seeking out the recorder while they spoke whereas, in contrast, others did not seem to notice to such a great extent. The views of participants on being recorded was not actively sought but a few passing comments were received. For example, Helen stated that she did not like being recorded. The comments made the researcher aware that participants will be conscious of their voices on tape and the comments that they make.

This chapter has described the method of recruitment and interviews conducted with a sample of pharmacists in the first cohort in Wales to undertake the supplementary prescribing training programme. The pharmacists' progress through the training programme and their actual implementation of supplementary prescribing will be described in the following chapters. The next chapter, Chapter Five was conducted during the training period where the pharmacist's time supervised in practice was investigated through the use of diaries and diary follow-up interviews.

4.13 Summary

- In this present stage seven out of 27 pharmacists were recruited from the first cohort of the supplementary prescribing training course in three HEIs.

- Recruitment was conducted with the assistance of the course leaders at each of the HEIs acting as gatekeepers.

- Initial recruitment requested that focus groups be conducted at this stage but due to less than anticipated recruitment and difficulties arranging a time and place to meet a protocol amendment was submitted to the LRECs. As a result face-to-face semi-structured interviews were conducted with five individual pharmacists and one joint interview with two pharmacists.

- In total, four female and three male, three community, one primary care and three hospital pharmacists were recruited. All had already completed some other form of pharmacy post-graduate education and were registered with the RPSGB between 1972 and 1995.

- The themes that emerged from these interviews were as follows:

  i) Motivation to undertake supplementary prescribing was varied and included utilising the skills of pharmacists to a greater extent and that it will legalise the role of the pharmacist in some setting.

  ii) The supplementary prescribing training programme. Recommendations to improve the course along with concerns regarding the time and commitment to complete such a programme were expressed. The views of the pharmacists on the multi-disciplinary training was also conveyed with contrasting opinions.

  iii) The pharmacists explained how they intended to implement supplementary prescribing in practice, the conditions they hoped to manage and in which settings.

  iv) Supplementary prescribing was expected to benefit patient care. For example, by monitoring treatment more closely and spending more time with patients.

v)   Supplementary prescribing was seen as a 'stepping stone' to independent prescribing.

- These particular interviews were conducted during the pharmacists' training; how they progressed and how supplementary prescribing was infact implemented into practice is now to be investigated in the following chapters. Chapter Five will follow-on by describing the next stage of the research, the use of diaries and diary follow-up interviews.

Chapter Five – Diary and diary follow-up interviews during cohort one of supplementary prescribing training (Stage Two and Three)

5.1 Introduction

Chapter Four described the interviews conducted during training with a sample of pharmacists in the first cohort to be trained as SPs in Wales. This chapter follows-on from Chapter Four by describing the next stage of the research, the use of diaries and diary follow-up interviews during training to become a SP. The aim was to explore the day-to-day activities that the pharmacists undertook during their time in supervised practice with their DSMP.

5.2 Research questions

The research questions to be addressed in this chapter were informed by the objectives presented in Chapter One and were as follows:

i) What day-to-day activities do trainee SPs undertake during their training period time supervised in practice?

ii) In which settings and conditions were the pharmacists gaining experience?

iii) What represents a 'typical day' in the working life of a trainee pharmacist SP?

iv) What additional information can the pharmacists provide with respect to their diary entries (Stage Two) via the related follow-up semi-structured interviews (Stage Three)? This is to clarify the events and to elaborate on the meaning of the occurrences to the participants

v) What problems and barriers were the trainee prescribers faced with during their training?

vi) What kind of interventions were the pharmacists performing with regards to the care of their patients during their training?

vii) How have their activities and how has their role as a pharmacist changed as a result of the supplementary prescribing training?

5.3 The use of diaries as a research tool

Diaries have been used successfully in health services research since the 1950s (Richardson, 1994). Examples of the use of diaries include exploring the views of mothers on children's minor illnesses and how they sought help to treat those illnesses (Cunningham-Burley, 1994), investigating the outcomes of OTC treatments (Cantrill et al., 1995), exploring the nature of

communication between community pharmacists and GPs (Kennedy *et al.*, 1997), documenting activities related to patient health help seeking behaviour (Verbrugge, 1980; Rosner *et al.*, 1992) and to record the use of pharmacy use by patients (Frankland, 2002). A diary has also been utilised in other settings such as exploration of the care activities of an oncology nurse over a six month period (Skott and Eriksson, 2005) and use of humour between nurses and patients (Åstedt-Kurki and Isola, 2001).

Health diaries are commonly used in nursing practice in order to assist patients to record their symptoms, diet and medication (Richardson, 1994). Verbrugge (1980) emphasises the usefulness of diaries in recording everyday occurrences in the context of health. However, even though diaries have value and are supported as a research method in the context of health experiences Carp and Carp (1981), Elliott (1997) and Jones (2000) state that diaries have been disregarded in comparison with other methods used in sociological research.

Elliott (1997) described the use of two forms of diary. The first being those that are 'documents of life', in other words the personal information recorded by individuals that are often used in historical research, and the 'researcher-driven' or solicited (Jones, 2000) diaries. The latter are used at the researcher's request and are focused by the research as a means of collecting information on a certain topic area. The 'researcher-driven' type of diary use is rare in qualitative research (Elliott, 1997). Both Elliott (1997) and Frankland (2002) state that an advantage of diary use is their 'closeness' to the occurrence recorded. A prospective use of diaries therefore ensures that events are recorded at the time of occurrence (Verbrugge, 1980) which are expected to generate data that have increased validity and reliability as the diarists do not have to rely on their memories to such a great extent (Richardson, 1994). The time period between event and recording will therefore be less.

Zimmerman and Wieder (1977) advocated the use of diaries to carry out research in areas where the researcher is not present. Diaries can therefore be used as a means to record and 'observe' occurrences where it is not possible to conduct participant observation. For example, when activities do not take place during a set time such as some of the supervised time a pharmacist spends training in practice. The 'diarists' (term used for subjects completing a diary) therefore act as 'adjunct ethnographers' (Zimmerman and Wieder, 1977 p484). Due to logistical and ethical considerations it was not possible to observe the diarists on a day-to-day basis during their supervised practice with their DSMP. The diaries therefore provide an approximation to

participant observation of those trainees (Elliott, 1997). The use of diaries in the context of supplementary prescribing is a novel method.

The information collected in a diary provides a means of generating questions to be used later in a semi-structured interview. The diarists are therefore 'actively participating in both recording and reflecting on their own behaviour' (Elliott, 1997 p3). This is known as the diary: diary-interview method. It has the advantage that it enables one to clarify entries, to 'fill in the gaps' should any information either appear to be missing or hard to understand, and to explore the meaning the participants give to certain occurrences (Zimmerman and Wieder, 1977). Certainly, Zimmerman and Wieder (1977) believe that the diary interview goes 'hand-in-hand' (p488) with the diary itself and that the value of the diary is 'belittled' if it is used alone. Corti (1993) stated that the diary: diary-interview method is 'one of the most reliable methods of obtaining information'. This diary and semi-structured interview method was utilised by Kennedy et al., (1997) when evaluating the professional contact between community pharmacists and GPs and the issues that arose from that communication. The interview was used as a way of explaining information provided and to expand on the noted contacts.

Rosner et al. (1992) utilised diaries to record health events and symptoms in the elderly. The diaries were later followed up and information provided compared to that given in an interview. Importantly, participants in the Rosner et al. (1992) study demonstrated inconsistencies in the reporting of symptoms and conditions using the two modes of research, the interviews and diaries. This may be partly due to factors such as age and different interpretations of the instructions provided with the two forms.

Triangulation, which is the combining of different types of approach, methods and / or data within the same research study (Burgess, 1984) is frequently used as a means to validate the data collected and to identify discrepancies (Smith, 2002c). The data generated from both interviews and diaries can therefore be combined to create a more complete picture than just through the use of a single method.

5.4 The use of diaries in this present study

The pharmacists (diarists) in this present study were requested to record everyday events and activities during their period of supervised time in practice with their DSMP and include any thoughts they had on these activities. The reason why this stage was deemed necessary was to

gain an insight into the working life of a pharmacist trainee SP and the activities that they undertook in relation to their training. Corti (1993) fully recognised that one important subject in sociology research is the activities that individuals spend their time doing. In contrast to the use of diaries proposed by Zimmerman and Wieder (1977) and Elliott (1997) where diaries were to be completed daily, this present study only asked that the diarists record events that they selected to record. The reason for this being the amount of time required to record the entries along with the training and day-to-day commitments that the pharmacists were already having to fulfil. Participants were asked to keep their diaries close to hand, as they trained in order to record events as they happened. All information was to be anonymised with the participants asked not to record any names or identifiable information such as the name of the hospital, GP surgery or patient.

5.5 Recruitment and sampling

The participants for this stage of the research were recruited in one of two ways. The recruitment procedure employed was dependent on which HEI the pharmacists were training at and consequently which LREC had reviewed the recruitment procedure.

5.5.1 HEI A

The five pharmacists already recruited from HEI A were provided with a diary information pack (which included a letter inviting participation (Appendix 5.1), an information sheet (Appendix 5.2) and two copies of a consent form (Appendix 5.3)) by the researcher at the end of their interview during training (Stage One). The researcher hoped that requesting participation, supplying the information pack and verbally explaining the diary concept face-to-face would aid recruitment. A signed copy of the consent form had to be received before the pharmacists could participate. If no consent form was received after two weeks then a duplicate copy of the information pack was posted to the pharmacists. When a signed consent form had been received, each pharmacist was provided with an introductory letter (Appendix 5.4), the pilot diary (Appendix 5.5) and a freepost envelope by post.

5.5.2 HEI B

The two pharmacists recruited from HEI B had consented to the diary: dairy interview stage of the research (Stages Two and Three) at the same time as their interviews during and after training. This was due to LREC approval requesting that consent for all four stages be provided at one time. Both pharmacists were therefore provided with an introductory letter (Appendix

5.4), the pilot diary (Appendix 5.5) and a freepost envelope at the end of their interview in Stage One.

5.5.3 Final recruitment

As a result of the recruitment procedure three pharmacists (one from HEI A and two from HEI B) consented to maintain a diary during their training and for a follow-up interview. Two of the pharmacists worked in hospital (Beatrice and Helen) and one in primary care (Nicola). The diary entries and interviews were anonymised. The names used for the diarists are pseudonyms, the same pseudonyms used earlier in the thesis.

5.6 Diary use

Corti (1993) published guidelines on how to structure a research diary and what they should include. Some of the criteria, based on daily recording diaries were suitable for this project and were adopted. For example:

a. An A4 booklet of approximately five to 20 pages should be used.

b. The first section should include a detailed set of instructions on how to complete the diary.

c. The second section should include an example of a diary entry in order to make clear the type of entries required of the participant. Also included was an explanation of what was to happen to the diaries (see below) and the researcher's contact details should the participants have any questions.

d. Where the term 'event' is used, such as in the diary used in this present study, a clear description of the term should be given.

It was deemed necessary to pilot the initial diary format (A4 size) in order to ensure that the information recorded by the participants was of the form that was required and that the diary structure was user-friendly. Eleven blank pilot diary sheets were provided to each participant, each sheet containing space for two entries. Figure 5.1 illustrates the pilot diary entry format. The participants were asked to record the date and time of the event, the location and a description of the event. The diaries were to be hand written. As detailed above the pharmacists were not expected to keep a record of all of their activities, but to note examples they believed represented their typical day-to-day activities, a sample for which they had time to record.

1) Date and time of the event	
2) Location of the event For example a GP surgery, out-patient clinic or community pharmacy. Do not specify any names.	
3) Description of the event This will include what happened, how you felt, why perhaps the activity was important.	

Figure 5.1. Pilot diary format.

The pilot diaries were utilised in the following manner:

- The pilot diary remained with the participants for two to four weeks for them to complete.

- After this time the researcher contacted the pharmacists and requested that the completed entries be returned in the freepost envelope provided.

- The participants were asked at this time to retain any remaining blank pilot sheets that they had not completed for further use. This ensured that should the pharmacists wish to record an event during this time they had a supply of diary sheets to do so.

- The returned completed pilot sheets were reviewed in order to determine if any amendments to the format was required. It was apparent that the space provided for the participants to describe the event was not large enough as many of the entries were continued outside of the box. The diary format was therefore amended (Appendix 5.6) to allow more room. Figure 5.2 displays the amended diary entry format.

1) Date and time of the event	
2) Location of the event For example a GP surgery, out-patient clinic or community pharmacy. Do not specify any names.	

3) Description of the event
This will include what happened, how you felt, why perhaps the activity was important.

Figure 5.2. The amended diary entry format.

- Once the entry sheets had been amended the participants were provided with ten blank sheets together with another freepost envelope. A covering letter was also provided explaining why the format had been amended and that it should be used in the same manner as the pilot diary. The researcher also thanked the pharmacists for the entries already received.

- The diary completion time period needed to be of a length where the events requested could be recorded but not so long where the participants would feel over burdened (Corti, 1993). The amended sheets were therefore completed for approximately three months. When the supplementary prescribing training programmes were finished the pharmacists were asked to return any remaining diary entries.

5.7 Maintaining contact

The pharmacists were contacted at approximately fortnightly intervals either via the telephone or email during the entire diary completion period. The participants were asked which method of contact they preferred. For example, Helen preferred email contact as she was frequently in and

out of her pharmacy department and thus was hard to contact via the telephone. Both Nicola and Beatrice preferred telephone contact.

The frequent contact served as a reminder to the pharmacists to continue completing the diary and to answer any questions they may have had. One participant commented that the researcher 'should' contact them in order to remind them and to ensure that they completed, otherwise they would forget. At each point of contact the researcher ensured that it was convenient for the participant to be contacted again in the next fortnight. Frankland (2002) stated that calling the participants regularly assisted in their motivation to complete entries. Verbrugge (1980) showed that the interaction the researcher has with the diarists impacts on the quality of the entries that are recorded and that participants should be contacted regularly throughout the diary period. Finally, Burman (1995) noted that contacting participants via the telephone improved diary completion compared to postal reminders.

5.8 Diary entries collected

The number of diary entries submitted by each participant is provided in Table 5.1.

Table 5.1. The number of diary entries received from each participant.

Participant	No. of pilot sheets	No. of amended sheets	Total no. of entries
Nicola	14	0	14
Beatrice	14	0	14
Helen	6	7	13

A number of entries had been misplaced by Nicola which were unfortunately not recovered which meant that such data were not available to the researcher. The anonymised diary entries are all provided in Appendix 5.7.

5.9 Data analysis – Content analysis

The diary entries were analysed by content analysis (Neuendorf, 2002), a method also utilised by Kennedy et al. (1997) to categorise the type of contact between the pharmacists and GPs in their study and by Skott and Eriksson (2005). Content analysis is defined by Neuendorf (2002 p1) as 'the systematic, objective, quantitative analysis of message characteristics' and has been utilised in sociology, journalism, business and psychology. It is basically, a 'coding operation' (Babbie, 2001 p309) and summarises the details of the 'messages' being analysed. The units of analysis for this present study were each diary entry. Content analysis allows the researcher to be able to

analyse unstructured data such as the diary entries used in this present study (Krippendorff, 2004).

However, in contrast to the quantitative view point of Neuendorf (2002), content analysis can also be seen from a qualitative perspective (Morgan, 1993; Graneheim; 2004; Krippendorff, 2004), as the reading of any text is seen as qualitative. In this approach the manifest or latent content can therefore be analysed. The manifest content is a description of what the 'text says' whereas the latent content concentrates on the fundamental meaning behind the text, the themes (Graneheim, 2004). Content analysis has previously been utilised to study and categorise diary entries. For example, to investigate the experiences of pregnant women with regards to nausea and vomiting (O'Brien et al., 1997) and to explore the use of humour between nurses and patients where a qualitative approach was adopted (Åstedt-Kurki and Isola, 2001).

In this present study a combination of quantitative and qualitative approaches was adopted. Diary entries were coded (qualitative) and each code was numerically tabulated and its frequency determined (quantitative) (Morgan, 1993). An 'a priori' study design is an inherent part of content analysis (Neuendorf, 2002). The main themes were therefore decided upon before the data were collected in the form of a coding table (Appendix 5.8). The codes were informed by the themes generated from previous stages and the supplementary prescribing curriculum. Each entry was categorised into themes and the frequency of each theme determined on the coding table. The location of the activities undertaken by the pharmacists, the interventions and monitoring undertaken, the individuals that the pharmacists communicated with and the counselling of patients were all noted and categorised. Any additional themes emerging from the diary entries were added to the coding table during analysis.

5.9.1 The results of content analysis

One diary entry could display a number of themes. For example, communication with a doctor and a patient could be recorded in the same entry. The events described in the diaries occurred in a variety of locations. These included the GP surgery (12) and the community pharmacy for Nicola (1). In contrast, Beatrice recorded entries in an out-patient clinic (12), a community rehabilitation unit for mental health (1) and in one patient's home (1). Helen recorded entries in out-patient clinics (3), on in-patient wards (8) and a telephone discussion in her pharmacy department (2).

Communication was recorded with patients and / or their carers (17), doctors (14), nurses (4), a health visitor (2) and a ward manager (1). The pharmacists counselled patients regarding a number of issues, which included:

- Patient's understanding of their medication (1)
- Explaining changes to patient's medication (1)
- Explanations as to which medicines a patient should be taking (1)
- Recommendations on OTC medicine purchases (3)
- Discussion of patient concerns relating to parallel import medicines (1)
- Agreement of treatment plans (2)
- Discussion of biochemical test results with patient (1)
- Explanation of the relationship between increasing doses and increased side effects of medication (1)

Recommendations were given to doctors on a number of medication issues, including increasing (1) and reducing (1) doses and initiating medicines (7), advice regarding the co-administration of medicines (1) and on the bioavailability of different formulations of medicines (1).

The pharmacists were involved in monitoring patients by using a variety of methods such as blood pressure monitoring (1), biochemical blood tests (2), blood drug levels (2) and medication review (4). Additional activities included observation of doctor and nurse consultations with patients (6) and referral to other HCPs such as the pharmacist's IP (1) and other doctors (3).

Stage Three – Diary follow-up interviews

During the supplementary prescribing training the pharmacists were required to complete a practice portfolio detailing how they had achieved the competencies set out in the curriculum. The next part of this Chapter will describe the use of the pharmacists' practice portfolios and the results obtained from their diary follow-up interviews.

5.10 Practice portfolio

The practice portfolio format was determined by each HEI. The entries recorded in the portfolios could be used to compare with the diary entries, additional information could have been included in the portfolios that otherwise may not have been available and to supplement the diaries. When the pharmacists were asked if they would consent to keeping a diary during their training in their

interview in Stage One, one of the participants (Neil) suggested that the researcher use their practice portfolio as an alternative as they did not have the time to complete a diary.

As a result of this suggestion the remaining six pharmacists who participated in interviews during their training (Stage One) were asked if it would be possible for the researcher to obtain a copy of the 'Record of Competencies' section of their practice portfolio in order to investigate the information detailed. Every participant apart from Bob consented verbally for the researcher to study their portfolio. The appropriate course leaders were therefore approached as a means to obtain a copy.

A copy of the 'Record of Competencies in Practice' was obtained from the portfolios of the four pharmacists in HEI A (Thomas, Neil, Helen and Tamsin). This section listed all of the competencies that the pharmacists had to meet to pass the course, 83 in total. An example of a 'Record of Competency' sheet is displayed in Figure 5.3. Each pharmacist was required to specify how he or she had achieved these competencies in the spaces provided.

The portfolios used in HEI B were of a different format to that in HEI A, there was not a 'Record of Competencies in Practice' section in the portfolio. The pharmacists were only asked to include their assessments (reflections and case studies) that had been completed and information regarding their professional experience. As a result the researcher arranged a time with the course leader at HEI B to review the portfolios, as it was not possible to obtain a copy due to the vast amount of paperwork. The researcher was therefore given time to make notes regarding the activities undertaken by the pharmacists and to compare those to the diary entries received.

Helen's 'Record of Competencies' section from her portfolio and the practice portfolios of Nicola and Beatrice were used to inform their individual diary follow-up interviews. However, for the remaining four pharmacists, (three of which agreed to the researcher obtaining a copy of their portfolio) their practice portfolios were used to inform the questions in their interviews after training had been completed (Stage Four), which are described in Chapter Six.

BEHAVIOURAL INDICATOR	EVIDENCE
Understands the medical conditions being treated, their natural progress and how to assess the severity of disease	
DSMP signature	... ... Date ... ...
Understands different non-pharmacological and pharmacological approaches to modifying disease and promoting health, desirable and undesirable outcomes and how to identify and assess them	
DSMP signature	... ... Date ... ...
Understands the mode of action and pharmacokinetics of medicines, how these mechanisms may be altered (eg. by age, renal impairment) and how this affects dosage	
DSMP signature	... ... Date ... ...

Figure 5.3. A sample of competencies listed in the Record of Competencies in Practice section in the practice portfolio at HEI A.

5.10.1 Information obtained from the practice portfolios of the three diarists

The record of competencies section from Helen's practice portfolio (HEI A) was read, entries categorised into themes and frequency of entry determined. Table 5.2 lists the themes generated with an example to illustrate the theme. Beatrice and Nicola's portfolios (HEI B) were read and notes made by the researcher. The information collected from these portfolios is described below.

Table 5.2. Themes generated from Helen's 'Record of Competencies' from her practice portfolio.

Theme	Examples to illustrate the theme (No. of entries)	Frequency of theme entry (Total = 141)
Academic qualifications	BPharm (6) Diploma in Clinical Pharmacy (4)	24
Day-to-day activities as a pharmacist	Regular ward rounds (15) Qualified pharmacist (14) Daily duties as a pharmacist (10)	90
The supplementary prescribing course	Lectures (7) OSCEs (9) Time spent with DSMP (2)	24
Miscellaneous	Common sense (1)	3

As stated above, Beatrice and Nicola's portfolio did not contain a 'Record of Competencies' section. The portfolios consisted of the assessments that the pharmacists had to complete, their reflective essays, their clinical management plans, their log of hours in supervised practice with their DSMP and their Objective Structured Clinical Examination results. The researcher read the portfolios and made notes listing the location of activities, the individuals who the pharmacists had been in communication with and the monitoring and interventions undertaken. The activities undertaken in the portfolio were compared with the diary entries and any additional information noted. The majority of the activities, monitoring and communication detailed in the portfolios had already been included in the pharmacists' diary entries with very little additional information collected. However, two additional entries had been noted in Nicola's portfolio which described her differential diagnosis of angina in a dyspepsia patient which will be discussed later in this Chapter in section 5.13.

5.11 Diary follow-up interviews

The contents of the diaries returned were initially read, scrutinised and analysed through content analysis as described above in section 5.9. The diary entries were then investigated further with follow-up interviews with the three diarists. This diary: diary-interview technique has been

advocated by Elliott (1997) and also Frankland (2002) in order to research into patient health behaviour and beliefs.

All diary entries were read before each interview in order to generate questions to be addressed during the interview. The questions were used as a means of investigating the experiences of the diarists as described by Zimmerman and Wieder (1977). It was intended that the follow-up interviews would take place as soon as possible after completion of the diaries so that the participants would have to rely on their memories as little as possible; an approach suggested by Frankland (2002). The interviews were conducted face-to-face at a convenient time in the workplace of the pharmacists to minimise inconvenience. The interviews were of a semi-structured format, audio recorded, anonymised, transcribed and analysed as described in Chapter Two.

The topics and questions to be discussed were informed by the diary entries and an interview schedule produced for each pharmacist. An example interview schedule is provided in Appendix 5.9. The researcher made reference to the diary entries during the interviews as a prompt. For example one of Helen's diary entries stated:

> 'Clozapine clinic – Patient attended for regular review, still dribbling on a low dose of hyoscine therefore dose increased from 300 micrograms daily to three times a day' (Helen)

The researcher therefore asked Helen if the intervention detailed (increasing a dose) was usual in her role as a trainee SP. The relevant diary entries were also made available to the diarists as a reminder before and during their interview to refresh their minds as to what they had entered.

The main topics discussed during the interviews are listed below:

i.   How the diary entries represented the typical activities of the diarists

ii.   How the diarists decided which entries to record

iii. The nature of the entries – contemporaneous or retrospective

iv.   Any potential entries or important events / learning opportunities that were not recorded and the reason for this omission

v.   Whether the entries recorded activities during the diarists time in supervised practice or of their day-to-day role as a pharmacist

vi.   How the pharmacists spent their time supervised in practice with their DSMP

These topics were used as a means of ascertaining how and why the entries were recorded and if those noted were typical of the diarists' activities. Table 5.3 lists the duration of the face-to-face diary follow-up interviews.

Table 5.3. Details of the diary follow-up interviews conducted in Stage Three.

Participant	HEI	Length of interview
Nicola	B	28m 23s
Beatrice	B	16m 25s
Helen	A	22m 57s

5.12 Data analysis – generation of themes

The themes that emerged from the diary follow-up interviews are discussed below.

5.12.1 The diary entries were believed to be representative of the pharmacists' activities during training

The diarists all stated that the period of time that they had devoted to completing the diaries was typical of their training period:

> HELEN: Um, it's probably fairly typical of what I would do cause I've got some bits here from in-patients and from the clozapine clinic um. It's probably a good kind of mix of what I do.

Not all of the activities were from their supervised time in practice as Nicola stated that she was not having supervision at the beginning of the diary period. She had therefore recorded activities of her day-to-day job as a pharmacist rather than from her training. The pharmacists stated that their position during training had changed in comparison to their day-to-day duties in the fact that they were more involved in other aspects of practice. For example, both Helen and Beatrice spent more time in out-patient clinics than they had done previously.

5.12.2 Challenges during training

The time required to undertake the training was a problem for the pharmacists. Both Beatrice and Nicola stated that they had been faced with some problems during their time in supervised practice. They both expressed difficulty in having to fulfil their normal day-to-day duties in addition to the time required under supervision. This is in contrast to Helen who did not identify any problems to overcome:

> NICOLA: Trying to fit the sort of supervision in with everybody else's working day I think was one of the biggest challenges. Um, initially we had a medical student so obviously she was here the end of her um sort of degree course so she got priority.

Nicola also had to remind her GPs to call her in to see the relevant patients as they were likely to forget which would mean she would miss out on valuable practice time.

Beatrice's time in practice did not start until a few months after the course had started due to lack of organisation and structure in her workplace. As a result of this and the fact that her DSMP was so busy, she found it difficult to complete the assessments on time. Additional concerns included:

BEATRICE: I couldn't understand why there was difficulty because um I think it's much easier for nurses cause, CPNs [Community Psychiatric Nurses] cause they've got their own case load anyway, they just incorporate their daily work into it but um because you don't work like that you had to make the time for it. I think build a lot of flexibility into your week because you have to re-juggle your week to accommodate it.

5.12.3 How the time in supervised practice was organised

The settings where the participants were undertaking their time in supervised practice had already been expressed in the diary entries. Helen attended the out-patient clinics of her DSMP as well as the in-patient ward rounds which she already participated in before the supplementary prescribing training commenced. It became clear that the entries in the out-patient clinics were therefore from her time in supervised practice whereas the in-patient entries related to her normal duties.

Beatrice also attended her DSMP's out-patient clinic which was a new experience. It emerged that the domiciliary visit entered in the diaries was a one-off as she was not intending to undertake home visits as a SP. However, in contrast to Helen, all of Beatrice's entries were from her time spent in supervised practice. Nicola undertook her supervised time in the GP surgery in which she worked. She believed that the time required supervised in practice was too great:

NICOLA: I really don't, and my DSMP agrees with me. I really don't think that amount of supervision was necessary......Ah because I'd learned what I needed to know sort of quite, quite early on in the supervision and really to get the hours up I was just sitting, watching more of the same so I I just felt it was a bit bit over the top.

The GPs were to call her in to their consulting room if they had a patient presenting with dyspepsia (the condition that she would be managing). The entries were a mixture of her time in supervised practice and her normal duties.

5.12.4 The pharmacist-patient relationship

The relationship each pharmacist had developed with their patients was varied, depending on their settings and group of patients. Nicola stated that the relationship she previously had with her patients was from a medication query and dispensing perspective. By being present in the GP-patient consultation she was able to interact to a greater extent and obtain a greater understanding of the conditions:

> *NICOLA: Because my relationship with the patients is very much sort of over the hatch, just answering queries about medicines and changes to their medicines. So the the physical examination and the taking of the history was quite quite a good learning experience.*

In a similar manner, Beatrice's patients were not used to seeing her in the out-patient setting:

> *BEATRICE: Cause they're [patients] not used to see a pharmacist there, do you know what I mean, they're not used to seeing a pharmacist in the out-patient clinic.*

Importantly, the patients that Nicola and Beatrice were in consultation with in their respective supervised time in practice, were happy to ask questions and interact with the pharmacists:

> *NICOLA: Sometimes the GP would, you know what do you think about this and then I'd ask the patient a few of the questions and ah they'd be quite interested that I was taking such an in-depth interest other aspects of why they might be feeling the way they are.*

> *BEATRICE: Most patients were very very obliging and very very nice and asked me question, lots of questions and things and have a chat with them, it's nice you know.*

In contrast, Helen already had input into patient care on in-patient wards:

> *HELEN: Well through the ward rounds which tend to be once a week for each team do tend to get quite a bit of um input into what patients come in on and what they get changed to and if they getting side effects what we can do about it and I also talk a lot to the patients themselves about what they feel about the medication. They often request to see a pharmacist.*

5.12.5 The pharmacist's relationship with their DSMP

All participants commented on the time they had with their DSMP since commencing their time in supervised practice. Nicola said that due to the amount of time she had worked at the GP surgery her relationship with her DSMP had not changed greatly. However, by attending the GP-patient consultations she was able to provide more expertise on medication related issues. This is in contrast to what she predicted would occur when GPs train medical students, a purely teaching role:

> *NICOLA: Um, but you know there's there's another professional point of view you know rather than you know it being a completely teaching role [with medical students]. Um you know I I had something to bring to the party.*

BEATRICE: He [DSMP] was actually very thorough, I think I was treated like an SHO [Senior House Officer], junior doctor.

HELEN: Cause he [DSMP] said he found it really beneficial cause I was kind of like quizzing him saying oh you know how's it been? Has it been really grim being a DSMP? And he said no it's been alright.

5.12.6 Input into consultations during training

All three participants stated that their respective DSMPs were willing for them to input into the doctor-patient consultations they were sitting in on. Both Helen and Beatrice who were spending time in out-patient clinics (this was a relatively new setting to Beatrice) had not previously had as much input into patient care in that particular setting in comparison to the in-patient setting:

BEATRICE: Yes I was observing, they [in clinic] were more than willing to let me contribute and ask my advice and my opinion and things like that, it was nice.

HELEN: I didn't just sit there and kind of take it all in. He [DSMP] actually, he would turn to me and say ok, about this persons medication what do you think and what could we do if there was a certain problem or having side effects. So that was kind of the major change really.

Nicola also had input into the patient consultations in the GP surgery:

NICOLA: Sometimes the GP would, you know what do you think about this and then I'd ask the patient a few of the questions and ah they'd be quite interested that I was taking such an in-depth interest other aspects of why they might be feeling the way they are or whatever.

However, having an extra person present in the consultation could change the dynamics:

NICOLA: It's a hassle for the receptionists getting the permission and the doctor having me sitting there. It it does change the dynamic between patient and doctor having a third person, whoever sitting in.

5.12.7 Valuable experience gained during the supervised time in practice

Both Helen and Beatrice believed that their time in the out-patient clinic was very valuable, especially in observing and gaining experience in interviewing patients. Nicola believed that her experience in performing physical examinations and taking patient histories was very valuable

5.12.8 Patient monitoring

The participants were monitoring patients via a number of different methods as stated in the diaries. In addition to those in the diary entries, Nicola was also undertaking *Helicobacter pylori* testing, spirometry and blood pressure measurements. These were omitted from the diary. She expressed an initial feeling of uneasiness at the physical monitoring. However, the requesting of blood tests noted in the diaries was a part of her ongoing duties as a practice pharmacist:

NICOLA: I mean I was completely twitched about taking blood pressures cause I've never ever taken a blood pressure in my life.

NICOLA: Um, as far as taking blood, I'm not gonna get involved in that no. That's another step too far. I'm not comfortable with that one yet.

Both Helen and Beatrice were undertaking mental health assessments. Helen stated that she would also recommend tests such as ECG and clozapine monitoring which was part of her normal duties.

5.12.9 Interventions undertaken by the pharmacists

All participants stated that the interventions recorded in the diaries were typical of those experienced during their time in supervision. However, it came to light during the interview with Beatrice that some of the interventions detailed in her diary relating to the out-patient clinic, such as changing the time of doses, were initiated by her DSMP. Not all of the interventions can therefore be credited to the pharmacists.

5.12.10 Communication

The communication with a number of different HCPs and with patients noted in the diary entries appeared to be representative of the pharmacists' day-to-day work. Both Beatrice and Helen stated that their own area of practice is multi-disciplinary and therefore they frequently had contact with other professionals:

HELEN: Well it's very much a multi-disciplinary team in [clinical area] and you know we [HCPs] all tend to work you know quite close together.

BEATRICE: I did have a lot of communication with people because it's entirely multi-disciplinary.

5.12.11 Reflection

Reflection was a key element in the supplementary prescribing training programme. Both Helen and Nicola stated that they at first did not enjoy the concept of reflection (as described in Chapter Four) but can now, in hindsight, realise its potential as a learning tool:

NICOLA: I mean the the pharmacists I think did fairly badly as a group with reflection because we hadn't been brought up to think in that manner um but sort of thing, spent a little more time looking at how reflective practice works I think yes it probably was [useful].

HELEN: I mean the nurses are excellent for reflecting. And I have to say although I hated it at the time, the reflection I do feel now that has been a good thing.

5.12.12 Experience as a pharmacist

The pharmacists believed that the experience they already had in their role as a pharmacist had been of benefit in their supplementary prescribing training. For example the knowledge the pharmacist has on therapeutics, previous pharmacy post-graduate qualifications, patient communication skills and experience of additional roles such as on Local Health Boards:

> *HELEN: Certainly without the therapeutics aspect the learning curve would have been so steep.*

5.12.13 Legalising a role already being performed

Supplementary prescribing was seen by Helen as legalising the role that she was already performing:

> *HELEN: Um, a lot of what supplementary prescribing will do is rather than me say I think Mrs Jones should be started on this drug it'll mean that I can actually see her and start her on it rather than me suggesting it and somebody else doing it. It'll just kind of make it legal really.....I mean I, what I do on the wards rounds now and in the clozapine clinic I've got all the drug charts and you know if the patient tells me that they've got the side effects I'll write it up and then the um you know the junior doctor who hasn't got much experience will then just sign it and say fine.*

5.12.14 Current prescribing status

At the time of the interviews, none of the pharmacists were registered with the RPSGB as a SP and therefore had not implemented supplementary prescribing into their practice. Beatrice was in the process of producing protocols for implementation within her trust, these would take another few months to be completed and approved. Nicola was in the process of deciding with her DSMP how the role was going to be taken forward but was still involved in the care of the patients she had been managing during her supervised time in practice. Helen stated that there was not any funding available for her at that time to begin prescribing. Due to the number of pharmacists in her trust undertaking the role her manager had to apply for funding to allow her to take on this role:

> *HELEN: A lot of it comes down to money. If there's funding for me to do the extra stage [work as a SP] then I can do it. But if there isn't funding then I can't.*

5.13 Missing data entries

When asked if there were any additional entries that the participants may have omitted, Beatrice stated that she could not remember. In contrast, Nicola had omitted one particular incident she deemed to be very important in her development as a prescriber. This episode was not recorded because she was affected by the idea that a diagnosis had been missed:

NICOLA: Yeah, there's probably a few holes now and again where we were either short staffed and you know I'd sort of think back oh I should have written that down but I didn't so. Um, it's a bit like me reminding the doctors to call me in because I'm just used to dealing with the sort of things that I initiated.

In contrast to this very important incident, Nicola also omitted some minor activities which may have been seen as mundane everyday actions and therefore she did not see the need to record them:

NICOLA: I probably didn't jot that down there because it was, I think it was probably so big and so important and I was so twitched about it you know, I could have missed this [differential diagnosis] you know.

5.14 How the diarists decided which activities to record

When asked how the participants had decided which entries to record, the following responses were received:

HELEN: It was the ones I could remember.

NICOLA: I think cause they indicate how useful a pharmacist is as far, as part of the primary health care team.

BEATRICE: I don't know, cause I I just thought they were interesting and sort reflect the type of things we were doing in the clinics.

5.15 Contemporaneous / retrospective recording in the diaries

During the interview the participants were asked when they recorded the events in order to ascertain whether they were recorded contemporaneously or retrospectively. It was apparent that some entries were recorded retrospectively and some contemporaneously:

HELEN: I did try and write them [entries] at the time. Um, but what I did tend to do at the time, I had a PDA [Personal Digital System] at the time so I used to record my interventions as I went along so what I would do to write these I'd just go back to the date in the PDA and kind of take them out of there so they were written at the time but not transcribed at the time.

NICOLA: I made an effort to try and put in initial bit and then try and fill it in at a later date but there's I think think a couple of retrospective ones but most of them as I went on.

BEATRICE: Looking back yes, cause um time I was, cause it was the clinic, time I didn't have time to write them now, I used to do them at the end of the day.

5.16 Discussion

The diaries were utilised as a means of providing an overview of the activities undertaken by the diarists during their supplementary prescribing supervised time in practice. A number of activities, including patient consultation, observation of, and communication with other HCPs and monitoring and providing recommendations for treatment changes could be seen which were

deemed as 'typical' during the diary period. As observation of this time period was not feasible it was also not possible to clarify how correct this claim was. In addition, the follow-up interviews brought to light how some entries had been omitted and that some treatment changes were not carried out by the participant, which also questions the validity of the findings. Kennedy *et al,* (1997) stated that the time frame where a diary is being completed may be 'atypical' and hence may not produce a valid reflection of activities over a more extensive time period. The participants were asked to complete the diary over three months, a time frame believed to be long enough to capture their activities as it was the time remaining between their first interview (Stage One) and when they completed the supplementary prescribing training programme. It was therefore not possible to ask the diarists to continue for any longer as the course had finished and the aim was to explore the time supervised in practice.

The diarists were asked to enter events into the diary as they occurred and therefore the intention was that they did not have to rely on their memories to recall events to such a great extent (Carp and Carp, 1981) during the interview. More detail can also be obtained from discussing the written record in comparison to a retrospective project where the participants are expected to recall events (assuming the participants do record occurrences) (Frankland, 2002). However, the follow-up interviews demonstrated that Nicola had omitted some entries and Beatrice could not remember if she had missed any. In light of this finding, it was evident that it was not possible to determine how many entries could have been recorded in total, how many were forgotten and how accurate these were, as many did not appear to be entered contemporaneously. Corti (1993) lists possible errors of diary use as information may not be recorded in its entirety, there may be under-reporting of information and, if the entries are recorded retrospectively then they may not be recalled correctly, what is known as 'recall error'.

Many health diaries are daily diaries (Richardson, 1994) where the participant is asked to record, for example their symptoms or help-seeking behaviour each day. In this present study the diarists were only asked to record a sample of their activities during their time in supervised practice. In hindsight, it may have been worthwhile to request daily entries to generate a greater amount of data as only a small number of entries were returned. The time and commitment required to undertake the supplementary prescribing training was vast and the motivation of the pharmacists to record daily, an activity which would have increased the research burden may have impaired participation. The use of the present diary was therefore reliant on the motivation levels of the diarists which could have contributed to the number of entries.

The number of diary entries received was relatively small, 41 in total. Elliott (1997) commented on the 'research fatigue' that she anticipated her participants would experience having already taken part in earlier stages of the research (clinical examination, in-depth interview and questionnaire) on help-seeking behaviour. The anticipated research fatigue in Elliott's (1997) study did not come to fruition. However, in this present study 'research fatigue' could have been felt by some of the participants as they had previously participated in an interview during their training. The pharmacists were also having to undertake their supplementary prescribing training and all of the additional work that came with that, the coursework and continuing with their day-to-day duties. It was therefore not surprising that a greater number of diary entries were not received. The diaries in this present study were also completed over a period of three months in contrast to Elliott's (1997) unstructured daily recording diary over eight weeks.

Burman, (1995) identifies two types of health diaries, a ledger where events are only recorded when they occur and a journal where daily entries are required regardless of events. The diary used in this present study, in the context of health diaries is the first type, a ledger. Burman (1995) claims that a ledger is 'less burdensome' (p148) than a journal. This was hoped to be the case in this study due to the pharmacists' commitment to, and the amount of time involved in their training. In contrast to the benefits of easing participant burden Jones (2000) notes that diaries 'may display biases if that which is recorded is a selection from the totality of events and may represent an underrecording or overrecording' (p556). By allowing the pharmacists to decide which events to record the benefits of freedom of choice are balanced by selection bias.

Higgins *et al.* (1985) discuss problems concerning the validity of diary entries to record everyday occurrences. The biases include the frequency of entries where diarists either underestimate the frequency of events, do not record events or note events that have been 'constructed', the duration of events where they may be more likely to be recorded the longer they are and the direction where events that have been initiated by others may be more likely to be noted compared to self-initiated events. These cited limitations must be recognised in the context of this present study.

Another limitation of diary use is that they cannot be used as a data collection method by those who are illiterate or those who are not able to keep a diary, a potential source of bias (Carp and Carp, 1981). However, as all of the diarists were practicing HCPs then this issue was not considered to be a problem.

The number of entries and the way in which the diarists completed their diaries differed as each individual would have approached the research in different ways, and therefore with their own idea of how a diary should be completed (Elliott, 1997). The guidance provided verbally by the researcher and the instructions in the diary itself aimed to minimise this variation. However, individuals still have their own interpretation of information. This was evident in the way that Beatrice completed all fourteen entries in one attempt and returned the whole diary, not just the completed sheets in a way to end diary use. In contrast, even though the same number of entries was received Nicola was more responsive and completed entries over a longer period of time with multiple returns. The time in which the pharmacists completed their entries was also variable, as discussed above with Nicola and Helen recording some retrospectively and some contemporaneously. In contrast, Beatrice recorded all entries retrospectively. In order to minimise this variability, more emphasis could be given during the verbal explanation at the beginning of the diary period on the need for contemporaneous entries.

In a similar manner to Elliott (1997), Rosner et al. (1992) also recognises in their study that personal information is shared in an interview and that the interaction is in some respects led by the researcher. However, in contrast it is the participant who decides how to interpret the diary and decides what to include and how much to report on a particular issue. The entries to be included are therefore selected on the basis of the participant's idea of what should be included and what they believe to be appropriate.

It is also important to acknowledge that diaries used for research use are not 'private documents', they are written with a 'particular reader and their agenda in mind' (Elliott, 1997), for a particular purpose (Skott and Eriksson, 2005) and an awareness of the researcher. Helen asked at one point of contact with the researcher if she was submitting the same number of entries as other participants, which demonstrated her awareness of the number of entries she was returning and if she was fulfilling her 'role' as a diarist. The researcher reassured her that she was returning no more or less than any other diarist to dispel her concerns. It must therefore be recognised that entries are consciously recorded, with a purpose and to fulfil a participant commitment.

The responsibility placed on the participant to complete the diary may be an issue, as Verbrugge (1980) states with the use of health diaries. Verbrugge (1980 p87) and Corti (1993) acknowledged the influences of what is commonly known as the 'conditioning effect' when

completing health diaries, particularly in the way that participants perceive their health has changed. Two effects have been identified, sensitisation and fatigue. Initially, the participants may have been more aware of the activities that they were undertaking (or the symptoms that they were experiencing) and therefore may have reported more than one would have expected (Burman, 1995). As time goes by, the participants may then become tired of recording all events. In addition, the reporting of minor health events or minor symptoms may not have been reported, as they may not have been considered to have been important. The same may apply in this present study in which mundane day-to-day activities may not have been recorded as the participant may have deemed them simply unworthy of being recorded. This is evident in the case of Nicola's diary who herself admitted that some everyday activities were not recorded as she was so familiar with them in her daily duties. An emphasis should therefore be provided at the beginning and throughout the diary period that the everyday occurrences are as important as the out of the ordinary activities. In order to ensure the participants are aware that these should also be recorded.

As described above the diarists were contacted periodically throughout their diary use. Both Verbrugge (1980) and Frankland (2002) advocate this strategy to encourage entries and to answer questions. The extent to which this contact aided and reminded the participants to use their diaries is unknown but all three were happy to be contacted. Helen even suggested that the researcher 'should' contact her in order to provide a reminder, as otherwise she would forget.

The use of content analysis to analyse text relies on the 'scientific method' where objectivity is paramount. It is mainly a quantitative procedure where the results are numerical, (Neuendorf, 2002) that is; the number of times a code appears in the diary entries. However, content analysis can also have a qualitative approach (Babbie, 2001; Morgan, 1993) as described above. In this present study the quantitative aspect of diary analysis allowed a summary of activities to be formulated but was secondary to the themes emerging which, importantly allowed and informed an interview schedule to be produced for the follow-up interviews, that is, a qualitative approach.

The practice portfolios, as recommended by Neil to be used as an alternative and an addition to the diary entries, provided only a relatively small amount of additional information. The diary entries of Nicola and Beatrice, it became clear, were informed by their portfolios with little difference between the two. However, Nicola's portfolio did allow the researcher to identify where some entries were omitted. Helen's portfolio 'Record of Competencies' contained only

very brief entries such as 'Lectures' or 'Regular ward rounds'. The entries were discussed briefly in the follow-up interview with respect to her development as a SP but with little expansion.

Elliott (1997) stated that in her study the participants had prepared for the follow-up interview as much as she had through reflecting on the diary entries. However, because the interviews in this present study were not immediately after the diaries had been completed (two to three months later) then the participants commented that they had mostly forgotten what they had submitted before reviewing them quickly at the beginning of the interview. This may have resulted in recall bias. The ability to discuss the entries in detail may have therefore been hindered by the long timescale of events which was demonstrated as little elaboration of events was provided, even with prompting. Due to the first cohort training programme ending at the end of the year and participant availability, it was not possible to conduct the interviews until after Christmas.

The use of a semi-structured interview as a diary follow-up brings to light the same issues as those described in previous chapters (Chapters Two, Three and Four). For example, interview location and participant awareness of recording. The interviews with Nicola and Helen were conducted in a quiet room with only the diarist and researcher present. This was hoped to facilitate discussion. However, Beatrice organised the interview in her staff room where people were moving in and out, creating noise which impacted on the flow of the conversation and the quality of recording, not an ideal interview setting. It was therefore not surprising that Beatrice's interview was the shortest and least in-depth as most questions were answered very briefly or just with a 'yes, yes' response. Helen expressed her 'dislike' of being recorded before beginning the interview which demonstrated her awareness of the tape recorder. She was happy to be recorded 'only if she didn't have to listen to herself'.

As discussed above there are several important issues to recognise concerning the use of a research diary, most notably the motivation of the diarists, the frequency of recording, research fatigue and timing of entries, which may affect recall. However, the use of diaries in this present study has provided an insight into the variety of locations and activities that are undertaken by trainee supplementary prescribing pharmacists. The entries were clearly not exhaustive of the activities undertaken by such pharmacists and were specific for the individuals who took part but they did provide the means to inform an interview schedule in order to base a discussion of their training in practice. The interview allowed the researcher to probe the participants on the use of

the diary which demonstrated that not always are diaries used as intended or to record all events but they are still worthwhile nonetheless, and served the purpose of the study adequately.

This Chapter has described the use of the diary: diary interview technique to investigate the time supervised in practice of three of the recruited pharmacists (cases). Each pharmacist's journey had therefore progressed from that described in Chapter Four (interviews during training) to the end of training. Chapter Six will follow-on from this chapter to investigate the views of the pharmacists when SP training was completed (Stage Four). Their views on, and recommendations to improve their training programmes and if it was possible for supplementary prescribing to be implemented into their practise were also explored.

5.17 Summary

- To summarise, three (Beatrice, Helena and Nicola) out of the seven pharmacists recruited in Stage One consented to maintain a diary for three months during their time supervised in practice.

- The diaries were used to record a number of activities and events in which each participant was engaged. The researcher maintained contact with the participants periodically to encourage completion.

- Forty-one entries were returned, analysed by content analysis and detailed the location and nature of the activities, the individuals the diarists were in communication with, patient monitoring and counselling. The entries were then used to inform the interview schedule to be used in the diary follow-up interviews which were conducted approximately two to three months after diary completion.

- The following themes emerged from the interviews:

    i) The entries were depicted as typical activities undertaken during the pharmacists' training period.

    ii) Challenges during training included time to undertake the time in practice and fulfilling day-to-day duties.

    iii) The relationship the pharmacist had with their patients and IP had evolved.

    iv) A variety of patient monitoring and communication with other HCPs was recorded.

    v) The use of reflection was advocated in comparison to the pharmacists' first interviews (during training).

    vi) The use of the diary itself:

- Some entries appeared to have been omitted.
- Some recorded interventions were not carried out by the participant.
- Some entries were noted contemporaneously and some retrospectively.

- This chapter has described the use of the diary: diary-interview technique to investigate the pharmacists' activities during their time supervised in practice. Chapter Six will follow-on by detailing the next stage of the research, interviews after training had been completed (Stage Four).

Chapter Six – Interviews with the pharmacists in the first cohort to be trained as SPs in Wales after their training was completed (Stage Four)

6.1 Introduction

At this stage of the research project the pharmacists in the first cohort in Wales who had participated in Stage One had successfully completed their supplementary prescribing training programme. Chapter Five described the use of the diary: diary-interview methodology to investigate the pharmacists' time supervised in practice during their training. This Chapter follows-on and describes the next stage of the research where the pharmacists were asked to participate in another semi-structured interview after completing their training. When these interviews were conducted reports were emerging that supplementary prescribing had been implemented in a number of settings in the United Kingdom including primary care (Smalley, 2005), secondary care (Gross, 2005), and general practice (Lavender, 2005). This stage of the research would therefore explore whether it had been possible for the participants to also implement their new role.

6.2 Research questions

The research questions to be addressed in this present stage were informed by the themes that had emerged from previous interviews and were as follows:

i)   Had participants implemented, or were the pharmacists in the process of implementing supplementary prescribing into their practice?

ii) Which patients were having, or were intended to have, their conditions managed through supplementary prescribing?

iii) How had the participants' views and perceptions of the supplementary prescribing role changed since the interviews conducted during training?

iv) What barriers or problems had the pharmacists experienced with respect to the supplementary prescribing training?

v)   What barriers had the pharmacists experienced with regards to implementing their role as a SP?

vi) What recommendations, if any, did the participants have on possible amendments to their supplementary prescribing training programme?

vii) How did the participants envisage the role of the SP pharmacist in the future?

6.3 Methodology

Semi-structured interviews were conducted with a number of pharmacists who had already participated in earlier stages of the research. The interviews were conducted, recorded, transcribed and analysed in accordance with the methodology described in Chapter Two.

6.4 Recruitment

The potential participants for this stage of the research were those pharmacists who had participated in interviews during their training (Stage One), and who had also agreed to their contact details being stored by the researcher and to be contacted for further stages. All seven pharmacists from Stage One were eligible to participate. Each pharmacist was telephoned by the researcher approximately one month before the end of their course in order to advise them of the intention to conduct interviews once their course was completed (Stage Four) and non-participant observation of pharmacist-patient consultations (Stage Five) and to verbally explain what was required in these additional stages. This was deemed necessary to keep the participants informed and to allow them the time to consider participating further, when the appropriate time came. All of the pharmacists expressed an interest in continuing to participate in the research and hence received an information pack for the interview (which included a letter inviting participation (Appendix 6.1), an information sheet (Appendix 6.2) and two copies of a consent form (Appendix 6.3)) and for the non-participant observation stage (which included a letter inviting participation (Appendix 7.1.1), an information sheet (Appendix 7.1.2) and two copies of a consent form (Appendix 7.1.3)) by post.

The pharmacists were requested to return a signed consent form (Appendix 6.3) should they wish to participate in an interview. If no consent form was received after approximately one month then the pharmacists were contacted again via the telephone or e-mail (depending on the method the pharmacist had said was more convenient) as a reminder and a duplicate pack supplied if the original had been misplaced either by hand or by post. All seven pharmacists who had been interviewed during their training (Stage One) consented to an interview at this time. However, due to illness Beatrice had to withdraw from the study and was not able to take part any further.

An additional interviewee was also recruited at this time. This particular pharmacist was already known by the researcher and had completed the supplementary prescribing course at HEI C. At the supplementary prescribing launch meeting at WAG in November 2004 the pharmacist (Lynne) approached the researcher and asked if the study was still ongoing. She wanted to

participate and provided her contact details. Lynne had previously received an information pack for Stage One (interviews during training) from her course leader (described in Chapter Four) and hence was aware of the research but had not participated in earlier stages due to the time commitment required of the course. The researcher posted an information pack for this present stage to Lynne who consented to the interview. A convenient time to hold the interview was arranged and she also completed a demographic questionnaire at this time. Lynne was 35 – 44 years old, worked in primary care, was registered between 1980 and 1989 and had completed other post-graduate qualifications. After her interview Lynne was supplied with an information pack for the next stage of the research (non-participant observation of pharmacist SP-patient consultations (Stage Five)) and the researcher explained what would be required of her should she wish to continue participating.

As a result of the recruitment procedure seven pharmacists consented to an interview, six of whom had previously been involved in the research.

6.5 Use of practice portfolios to inform the interview schedules

As described in Chapter Five six pharmacists (Nicola, Beatrice, Helen, Tamsin, Neil and Thomas) consented to the researcher obtaining a copy of the 'Record of Competencies' section of their practice portfolio (from HEI A) or to review their portfolios (from HEI B). Helen's 'Record of Competencies' section was analysed through content analysis and the themes that emerged were used to inform her diary follow-up interview. All three portfolios were used to supplement and to compare entries with those in the diaries.

The 'Record of Competencies' section of the practice portfolios of the other three pharmacists (Tamsin, Neil and Thomas) were analysed through content analysis (Neuendorf, 2002) in the same manner as Helen's. Entries were categorised into themes and their frequency of entry determined for each participant and incorporated into their interview schedules (Appendix 6.4) to be used for this present stage. The information obtained from the portfolios of Tamsin, Thomas and Neil is provided in Tables 6.1, 6.2 and 6.3 respectively. Details of Nicola, Beatrice and Helen's portfolios have been described in Chapter Five. Lynne's practice portfolio was not utilised due to the late entry into the study.

Table 6.1. Themes generated from Tamsin's 'Record of Competencies' from his practice portfolio at HEI A.

Theme	Examples to illustrate the theme (No. of entries)	Frequency of theme entry (Total = 139)
The supplementary prescribing course	Clinical logs (18) Summative OSCEs (38) CMPs (9) Discussion (12) Case scenarios (5) Observation of practice (22) Narratives (6)	110
Duties as a pharmacist	Committee member (10) Job description (4) Continuing Professional Development (4) Checking prescriptions (2)	21
Miscellaneous	Evidence from team members (2) Diary of experiences (1)	8

Table 6.2. Themes generated from Thomas' 'Record of Competencies' from his practice portfolio from HEI A.

Theme	Examples to illustrate the theme (No. of entries)	Frequency of theme entry (Total = 114)
Community pharmacist	Professional practice as a community pharmacist (1) Daily job as a pharmacist (3) Guided by RPSGB regulations (1) Awareness of regulations and responsibilities (2) Working habit (1) Self employed pharmacist (1)	9
Theoretical knowledge	Excellent theoretical knowledge e.g. yellow card system, interactions, contra-indications(1) Keeps knowledge up-to-date e.g. information on new drugs (3) Sound knowledge (1) Conversant (2)	14
Time in supervised practice	Clinical supervision days (1) Discussion with DSMP (1)	2
Communication skills	Tolerance and compassion (1) Actively discusses treatment options (2) Excellent communication skills (1) Spends time explaining options to patients (3) Explains in simple language (1)	11
Miscellaneous	Yes (62) Member of LHB (1) Very well (3) Well organised (3) Use of Information Technology (1)	78

Table 6.3. Themes generated from Neil's Record of Competencies from his practice portfolio.

Theme	Examples to illustrate the theme (No. of entries)	Frequency of theme entry (Total = 204)
Academic qualifications	BSc (Hons) degree (1) Clinical diploma in community pharmacy (11) Certificate in management of drug misuse (3)	15
The supplementary prescribing course	Use of CMP (39) Clinical logs (10) OSCEs (9) Discussion with DSMP (4) Developing list of P-drugs(2) Time in supervised practice (2) Doing supplementary prescribing course (3)	75
Activities as a community pharmacist	Practising as a community pharmacist (3) Use of community pharmacy log (1) Pre-registration tutor (3) RPSGB Code of Ethics (1) Continuing Professional Development (3)	19
Communication	Negotiation with DSMP (1) Liaison with GPs / nurses (3) Developing networks with SPs (1) Advice to patients (14)	21
Knowledge / demonstration of skills	Use of guidelines (23) Adverse event identification (2) Use of Standard Operating Procedures (3) Use of reference sources (5) Use of evidence base (1) Medication review (1) Documentation in patient notes (1) Development of protocols(3)	55
Miscellaneous	Feedback from other HCPs (5) Focus prescribing due to limits of knowledge (4)	9

6.6 Interview schedules

The interview schedules used in this present stage were informed by the information obtained from the practice portfolios of the individual pharmacists and the themes that had emerged from the previous interviews. A number of the views expressed by each pharmacist in their interview during training (Stage One) were included in each individual schedule as bullet points. These were used as a reminder to the researcher of what views the participant had expressed previously. An example of an interview schedule is provided in Appendix 6.4.

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6.7 Interview arrangement

All of the interviews were held face-to-face, recorded with a mini-cassette recorder and all except one (which was held at the Welsh School of Pharmacy) were conducted at the pharmacist's place of work. Table 6.4 displays the interview durations. The interviews lasted between 22 and 54 minutes with a mean of 32.24minutes. Before the interviews began the pharmacists were provided with another copy of the self-completion demographic questionnaire that was used before their interview during training in Stage One (Appendix 2.4). The questionnaire was used in order to enquire if any information previously supplied had changed. For example, if they had completed any additional qualifications or a change to the pharmacists' professional position. The information provided on the questionnaire in the first interviews had not changed; hence none of the pharmacists were required to complete the form a second time.

Table 6.4 Stage Four interview duration.

Participant name	Duration of interview
Thomas	54m 25s
Neil	28m 35s
Helen	27m 39s
Bob	26m 17s
Tamsin	29m 06s
Lynne	37m 18s
Nicola	22m 25s

6.8 Themes emerging from the interview data

The key themes that emerged from the interviews are described below.

6.8.1 Current prescribing status

Only one (Tamsin) out of the seven pharmacists was supplementary prescribing at the time of the interviews. She had begun prescribing in a hospital out-patient clinic one morning a week. Thomas had extended his role by working in a GP surgery reviewing medication changes in accordance with agreed protocols but was not supplementary prescribing *per se* as he was not able to issue prescriptions:

> *THOMAS: To all intents and purposes um it's supplementary prescribing. Ah and rather than within individual clinical management plans for individual patients we've taken a sort of clinical management plan of of treatment.*

Thomas believed that supplementary prescribing had assisted him in developing his medication review role and that the GPs were more comfortable with him making the medication changes as he had an additional qualification:

THOMAS: I don't think if I, if I didn't have the supplementary prescribing course ah behind me I think that the way in which I approach that [medication change] would be far shallower than the way that I'm able to do it now.... and it's irrelevant the fact um that I'm actually signing, whether I sign a prescription at the end of it or not.

Every participant except Bob had registered with the RPSGB as a SP. Neil, Helen, Lynne and Nicola were hoping to implement the role in the near future. Neil and Lynne had organised clinics to start within a month of their interviews in a GP surgery. In contrast neither Helen, Nicola nor Bob had any structures in place to implement within hospital out-patients, GP surgery or community pharmacy respectively at the time of their interviews due to identified barriers which will be discussed in section 6.8.3.

6.8.2 Patients and conditions to be managed

The conditions that the pharmacists hoped to be managing were the same as those described in the interviews in Stage One (Chapter Four). Conditions included mental health such as schizophrenia or bipolar disorder, dyspepsia, hypertension, breast cancer, benzodiazepine withdrawal, chronic obstructive pulmonary disease and medication review.

6.8.3 Barriers to implementation

The participants expressed several reasons why implementation was either not possible or was a barrier that needed to be overcome to enable supplementary prescribing to begin within their own practice. Those barriers predicted in their interviews during training (Stage One) had, indeed become a reality. The barriers identified are discussed below.

6.8.3.1 Funding

Of the three community pharmacists both Thomas and Bob saw funding as a barrier:

THOMAS: [It's] completely different for me because I'm an independent supplementary prescriber if you see what I mean so more free lance and so if I'm gonna work somewhere as a supplementary prescriber then I've gotto be paid for it. Um, because I'm not gonna, I'm not gonna go and um work in a in a GP surgery ah which earns them money and um increases and increases their quality points and earns them even more money and takes their pressure off them and do it for no fee.

BOB: That's another barrier then isn't it? It's it's funding from the LHB.

In contrast Neil was hoping to undertake the role in a GP surgery free of charge initially in order to demonstrate the effectiveness of the service before requesting funding. He believed funding would then follow. However, both Thomas and Bob were independent community pharmacists whereas Neil was employed by a large pharmacy multiple.

Neither Lynne nor Tamsin identified funding as a barrier. Helen, a hospital pharmacist suggested that for her to expand a role that she was already undertaking such as in her out-patient clinic funding was not going to be a problem. However, to develop an entirely new role would cause a funding issue.

6.8.3.2 Lack of implementation strategy in the primary care sector

Thomas believed that there was a need for a strategy from the WAG to decide where the SPs' skills should be deployed, how their skills could be best utilised. In addition, he recommended that a register of the resources available in primary care should be produced so that policy makers are aware of the skills available:

> *THOMAS: I don't think that that sort of situation is really being thought about from a strategic point of view from from the people that have introduced the course and so um I don't think that there is the the network or the knowledge about what a supplementary prescriber could do in the more in the primary care sector.*

6.8.3.3 Access to patients' medical notes

Access to patient medical notes is fundamental to practice as a SP:

> *THOMAS: I think it would be, it's very difficult to run, to do your job fully as a as a supplementary prescriber without using the same notes that the GP uses.*

> *NEIL: Basically need patient records to do it otherwise you can't do it [supplementary prescribing].*

> *BOB: I can't provide that that service unless you know we're [pharmacist and GP] all connected to the same ah same network.*

Thomas, Neil and Bob all referred to access to patient medical notes as a barrier to practising as a SP in their respective community pharmacies. To overcome this issue Neil, Beatrice and Lynne planned to manage their patients in a GP surgery where patient notes would be readily accessible. In contrast, the two hospital pharmacists (Tamsin and Helen) would have free access to patient notes and therefore this issue was not applicable to their settings.

6.8.3.4 Information technology

Information technology is related to access to patient notes as the correct network system would have to be in place to enable the community pharmacists to link into the GP's electronic patient records to document interventions:

> *THOMAS: In an ideal situation you would have a computer that you could link to the surgery that you were seeing.*

NEIL: I I think it'll be GP surgery based until the IT [information technology] is in place to actually move it back towards the pharmacy. I think longer term it should be through pharmacies but there's some big barriers

BOB: I think I think the biggest, the biggest barrier I see is is the IT [information technology] barrier.

Funding would also need to be provided to enable this link to be made. An additional information technology concern was if the GP computer system would recognise the pharmacist as a prescriber (Beatrice) and hence allow prescriptions to be printed instead of hand writing each time.

6.8.3.5 Being in the first cohort of SPs

Neil believed that being in the very first cohort of SPs was a barrier to implementation. This was especially true of community pharmacy:

NEIL: I think, the main, the main barrier is because we're in the first cohort, because we're community pharmacists it's completely new. I've had to, I've had to set the whole agenda for it because it's never been done before.

In contrast hospital pharmacists were believed by Neil and Thomas to be already performing a 'prescribing' role:

NEIL: Hospital pharmacists, really it's just an extension of the clinics they do anyway whether that's arthritis or rheumatology, they do clinics anyway. And hat's just an extension of that.

THOMAS: The way that I see a lot of the other people that were doing the supplementary course was that they were there from their Trust or whatever and they're working within a larger organization, to a large extent they were already doing the job ah of a supplementary prescriber and the course has legalised what they're doing to enable them to actually sign a prescription rather than get a, get a junior doctor to sign it.

The views of Neil and Thomas were supported by Helen who was already undertaking a pseudo-prescribing role within hospital:

HELEN: I'm used to working with very inexperienced SHOs [Senior House Officer] and making the decision anyway.

6.8.3.6 Time

Time was viewed as a barrier to implementation and to practise as a prescriber. Time is required to leave the pharmacy to practise and to continue with the day-to-day duties required of the pharmacists' current posts:

NEIL: I mean I suppose it's getting time to be at least, from the actually pharmacy's a barrier.

HELEN: The main trouble um with doing new things um is the actual, it's not the supplementary prescribing bit, the actual starting it but obviously once you've started somebody you need to review them regularly and unfortunately I haven't got time in the timetable to do that unless we get more money into the pharmacy department.

BOB: Another barrier .... it's the um it's the time constraint of you know the, legally to be a supplementary prescriber, to make, to issue a supplementary prescription.

LYNNE: It's [supplementary prescribing] just time consuming um and you know I think at the LHB [Local Health Board] as well there's a perception well that's lovely but you know really there's lots of other things that I could be doing so it's quite a few barriers.

6.8.3.7 Obtaining prescription pads

At the time of the interviews none of the community or primary care pharmacists were able to issue a prescription as they had not received their prescription pads:

NEIL: Ah, (laugh) you wouldn't believe how complicated it is [to obtain prescription pads].

As a result none of the pharmacists was certain from where and from whom they should order their pads and how long it would take.

6.8.3.8 Space

In order to conduct a supplementary prescribing consultation with a patient a private area is required. Obtaining this space can be a barrier either in the community pharmacy or in the GP surgery:

NICOLA: Obviously you know you've gotto be available when the patients can can get to see you for it to work properly. But um I mean the thing is we have a desperate shortage of rooms at the moment [in the GP surgery].

BOB: So that's another barrier um, it's the cons consultation area, ok? [in the community pharmacy].

6.8.3.9 Implementation of the pharmacy contract

Early 2005 saw the introduction of the new community pharmacy contractual framework in England and Wales (Pharmaceutical Services Negotiating Committee, 2005). This new contract aims to recognise high standards of service provision with each service being classed into essential, advanced or enhanced. All pharmacies are required to provide the essential services, demonstration of which takes priority. Supplementary prescribing is classed as an enhanced service (Bellingham, 2004a):

BOB: Well there's a lot of barriers, yeah, not really um, the the main priority for any community pharmacy now over the next few months is to deliver the ah essential services of the new contract, ok? And then ah, so that's that's that's the priority and then um the

long term plan then is as I, as we've discussed is consultation area, um and then provide, provide some enhan, advanced and some enhanced services.

6.8.3.10 Awareness of supplementary prescribing

Lynne suggested that there is little awareness among the GPs within her area as to what supplementary prescribing is:

> *LYNNE: Yeah, quite a lot of barriers [to implementation] in the fact that um GPs none of them really know what it is apart from my one practice. Um, and the other practices where they've got the just that I might be able to do something now think that I'm gonna just be able to take all these patients and do it, don't know what clinical management plans are, don't realise there's gotto be one per patient. They just think I'll go and sort it out for them........... I would say that in the thirteen practices in (LHB) probably two or three practices know what a supplementary prescriber actually is.*

6.8.3.11 CMPs

As described in Chapter One a CMP has to be produced for each patient managed by a SP. The amount of work required to produce an individual CMP for each patient was seen as immense. As a result, the majority of the participants were planning to produce a generic CMP which could be 'tweaked' for each individual patient:

> *HELEN: Otherwise we've got forty patients on [medication], I can't write them a brand new, completely different cmp every time cause that's just a nightmare.*

The barriers described above have also been identified by another group of qualified SPs (Bellingham, 2005). Limitations of the role, insufficient support, information technology, funding, the use of CMPs, awareness of the role by others and access to medical records are all cited as barriers affecting other pharmacists in similar situations.

6.8.4 Signing the first prescription

The participants were asked during their interview how they anticipated they would feel when they signed their first prescription. The responses were diverse:

> *BEATRICE: I can only sort of reflect at the first time I actually wrote a prescription when I first came to, we didn't have a computer system when I first came to work here [surgery] so everything was hand written and actually hand writing my first prescription was a very scary experience. Sort of look at it and think wow. You know having handled probably thousands of prescriptions in my previous ten years as a qualified community pharmacist you don't think anything of it. But when it's you writing this you do look and check and have I got it all right? And remember to sign it (laugh). So yes I think probably um initially I'll be quite cautious but I'm sure as, with everything else you become more comfortable and experienced.*

> *NEIL: Terrified, you can be nervous and um, it's um it's it's it's a whole new um, it's a whole new ball game in terms of risk and in terms of professional skills, you know it's*

completely different. Infact why am I doing this, good question? But it's very different, it's like, I remember the first ah script I dispensed as a pharmacist, I'm sure you can too, you know.......It sticks in your mind......All of a sudden for the first time it's um, it's you who's doing it and this is if you like a big step again forward.

HELEN: I think I'll probably be very careful you know, probably more careful than I am now when I just write the prescriptions and say to the doctor sign this, this is you know what the treatment plan is. I'll probably feel like right you know, you know I'll probably bit more kind of like double checking.

BOB: I'm sure when I write my first prescription I'll be checking and double checking and triple checking and it'll be ah, I'm sure it'll be daunting but ah um yeah no I'm, it's good.

LYNNE: I'm gonna be bricking (laugh). Um, well it's just gonna be really really odd. I mean you know I just, it's gonna be, I'll be really nervous. I think I'll probably double check it about fifteen hundred times (laugh) before I actually sign it. Um, cause we did write some on the course but it's just a very surreal, I mean you deal with them all day everyday, these prescriptions and yet I. It's not so much the writing, I think when you sign it as something you're taking that responsibility and that's the thing I think will be quite surreal really, I'm not really looking forward to that bit to be honest. I think you know, it's gonna bring it all home then what you're actually doing.

In contrast:

TAMSIN: I'm so used to them from the dispensing side that it [signing] wasn't any big deal really.

THOMAS: I think that I I thought at the very beginning of the course was was that would be a really um sort of ah crowning glory moment of my um whole ah whole career. Um, after completing the course um I really don't see the actual signing of the prescription as a big deal. I think it's, it'll be nice the moment that I do it and it'll be one of, and it'll be something that I do enjoy doing at the time but I don't think that's um ah I don't think it's something that is as important to me now as I thought it was gonna be before I started the course if that makes sense.

6.8.5 The future of supplementary prescribing

Supplementary prescribing was viewed by the majority of the participants as a means to follow-on to independent prescribing as the following comments suggest:

BEATRICE: I mean I'm hoping it's [supplementary prescribing] a step on the way to independent prescribing.

THOMAS: I think what should happen, I think we should be running independent prescribing.

NEIL: I think it's [supplementary prescribing] going to disappear. Um, well it's gonna be merging into independent prescribing cause I mean there's a consultation out, being brought out ah by the Government which, I think that they'll work together very well. ....I think really people who are the first sups will be the first independents through, in my view.

HELEN: I mean that's one of the main reasons I did this course cause I knew that the people that had done supplementary prescribing would be the first ones looked at for independent prescribing. And if you didn't get over this first hurdle you'd never get to the

independent prescribing. So that was one of the main kind of driving forces for me to doing this course.

LYNNE: I don't think ultimately I'd wanna be independent in the true sense as in diagnosis. Um, I think independent in the sense that once you get a patient you manage them would be quite you know, I could see that with experience being you know something quite easily done.

Neil saw the CMP as requirement until independent prescribing comes into place:

NEIL: [CMP] Safety net, yeah, I think you, I think you then tend to move on although I think the CMP partly devised with the aim in future independent prescribing coming on board because once you've worked with them there you then feel more confident about working by by yourself.

6.8.6 The supplementary prescribing training programme

6.8.6.1 Most valuable aspect of the training programme

All of the participants believed that the time spent supervised in practice with their DSMP was a valuable and enjoyable aspect of the training programme. When asked what they believed to be the most valuable aspect of the course some of the pharmacists had this to say:

NICOLA: We had a couple of sessions on consultation skills and what have you and I learnt a lot more from the actual supervision with the patient and my DSMP from that side of it and sitting in with the nurses as well.

THOMAS: I think all of it really because I don't think there's anything, any single thing that I could say well that was, that, I I mean I enjoyed more my days in practice um, I found that the most enjoyable thing.

NEIL: I think time in practice; the actual taught element was probably at the end of the day it was too broad to be of sufficient use. ....The practice time was absolutely invaluable and I would argue you actually need more of this and less of the actual taught time.

HELEN: Finishing it (laugh). Ah, no um, the most valuable aspect was the time I spent with my DSMP yeah cause that was excellent. Um, cause I mean I spent the ward rounds with him that I did anyway but he involved me more and the time I spent in out-patients with him I learnt loads. And he also kind of you know used me and kind of asked me you know like when the patient was in you know what do you think about the medication? What can you suggest? You know I wasn't just sitting there kind of like this person in the corner just a student observing he was actually you know making me part of the consultation. So I think I've got a better relationship with him now than I had before. Um, and I think that's been helpful. So I think that's been the most helpful part.

BOB: Um, and yeah very very, very very good ah learning experience, really good.

TAMSIN: Um, for me it was the um seventy two hours, twelve days ah work based education led training. That was the most, that was the the bit that taught me most.

LYNNE: The time in practice was by far yeah. I mean I didn't, to be honest we had fifteen study days and for what I felt I got out of them I could have done it probably in two or three.

6.8.6.2 Training programme feedback

The participants were asked during the interviews what their views were on the training programme and any improvements or amendments they could recommend for future cohorts. The suggestions provided by individuals, were:

- More information should be provided about the training programme prior to enrolment (Thomas, Helen and Lynne)

- Examples of CMPs and clinical logs should be provided as standards of good practice (Helen)

- There needs to be some continuing support for the pharmacists after completing the training programme in order to sustain their Continuing Professional Development (Thomas)

- The amount of time spent supervised in practice was too great (Nicola)

- More training was required on clinical assessment rather than pharmacology (Nicola)

- Training days at the HEI should be alternated so that the pharmacists do not miss opportunities to participate in ward rounds or clinics on the same day each week (Helen)

- The pace of the training days at the HEI was too slow with too many breaks (Helen)

- The training days that were only half days were more inconvenient to attend, full training days would have been preferred (Nicola)

- The lectures on the face-to-face training days did not fulfil the learning needs that the pharmacists had identified, for example specific clinical therapeutics (Nicola and Lynne)

- The course tutors needed consistency in the information they passed onto students (Bob)

However, even though suggestions were provided to improve the training programme some of the pharmacists understood why the course was not as they would have hoped and were positive on some aspects:

NICOLA: I think all of us went into it expecting that [first courses need amendments] anyway so. The tutors were very very supportive, they really must have worked terribly hard to make make the course work. Um, getting the lectures together and all the rest of it, booking the room. Um, I know they were all quite sort of relieved at the end of it that it hadn't gone completely pear shaped.......Um, no I think all in all it was a good experience and I certainly wouldn't put anybody off going.

HELEN: I mean you know it's the first course so you know there's always problems with the first course of any of anything. And I suppose I've kind of finished it a number of months ago and I think I've kind of probably forgotten a lot of the really awful points.

BOB: I mean undoubtedly there were teething problems ah and um I think you know the the the the (HEI) would admit that, they were finding their feet as much as as as you know us the students were.

THOMAS: I got no complaints about the course itself and um what was in it and ah um and the standard of the teaching and all that sort of stuff, all of that was superb.

TAMSIN: Yes I did enjoy it [training programme], I found it intellectually stim and academically very stimulating ah and it honed my skills on things like critical appraisal and medicines information, sources of information, use of medline, pubmed and all the rest of it. So there were also skills there that I gained

6.8.6.3 Time to undertake the course

The time required to complete the designated training programme in addition to the day-to-day duties of the pharmacists was an issue as a large amount of work had to be undertaken in their own time:

THOMAS: I think that the course was crammed, not crammed maybe is the wrong word but I I think the course was in too short a time.

NEIL: I enjoyed it, the major barrier is time cause you're still talking about people working full time and doing the full ah course, which is hard work. In that, some of that is still taught time at the University you've still got your job to go back to so you your work load was very high. And sort of personal work load, sort of personal time sense is very high workload. There's things you have to sacrifice for it. Um, very worthwhile, I thoroughly enjoyed it but it was hard work. I think people don't, didn't really actually realise how much work was involved in doing it when they went into it.

NICOLA: I spent a lot of time at the weekends and in the evenings to fit it all in so, it was a bit hard.

BOB: It's very hard for a, you know a community pharmacist has, you know gotta run a business, gotta um make sure his shop's running, and the VATs done and the girls are paid. You know it was, it was a tough time, hold my hand up, it was tough ah to to to do all that, that day-to-day running and then go home and ah you know you're on the internet every night, you know it was um. Since I've graduated it's probably the toughest ah few months I've had, ah work wise.

LYNNE: It was a nightmare really um because it was such a short time so I just you know did loads of work at home in the night.

6.8.6.4 Nurses and pharmacists training together

The pharmacists held contrasting opinions on the issue of multi-disciplinary training (nurses and pharmacists on a combined course) during the interviews during their training (Stage One). These views were explored again at this stage of the study. It was apparent during the interviews that the pharmacists believed that their training needs and those of the nurses were different. The pharmacists felt that they required more training on communication skills and the physical assessment aspect of patient care, with the nurses expressing to the pharmacists a need for more pharmacology. The way that the two professions approached their work was also believed to be different:

NICOLA: But we [pharmacists] do learn in a completely different way from the nurses and that wasn't appreciated.

However, Thomas viewed this as a positive aspect of the course in that:

THOMAS: You see different sort of um styles and approaches and stuff. And I think you get that more from having another profession there than you do from having other pharmacists there because generally speaking pharmacists as a breed tend to have very similar attitudes.

Thomas believed nurses to be more extrovert than the pharmacists which enabled them to 'get on' with patients to a greater extent. On the other hand pharmacists are more concerned with the medicines aspect of treatment rather than the patient as a person. He believed that neither approach to patient care is superior; a mixture would be more appropriate which professions can adapt while training together. Neil, Nicola and Lynne found the networking with other HCPs beneficial, to share ideas with each other and to become aware of the varying strengths and weaknesses of the two groups.

The question of how to teach such a broad range of professional skills and knowledge base was acknowledged:

HELEN: But actually to try and put a course together that's suitable for nurses and pharmacists with all the differences in skill mix is very very difficult.

NEIL: I think it's very beneficial, I think I think there was just issues in terms of um teaching, teaching the range of roles and experience.

The course leaders hoped that the nurses and pharmacists would integrate with each other and learn and develop from each other (Chapter Three). However, a number of the pharmacists stated that the two professions did not interact to a great extent:

THOMAS: Right, ok, from what I saw less pharmacists were making the move to integrate with the nurses than the nurses with, with the pharmacists.

BOB: Everybody seemed, tended to sort of um branch off into their sort of safe ah, safe groups, you know their colleagues.

The pharmacists suggested a number of ways of combating the issue of nurses and pharmacists training together. These included having a mixture of separate and combined training days as Lynne believed that not all training needs could be satisfied on a completely multi-disciplinary course. Alternatively Neil suggested more self study and less time being taught on training days and Helen would have preferred a separate course. Both Bob and Lynne commented that the nurses had benefited from the pharmacists' knowledge of medicines on the course:

BOB: Um, well our knowledge of drugs you know, I mean they [nurses] um, I think they were all very surprised that you there is a lot to know about drugs and that ah you know there's a profession the pharmacists that do know about, about drugs, knowledge of drugs.

LYNNE: Well the nurses, a lot of the nurses funnily enough said to us that they found they learnt an awful lot about the drugs from us. ..... So um and and a lot of them actually commented that they didn't realise that what pharmacists could do and how much that they thought they could ask us in the future.

6.8.6.5 Reflection as a learning tool

The topic of reflection generated a range of opinions in the interviews during training (Stage One). Nurses and pharmacists were believed to have a contrasting attitude and level of experience of reflection:

NICOLA: I think the way that we [pharmacists] approach our assessment work. Um, the actual essays that we did, we don't, we don't reflect. We take a very cut and dried view of things, there's no grey areas in pharmacy, it's either right or it's wrong. Um, whereas the nurses have a lot more soft skills than we do I think, you know get that from way they are in they're far more expressive and a bit waffly.

A number of the pharmacists in Stage One did not believe that reflection assisted in their learning process. However, those pharmacists, by the time of this present interview had realised its potential and were advocating its use:

HELEN: I mean when I first come across it I absolutely hated the idea of reflecting and I just thought ohh what a nonsense. But after actually doing it and you know writing an essay on it and getting into it a bit more I feel it's been beneficial.

BOB: Yeah, yeah well in in retros, with the benefit of hindsight I think um you know I I can see now that that you do learn more don't you? .....It took, you know it wasn't until I'd graduated that I realised the benefit of it [reflection] I suppose.

Thomas believed he had undertaken reflection in a more informal manner before the training programme. However, Thomas also thought that the use of reflection was possibly 'dressed up' on the course with too much emphasis being put on its use. Even though Neil could see the benefit of adopting this approach he stated that a number of the pharmacists on the course were only paying 'lip service' to it because they had to. However, he had not changed his practice since the course; he would continue with the method of learning he had used since beginning training years previously. The nurse colleagues who worked with some of the pharmacists (Nicola, Helen and Tamsin) were also assisting in the pharmacists' use of reflection.

6.8.7 Competence to prescribe

The researcher asked the pharmacists if they believed that after undertaking the training programme they felt confident to prescribe and manage their patients' conditions. The general feeling was that the pharmacists were feeling confident to begin their role as a SP. However, they believed that it was the time spent supervised in practice with their DSMP that had prepared them to undertake the extended role rather then the time spent at the HEIs:

> *NICOLA: There's some of the course, the directed learning, my supervision here has prepared me yeah. I wouldn't say the course alone would have done no.*

Thomas believes that he will always strive to attain the level of competence he would aspire to but he is also ready to begin his new role. Neil on the other hand felt that he was competent to begin prescribing but was not yet confident, this would come with practice.

6.8.8 Supplementary prescribing has made a difference to the way the pharmacists practise

Some of the pharmacists stated that undertaking the supplementary prescribing training programme had resulted in a change to the way that they did practise:

> *NICOLA: I'm more inclined to look at the patient holistically now rather than just looking at a prescription and seeing the interactions, side effects, lack of compliance, all the rest of it. ... So, oh yes it's it's much much bigger picture.*

> *THOMAS: I think supplementary prescribing has made a difference, the course has made a difference to the way that I practice normally when I see patients.*

Thomas believed that before the course he would question patients in his community pharmacy in order to 'match' an OTC product to the patient's symptoms. He believed the time on the course on how to question patients and take medical histories with his DSMP had changed the way he approaches his patients. Helen also believed that she has improved the way that she interacts with patients.

6.8.9 Patient feedback

The feedback that the pharmacists had from their patients while they were present with their DSMP was positive. However, Lynne still thought work needs to be done on the public's view of the pharmacists' role:

> *LYNNE: I mean the thing is we've got a huge job to change the public perception of what we can do.*

None of the pharmacists reported receiving any negative feedback from the patients that they saw during their time in supervised practice. Neil provided one explanation for this:

NEIL: I think they [patients] recognise those patients that GP time is limited therefore you need to use different skills to actually achieve, you know if they want to be seen within a certain time at the surgery then they might need to accept seeing somebody else. I think most patients prefer us [pharmacists].

6.8.10 The participants' role as a pharmacist

All of the pharmacists thought that supplementary prescribing would enhance their role and job satisfaction. For example:

NEIL: Well, probably definitely cause pharmacy, it's basically boring, if you if you don't sort of move things and that's why I've started doing this [supplementary prescribing] at the moment. And I've also been at the forefront of of new developments, be at the leading edge.

HELEN: Yeah I think it will increase the job satisfaction cause it'll be the end of chasing doctors who know, you know who are new into mental health, junior doctors who know nothing about the patient, never met them, never heard about clozapine and you kind of say well can you sign this dose increase for me please. And it's just like it does make a bit of a mockery of things, you know because they don't know anything at all. You know maybe first day in mental health but because they're a doctor they have to finally sign.

The way that satisfaction would be improved varied between different sectors of practice. Bob, in his community pharmacy, thought supplementary prescribing would help develop pharmacy because ever since he had started in the profession people had been saying that pharmacists are very intelligent people but their role essentially involved 'sticking labels on boxes'. By expanding the role his vision of further roles would be fulfilled. Tamsin on the other hand, from the hospital sector, had been amending doctor's prescriptions for years, developed prescribing protocols and educated doctors on their use. Supplementary prescribing was therefore the next logical step to allow her to use her expertise and to increase her 'personal satisfaction'. Lynne and Beatrice in primary care had been making recommendations to GPs to alter patient medication. On some occasions Lynne would return to the surgery and find that the recommendations had not been followed through. On many occasions she noted it was not because the GPs did not agree with her suggestions but because they were so busy. Supplementary prescribing would allow her to follow through her recommendations and result hopefully in improved patient outcomes.

6.8.11 Supplementary prescribing will improve patient care

The pharmacists believed in their interviews during training (Stage One) that supplementary prescribing would benefit patient care. This view was still supported in these second interviews. For example, by having more time to spend with the patient (Tamsin and Lynne) and pharmacists will follow prescribing guidelines more closely (Neil).

6.9 Change of views compared to those expressed in Stage One (described in Chapter Four)

The pharmacists as a whole expressed the same opinions as those in Stage One. The main exception being that the pharmacists who previously could not see the benefit in reflecting were utilising it as a learning tool in their practise. The pharmacists, whether they had implemented the role or not were still keen to develop their role in the areas described in Stage One.

6.10 Discussion

There are currently several examples in the literature where supplementary prescribing has been successfully implemented into practice in England and Scotland. These include managing patients in an intensive care unit (Shulman, 2004), HIV clinic (Bellingham, 2004b), parenteral nutrition in acute care (Tomlin, 2005; Gross, 2005), discharge planning from hospital (Elfellah and Hillis, 2005), rheumatology clinic (Thomas, 2005), medication reviews (Lavender, 2005) and hypertension (Smalley, 2005). The authors of the above examples state that their role as a SP is a 'natural extension' of their previous role (Smalley, 2005 p214), that pharmacists are incorporated into the multi-disciplinary team (Gross, 2005), patients accept and benefit from being managed by a SP (Shulman and Jani, 2005) and that supplementary prescribing brings professional satisfaction to the individual prescriber (Andalo, 2004).

Only one out of the seven participants had formally begun their role as a SP at the time of these interviews, within a hospital setting. The remaining pharmacists were still hopeful that, with time they too could practice as a SP. However, the interviews were only conducted one to three months after the training programmes had been completed. For the majority it would appear that this was an insufficient amount of time to set procedures in place.

The pharmacists stated in their first interviews (Stages One) how they anticipated they would be practicing supplementary prescribing at the end of their courses. The variety of conditions and settings had previously been predicted by the key informant interviewees and even within the small sample size a whole range of settings and conditions were noted. The expectations of some of the pharmacists had not come to fruition at this time, in many cases due to the barriers as stated above. The WAG asked, in the applications to attend the training programmes for the pharmacists to state where they would be practicing supplementary prescribing after training was completed. This was in an attempt to ensure that prescribers did not become qualified to only remain redundant. However, it became clear that many pharmacists had been placed on the course because funding was available from the WAG to pay for the training, but without a

strategy in place to use supplementary prescribing after. Lessons could have been learnt from the prior implementation of nurse prescribing where in 2003 only approximately half of those trained were actively prescribing (Granby, 2003; Timbs, 2003). Other reasons cited why nurse prescribers did not prescribe was lack of support and lack of confidence. The longer it is between qualification and prescribing the more effect it will have on the confidence of the prescriber to begin their new role (Luker and McHugh, 2002). It was therefore imperative that the pharmacists started supplementary prescribing as soon as it was possible. Timbs (2003 p5) also states that it is 'crucially important that prescribing pharmacists prescribe on a regular basis – so they retain both confidence and competency'.

The ability to implement supplementary prescribing into community pharmacy was questioned by Bellingham (2004c) and Axon (2003) who asked "Is pharmacist prescribing our golden future – or is it a blind alley". The remuneration and reward for the community pharmacist was believed to be little for such an intensive training course and it was predicted that supplementary prescribing could only be implemented in a small number of pharmacies. At the time of this present study supplementary prescribing had not been implemented within the community by the participants and the issue of remuneration had not been resolved. Indeed, there were a greater number of barriers identified in this present study in community compared to secondary care.

A whole array of barriers to implementation was identified by all of the recruited pharmacists. The anticipated barriers in the interviews during training (Stage One) had indeed, become a reality by the time of the interviews in this stage. Barriers have been noted in the literature when describing the experience of pharmacists who have already completed their supplementary prescribing training. These include funding, access to medical records, CMPs where they are seen as the 'rate-limiting step' and the pharmacist not being able to computer generate prescriptions (Bellingham, 2004c pPM3). Other barriers cited include remuneration within community pharmacy, information technology, insufficient support after training and awareness and understanding of other HCPs as to what supplementary prescribing is (Bellingham, 2005) which all agree with those listed in this present study. There have also been concerns regarding the lack of awareness of pharmacists themselves as to the details of supplementary prescribing as many it seems were declining to dispense a SP prescription (Anon, 2005). Finally, time and space (a consulting room) to conduct supplementary prescribing has also been previously recognised as issues to consider with regards to implementation (Bellingham, 2002c). One of the community pharmacists stated that he was unable to implement supplementary prescribing in his

pharmacy without a private consulting area. These recognised barriers demonstrate that other pharmacists have been faced with similar problems.

Thomas also stated that he would like to see increased support for those completing training, for example, to fulfil their continuing professional development requirements. Since the data collection period ended the NPC has formed a non-medical prescriber network in order to support individuals and to allow access to other SPs and resources (NPC, 2005b). However, a similar scheme has not been initiated in Wales. In addition, a United Kingdom wide Clinical Governance framework has been released by the RPSGB to assist in ensuring that Clinical Governance is supported within pharmacist prescribing roles and to provide examples and indicators of good practice (RPSGB, 2005d).

Many pharmacists, as can be seen from this present study, are utilising generic or template CMPs in order to overcome the barrier and time commitment to produce a different CMP for each patient. A scoping study conducted by the DoH (DoH, 2004d) also concluded that the CMP should be 'simple and quick to complete' otherwise conducting supplementary prescribing would not be worthwhile. In all cases, the identified barriers must be overcome if supplementary prescribing is to fulfil its potential and be implemented on a wider scale. Similar barriers to implementing a prescription review service were reported by Tully *et al.* (2000), these included funding and the time required to run the service.

In a similar manner to this present study Latif *et al.*, (2005) conducted interviews with pharmacists in the North of England during and then after their supplementary prescribing training. Eight pharmacists were recruited via their course leaders acting as gatekeepers, the majority being from secondary care. The way in which the pharmacists anticipated their role would change the most by undertaking supplementary prescribing was in writing CMPs and spending more time with patients (Latif *et al.*, 2005), a change also expected by this present study. In addition, many of the pharmacists, as in this present study had not implement supplementary prescribing by the time of their second interviews. The barriers to implementation expressed by Latif *et al.* (2005) included lack of support and resources, writing of CMPs and workload, also cited in this present study.

As one of the main topics to be considered was the supplementary prescribing training programme it was to be anticipated that a significant time of the interviews would consist of a

discussion on aspects of this topic. The pharmacists in this present study expressed varying views on the supplementary prescribing training programme, including if pharmacists and nurses should be taught together. Jones and Graham (2003) had previously questioned whether a 'one size fits all' (p480) supplementary prescribing course was suitable, and how these courses could be 'tailored' to the individual to fulfil their needs. The ability to train individuals from a diverse range of professional backgrounds, experience and clinical areas was a difficulty recognised by the course leaders (Chapter Three). Hemingway and Davies (2005), in the context of nurse supplementary prescribing also question how 'generic' training can suit nurses from a number of specialities. The same could possibly be said about the variety of pharmacists and the diverse clinical areas, even in this small sample. Hemingway and Davies (2005) state 'with a growing diverse group of students the challenge for educational institutes is how best to meet their educational needs, both before and after the prescribing course. This is of particular importance given the advancement of prescribing to firstly pharmacists and more recently Allied Health Professionals'.

A multi-professional approach to training is supported by Strickland-Hodge (2005) who described the course provided at the University of Leeds, one of many throughout the United Kingdom. Lovejoy (2003) also recognised the different learning styles and needs of nurses and pharmacists on the training course at King's College, London. Pharmacists required more training on the 'hands-on' aspect of patient care and are not so used to expressing their feelings. In addition, Tomlin (2005) noted that in his experience, training with nurses was 'informative' with the pharmacists demonstrating more knowledge in the medication aspect of training in comparison to the nurses' experience in assessment. The contrasting knowledge and skills was recognised in this present study. However, the degree to which the two professions interacted and learnt from each other is a matter for the individuals and how willing they are to work together and collaborate.

Each pharmacist approached the concept of reflection in a different manner. Reflection has been recognised within the supplementary prescribing curriculum in that pharmacists are expected to 'demonstrate a reflective approach to continuing professional development of prescribing practice' (RPSGB, 2002b). The use of reflection, that is, the emotional side of care (Lovejoy, 2003) has not been so prevalent in pharmacy education and was not viewed positively by the majority of the pharmacists in their first interview (Stage One). It has been recognised that pharmacists do have difficulties in using reflection (Swart, 2003). In contrast, nurses are believed

to have more experience of using reflection in both training and practice. However, Bob and Helen both had recognised the value of reflection by this stage and had adopted it into their practice. Edwards *et al.* (2004) had conducted a small-scale study by analysing the reflective portfolios of the pharmacists on one supplementary prescribing training programme through content analysis. They were able to demonstrate that it is possible for pharmacists to adopt reflective practice within the context of supplementary prescribing training (Edwards *et al.*, 2004). Droege (2003) also advocates the use of reflective practice within pharmacy education.

The pharmacists in this present study considered the time and commitment to complete training to be great, but worthwhile. The small sample of nurses surveyed by Hemingway and Davies (2005) also found time to be a barrier. However, supplementary prescribing was perceived to improve job satisfaction, should implementation be possible, a feeling supported by 91% of community pharmacists in one study (While *et al.*, 2004).

As the pharmacists had participated in different training programmes from HEI A, B and C then the suggestions for course improvements are specific for their particular HEI and their own personal requirements. Even though the curriculum and course outcomes were the same for each HEI (All Wales) the specific course delivery was varied. For example, one HEI held one half day training session a week whereas another HEI held a full day every week. The specific content, lecturers and format would also be different depending on the individual course leaders' approach. However, the suggestions can be taken onboard by the HEIs as general requirements of a supplementary prescribing course and have since been provided as feedback to each course leader in the form of an interview.

As Helen and Tamsin had described, Tomlin (2005) also stated that having prescribing status was only a 'small step forward in practical terms, but psychologically it made a big difference' (p183). The pharmacists had contrasting views as to their anticipated feelings of signing a prescription ranging from '*not a big deal*' to '*terrified*', depending on their own personal experiences. It was likened, on several occasions to checking the first prescription on qualifying as a pharmacist. The additional responsibility felt by writing prescriptions was evident in many of the comments received as pharmacists take the additional step from recommending to implementing prescribing decisions. Pharmacists have, for many years been 'prescribing' OTC medicines in response to symptoms in the pharmacy, managing minor ailments and utilising

Patient Group Directions. However, with supplementary prescribing comes an added responsibility (Newdick, 2003).

The majority of pharmacists believed that supplementary prescribing would benefit patient care, which has been recognised in the Crown Report (DoH, 1999). Benefits included increased time to spend with patients, improved management of conditions, more consistency of treatment and improved access to a HCP. Indeed, all of the pharmacists stated that they had received positive feedback from their patients during their time supervised in practice. In practice anecdotal information has been seen, for example by Tomlin (2005) who believes that supplementary prescribing has increased the pharmacy profile within the HCP team and has also benefited patient care. The benefit of supplementary prescribing was also demonstrated by Shulman and Jani (2005) when they evaluated how SPs adhered to haemofiltration protocols on an intensive care unit to a greater extent than doctors.

The practice portfolios of the participants were used to inform the interview schedules used in this present stage. The 'Record of Competencies' section of the portfolios was, however approached in a different manner by each participant. For example, Thomas' competencies section was completed by his DSMP and contained very brief statements (e.g. 'yes'), the detail of which was unknown to Thomas. Tamsin's entries were also very brief (e.g. 'Summative OSCEs') whereas Neil's Record of Competencies contained detailed scenarios of how he had fulfilled each competence. Hence, the detail of information obtained was variable between each portfolio, as well as the participant's ability to discuss their entries. On reflection, the researcher must therefore question the usefulness of the portfolios to inform the research as on many occasions the entries did not facilitate further discussion.

The interviews were mainly conducted at the participants' place of work which meant that the interview 'set-up' was organised by the pharmacist rather than the researcher. As a result two interviews (with Thomas and Bob) were conducted in a small room off a community pharmacy dispensary. In the rooms there was only one chair which both participants insisted the researcher had. This meant that the interview was not conducted in the ideal environment with the participant standing above the researcher. The interview with Thomas was also interrupted on several occasions by the pharmacy staff asking for a dispensing check which meant that the 'flow' of the interview was affected. During the interview with Tamsin another pharmacist entered and began working on a nearby computer. It must therefore be recognised that having

another individual present may affect the dynamics of the interview and make the participant more aware of how she voiced her opinions.

This Chapter has described the second interviews with the pharmacists who were recruited for interviews during training (Stage One). The interviews successfully explored their experiences of the supplementary prescribing training programme and their implementation progress at that time. As expected, each pharmacist or case, had progressed to varying degrees in practising their new role and were faced with different challenges. The next Chapter, Chapter Seven will follow-on and describe supplementary prescribing in practice, more specifically non-participant observation of pharmacist SP-patient consultations.

6.11 Summary

- In summary, six out of the seven pharmacists who participated in Stage One of the research agreed to be interviewed for a second time after their supplementary prescribing training programme had been completed.

- One additional interviewee from HEI C was also recruited. Seven face-to face, semi-structured interviews were therefore conducted in total.

- The themes that emerged from these particular interviews were as follows:

  i) Only one of the participants (Tamsin) had implemented supplementary prescribing into practice at the time of the interviews.

  ii) Barriers to implementation were identified mostly in community pharmacy and included funding, access to patient records, information technology, lack of strategy, being in the first cohort, time, space, implementation of the new pharmacy contract, obtaining prescription pads, lack of awareness and CMPs.

  iii) The pharmacists discussed how they anticipated they would feel when signing their first prescription, varying from 'terrified' to 'no big deal'.

  iv) Independent prescribing was seen to be the future for supplementary prescribing.

  v) The training programme –
      - The most valuable aspect was the time spent supervised in practice.
      - Recommendations were provided to improve the training.
      - The time and commitment to undertake training was vast.

- A mixture of negative and positive views was expressed regarding multi-disciplinary learning. Nurses and pharmacists have both different learning needs and styles.

vi) Reflection was adopted by a few of the pharmacists, even though they did not support it in their first interviews.

- The interviews conducted in this chapter (after training was completed) were utilised to explore the views of the pharmacists on their training programme and to identify where, if possible the role was being practised. The next chapter will now explore supplementary prescribing by pharmacists in practice through non-participant observation of pharmacist SP-patient consultations.

Chapter Seven – Non-participant observation of pharmacist SP–patient consultations (Stage Five and Eight)

7.1 Introduction

The last chapter, Chapter Six described the interviews that were carried out with the pharmacists in the first cohort of the supplementary prescribing training programmes in Wales, after they had completed the courses. This chapter will follow-on and describe the next stage of the research where non-participant observation of pharmacist SP-patient consultations was conducted. In order to allow the recruited pharmacists the opportunity to implement supplementary prescribing into practice this stage took place approximately three months after the previous interviews (Stage Four). The aim of this stage was to observe, record, analyse and report pharmacist SP–patient interactions in the new context of pharmacist prescribing.

This chapter will first present the research questions to be addressed in this stage then a brief description of the medical consultation literature and the methodology to be utilised. A detailed account will then be presented explaining how the methodology of non-participant observation was adopted in this research and the results obtained.

7.2 Research questions

As the use of observation within SP-patient consultations is a new area the research questions to be addressed in this present stage were informed by the literature on medical consultations and were as follows:

   i)   In which settings did the SP-patient consultations take place?
   ii)   What is involved in a supplementary prescribing consultation?
   iii)   How long were the pharmacist SP-patient consultations?
   iv)   How did the pharmacists and patients interact during their consultation?
   v)   What information was discussed during the consultations?
   vi)   What interventions did the SP make during the consultations?
   vii)   How many questions did the patient ask during the consultations?
   viii) How was the CMP used in practice?

7.3 The medical consultation

The medical encounter is a very important communication event where the interaction between the patient and the HCP is used as a means to make decisions regarding treatment options and the care of the patient. Much of the wider literature investigating medical consultations concentrates on the doctor-patient interactions as opposed to the pharmacist-patient consultation. It must therefore be noted that the findings generated from the doctor-patient studies cannot be readily extrapolated to the present study.

Medical consultations can take many forms, from the passive, all-accepting patient who allows the doctor to take control of the consultation to the collaboration of doctor and patient to achieve a mutual goal. For many years the doctor-patient consultation has been dominated by the HCP, what is known as paternalism (Charles *et al.*, 1999). However, this approach has more recently been opposed where a partnership between the doctor and the patient is viewed as more favourable in order to promote concordance as opposed to compliance (Charles *et al.*, 1997; RPSGB, 1997b). The Medicines Partnership initiative has also been supported by the DoH in order to assist patients in becoming partners with HCPs in making decisions about their medicines (Medicines Partnership, 2005). In concordance the decision making is therefore shared and is seen as a means of reducing the power asymmetry between the doctor and patient therefore allowing increased patient autonomy. As the treatment of chronic conditions has been increasing over the years then the relationship that the doctor and patient has is more than likely going to be long term. The treatment and management of the condition is therefore going to be made easier if a partnership exists (Charles *et al.*, 1997).

Charles *et al.* (1999) differentiate between three models of consultation. Firstly, the 'paternalistic model' mentioned above where information is passed from the doctor to the patient with the patient passively accepting the doctor's information and decisions. In this model there is no shared decision making. This is in line with Parsons' (1951) model of the 'sick role' where the patients are passive accepters of information and the doctor is regarded as being the expert. Secondly, in the 'shared model' information is provided from both the doctor and the patient, there is a free exchange of information about disease management options and treatment preference. It is both the doctor and patient that agree on a treatment option. Finally, in the 'informed model' the doctor provides the patient with sufficient information to allow them to make their own decision about which treatment option to adopt. However, doctors, in practice may utilise a mixture of the three models.

The patients in this present study may have several HCPs managing their conditions including the doctor (IP) and pharmacist SP. It would therefore seem beneficial if the preferences of each party be agreed in order to conform to the definition of supplementary prescribing, that is, 'a voluntary partnership between the IP and a SP' and to produce the patient specific CMP. Charles *et al.* (1997) state that in order to display shared decision making four criteria need to be present in the interaction. These are a) the patient and doctor is involved in the interaction, b) information is shared between the two parties, c) the doctor and the patient work to an agreement with regard to the treatment of choice and d) there is a final agreement about which treatment to be carried out. However, the research suggests that in a significant number of consultations shared decision making does not happen. The research based on sharing the decision making process appears to come from North America. The results therefore cannot be readily extrapolated to the United Kingdom due to the differences in the health care system (Stevenson *et al.,* 2000).

The relationship between the doctor and patient is a complex one. Ong *et al.* (1995) state that this is probably due to the fact that the participants do not have an equal status; it is not a voluntary relationship. Doctor-patient interactions are also most likely to deal with important, sensitive information and hence are emotionally charged. The communication between the HCP and patient is likely to have an affect on the satisfaction of the patient, how they concord with treatment, how they remember and recall information provided during the interaction and their quality of life. The communication process is therefore very important. Communication is necessary in order to develop a 'good inter-personal relationship' between the doctor and patient, to share information by either information giving or seeking, and to share the decision making (Ong *et al.,* 1995).

A number of studies have been conducted on the information giving and seeking behaviours of both the doctor and the patient (Ong *et al.,* 1995) with the doctor being responsible for the majority of the 'medical dialogue'. One study demonstrated that the most frequent activity undertaken by the doctor was information giving with asking questions being second (Roter *et al.,* 1988). The amount of information provided can be influenced by a variety of factors such as the amount of questioning by the patient. Both the prescriber and the patient bring their specific agenda to the consultation which must not be ignored. The values, beliefs and ideals of both parties must therefore be acknowledged in order to achieve a successful consultation.

Other features of medical encounters that have been subject to research include the non-verbal aspect of medical encounters such as gaze, posture, tone of voice, touch, laughter and facial expressions, the language used during the consultations such as the use of medical jargon (Ong *et al.*, 1995) and the socio-demographic characteristics of the individuals present such as gender, age and ethnic background (Beisecker, 1990). It is noted in the literature that improved communication between the doctor and the patient does result in better outcomes for the patient (Rimal, 2001). However, it has been recognised that different patient and doctor characteristics such as gender and social class, the type of disease (e.g. acute or chronic) and culture can influence the structure of the encounter (Ong *et al.*, 1995).

The asymmetry of power between the physician and patient has been discussed in the literature (Heath, 1992). The issue of asymmetry in medical encounters was raised by Parsons (1951) who described the roles of the physician and patient as being 'socially prescribed'. In contrast, Pilnick (1998) stated that the asymmetry seen between the pharmacists and patients in the encounters she examined in a paediatric oncology clinic may be accomplished in partnership instead of being forced due to the knowledge held by the patients about their long term condition. Pilnick (1998 p34) also recognised the issue of asymmetry in her study by noting that 'there is some degree of separation between knowledge and status [of doctor and pharmacist]; pharmacists have claim to a specialised body of knowledge but are not generally seen as having the same status as that of a doctor'. The power differential between patient and pharmacist may therefore not be as great as that between doctor and patient. However, in Pilnick's (1998) study the pharmacists were not prescribing medication, instead they were only facilitating the doctor's instructions. In contrast, the SPs in this present study will have the ability to issue prescriptions and monitor treatment in a similar manner to a doctor but within the confinements of a CMP.

Petty (2004) has identified a need for SPs to develop their communication skills in order to better organise their patient consultations. The extended role of pharmacists will result in a modification in the way that the pharmacist and patient communicate. It is also paramount that the pharmacist and their IP can work in partnership together. However, at this point in time the undergraduate teaching of communication skills within pharmacy is very little and hence, pharmacists will need to develop their skills and approach to patient consultations.

A differentiation can be made between a 'task-orientated' or 'doctor-centred' approach and a 'patient-centred' or 'behaviour-orientated' approach to the medical consultation. Petty (2004)

suggests that a 'task-orientated' style may be more appropriate for supplementary prescribing pharmacists in order to minimise the length of consultation and to ensure that achievable outcomes may be set. However, Tawab *et al.* (2005) suggest that a more 'patient-centred approach would be more suitable to facilitate the extension of the pharmacists' role because it is 'at the heart of pharmaceutical care'.

A limited number of studies have investigated pharmacist-patient interactions. Hargie and colleagues (2000) investigated communication within the community pharmacy in order to identify key elements of effective communication skills. These included building rapport, explaining, questioning, listening, non-verbal communication, suggesting or advising, opening and closing. Morrow *et al.* (1993) concentrated on a more quantitative approach to investigate the number of questions asked by the pharmacist and patient during a consultation. However, this approach fails to concentrate on the two-way nature of the dialogue and the interaction between the pharmacist and patient. In contrast, Discourse Analysis (DA) can be used as a means to 'unpick' the nature of the consultation.

7.4 Discourse analysis

Medical consultations can be analysed in a number of ways. DA has grown in popularity within qualitative research (Creek, 2004). DA 'describes a heterogeneous range of social science research based on the analysis of interviews and texts as well as recorded talk' (Silverman, 2001 p178). DA can be used as an 'umbrella' term to contain a number of approaches including conversation analysis (CA). DA is an entirely qualitative approach (Potter, 1997) with the typical studies conducted being an analysis of transcripts from talk in either institutional or everyday situations. DA studies 'discourse as texts and talk in social practices' (Potter, 1997 p146). The language used is therefore not analysed as a separate entity, it is 'the medium for interaction; analysis of discourse becomes, then, analysis of what people do' (p146); it is analysed within the wider context of social action. In contrast CA analyses the minute detail of the social world, the micro social world and how people produce social order, and concentrates on the 'sequential organisation of talk'. Both CA and DA have been utilised as a means of analysing text within health care research.

Sacks *et al.* (1978) have differentiated between the 'institutional talk' and the 'ordinary conversation'. CA's application into the study of institutional settings is known as the 'Institutional talk programme' (Drew and Heritage, 1992). Drew and Heritage (1992 p3) state

that 'talk-in-interaction is the term used for the way that people perform and achieve their institutional goals and tasks - conversation is therefore situated in the task at hand (Drew and Heritage, 1992; Drew and Sorjonen, 1997) and how people make sense of the world around them (Pomerantz and Fehr, 1997).

The analysis of talk through CA in the context of the pharmacy-client interactions has received little attention (John and Housley, 2001). In contrast, the interaction between doctors and their patients to analyse the institutionally specific characteristics of the interactions has generated a number of studies and significantly more interest. Examples include studies reported by Heath (1992). CA has also been successfully used to study pharmacists in a paediatric oncology clinic (Pilnick, 1998; 1999; 2001) and health visitor interactions with their patients (Heritage and Sefi, 1992). Examples of the use of DA within the medical setting includes Wodak (1997) and Mishler (1984), in the pharmacy setting by John and Ylanne-McEwen (2002) and in the HIV counselling setting by Silverman (1997).

7.5 Methodology

7.5.1 Non-participant observation

Observation may be used as a component of the multi-method case study approach (Gillham, 2000). The use of observation within research may either be participant or non-participant, the majority undertaken in PPR being non-participant and quantitative in nature (Smith, 2002d). Observation has been fundamental in the development of social science research (Silverman, 2001). This method allows information to be collected about a person, group of people and the social processes involved within the natural setting in which they occur (Silverman, 2001).

Non-participant observation has been utilised within community pharmacy (Savage, 1996) and the hospital setting (Novek, 2000; Cooper et al., 2004). Mays and Pope (1995) state that this method provides an insight into health care settings. Observation has also been used in combination with other methods such as interviews (Smith, 2002c) within PPR in order to collect data from multiple perspectives. The majority of observation studies in pharmacy have been descriptive, 'identifying, counting and characterising events and activities' (Smith, 2002d p163).

Gold (1958) describes the 'four-fold typology' of observation namely, complete observer, observer as participant, participant as observer and complete participant. The researcher therefore adopts one of the four roles while undertaking field research. However, Hammersley

and Atkinson (1983) state that we are all part of the social world therefore any research that is undertaken will be a type of participant observation, 'no data are ever untouched by human hands' (Silverman, 2001 p159). Observation is believed to be an 'everyday skill' like listening and speaking that has been systematically used within qualitative research (Flick, 2002 p135).

Non-participant observation involves the researcher positioning themselves within the field of study and observing what is happening, to observe what is occurring naturally. What Mays and Pope (1995 p182) call 'naturalistic research'. This is in comparison to the 'researcher driven' data such as in the interview where the information collected would not have been produced without the intervention of the researcher (Silverman, 2001). In contrast to participant observation, in non-participant observation the researcher does not take part in the activity being observed; instead they only observe and record data in the form of field notes and audio recordings. The researcher endeavours to be as 'discreet' as they possibly can. Adler and Adler (1998 p81) define non-participant observation as 'simple observers follow the flow of events. Behaviour and interaction continue as they would without the presence of a researcher, uninterrupted by intrusion'. The advantage of non-participant observation is therefore its unobtrusiveness and the insight it provides into the behaviour of those individuals being observed.

Through observing information is gathered firsthand which allows the researcher to see for themselves what actually happens rather than relying on people to self-report (Flick, 2002). In addition, self-reports such as in diaries or surveys may be an inaccurate account by the participant of what they do, therefore by observing the researcher can obtain accurate information. What may be reported in an interview is often a mixture of what happens and what should happen, the distinction of which needs to be made (Flick, 2002).

The novel use of observation in the context of supplementary prescribing pharmacist-patient consultations is described below.

7.5.2 The use of observation in the context of supplementary prescribing

In this present study non-participant observation was adopted in order to describe the features of a sample of pharmacist SP-patient consultations. The use of the methodology and the recruitment of participants are described below.

7.5.3 Recruitment

The potential participants for this stage of the research had previously participated in earlier stages of this present multi-staged project (Stages One to Four). Convenience sampling was therefore adopted as the researcher was already in contact with the pharmacists and had a record of their contact details. In order for observation to be possible consent had to be provided by the appropriate IPs, pharmacist SPs and patients involved. Consent from multiple parties was necessary as patient management within the context of supplementary prescribing was a partnership. The method for recruitment approved by the LRECs is described below.

7.5.3.1 The SP

- The researcher telephoned the recruited seven pharmacists (from Stage One) approximately one month before completion of their training programmes in order to inform them of the researcher's intention to conduct observation of pharmacist SP-patient consultations (as described in Chapter Six). This was deemed necessary in order to keep the pharmacists updated. An information pack produced specifically for the pharmacists was provided by post at this time (which included a letter inviting participation (Appendix 7.1.1), an information sheet (Appendix 7.1.2) and two copies of a consent form (Appendix 7.1.3)).

- The pharmacist information pack explained what was meant by non-participant observation and what was expected of them. The information pack asked for the pharmacists' permission to be observed in consultation with a number of the patients they would be managing as a SP. They were also asked to act as a gatekeeper to their patient(s) and their respective IPs. A signed copy of the consent form agreeing to the observation and to act as a gatekeeper had to be received by the researcher in order to participate.

- A duplicate information pack was given to the pharmacists at the time of their interview in Stage Four if their initial information pack had been misplaced and for the first time to Lynne. At this time an information pack that had been specifically produced for the pharmacists' IP was also provided (which included a letter inviting participation (Appendix 7.2.1), an information sheet (Appendix 7.2.2) and two copies of a consent form (Appendix 7.2.3)). The pharmacists were asked to forward this pack onto their respective IPs.

- The pharmacists were contacted via e-mail or telephone (the method deemed most convenient by the pharmacists in earlier stages) by the researcher approximately three

months after the training course in order to ascertain if they were supplementary prescribing and to encourage participation.

- If the researcher had received no response after two weeks then it was assumed that the pharmacists did not wish to participate. If, at this time supplementary prescribing had not been implemented it was agreed that the researcher could maintain contact with the pharmacists to ascertain when they had begun prescribing to potentially participate at a later date.

- When supplementary prescribing had been implemented and consent had been received from the pharmacist and IP the pharmacists were then asked to identify eligible patient(s) to be observed. The researcher was not aware of the patients' identity until patient consent had been received. Patient inclusion criteria was as follows:

I. Adult (18 years old or over).

II. The patient must have their treatment managed by the pharmacist SP.

III. The patient must have a pre-arranged consultation date with the pharmacist.

IV. Patients whose IP and SP had consented to the observation.

- A form was also provided to be used by the SP and IP as a means to identify which individual patients they had both agreed were suitable to be approached for this stage of the research (Appendix 7.4).

7.5.3.2 The IP

Informed consent had to be obtained from the IP of each pharmacist that consented to this stage of the research. Even though the IP may not have been present at the consultations it was necessary to request their consent as the patients were managed in a partnership between themselves and the pharmacist SP. Consent was obtained as follows:

- As explained above the pharmacist SP who had agreed to participate was requested to forward a copy of the IP information pack (Appendices 7.2.1, 7.2.2 and 7.2.3) to the IP that they were working in partnership with. The consent form also requested permission for the researcher to store the IP's contact details so that they could be contacted for further stages in the study (an interview in Stage Six).

- A signed copy of the IP consent form agreeing to the observation had to be returned to the researcher before this stage could progress.

- The decision as to which patients were appropriate to be observed was left to the discretion of the SP and IP (within the inclusion criteria). Only after the pharmacist and

IP were in agreement as to which eligible patients should be approached was the process of obtaining patient consent initiated.

7.5.3.3 Patients

Consent was obtained from each patient as follows:

- Once the SP and IP had agreed as to which patient(s) were appropriate the pharmacist was then requested to forward a patient information pack (which included a letter inviting participation (Appendix 7.3.1), an information sheet (Appendix 7.3.2) and two copies of a consent form (Appendix 7.3.3)) to each individual. This was done in a variety of manners depending on the pharmacist, either by post or handed face-to-face.

- A signed copy of the patient consent form had to be received by the researcher before the observation could take place. The patient was also asked if they would consent for their contact details to be held by the researcher so that they may be contacted for another stage of the research (an interview in Stage Six). The patients had the option to consent to the observation with or without providing their contact details.

- Observation of the next consultation that the patient had with their pharmacist SP could then take place.

7.5.4 Position of the researcher

The position of the researcher while observing must be suitable to record all of the data required but not so that it is obtrusive to the process being recorded (Smith, 2002d). The exact position of the researcher was different for each pharmacist being observed as this depended on the layout of the consultation rooms. However, on each occasion the researcher sat away from the patient and pharmacist, out of their eye line so that their presence could be minimised as much as possible.

7.5.5 Recording

The researcher intended that the pharmacist-patient consultations be audio-recorded. Sacks states that researchers should work with 'actual occurrences of talk' (Silverman, 2001 p161), that is, record them as they happen as the notes that can be made and the recollection that individuals may have can in no way reflect the detail of the conversation such as the pauses and overlaps (Sacks, 1992). The actual details of the interaction can therefore be recorded and transcribed verbatim. The use of the tape recorder has overcome the issue of recall and provides the following advantages (Psathas, 1995; Sacks: 1992); it is a public record, the tapes can be played and re-played so that the initial transcript can be improved and any mistakes rectified and the

sequences of the talk is preserved. By taping the interaction the researcher is also free to make contextual notes such as the position of the pharmacist, patient and recorder, non-verbal interactions and activities undertaken during the interaction such as patient monitoring.

The recordings were made using the same audio recording system used for the interviews in previous stages (Sanyo TRC-6300 micro-cassette recorder). This was placed in close proximity to the participants in order to record all of the utterances made during the consultation.

7.5.6 Field notes

Field notes were made during the consultations on a pre-printed form by the researcher (Appendix 7.5). The use of audio recordings and field notes in combination were also used by Pilnick (1998) as a means to 'illuminate some activities' (p34).

7.5.7 Transcription

The recordings of the consultations were transcribed verbatim using conventions modified from Gail Jefferson's (1984) (Appendix 7.6). This system is recognised as being suitable to make the sequential aspect of talk visible (Ten Have, 1999). Ten Have (1999) also states that transcribing is used to allow the investigator to 'capture the data' (p6). Mishler (1984) notes that by omitting the detail of speech such as overlaps, pauses and false starts the data analysis, interpretation and understanding of the interaction will be affected. It is therefore paramount to recognise the difference between text and speech and to move between the transcript and the tape recording to review the interaction and to 'ground' the analysis (Mishler, 1984).

7.5.8 Analysis of the observation transcripts - DA

The use of DA to analyse medical consultations has been discussed earlier in this chapter in section 7.4.

7.6 The results of the recruitment process

Table 7.1 details which of the pharmacists had implemented supplementary prescribing, who consented to be observed in consultation, to the consultation being audio recorded and which IP allowed the researcher to hold their contact details.

The manner in which each consenting pharmacist identified and recruited their patients is described below.

Table 7.1. SP and IP recruitment summary for Stage Five

| Name of SP | Supplementary prescribing? | SP | | IP | | |
		Obs	Audio	Obs	Audio	Contact details stored?
Thomas	No	-	-	-	-	-
Neil	Yes	No	-	-	-	-
Helen	Yes	Yes	Yes	Yes	Yes	Yes
Bob	No	-	-	-	-	-
Tamsin	Yes	Yes	Yes	Yes	Yes	Yes
Nicola	No	-	-	-	-	-
Lynne	Yes	Yes	No	Yes	No	No

Obs = Observation   Audio = Audio recording of the consultations

7.6.1 Helen

Both Helen and her DSMP consented to the observation of her supplementary prescribing consultations. However, Helen had only started supplementary prescribing with one patient, and the consultant of that particular patient was not her DSMP. Helen stated that it was therefore not possible to observe this patient's consultation and consent was not received from the other consultant.

7.6.2 Tamsin

Both Tamsin and her DSMP consented to observation of patient consultations, including audio-recording. Tamsin's clinic was organised so that patients attended every three weeks:

- Tamsin identified which clinic it was convenient for the researcher to attend and the number of appropriate patients.

- The researcher supplied Tamsin with the correct number of patient information packs by post.

- At the patient's appointment before the identified clinic (three weeks earlier) the information packs were handed to the patients by Tamsin. She was also asked to verbally describe what was expected, to explain who the researcher was and that a consent form was included in the pack which was to be returned should the patient agree to be observed.

- The researcher was present at the next consultation of the consenting patients three weeks later.

- This process was carried out twice (Table 7.2).

Table 7.2. Recruitment details of Tamsin's supplementary prescribing patients

Clinic no.	No. of patients identified	No. of patients consenting to		
		Observation	Audio-recording	Researcher holding contact details
1	2	1*	0	0
2	2	2**	2	1

* This patient will be referred to as patient number T1
** These patients will be referred to as patient numbers T2 and T3

7.6.3 Lynne

Both Lynne and the IP that she worked in partnership with in her clinic consented to the consultations being observed but not to the audio recordings. This particular IP was not the DSMP who mentored Lynne through the supplementary prescribing training programme. It was therefore appropriate to obtain consent from the clinic doctor rather than her course DSMP as they were from different GP surgeries.

Lynne held a clinic one morning a week where patients would return every two to four weeks:

- After consent was obtained from her IP she provided the researcher with a clinic date to attend and the number of patients with appointments that she deemed suitable to be observed for that day.

- The appropriate number of patient information packs was supplied to Lynne by post.

- Lynne asked that the receptionists at the surgery post the packs out to the patients. However, the day before the researcher was due to attend Lynne telephoned to say that the receptionists had forgotten.

- As an alternative Lynne suggested that before each appointment she would explain the research to the patients with the aid of the information packs and ask the patients then if the researcher could be present and to sign the consent form. At this time Lynne explained who the researcher was, the reason behind the research and that the researcher was only there to observe. The researcher was not present at this time.

As this process was deemed to be more convenient to Lynne and the practice this was the process adopted during each clinic visit. In total the researcher attended three clinic sessions. Table 7.3 describes patient recruitment for each clinic.

Table 7.3. Recruitment details of Lynne's supplementary prescribing patients

Clinic no.	No. of patients identified	No. of patients consenting to....	
		Observation	Researcher holding contact details
1	5	4*	0
2	6	5**	0
3	7	5***	0

In clinics one and two, one patient did not attend hence there was one less potential patient to consent to the observation than the number identified.

*These patient will be referred to as patient numbers L1, L2, L3 and L4

** These patients will be referred to as patient numbers L5, L6, L7, L8 and L9

*** These patients will be referred to as patient numbers L10 and L11. Those observed a second time were L4, L6 and L9.

Out of the seven patients in the third clinic, only two had not previously been observed by the researcher (L10 and L11), both of these patients consented. Out of the five remaining patients one had already been observed in the first clinic (L1) and declined to be observed a second time. The other four patients had been observed previously and three of these consented to be observed again (L4, L6 and L9). In agreement with Lynne, the researcher deemed the fourth patient (L8) inappropriate to be approached for a second time as she was unable to provide informed consent. Her consultation was only observed the first time as she was present at her mother's appointment (L7) with her consultation immediately after. The researcher was therefore already present at the mother's agreement. The second consultations with the same patients will be referred to as L4(2), L6(2) and L9(2).

7.7 Clinic organisation

7.7.1 Layout of the clinic – Tamsin

Tamsin ran a hospital out-patient breast cancer clinic one morning a week with a specialist nurse where the patients would attend every three weeks for a course of chemotherapy. They would come to the clinic, have a blood test taken then have a consultation with Tamsin and a specialist nurse to discuss their health. Once the blood test results were returned and interpreted the decision was made whether to repeat the chemotherapy. If the chemotherapy was to go ahead Tamsin then wrote a prescription for the patient's treatment to be dispensed by the pharmacy and administered the following day. The layout of the clinic and consultation room is displayed in Appendices 7.7 and 7.8 respectively.

7.7.2 Layout of the clinic – Lynne

Lynne ran a benzodiazepine withdrawal clinic in her IP's GP surgery one morning a week. The surgery had taken the decision to encourage and assist their patients to cease taking benzodiazepines. The patients who regularly took this class of medication were identified,

contacted and asked to attend an appointment with Lynne. The patients attended an initial consultation to discuss whether reducing their medication was appropriate and if so, the options of how to reduce. After the initial consultation patients would attend regular appointments at two to four weekly intervals to assess progress and decide whether to reduce further. The layout of the GP surgery and consultation room is displayed in Appendices 7.9 and 7.10 respectively.

7.8 An introduction to the patients

As described above three of Tamsin's patients and 11 of Lynne's patients were observed in consultation, all were adult. Tamsin had previously met all of her patients before and all were middle-aged and female. Nine of Lynne's patients were female and two were male. The majority of Lynne's patients were middle-aged or elderly with only one female patient in their thirties. Lynne had met seven of her patients previously (Patients L1, L2, L3, L4, L9, L10 and L11). The medical notes of those patients she had not met before were used a means to assess their suitability for observation.

7.9 Field notes details

For the observed consultations the following information was collected on a field note template:

1. The purpose of the consultation

The arrangement and purpose of the consultations for both SP is detailed above. Tamsin saw her patients in order to discuss their side effect symptoms and answer their questions before their next course of chemotherapy. Lynne had regular appointments with her patients to evaluate their progress as they attempted to withdraw from benzodiazepine use. Lynne's patients were withdrawing from nitrazepam, temazepam or zopiclone at varying doses. The strategy used to withdraw also varied between individuals. These included titrating doses on alternative nights (for example zopiclone 7.5mg and 3.75mg on alternative evenings) or selecting a couple of evenings a week where a reduced dose would be taken (for example two 5mg nitrazepam tablets each evening except on Tuesdays and Thursdays where one 5mg tablet would be taken). Both pharmacists had access to the patients' medical notes either prior to or during the consultation.

2. Duration of the consultations

Tamsin's consultations lasted on average 13 minutes and 20 seconds where 15 minute appointments were provided. Lynne's appointments were 20 minutes long with the average consultation length being 14 minutes and 20 seconds.

3. How the researcher was introduced to the patients

The researcher was introduced by Lynne by their name and that they were from Cardiff University. She emphasised that the researcher was present in order to investigate her in consultation and that the patient was not to worry about the researcher being present and was only going to sit and observe.

The researcher introduced herself to patients T1, T2 and T3. Tamsin was unfortunately unwell when the researcher attended her clinic to observe patients T2 and T3. Because this was a chemotherapy clinic and the risk of contamination it meant that Tamsin was unable to take part in their consultations. As an alternative the researcher introduced herself to the patients and asked if it would be possible to attend their next appointment in three weeks time when Tamsin had recovered. Both patients agreed to this and therefore had already met the researcher when the observation took place.

4. How the pharmacist introduced herself to the patients

Tamsin had already met all three patients previously therefore did not introduce herself in the consultations observed. Where Lynne had not previously met the patients she introduced herself by her first name and that she was a pharmacist who had done some extra training which meant that she could prescribe. The term 'supplementary prescriber' was not used during any of the consultations.

5. The individuals present and interruptions to the consultations

The individuals present in each of the observed consultations are displayed in Table 7.4. For patient T1 the regular specialist nurse had decided not to participate in the consultation as research was being conducted. However, the consultation was interrupted by another specialist nurse who joined the consultation to provide the patient (T1) with information she had requested at a previous appointment. The same specialist nurse also entered patient T3's consultation, queried her entry (as she knew the researcher was present) but was told by Tamsin:

1. **Pharmacist:** No no no it's a normal [normal consultation]
2. **Nurse:** [Right ok (0.2) fair enough]

The researcher was therefore unable to obtain the nurse's consent to be recorded as it would have meant interrupting the consultation.

Table 7.4. The individuals present during the consultations observed in this present stage.

Patient	Individuals present
Tamsin	
T1	Tamsin, T1 and specialist nurse
T2	Tamsin and T2
T3	Tamsin, T3, T3's husband and specialist nurse
Lynne	
L1 – 6, L9 – 11	Lynne and the patient
L7 and L8	Lynne, L7 and L8 in joint consultation

The majority of Lynne's consultations were interruption free apart from L1, L4(2) and L6(2) where the practice nurse whose consultation room Lynne was using entered to collect an item from the room and L3 where a member of the practice staff knocked and opened the door of the consultation room in error.

6. **The monitoring and interventions conducted by the SP including any issuing of prescriptions**

The interventions undertaken during the consultations varied between pharmacist and patient. No physical assessments such as blood pressure monitoring were carried out in any consultation. Tamsin's clinic was used to only discuss the patient's side effects to treatment hence no interventions were carried out to the patient's treatment at that time. No prescriptions were issued by Tamsin during her consultations as they were to be written only after the patient's blood test results had been confirmed as suitable to receive chemotherapy. The prescription would be issued to the hospital pharmacy department to prepare the chemotherapy rather than to the patient. The patient would receive medications to manage their side effects but only on the following the day.

In the consultations observed in Lynne's clinic she titrated doses to assist in benzodiazepine withdrawal. Table 7.5 describes the interventions undertaken, where prescriptions were issued and consultation outcomes. The quantities supplied on the prescriptions issued were calculated to ensure that the patient had enough supplies to last until their next appointment. For patient L6(2) two prescriptions were issued to cover the time until the next appointment. As a large number of the controlled drug temazepam were prescribed Lynne was aware that when the patient took the prescription to the community pharmacy to be dispensed the pharmacist may query the large amount and therefore she split the total over two prescriptions to avoid this delay on dispensing.

Table 7.5. The interventions, outcomes and prescription supply in Lynne's consultations.

Patient	Intervention	Prescription supplied?	Outcome
L1	Reduce dose of zopiclone from 7.5mg a night to 7.5mg and 3.75mg on alternate nights.	Yes*	Prescription and appointment in four weeks.
L2	Reduce dose of zopiclone from 7.5mg a night to 7.5mg and 3.75mg on alternate nights.	Yes*	Prescription and appointment in three weeks.
L3	Reduce nitrazepam dose from two 5mg tablets each night to one 5mg tablet on a Monday and Thursday and two 5mg tablets the other nights.	Yes*	Prescription and appointment in two weeks.
L4	No interventions. Patient to think about reducing.	No	Appointment in two weeks.
L4(2)	No interventions. Patient to remain on nitrazepam 5mg a night.	Yes	Prescription and appointment in four weeks.
L5	No interventions. Patient to think about reducing.	No	Appointment in three weeks.
L6	Re-introduce temazepam 10mg on alternate nights.	Yes**	Prescription and appointment in three weeks.
L6(2)	Increase dose from temazepam 10mg alternate nights to 10mg and 5mg on alternate nights.	Yes	Prescription and appointment in nine weeks.
L7	Patient inappropriate to be withdrawn via Lynne. Patient referred back to IP.	No	Referral to the IP.
L8	No interventions. Patient to remain on temazepam 5mg a night	No	Appointment in three weeks.
L9	Reduce dose of zopiclone from 7.5mg a night to 7.5mg and 3.75mg on alternate nights.	Yes	Prescription and appointment in three weeks.
L9(2)	No interventions. Patient to remain on zopiclone 7.5mg and 3.75mg on alternate nights.	Yes	Prescription and appointment in four weeks.
L10	Increase dose from one nitrazepam 5mg tablet a night to one and a half a night.	Yes	Prescription and appointment in four weeks.
L11	No interventions as patient inappropriate to withdraw.	No	Patient to continue taking tablets as before.

* Lynne authorised the prescription but as her prescription pads had not yet arrived. The patients therefore took a seat in the waiting area while she asked the receptionist to print a prescription and then asked the IP to sign it before handing it to the patient.

** This was the first prescription that Lynne had ever written as a SP.

Lynne wrote her first prescription for patient L6 who had taken a seat in the waiting area. Lynne had assumed that she would have to ask her IP to sign the prescription for her again but on that occasion she discovered that her prescription pads had just arrived. She wrote the prescription in front of the researcher openly questioning if she had written everything correctly before she handed it to the patient.

Where the next appointment was agreed during the consultation Lynne entered the appointment onto the practice computer system and issued the patient with a card stating the date and time. In a number of consultations Lynne also entered notes onto the patient's electronic medical record.

In addition, Lynne discussed the reasons and benefits of reducing benzodiazepines to the patients in an attempt to explain why the surgery had decided to take on this initiative. She also discussed the options of how to withdraw and what the patients' views were on reducing their usage. In a number of consultations health promotion information was provided both verbally and in the form of leaflets in order to assist the patients in having a good night sleep. Lynne also provided advice at the request of the patients regarding other medicines. Advice included the addictive properties of another drug a patient had been prescribed (Tramadol), the timing of taking other medicines in relation to sleeping tablets and pain control.

7. The use of the CMP during the consultation

The CMP was not referred to in any of Tamsin's consultations. Tamsin held the patient's notes on her lap throughout the consultations. However, she did not refer to them with patient T1; she wrote in the notes with patient T2 and looked at the notes with patient T3.

Lynne referred to the CMP with patients L4(2), L9 and L10. The CMP was described as a plan to ensure that the pharmacist could write a prescription for the patient. The words 'clinical management plan' was not used, none of the three patients read the document and each signed without asking any questions.

8. The input of the individuals during the consultations

The consultations mostly consisted of the pharmacist asking questions and providing information. In contrast the patients asked a small number of questions and tended to agree with the information that they were being told. Comments such as:

> 'That's right, well you know' (L4) and
> 'I know you're doing your best' (L4(2))

were given by some of the patients. The patients related their symptoms (in Tamsin's clinic) and the reasons for wanting to continue taking their sleeping tablets (in Lynne's clinic) to occurrences in their life by using narrative. The patients therefore referred to issues in their personal life such as other members of their family, family problems and how they were coping with their conditions in their every day life.

An exception was seen with patient T3 who asked several questions during her consultation such as:

63. **Pharmacist:** [Have] we have we given you the tablets
64. to put under your tongue before you come? (0.2)
65. **Patient:** What's that for? (0.2)

The specialist nurse present with patient T3 also had a significant input into the consultation including asking and answering the patient's questions. Tamsin's contribution was therefore reduced but did include providing information relating to the medication used to treat the side effects. The husband of T3 only played a small role in the consultation where the patient was clarifying information with him. The transcripts of the two recorded consultations, that is, Tamsin with patients T2 and T3 are provided in Appendix 7.11 and 7.12 respectively.

9. The non-verbal behaviour of the pharmacist and patient

Tamsin was positioned either opposite (T1 and T3) or next to (T2) her patients during the consultation. (Tamsin's consultation layout is displayed in Appendix 7.8.) Hence there were no barriers between them. Lynne and her patients sat around the corner of her desk. (Lynne's consultation layout is displayed in Appendix 7.10.) There was no personal contact between them apart from L7 who touched Lynne's hand at one point during the consultation. The patients, as they agreed with the information provided by the pharmacists nodded and said 'yeah' and 'mm mm' frequently throughout the conversations.

10. The awareness of those present that the researcher was observing

Non-participant observation meant that the researcher sat in the corner of the consultation room and did not contribute to the interaction. However, in nine of Lynne's and two of Tamsin's consultations the patients smiled or directed some of their comments at the researcher. In order to do this the patients had to physically turn around to face the researcher which meant that the gestures were intentional. At which point the researcher only smiled back at the patient but did not respond to their comments in order to minimise participation. Only patients L7 and L8 shook the researcher's hand as they left their consultation.

Both Tamsin and T2 were acutely aware of the researcher's presence where Tamsin wanted to clarify that the interaction was satisfactory to the researcher and patient T2 spoke to the researcher as she left the consultation:

235. **Pharmacist:** [[Lovely That that fine? (directed at the researcher)
236. **Researcher:** Brilliant, thank you very much

237. **Patient:**	I'll see you on the twenty first then about ten o'clock
238. **Researcher:**	Brilliant
239. **Patient:**	Ok?
240. **Researcher:**	Thank you very much
241. **Patient:**	You're welcome, after all if you don't have people you
242.	can't learn anything
243. **Pharmacist:**	No

Patient T3's husband also stated that:

723. **Husband:**	She doesn't talk this much normally (laugh)
724. **Patient:**	Normally quiet usually, usually talk about it, I bring it
725.	up, my son's a doctor as well

This begs the question why patient T3 had been talking more throughout the consultation when the researcher was present.

7.10 Analysis of transcripts

The recorded transcripts for patients T2 and T3 have been described above and are provided in Appendix 7.11 and 7.12 respectively. DA and CA were not utilised in this present study due to the recruitment of only two patients.

7.11 Non-participant observation of pharmacist SP-patient consultations with those pharmacists in the second cohort (Stage Eight)

As described in Chapter Two a third protocol amendment was approved in order to allow non-participant observation of the second cohort of pharmacist SPs in consultation with their patients. However, as none of the pharmacists from the second cohort had implemented supplementary prescribing into their practise by the end of the research period it was not possible to conduct this stage of the study.

7.12 Discussion

'Non-participant observation studies are a popular and valuable method of obtaining data for research on topics of importance to the future of pharmacy, documenting what actually goes on rather than what people report' (Smith, 2002d, p174). During some of the consultations there were some additional individuals present such as the husband and specialist nurse with patient T3. Mason (2002) recognises that some individuals can be observed unintentionally by the researcher where they have not provided consent. However, the researcher had been introduced to the specialist nurse and it was explained that Tamsin was being observed in consultation. This explains why the specialist nurse had queried whether she should be present in patient T3's

consultation and hence re-assured by Tamsin. Consent was not obtained before hand but the nurse was aware of the research. Consent was also not obtained from the patient's husband but it was hoped that she had made him aware before hand that the researcher would be present.

As explained above three of Lynne's patients were observed for a second time. This was originally not intended but as Lynne invited the researcher to stay longer in the third clinic it was decided it would be appropriate to do so. The results obtained from seeing these patients a second time did not justify asking all patients for a second observation. The consultations were held in the same manner as the first and no further information was obtained.

Only three pharmacists allowed the researcher to observe some of their consultations. Supplementary prescribing was a new role for the majority of the participants and the idea of a 'stranger' watching how they were practicing in a new area may have been a deterrent. A number of the pharmacists stated that they needed a 'bedding in' period so that they could build their confidence in the role before being observed. However, even after some time had elapsed further participation had not come to fruition. The timing of the research also meant that the non-participant observation (Stage Five) was conducted before some of the pharmacists had the opportunity to implement the role into their practice. This meant that an opportunity to recruit more patients and observe more consultations was lost.

Due to the small number of pharmacists and consultations observed and the nature of qualitative research it is not possible to generalise the information collected to a wider population (Babbie, 2001). In addition, only two consultations were audio-recorded and only one of those being with a pharmacist alone. It was therefore not possible to draw conclusions from the interactions through DA and deemed more appropriate to only describe what occurred in the consultations. If more recorded supplementary prescribing consultations could be observed in the future then DA would be an appropriate method of analysis to investigate the interaction between the pharmacist SP and patient further.

Frankfort-Nachmias and Nachmias (1992) state that the biggest advantage of observation is that it is 'direct' and therefore researcher's can see what participants do first hand. However, it must be recognised that the behaviour and prescribing practices of the pharmacists may deviate from a time when they were not being observed. This could be seen, for example, where Tamsin asked the researcher if she had performed satisfactory with patient T2. The recorded interaction with

the patients may therefore not be a true reflection of a supplementary prescribing consultation. This will affect the validity of the study and is known as the Hawthorne effect (Savage, 1996). One study made an effort to quantify the Hawthorne effect in community pharmacy stating that as the period of observation was extended then the effect or reactivity would decrease as the pharmacists adapted to being observed (Savage, 1996). The potential for reactivity is increased if the activity being observed is socially acceptable. For example it is socially acceptable to provide information to patients with dispensed medication to ensure safe use, with observation this activity may be increased. However, the presence of the researcher in the study by Savage (1996) affected each participant differently. It is therefore difficult to assess in this present study how each observed individual adapted to the presence of the researcher. Each participant reacted differently in the manner they recognised the presence of the researcher from only smiling at the researcher to directing comments at them to talking more frequently (patient T3). The researcher made a point of sitting out of view of the patient so that they were not facing each other, to remain as unobtrusive as possible as it may have biased the results (Smith, 2002d).

Any reaction to the researcher was therefore intentional as the patient would have had to turn around to do so. The researcher must therefore be reflexive on the impact they have had on the field under study and the role of the researcher within the field must be defined (Flick, 2002). Cooper et al. (2004) also reflected that some participants in her study chatted to the researcher, making observation more difficult. In this present study, when the participants turned and spoke, looked or smiled at the researcher it was more difficult to make notes due to patient awareness.

The ethical aspects of observation are an important issue to acknowledge (Mason, 2002). The researcher must therefore decide the 'identity' that they will take on in the field. In this present study the researcher was not introduced as a pharmacist, but as a 'researcher from Cardiff University'. The reason being that the researcher didn't want the patients to feel that they were being viewed by two HCPs or that the clinical performance of their pharmacist was being evaluated, to be as unobtrusive as possible. In addition, the patients were then less likely to utilise the researcher as a health care resource such as asking questions about their medication or condition. It was purely the interaction that was concentrated on. However, the researcher's position as a pharmacist was mentioned in the patient information sheet, the detail of which absorbed by the patient is unknown. Mason (2002) acknowledges that the role that a researcher decides they are going to undertake will not necessarily be perceived as such by those involved.

Even though observation allows the researcher to obtain a 'thick description' of the activity being researched the method is limited as it is impossible for the researcher to record everything that happens (Flick, 2002). The data are also very context specific and situated in the field of study. It is not possible to produce a 'full and neutral account of a setting' (Mason, 2002 p89). The researcher needed to be focused and selective during the data collection in order to obtain the information needed. What was recorded was also dependent on the researcher's views and ideas as the research may be 'contaminated' by the beliefs of the researcher. This may add bias to the data as each researcher may observe and record things differently (Silverman, 2001). However, in this present study only one researcher was performing the observation minimising the affect of multiple observers. Reliability can also be increased by utilising standardised formats of collecting field notes (Silverman. 2001). For the purpose of this present study the prepared field note sheet was produced before hand as a means of limiting and concentrating on the relevant aspects of the consultation. The format of the field note sheet was amended after the first two periods of observation to make entries easier to record.

Silverman (2001) believes that the idea that something can occur completely naturally away from the researcher should be used with care. The complete observer as mentioned earlier would be some distance from the event with the participants potentially unaware of being observed. It must therefore be recognised that due to the researcher being present in the pharmacist-patient consultation that some interaction is going to be made with the participants even if it is only a greeting and an explanation of the research (as seen in this present study). The role of observer as participant may therefore be more appropriate to this present study as it involves formal observation with only brief visits to the field of study and in a small number of consultations (Gold, 1958).

Atkinson and Hammersley (1994) list four problems concerning observation fieldwork. These include whether the individuals being observed know if they are being observed or not as covert research is deemed unethical. Secondly, the amount of information the participants are supplied with may influence how they behave and finally the role and orientation of the researcher must be recognised as discussed above. Enough information therefore needs to be provided so that the participants can provide informed consent (COREC, 2003). Hence, the participants in this present study were provided with a detailed information pack.

Cooper *et al.*, (2004) state that their professional association with the hospital pharmacists and common interests in their non-participant observation study allowed easier access. The relationship with the two pharmacists (Lynne and Tamsin) had developed over the course of the research, especially as Lynne was known to the researcher previously which may have assisted in gaining access to the consultations. Access to the clinics may have been aided by the fact that the researcher is also a pharmacist and is therefore aware of, for example patient confidentiality along with the approval of the LRECs and R&D Offices which may have eased concern on the participants' part.

Smith (2002d) reports that the response rate for non-participant observation may be greater than, for example interviews due to the fact that once an individual has agreed to be observed it is then up to the researcher to organise and collect the data. The effort required on the part of the participant is minimal as they will be attending their appointment regardless of the researcher's presence. Hence, the majority of the identified patients (17 out of 18) agreed to the researcher being present. However, should either the pharmacist or the patient have believed that the presence of the researcher would compromise the privacy of the patient or if sensitive issues were being discussed then this may account for some non-participation. For example, when patient L5 declined for the researcher being present a second time and Tamsin's patient who declined as she had been unwell prior to the consultation.

The patients had a very minimal input into the consultations with the majority not disagreeing with what the pharmacists' said. As stated above the asymmetry of the medical encounter has been discussed in the literature (Beisecker, 1990) with the HCP generally having more of an input compared to that of their patients. Further research may be carried out on the communication processes of the pharmacist SP and patient. The communication of the doctor and patient within the cancer (Ong *et al.*, 2000), and more specifically within breast cancer setting have been researched (Siminoff *et al.*, 2000). The results demonstrate that the communication and patient input (for example asking questions) can affect the outcome of the consultations and the patient's satisfaction with care.

The term 'supplementary prescribing' or 'supplementary prescriber' was not used throughout any of the consultations. As the majority of patients had already been seen previously it was not known how supplementary prescribing was explained and how much input the patients had in deciding who would manage their care or in their CMP. When Lynne met new patients, it was

only explained that she was a pharmacist who had done extra training to mean that she could prescribe. CMPs were only mentioned in three consultations where no questions were asked by the patients. A fundamental aspect of supplementary prescribing is that the CMP is produced with the patients' agreement (RPSGB, 2002a). Further research could be carried out to determine the level of involvement patients have in deciding their treatment path and their views of having pharmacists managing their care.

Only a small number of prescriptions were actually written by the SPs. This was due to the clinic organisation on Tamsin's part but to the delay in obtaining prescription pads for Lynne, a barrier to implementation already discussed in Chapter Six. It was a privilege for the researcher to be present at that moment in the pharmacist's career. She openly questioned what she had written on the prescription with the researcher to ensure all of the required information was present. Her nervousness expressed in response to issuing the first prescription corresponds with the way she had anticipated feeling (described in Chapter Six). The presence of the researcher gave the opportunity to see that how the pharmacist had predicted she would feel actually happened in really, that is double and triple checking her prescriptions.

Non-participant observation has previously been carried out within a number of health care settings (Mays and Pope, 1995) but not within the context of supplementary prescribing. The results obtained from the small number of consultations observed therefore provide a glimpse into the pharmacist SP–patient consultations. This is an exploratory study and hence the aims set out have been achieved. The researcher hoped that more of the pharmacists from previous stages would have participated and hence recruited more patients. However, as supplementary prescribing and the process of leading a clinic was a new role for many of the pharmacists then maybe they did not care for the presence of others as they developed their confidence in the role. Further work needs to be carried out in order to recruit more pharmacists and patients to this type of research to gain a broader perspective and to utilise the DA method of analysis.

This chapter has described the use of non-participant observation of pharmacist SP-patient consultations. Chapter Eight will continue with the next stage of the research. This next stage (Stage Seven) involves a final interview with a number of the recruited pharmacists from cohort one in order to explore their progress in practising as a SP. In addition interviews were conducted with a number of DSMPs and a patient who was managed by supplementary

prescribing. This allowed the other members of the prescribing partnership the opportunity to participate and to explore other aspects of the case or pharmacist.

7.13 Summary

- In summary, out of the seven pharmacists who participated in Stage Six only four were supplementary prescribing at the time of this present stage. Three consented to be observed in consultation and hence to act as a gatekeeper to their IPs and patients but only two participated.

- In total, three of Tamsin's patients and eleven of Lynne's patients were observed in consultation.

- Out of a total of seventeen appointments only two were audio-recorded and transcribed. Detailed notes were recorded throughout all of the consultations on a field note template.

- Due to the small number of recorded interactions it was deemed appropriate to only describe what happened in the consultations on the following aspects:

  i) The purpose and duration of the consultations.

  ii) How the pharmacist introduced themselves and the researcher to the patient.

  iii) Who was present at the consultations and any interruptions.

  iv) The patient monitoring, interventions undertaken and whether a prescription was issued by the pharmacist.

  v) The use of the CMP.

  vi) The input of individuals into the consultations.

  vii) The non-verbal aspect of the interactions.

  viii) The awareness of those present that they were being observed and / or recorded.

- The information obtained detailing what happened in the consultations is specific for the interactions in this present study. However, they do provide an insightful description of what happens in a supplementary prescribing consultation which was the aim of this stage of the exploratory study.

Chapter Eight – Interviews with IPs, SPs and patients of the first cohort of pharmacists to become SPs in Wales (Stage Six, Six (a) and Nine)

8.1 Introduction

The previous four chapters have described a number of stages of the research, which involved the pharmacists in the first cohort to be trained as SPs in Wales. This chapter describes the next stage of the research that was conducted approximately six months after the first cohort training programmes had been completed in order to allow the pharmacists the opportunity to implement supplementary prescribing into their practice. The aim of this stage was to explore the views of the other partners in the supplementary prescribing process, namely the IPs (DSMPs) and patients who were being managed by pharmacist SPs, as well as a final follow-up interview with the recruited pharmacists. The researcher still intended to conduct semi-structured interviews with both the pharmacists and DSMPs even if the SPs had not started prescribing to explore their views on the role.

8.2 Research questions

The research questions to be addressed in this present stage were as follows:

8.2.1 Pharmacist SPs

i)   How, if possible had supplementary prescribing been implemented into practice?

ii) Why, if appropriate had implementation of supplementary prescribing not been possible?

iii) What were the views of the pharmacist on their prescribing role?

iv) How many patients were being managed through supplementary prescribing and what conditions did they have?

8.2.2 IPs (DSMPs)

i)   What were the views of the IP on pharmacists taking on a supplementary prescribing role?

ii) How was or how did the IPs envisage supplementary prescribing working in practice?

iii) What was their experience of mentoring a pharmacist through the training programme?

8.2.3 Patients

i)   What were the views of the patients on being managed by a pharmacist SP?

ii)   What advantages and disadvantages did the patients see in pharmacist supplementary prescribing?

iii)   What was their opinion on pharmacists taking on a prescribing role?

iv)   How much of an input did the patients have into the decision to be managed by a SP and into the formation of the CMP?

8.3 Recruitment and sample

8.3.1 SPs

The seven pharmacists who had participated in Stage Four were provided with an information pack (which included a letter inviting participation (Appendix 8.1.1), an information sheet (Appendix 8.1.2) and two copies of a consent form (Appendix 8.1.3)) asking if they would consent to an interview. Out of the seven pharmacists three (Lynne, Tamsin and Nicola) agreed to a final interview by returning a signed consent form. The remaining four pharmacists (Thomas, Neil, Helen and Bob) were provided with a reminder information pack approximately two weeks after the first pack. However, no further consent forms were received.

The pharmacists from the second cohort were not approached for an interview six months after their course had been completed as the study period had ended.

8.3.2 IPs

As described in Chapter Seven (Stage Five) the pharmacist SPs were asked if they would consent to non-participant observation of a number of patient consultations. However, only four of the pharmacists had implemented supplementary prescribing and hence could participate in Stage Five. The pharmacists who consented to the observation (Helen, Tamsin and Lynne) were then asked to pass an information pack to their IPs to ask for their consent for the observation to take place. At this time the IPs were asked if the researcher could hold their contact details for further stages of the research (the interview in this present stage). The IPs of both Tamsin and Helen agreed to their contact details being stored and were therefore provided with an information pack (which included a letter inviting participation (Appendix 8.2.1), an information sheet (Appendix 8.2.2) and two copies of a consent form (Appendix 8.2.3)) asking if they would consent to an interview by post. Only Tamsin's IP consented (Dr. Charles).

8.3.3 LREC amendment number three

It became apparent that utilising the method described (Section 8.3.2) above to recruit the IPs for an interview would restrict the number of potential participants. Only those IPs whose pharmacists had implemented supplementary prescribing could be approached. Only then, if the IPs consented to the observation (Stage Five) and for their details to be held could they be asked for an interview. The IPs of the pharmacists who had not consented to the observation or who had not implemented supplementary prescribing could not be recruited.

Protocol amendment number three allowed the pharmacists who had not participated in Stage Five or who had not implemented supplementary prescribing into their practice from cohort one and all recruited pharmacists from cohort two to forward an interview information pack (which included a letter inviting participation (Appendix 8.3.1), an information sheet (Appendix 8.3.2) and two copies of a consent form (Appendix 8.3.3)) onto their IPs on the researcher's behalf. This is, **Stage Six (a)** and **Stage Nine** respectively.

Stage Six (a): Thomas, Neil, Nicola, and Bob were provided with an IP interview pack by post and asked to forward them on the researcher's behalf. Lynne, whose DSMP from the training programme was different to the IP that she worked in partnership with in her clinic approached her DSMP and informed him of the researcher's intention to conduct an interview. This particular DSMP (Dr. Browne) asked that Lynne forward his email address onto the researcher so that the researcher could make contact. An information pack was provided and he consented to an interview.

Stage Nine: All of the pharmacists recruited from the second cohort were provided with an IP information pack at the time of their interviews after training (Stage Seven (b)) or by post if they had not participated in Stage Seven (b). Interviews were conducted with all IPs who had consented by 31st August 2005.

In total, only two IPs consented to an interview – Lynne's DSMP (Dr. Browne) and Tamsin's DSMP (Dr. Charles).

8.3.4 Patients

The potential patient participants were those who agreed in Stage Five for their consultation with their pharmacist to be observed and who had allowed the researcher to store their contact details.

As described in Chapter Seven only one of the 14 patients observed in consultation allowed the researcher to store their contact details (One of Tamsin and Dr. Charles' patients (T2)).

One further consent form was received from one of Tamsin's patients agreeing to non-participant observation of her consultation. When the patient was contacted by the researcher it became apparent that she had received the Stage Five information pack from Tamsin months previously and was no longer under the pharmacist's care. Hence, it was not possible for a consultation with the SP to be observed. However, she still wished to participate in the research and it was deemed appropriate to request an interview as she had taken the time and effort to consent to Stage Five, albeit late. This patient will be known as patient T4.

In order for the patients to be interviewed their SP and IP had to agree to the interview as well as the patient themselves. This additional consent was deemed necessary as the patient's opinions of their treatment was to be discussed during the interview. Before the patients were approached for an interview an information pack was posted to both Tamsin (which included a letter inviting participation (Appendix 8.4.1.1), an information sheet (Appendix 8.4.1.2) and two copies of a consent form (Appendix 8.4.1.3)) and Dr. Charles (which included a letter inviting participation (Appendix 8.4.2.1), an information sheet (Appendix 8.4.2.2) and two copies of a consent form (Appendix 8.4.2.3)) asking for their permission for their patients (2) to be interviewed. Two separate information packs were distributed to each prescriber, one for each patient due to the length of time between them consenting to Stage Five. Both prescribers consented to both interviews. However, as Dr. Charles' consent for patient T4 was received after 31st August 2005 (end of the data collection period for the study) then an interview with this particular patient was not possible.

Patient T2 received an interview information pack (which included a letter inviting participation (Appendix 8.4.3.1), an information sheet (Appendix 8.4.3.2) and two copies of a consent form (Appendix 8.4.3.3)) by post and duly consented. She will be referred to as Mrs Raymond for the remainder of the thesis. A convenient time and place was then arranged to hold the interview.

8.3.5 Interviews with patients of the second cohort of pharmacist SPs (Stage Nine)

Chapter Two explains that approval was granted to allow the patients of the second cohort of pharmacists to be interviewed in the same manner as those of the first cohort (Stage Nine). The patients would have been recruited and interviews conducted in exactly the same manner as

Stage Six for the patients of the first cohort. However, as stated in Chapter Seven no pharmacists in the second cohort had implemented supplementary prescribing into their practice by the time the research project was terminated. Non-participant observation and hence recruitment for patient interviews could not be conducted.

The final recruitment for Stage Six is displayed in Table 8.1.

Table 8.1. The final recruitment for Stages Six, Six (a) and Nine.

Stage / participant	No. of potential participants	No. of consenting participants
Stage six (First cohort)		
SPs	7	3
IP	2	1
Patient	2	2
Stage Six (a) (First cohort)		
IP	5	1
Stage Nine (Second cohort)		
IP	7	0
Patient	0	0

8.4 Interview schedule

All of the interviews were semi-structured in nature with the interview schedule informed by the themes generated in previous stages of the research. The interview schedule used for the SP is provided in Appendix 8.1.4, for the IP in Appendix 8.2.4 for the patient in Appendix 8.4.4.

8.5 Interview information

All of the interviews were audio-recorded and conducted face-to-face at a convenient time and place to the participant in accordance with the semi-structured interview method described in Chapter Two. Table 8.2 displays the location and duration of the interviews.

Table 8.2. Stage Six and Six (a) interview location and duration.

	Location	Duration
SP		
Tamsin	Place of work	25m 59s
Lynne	Welsh School of Pharmacy	29m 59s
Nicola	Place of work	23m 38s
IP		
Dr. Charles	Place of work	33m 37s
Dr. Browne	Place of work	44m 48s
Patient		
Mrs Raymond	Patient's home	18m 08s

8.6 Themes emerging from the interview data

The themes that emerged from the interviews with the SPs, IPs and patient are described below.

8.6.1 SPs

8.6.1.1 Current prescribing status

At the time of the interviews in this present stage Nicola had started managing her patients with the agreement of her IP at her GP surgery. However, as she had not received her prescription pads the IP still had to sign all of her prescriptions. She was spending approximately a 'couple of hours a week' on her supplementary prescribing role and was managing nine or ten patients. Tamsin was continuing to manage the patients that she had started prescribing for (as described in Chapter Four) in a hospital out-patient clinic each week. She was now managing approximately thirty patients and had issued countless prescriptions. Lynne was also continuing to manage approximately thirty patients (as described in Chapter Five) in a GP surgery clinic on one morning a week and had issued approximately ten prescriptions. Only Tamsin was conducting physical assessments on her patients which included breast examinations.

8.6.1.2 Enjoyment of the supplementary prescribing role

All of the pharmacists stated that they were enjoying managing their patients and taking on the role of a SP:

> NICOLA: I enjoy the patient contact and I enjoy the the one to one contact. Um, previous to what it tends to be sort of across the dispensary hatch or you know occasionally I would take someone somewhere more private. But um, actually having the time to sit down with the patient and talk to them I I really enjoy. Yes that that's the big change...... Um, well to actually see some of the results from my efforts.

> LYNNE: Well yeah I am I suppose, it's um, I still find it a bit surreal that I'm actually doing it, if you see what I mean but um but yeah no I am quite enjoying it cause I actually feel it's sort of, it's [patient care] all down to me now rather than just doing bits and then you know getting somebody else to sign it. That you know I I can actually do it all myself really. So yeah so I am enjoying it. It is, it is quite stressful at times but um but yeah no overall I think I am yeah.

However, Lynne's enjoyment was compromised:

> LYNNE: I'm quite enjoying it but it it's just all a bit much really at the moment. I'm just finding I'm squashing everything in. So, but that's not the fault of the supplementary prescribing it's just the fact that really you know there's too many things to do in the time that I've got. But um, yeah I think you know I think I think it has. It's given me a bit of hope for the future as well I think

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Nicola's vision of what her supplementary prescribing role would be like at the time of the interview was different to reality:

> *NICOLA: I think my initial, what I envisaged was that I would be doing a lot more of it [supplementary prescribing] by now but I think until we sort of come up against the barriers you sort of clear how many obstacles there were going to be even given this is a fairly ideal situation.*

8.6.1.3 Barriers to implementation

All three pharmacists had had multiple barriers to overcome in order to implement supplementary prescribing into their practice. Those mentioned in the interviews are listed below with a quote to illustrate the barrier:

Time and workload:

The time required to practice as a SP was a barrier:

> *LYNNE: That's why I've kept it [supplementary prescribing] to half a day, I I'd prefer to do more cause I think it would just be much more meaningful and it'd be easier to get more experience but I just haven't got the time cause there's there's just nobody else at the LHB to do my job as well so I just have to fit that in around it.*

Obtaining prescription pads:

Both Lynne and Nicola, in primary care had difficulties in obtaining their prescription pads. The prescriptions, when they did arrive were not compatible with the computer system and therefore also had to be handwritten. There was much confusion about who and where the pads should be ordered from:

> *NICOLA: The LHB have sent off so many forms now and we're just in in a sort of wait situation. It's a bit depressing really. You know although I am doing it [supplementary prescribing] no nobody can track me or you know. I mean I've got my own sign on on the prescript, on the computer.....Yes, and the prescription pads I'm really really gutted about and I must admit the um, the practice nurses that I'm in touch with, have you had yours yet? You know that's the first question anybody that's been on the course; have you got your pad yet? None of them have got them.*

> *LYNNE: Um, prescriptions, getting prescriptions was a complete nightmare, um. Been chasing them for months and months and months and nobody ever really seemed to know where they were gonna come from and who they were gonna come from. I ordered my own in the end. But apparently that wasn't the right way to do it either. So they've arrived now and that's fine. But um and for reordering we've got a name now to re-order. But um and they don't fit in the computer, so gotta hand write them.*

The number of other SPs:

As there were only a few pharmacist SPs at that time then there was a restriction of how much the service could be expanded in primary care:

LYNNE: We were talking about that yesterday whether we can take that forward and do it [condition]. But the problem is it's only me and so I don't think at the moment we could take that forward because again it would only probably be in one surgery. And so really we need a bit more of a a cross the board approach first so um, but hopefully in the future.

And the support that can be obtained from colleagues in a similar situation:

LYNNE: There's not many people doing it either so there's not really anybody around I can phone and say, luckily there's a colleague in [Local Health Board] doing the same and I find that I ask him lots of questions and he often sends me things saying are you alright.

Support from employers:

Support is required for pharmacists to be able to undertake the supplementary prescribing role:

LYNNE: The problem is that um I had to, not persuade the LHB [Local Health Board] but it's quite difficult that we're only offering this [supplementary prescribing] to one practice out of our thirteen and and it's not one of our worse practices either. But I chose the practice because I wanted to go somewhere where I felt I'd get some support cause in our more um poorly performing shall we say or however you, practices I don't feel I'd have got any support. They'd have just left me on my own to do it all because that's part of the problem that we have already so. Um, it was it was a bit tricky then but as the LHB had wanted me to do the course in the end I said well you know if you don't really support me to use it then there was no point in me doing it.

Information technology:

As well as the prescriptions not being computer generated Lynne was not able to place a copy of her CMPs on the computer system. Paper CMPs had to be used instead.

Space:

Space was seen as a barrier by Nicola in order to find a consultation room to see her patients:

NICOLA: Um, the reason why we haven't expanded it out, everybody again, space constraints. So um, they're looking at re-jigging the way that the reception area is done. Basically we've run out of consulting space.

8.6.1.4 CMP

The use of the CMP was discussed during the interviews. The use and opinions of the CMP was varied between pharmacists:

NICOLA: It's [CMP] a bit tedious but I think it gives the patient a degree of comfort in that they're being involved in discussions around around treatment. So I think although it's tedious it's there for a reason, not a major problem with it. And because we've got it on the computer electronically it's very very quick to fill in, it's there so it's with the date it was done.

TAMSIN: I mean the clinical management plan um I think, I don't refer to it because I think I know it off by heart. It's in some respects we use it just as a legal document more than anything else.

LYNNE: So fact is, you know I think its [CMP] a bit of a waste of time really. It's good for me but but not really, doesn't seem to apply to anyone else.

The reason why Lynne said that the CMP was not useful for anyone apart from herself was:

LYNNE: Well they [patient] sign it, yeah. I mean they're [CMP] hopeless really because, now I have to get the clinical management plan signed by the GP. And all he does is sign them. So, you know he doesn't look at them or anything like that......Um but the patient signs it but you know I mean they're not interested as long as I give them a prescription and you know they can get an appointment.

8.6.1.5 Patient care

Benefits to patient care were cited by the participants. Nicola stated that the SP would be able to spend more time with patients, her patients ask a lot more questions concerning side effects, how their medication has stopped their symptoms, interactions and safety. She added that patients were more involved in discussing their treatment which gave them a sense of 'comfort'. Tamsin stated that the knowledge that pharmacists have in her hospital on side effects is greater than the doctors therefore patients would benefit by receiving evidence-based medicine, waiting times would be reduced and patients would receive continuity of care from pharmacists who are long standing members of the health care team. Lynne also stated that she has more time to spend with her patients compared to the GP and has had the time to discuss compliance issues. Feedback she has received from patients demonstrated that they appreciated the opportunity to discuss their care and to ask questions concerning other medication.

A disadvantage of supplementary prescribing to patients was expressed by Lynne. Patient expectations mean that it is hard for the pharmacist to keep to the CMP and maintaining communication between HCPs:

LYNNE: The disadvantages are that um they [patients] still see their doctor for everything else and they take them [prescriptions] to a community pharmacy and I'm just another person in the loop really. Um, so I suppose that could be a disadvantage as in it's just another health care professional involved in their care but you know if you don't all tie everything up you know it could make things tricky. And also the they often don't want to just talk about one thing. And that's quite hard to, you know when they come to see me they have expectations that I'm gonna be able to sort other things out for them as well so for the patient sometimes they're like well is that it, you know is that all you can do? Sort of thing, because they don't really understand why they've come as in it's only one thing cause normally when they see the GP they can ask really about whatever they want to.

Tamsin had already conducted a brief audit to assess her hospital out-patient clinic in terms of patient satisfaction which received a very positive response. Nicola had received positive anecdotal feedback from her patients; a formal evaluation had not been conducted.

8.6.1.6 Signing the first prescription

The pharmacists expressed, in the case of Tamsin and Lynne how they felt when they signed their first prescription, and in the case of Nicola how she felt when she issued the first prescription for her IP to sign:

> *NICOLA: Have I done it right? (laugh) Sort of, I issue probably about five, six hundred prescriptions a day as part of the repeat prescribing system and I I don't scrutinise them to the extent. Whereas if I put it on um, double check it, just make sure it is absolutely you know spot on.*

> *TAMSIN: I didn't have that much of a problem actually writing prescriptions. Um because I've done it before in that I've done sort of patient specific direction way so that part ah and the [treatment] is so protocolised ah it's it's um it's not too bad.*

> *LYNNE: I found it quite stressful the first week, writing them [prescriptions] for the first time. Cause I kept thinking I'm bound to make a mistake and then you're gonna look a right idiot (laugh).... It wasn't, it wasn't that bad but it's just. The first one or two were fine as in you know cause I was concentrating and everything else. I think it's harder as you go along to maintain that, you know it's um. I don't know if I quite like writing them yet as in you know, cause you know it's all down to you then so that is a bit scary. But um, but no so far it's been fine and I haven't had any back or, we haven't had any problems with them being dispensed or anything like that so I think that helps as well really.*

8.6.1.7 Awareness of SP

The perceived awareness of supplementary prescribing varied between participants. Tamsin believed that there was an awareness within her trust and the role was part of the trust strategy. Lynne commented on the awareness of her Local Health Board and GPs and how her role was not fully understood:

> *LYNNE: At the LHB I think quite a few people now view view it differently cause they know I can prescribe. So you know it's um, it's quite odd really I think they're not quite sure now what's the difference between me and a doctor because they don't know the details they don't understand that it's only on a certain topic and everything else. I think they don't really know now where the difference is is lying.*

> *LYNNE: They [GPs] still don't know, no. I mean they know I work in one surgery now and I can do prescriptions and that and that that's probably it so even again for the GPs most of them don't really understand what it is so, it's ah, so no I don't think that's [awareness] improved or increased or anything.*

8.6.1.8 Relationship with other HCPs

Supplementary prescribing can affect the relationship the SP has with the other HCPs they are working in partnership with, which may include a greater recognition of the pharmacists' skills:

> *NICOLA: I wouldn't say it's [relationship] changed I would say that um he's [GP] sort of more aware of my clinical input.*

> *TAMSIN: I think um with the nurse I'm working with closely I mean she says that she did never realise what the skills the pharmacist have until she started working with me.*

> *TAMSIN: He [IP] sees me as part of his medical team now where I was just a colleague he worked closely with before.*

8.6.1.9 Future of SP

The pharmacists hoped to expand supplementary prescribing either within their own role or within their organisation to manage more patients or conditions. However, Lynne believed there was a way to go before supplementary prescribing could be fully expanded and she had achieved her goal of being employed solely as a SP:

> *LYNNE: To a certain extent, not really, you know I, it's [currently] just not enough really. I think they, the doctors see it [supplementary prescribing] as a novelty kind of thing at the moment. I don't really think that they see it as a true service as such. You know I think it's um to a certain extent I think it's started the process. But I mean it's you know not really you know, we haven't gone anywhere near far enough yet, I think it's, I mean it's starting to and I think you know that the patients who come and see me now are starting to understand that pharmacists can do other things. So I think that's starting but um but only just (laugh) unfortunately.*

Independent prescribing was seen as the way forward for Nicola, if not a little soon after SP:

> *NICOLA: Then we had the news that the independent prescribing is coming along so hoping to top it up to become an independent prescriber. Seems to have you know gone over a hurdle before we've even addressed one side of it.*

For Tamsin, independent prescribing in her hospital was viewed as:

> *TAMSIN: Independent prescribing ah, not full independent prescribing but um if we had independent prescribing perhaps we could use it more especially for in-patients. Ah use it for ah writing TTHs, [To take home] um amending um prescriptions um, deleting items um, clarifying things like that which is prescribing in a way. Um, but not sort of initiating, not initiating new treatment but um certain, repeat prescribing, a few things. It'd be sort of ah ah I think some would say it's a half way between independent and dependent and supplementary prescribing.*

Lynne was also supportive of independent prescribing:

> *LYNNE: I don't really see much problem with that [independent prescribing], it would take out this clinical management plan business but um, you know I think I personally I would feel that I would need more training to, a lot more training to do that because I*

think you know they would still have to have their diagnosis. I mean that would be the the main thing really. But um, you know I wouldn't be, I you know I think that that's definitely the way to go because I think you know you've gotto know your own boundaries.

8.6.1.10 Tips to start SP

The participants were asked what advice they could give to other pharmacists who were hoping to implement their role as a SP. Tips included:

- A good relationship with the IP the pharmacist would be working in partnership with (Nicola)

- Choose a subject that the pharmacist is genuinely interested in (Nicola)

- Be clear what the pharmacist's role is going to be instead of completing training then deciding where supplementary prescribing can be utilised (Tamsin)

- Ensure the IP supports supplementary prescribing (Tamsin)

- Implement supplementary prescribing within a surgery / clinic that is going to support the initiative and the pharmacist themselves should be well organised (Lynne)

- Explain to the other staff involved in the clinic / surgery what the supplementary prescribing role is so that they are kept informed (Lynne)

8.6.2 IPs

The themes that emerged from the interviews with the two IPs (Dr. Browne and Dr. Charles) are described below.

8.6.2.1 Positive views on supplementary prescribing

Both IPs were supportive of pharmacists taking on a supplementary prescribing role and utilising their skills to benefit patients:

> *Dr. CHARLES: I mean we're very supportive. We've [Trust] always supported extended roles......It was quite interesting and um but it was nice to see her [Tamsin] develop you know and and in a way be able to put her expertise to even more use um, you know in my in my view anyway than than previously.*

> *DR. BROWNE: Well I think it's [SP] very exciting. I think it's an opportunity for clinical colleagues, cause that's my first starting point is I do view pharmacists as clinical colleagues. Clinical being at the bed side working with patients and I think it's a really exciting opportunity for clinical colleagues to extend and expand their role to use their skills, to actually improve the quality and range of services offered by the health service. Because I know that pharmacists have got a great deal to offer to patients, particularly patients with chronic disease and that there are some things pharmacists can do that nurses and doctors can't do or are much less skilled at doing. And therefore we give pharmacists who can then also prescribe um you've then got a situation where the pharmacist is benefiting cause they're expanding their role, patients are benefiting cause*

they're getting a very good service and so the NHS as a whole is benefiting because if you like it's working in a more intelligent sensible way.

8.6.2.2 Pharmacists' knowledge

The IPs discussed the knowledge they believed pharmacists possess and therefore make them able to undertake the supplementary prescribing role. Skills included knowledge of side effects, drug interactions and doses and that pharmacists are also more thorough at patient history taking and keeping up-to-date with medication developments. Pharmacists are also better at talking with patients about their medication and explaining important information such as potential side effects compared to doctors. Dr. Browne also believed that pharmacists are 'less paternalistic than doctors'. However, some skills would still need to be developed:

> *Dr. CHARLES: With a pharmacist they have a tremendous knowledge of drugs, ah you know dosing, pharmacokinetics, um interactions, particularly good on the interactions. Um, but they don't have much of the the sort of nursing or medical background in terms of talking to patients and um how to you know meet a patient, how to talk to them.*

> *Dr. CHARLES: Then we have to prescribe it [medicine] and um, I think there the pharmacist find that quite easy cause they're used to checking our [doctors] prescriptions.*

Nurses on the other hand need more training on the pharmacy aspects of prescribing and are more comfortable with clinical assessment and talking with patients.

> *Dr. CHARLES: I think it's that that [seeing patients] only comes with experience and confidence. I think initially most people will be quite nervous of the patient. I think pharmacists are more, gonna be more nervous in that situation cause they, that's not what they. I mean the first thing we do and nurses do is to meet patients before we know anything about medicine, you know we we we grapple them.*

> *Dr. BROWNE: Initially you know the idea that a pharmacist would have to touch a patient or listen to a chest or ah was an absolute horror.*

Dr. Browne also discussed the prescribing potential of pharmacists in relation to doctors:

> *Dr. BROWNE: I think it's [supplementary prescribing] an excellent idea because I'm quite certain that if you evaluated the safety of an experienced clinical pharmacist or an experienced nurse specialist and compared their prescribing quality to the prescribing of anybody below consultant level you'd find that the pharmacist and the nurse prescriber nurse, specialist nurse were prescribing with with much higher quality, to a higher standard than than any of their medical colleagues I would think.*

8.6.2.3 Relationship with the SP, benefits of supplementary prescribing to the IP

Dr. Charles was working in partnership with Tamsin in his hospital out-patient clinic:

> *Dr. CHARLES: I found it very useful because we've [doctor and pharmacist] actually worked together now in the clinic on the same clinical problems. We kind of um, well I think it has made, you know we've got more personally friendly. You know we've actually*

got to know each other better and um you know we're now professionally related in that sense ah with patients. So it's been a very positive ah thing really I think.

Dr. Charles reported that having a SP in the clinic benefits the IP through their knowledge and as a resource, to assist in the IPs workload and to help in training further SPs.

8.6.2.4 Awareness of supplementary prescribing before becoming a DSMP

Neither IPs were very aware of supplementary prescribing before becoming a DSMP:

> *Dr. CHARLES: I knew nothing about it [SP] at all, I mean I I didn't even know there was a movement really, I vaguely heard the term but I didn't really know what it was to do with. Um, and I guess I probably thought it was gonna be more ah sort of asthma and you know things that perhaps nurses and pharmacists are already involved in.*

> *Dr. BROWNE: I wasn't very aware of it [SP] no. I I was aware of it um but when I actually read up all the information on the internet it was a bit scary to think gosh that's what I've gotto do. But I I was still committed to it in principle and as an idea. So I thought well let's just get on with it.*

8.6.2.5 Being a DSMP

The IPs expressed their views on being a DSMP:

> *Dr. CHARLES: I mean it [mentoring] was very enjoyable and ah I suppose at the end of it there's the carrot that as a busy clinician you're gonna get an extra pair of hands at the very base level you know, the very least, that's quite a nice thought. Um, and you also feel that you're helping someone develop, it's great to see someone you know, and they're very grateful aren't they you know, people that you help. So, you know it's it's fairly a positive experience.*

> *Dr. BROWNE: Well I thought it [SP] was a great idea, I mean I was asked if I would and um because I I was aware of developments in England and aware of how it could work because I I've always had an interest in developing the role of clinical colleagues and and um exploring new ideas and they said would you be able to I jumped at the chance.*

Dr. Browne commented about the time commitment required to be a DSMP. However, he also expressed his enjoyment of the challenge.

8.6.2.6 Time in supervised practice

The amount of time the pharmacists were required to have supervised in practice was discussed and contrasting views were expressed:

> *Dr. CHARLES: I didn't think it [time in supervision] was that long actually. I mean I don't wanna burden myself with even more work but I think they, I think it was a fair fairly rushed programme really and I don't think my. I don't feel that Tamsin had an excessive amount of clinical experience. If anything it was just about the minimum really. I think I think it's it's not much actually.*

Dr. BROWNE: That's a difficult one really cause the, everybody's going to have different needs and it's, some people probably need far less than that and some people might need more. It's just quite a substantial commitment and I've got no idea how they came up with that number but I would think for most experienced clinicians, both nurses and pharmacists they don't need as much as seventy two hours.

8.6.2.7 The CMP

Only Dr. Charles had experience of working with CMPs in practice. However, Dr. Browne expressed his views on the concept of CMPs which he believed ensures professional accountability of the SP and that they act within their own competence, the most important aspect of supplementary prescribing:

Dr. CHARLES: It [CMP] gets a bit repetitive after a while because obviously once we've been through a few they're, it becomes a little bit of a paper exercise cause they're all identical.

Dr. BROWNE: And the question for me then is that the safety net for the patient is that within the clinical management plan you have those kind of criteria very explicitly written that the pharmacist is working with the independent prescriber and has formed a relationship with the independent prescriber so that the independent prescriber can trust the pharmacist and his or her judgement in that kind of scenario and equally the pharmacist learns the limits of what they can and can't do. ....Again for me the foundation of the safety of the clinical management, of supplementary prescribing is the clinical management plan.

8.6.2.8 Views expressed when quoted the heading 'pharmacists should focus on what they do best, not be dazzled by new ideas' (Jenkins, 2004)

The above quote was read to the IP, in the same manner as the pharmacist interviews during training (Stage One) to ascertain their views on such a statement:

Dr. CHARLES: I mean that's fine. But I think it needs, you know there needs to be a range of roles for for every speciality. Um, and then people will fill the role that they feel comfortable with. But there will be pharmacists who feel that their best skills are in the dispensary, that's fine. I mean we wouldn't expect everybody to want to do one particular job within a speciality.

Dr. BROWNE: Well, it's a load of rubbish isn't it? I mean whoever said doesn't actually know what pharmacists are already doing. And I think again you know my experience when I was training in hospital, my experience in in the locality is the way you've got a good committed pharmacist, you know as far as I'm concerned I do have a clinical colleague who is practicing as a clinician and who has a great deal of wisdom and experience as well as knowledge and certain skills that I lack to offer to patients.

8.6.2.9 What characteristics do pharmacists need to be a competent prescriber?

The skills required to be a prescriber noted by the IPs are as follows:

- Communication skills

- Clinical skills – assessing patients
- Be able to take a good patient history
- Scientific knowledge in terms of pharmacology, doses etc.
- Keep up-to-date
- Be aware of current guidelines and protocols

8.6.3 Patient

The issues that emerged from the patient interview are provided below.

8.6.3.1 Awareness of supplementary prescribing and the CMP

The patient was not aware of supplementary prescribing or of the existence of a CMP. She had not heard the term supplementary prescribing before. She was also not aware that her pharmacist SP was going to be present at her appointment in the hospital until she arrived and it was explained by the specialist nurse. She had seen the pharmacist SP five times since starting treatment.

The pharmacist had assisted in successfully treating the side effects of her medication, which the patient was very satisfied with:

> *Mrs Raymond: Well I think they [pharmacists] know a little bit more about some of the tablets that you take than somebody like [nurse] knows.*

The patient only saw the IP very briefly:

> *Mrs Raymond: I saw him [IP] the first that I went for my [treatment] when I had to sign some form and ah he told me that I was gonna have six treatments and then I'd have my twenty [other treatments] and he said I'll see you at the end of your sixth treatment.*

8.6.3.2 The difference between pharmacists and doctors

Mrs Raymond believed, in her view that there is a difference between pharmacists and doctors with respect to their relationship with patients:

> *Mrs Raymond: You can ask either of them [pharmacists] anything at all that you want to know. And it's like sitting and talking to you [researcher] or talking to my daughter. They're such, they come over so ordinary to you.....Not like doctors or nurses or professional or what have you. You know it's just like a normal conversation when you go and you see them [pharmacists]. ..... I think in the pharmacist they tend to be more, perhaps human isn't the right word. Um, more one of you. Whereas you always think of your doctor as being that little bit more remote. However good they are and however friendly they are they're always that little bit further from you. Whereas a pharmacist are there because you go in and out of, we go in and out of (company) very frequently. They become part of your life. Somebody that you know quite well.*

8.7 Summary of cohort one participation

Table 8.3 displays a summary of which stages the pharmacists from the first cohort of the supplementary prescribing training programmes in Wales, their IPs and patients participated in.

Table 8.3. A summary of which stage each recruited pharmacist, their patients and IP from cohort one participated in.

Stage	Nicola	Beatrice	Thomas	Neil	Helen	Bob	Tamsin	Lynne
1	✓	✓	✓	✓	✓	✓	✓	✗
2	✓	✓	✗	✗	✓	✗	✗	✗
3	✓	✓	✗	✗	✓	✗	✗	✗
4	✓	✓	✓	✓	✓	✓	✓	✓
5								
SRxer	✗	-	✗	✗	✗	✗	✓	✓
IP	✗	-	✗	✗	✓	✗	✓	✓
Patient	-	-	-	-	-	-	3	11
6								
SRxer	✓	-	✗	✗	✗	✗	✓	✓
IP	-	-	-	-		-	✓	✓
Patient	-	-	-	-	-	-	✓	-

✓ - Participated   ✗ - Didn't participate
- Could not participate (for example, as the SP role had not been implemented)

8.8 Discussion

The interviews conducted with the pharmacists in this present stage were as a final follow-up to explore their prescribing status. The amount of additional information gained from the interviews was minimal which can be seen from the same themes emerging from previous interviews (Chapter Six). It was unclear at what stage of supplementary prescribing implementation the other recruited pharmacists (Thomas, Neil, Bob and Helen) were and the issues that they had come across as the researcher was no longer in contact with those individuals. These pharmacists had not expressed a wish to participate further therefore the researcher deemed it unsuitable to maintain contact in accordance with ethics approval.

At this time Nicola had still not received her prescription pads, a barrier to implementation still not having been overcome and hence her IP was still signing her prescriptions. A delay in receiving prescription pads was also experienced by nurse prescribers (Luker and McHugh, 2002) which affected its implementation. One of the objectives of the Task and Finish Group for Supplementary Prescribing in Wales was to ensure that prescription pads were made available so that SPs could start prescribing as soon as possible after qualifying. The delay in supplying the prescription pads was recognised as a problem in mid 2005 (Hinchliffe, 2005). The pads were not available until April 2005 despite the earlier reassurances that they would be ready in

September 2004. Nicola's concern as to whether her GP computer systems would identify her as a prescriber was also noted as it was believed that the computer software companies had made little progress in allowing SPs to undertake electronic prescribing (Hinchliffe, 2005).

In contrast to Nicola, Lynne and Tamsin were freely issuing prescriptions with Lynne, at this time feeling more comfortable than her interview in Stage Four. Problems to overcome such as lack of support and information technology still existed which must be expected within a new role. However, the anticipated benefits to patient care had come to fruition and the professional relationships with the IPs had improved with an increased awareness of their knowledge. All three pharmacists stated that they enjoyed managing their patients. However, their existing role still needed to be fulfilled.

None of the pharmacists in the first cohort completed all the six stages, possibly due to what is known as 'research fatigue' (Elliott, 1997). Maintaining contact and participating for a total of 16 months is a large commitment when undertaking a new professional role and the researcher recognises this limitation. Research fatigue may also pose an issue with the amount of paperwork there was to fill in and the amount of consent forms to complete and information packs to forward onto other individuals such as the DSMPs and patients. After recruiting the pharmacists in Stage One it became evident that one of the participants worked with an acquaintance of the researcher's. As the stages progressed the researcher was informed of a couple of comments that the pharmacist had made such as 'Rhian's pestering me again'. These were apparently made in jest but do highlight what some of the pharmacists may have been thinking. The relationship that the participants had with the researcher may also have impacted on their willingness to participate in multiple stages. It came to light that some of the pharmacists were professional acquaintances with the researcher, which may have had some influence on their decision to participate or may have impacted on what the participants commented on during the interview (Flick, 2002) as they may failed to inform the researcher of issues they perceived the researcher already knew.

Both IPs expressed positive views on their experience of mentoring and of the concept of pharmacists prescribing. This opinion was anticipated as the IPs would not have taken on the role of a DSMP if they did not support the development of the pharmacists' role, they were therefore biased towards the positive. Avery *et al.* (2004) delivered structured questionnaires through interviews with IPs who mentored nurse prescribers. These IPs were also supportive of

expanding the nurses' role and cited benefits such as updating their knowledge, improving the relationship with other HCPs and increasing their awareness of the input that nurses could have in their workplace. However, the large amount of time and commitment required to be a mentor was also recognised, as was the case in this present study. The IPs in this present study were used to mentoring colleagues and already had a working relationship with their supplementary prescribing pharmacist which also may have contributed to their eagerness to mentor the SPs (Avery *et al.*, 2004).

Child and Cantrill (1999) explored the views of hospital doctors on the possibility of pharmacists undertaking a prescribing role and Child (2001) has explored the views of hospital nurses on pharmacist prescribing. Questionnaires were used in both small-scale studies. Themes emerging from these studies concerned the pharmacists' clinical knowledge of the patient, communication problems, the professional accountability of issuing prescriptions and the pharmacists' workload (Child and Cantrill, 1999; Child, 2001). These results have similar concerns to those of the pharmacists in this present study, especially regarding their workload and accepting responsibility for signing the prescription. Semi-structured interviews with pharmacist DSMPs have been conducted in Northern Ireland (Cassidy *et al.*, 2004). The themes that emerged from the interviews included that supplementary prescribing would allow pharmacists to undertake the role that they should already be doing. But with new roles comes increased responsibility. Again, because these doctors were mentoring pharmacists then it was not surprising that positive views emerged from the interviews.

The views of doctors on a prescribing role for pharmacists have also been investigated by Buckley and colleagues (2005) and Lloyd and colleagues (2005a). Sixty-one per cent of hospital doctors in Buckley *et al.*'s (2005) study agreed that pharmacists should prescribe. However, 61% and 64% agreed that pharmacists do not have the skills to diagnose and do not have enough knowledge of the patient respectively. Seventy-two per cent of hospital doctors in another study (Lloyd *et al.*, 2005a) believed that supplementary prescribing would improve their relationship with pharmacists; they recognised the pharmaceutical knowledge that pharmacists possessed but only a small proportion believed that pharmacists were the most suitable profession to prescribe. However, they did recognise that pharmacist prescribing would ease their workload (74%), a predicted benefit of SP. The doctors in these studies were not mentoring pharmacists and therefore could possibly have had differing views to those who do.

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Being a DSMP is a voluntary undertaking and does not come with any remuneration and only a one day training session (Chapter One). The IPs must therefore be initially supportive of developing the pharmacists' role to put themselves forward without any financial incentives. Other non-financial incentives do exist however, as discussed by Dr. Charles which included utilising pharmacists as a knowledge resource, assisting in training other colleagues and undertaking part of the clinic workload.

The IPs recognised that pharmacists need to develop skills on patient assessment and communication. The need to advance these skills has been recognised in earlier stages of this study (Chapter Six) and by the pharmacists in Dawoud *et al*'s (2004) study. The perceived amount of time required in practice also differed between IPs. Their opinions were based on the experience they had had with a very small number of pharmacist trainee SPs, the requirements of which would differ between individuals, sector of practice and experience.

On reflection, the manner in which the IPs were recruited for the interviews could have been amended. The protocol stated that the IPs were initially asked for consent for non-participant observation of their pharmacist SP-patient consultations (Stage Five) At that time their permission to hold their contact details was also requested so that they could be recruited for further stages. At this time Lynne's IP did not give his permission to be contacted to participate further. The researcher was informed by Lynne that the reason for this was because he was worried that if he gave his details he would get recruited into a long term study. As an alternative the IPs could have been asked for an interview (Stage Six) at the same time as providing their consent for the non-participant observation (Stage Five). This would minimise paperwork, give the opportunity for the IPs to consent to either or both Stage Five and Six and they would be fully informed of why their contact details would be required (only to arrange a place and time to meet).

In Stage Six (a) the recruited pharmacists were asked to forward information packs onto their DSMPs to request their permission for an interview. Alternatively, it may have been more efficient to request that the HEIs act as gatekeepers for the IPs rather than relying on the pharmacists to pass on the information packs. The reason being that it was unclear which pharmacists had forwarded the packs on; apart from those whose IPs had an interview. The strategy used also meant that the potential IPs were restricted to those who worked in partnership

with the recruited pharmacists. The HEI could have been asked to forward packs onto the IPs of all of their pharmacists in the same manner as Stage One to assist in greater recruitment.

Finally, the IPs and pharmacists could have been asked at the time of the non-participant observation (Stage Five) to also consent for the identified patients to be interviewed, if the patient agreed to be contacted for further stages. This would have then removed the longer process of having to return to the IP and pharmacist asking for their agreement for each patient interview which delayed the process of asking the patient for the interview.

As a result of the recruitment procedure adopted one patient was interviewed during this present study. It became clear that the patient (Mrs Raymond) was not aware of supplementary prescribing, the CMP or the extended role of her pharmacist. She was supportive in general of pharmacists taking on new responsibilities as she viewed them as more 'down to earth' than she perceived doctors to be. The definition of supplementary prescribing states that the patient's agreement must be sought to implement the CMP (RPSGB, 2002a), it was therefore assumed, when forming the interview schedule that the patient would have some idea of the concept of supplementary prescribing. However, due to her unawareness it was not possible to explore her views on supplementary prescribing in any great depth and the interview course had to be amended. It was not the researcher's intention to worry the patient or compromise her trust in both her IP and pharmacist.

The information pack (Appendices 8.4.1.1, 8.4.1.2 and 8.4.1.3) supplied to the patient before the interview clearly stipulated that the research was concentrating on supplementary prescribing by pharmacists. As the patient had returned her consent form agreeing to the interview it was assumed that she had understood the information pack and knew what supplementary prescribing was. After the unawareness expressed in the interview the extent to which the information pack was read must be questioned. The positive view of pharmacy expressed by the patient primarily concentrated on her experiences with the local chemist and an episode on holiday abroad where a pharmacist in Spain had been able to supply a medicine otherwise unavailable OTC in the United Kingdom. The perceived benefits of pharmacists cannot therefore be solely attributed to her experience with the SP but to her experiences of pharmacy in general.

During the patient interview both the patient's husband and daughter were present, both of whom contributed to the discussion. The focus of the interview was therefore diverted on a number of

occasions which again, affected the flow of the interaction with the patient. In a similar manner to additional participants being observed in Chapter Seven (Mason, 2002), the same is true in this particular interview where the explicit consent of the husband and daughter was not obtained before hand to be recorded. However, they were both aware why the researcher was there.

Mrs Raymond appeared to be satisfied with the service that she was receiving from her pharmacist SP. All of the pharmacists in previous stages stated that during their training they had received positive feedback from their patients. Tamsin's clinic patient satisfaction evaluation also demonstrated positive opinion. However, no formal research has been conducted on patient perceptions of the prescribing role from those who are being managed by a SP. Anon (2003c) reported the results of a survey by 'Which?' on the views of patients on expanded community pharmacy roles. Over a third of patients did not support supplementary prescribing with the most negative responses coming from those patients on regular medication, the ones where supplementary prescribing is expected to have the greatest impact. Further research needs to be conducted to evaluate patient opinions on the supplementary prescribing role. As Taylor stated in 2004 'What are the patients' views? Although critical to the success of SP, we really do not know much about this yet' (p3).

The views of patients on nurse prescribing have been investigated (Luker et al., 1998; Brooks *et al.*, 2001). Benefits to patients included that nurses used less medical jargon in their consultations, increased convenience, more time was spent with patients and that nurses are more approachable (Brooks *et al.*, 2001). Increased access to medicines and compliance and savings to both patient and nurses' time (Nolan et al, 2001; Lewis-Evans; Jester, 2004) has also been cited. However, these studies were conducted before supplementary prescribing and cannot be extrapolated across professions. One small evaluation on nurse supplementary prescribing in a rheumatology clinic demonstrated patient satisfaction with the notion of supplementary prescribing (Hennell, 2005).

The interviews conducted in this present stage with both the patient and IPs provides a brief exploratory insight into the views of the other two partners in supplementary prescribing. However, the need for further research in these areas is evident to explore further the perceived benefits and opinions of patients on supplementary prescribing and on the experiences of DSMPs on mentoring and their professional relationship with their pharmacist SPs.

8.9 Summary

- In this present stage interviews were conducted with three pharmacist SPs as a final follow-up and with two IPs and one patient to explore their views on pharmacist prescribing.

- The themes that emerged from the pharmacist interviews supported the views already expressed in previous interviews.

- Both IPs were supportive of expanding the pharmacists' role. However, this was anticipated as the IPs would not have become a DSMP without agreeing to the concept of supplementary prescribing.

- The IPs recognised the pharmaceutical skills and knowledge of pharmacists and the need to develop competencies in other areas such as clinical assessment, a view recognised by the SPs themselves in previous stages.

- Benefits to the IPs included reducing doctor workload, assisting in training other colleagues and the pharmacists' ability to take more comprehensive drug histories and patient counselling.

- It became apparent during the patient interview that Mrs Raymond was not aware of the supplementary prescribing process or the existence of a CMP.

- Mrs Raymond was generally supportive of expanding the pharmacists' role and was satisfied with the service she was receiving from her SP.

- This chapter has described the final stage of the research with the first cohort of pharmacists in the first cohort to train as pharmacist SPs in Wales, their IPs and patients.

- The next chapter will follow-on to describe the research conducted with the second cohort of pharmacists to undertake supplementary prescribing training in Wales. Interviews were conducted both during and after training (Stage Seven a and b) in the same manner as with the pharmacists in the first cohort (Stages One and Four).

Chapter Nine – Interviews with pharmacists in the second cohort, a) during and b) after their supplementary prescribing training (Stage Seven)

9.1 Introduction

In the previous chapter (Chapter Eight) the final stage of the research conducted with the first cohort to undertake the supplementary prescribing training programme in Wales, their IPs and patients has been described. This chapter will now follow-on to describe the final stages of the study. These stages (Stage Seven a and b) provide the opportunity to allow the second cohort to participate in the research and to explore their views and expectations of the supplementary prescribing role and training programme. This Chapter will include how the pharmacists were recruited, the semi-structured interviews undertaken (during and after training in the same manner as Stages One and Four with the first cohort) and the themes emerging from those interviews.

9.2 Research questions

The research questions to be addressed in these present stages were informed by the themes emerging in previous stages and were based on the interviews held during and after training of the first cohort as follows:

9.2.1 Stage Seven (a) – Interviews during training

i)   What were the pharmacists' views on undertaking the role of a SP and its limitations?

ii)   What previous experience did the pharmacists in the study have of a prescribing (or similar) role?

iii)   How did the pharmacists envisage supplementary prescribing working in practice after training had been completed and the conditions to be managed?

iv)   What were the pharmacists' motivations for undertaking the supplementary prescribing training programme?

v)   What would the pharmacists like to see on the course in order to become a competent SP and to meet the learning outcomes?

9.2.2 Stage Seven (b) – Interviews after training

i) How many patients were managed through supplementary prescribing, what conditions did they have and the interventions undertaken?

ii) What barriers did the pharmacists face in order to implement their role as a SP?

iii) How comfortable did the pharmacists feel to be able to prescribe after their training had been completed?

iv) What recommendations, if any did the participants have on possible amendments to the supplementary prescribing training programme?

v) How had the pharmacists' role changed in comparison to when they were not trained to prescribe?

vi) How did the pharmacists envisage the role of a SP in the future?

Stage Seven (a)

9.3 Recruitment and sample

The pharmacists in the second cohort of the supplementary prescribing training programme in Wales were recruited in the same manner as those in the first cohort described previously in Chapter Four (section 4.3). The same course leaders at the same three HEIs were approached and agreed to act as gatekeepers. The number of pharmacists enrolled onto each training programme in the second cohort in relation to the first cohort is illustrated in Table 9.1.

Table 9.1. Number of pharmacists per HEI enrolled on the first and second cohort training programmes

	Number of pharmacists enrolled onto the...	
HEI	First cohort	Second cohort
A	16	8
B	8	2
C	4	2

All 12 pharmacists enrolled onto the training programmes in the second cohort were eligible to participate. Ethics approval had been obtained to carry out either focus groups or interviews at this stage.

9.3.1 HEI A

As eight pharmacists were enrolled onto the course at HEI A there were potentially enough pharmacists to conduct a focus group. However, due to the problems encountered with the first cohort in recruiting enough participants and arranging a convenient time to meet the pharmacists

were provided with an information pack on focus groups (which included a letter inviting participation (Appendix 9.1.1), an information sheet (Appendix 9.1.2) and two copies of a consent form (Appendix 9.1.3)) and interviews (which included a letter inviting participation (Appendix 9.2.1), an information sheet (Appendix 9.2.2) and two copies of a consent form (Appendix 9.2.3)). The pharmacists were required to decide which they would prefer to participate in and to return the focus group consent form or the interview consent form, or both, as appropriate. This allowed greater flexibility so that if there were enough pharmacists a focus group could be conducted; if not then consent had already been collected for an interview as an alternative.

The course leader at HEI A introduced the researcher to the pharmacists on their course on the first day of the training programme. The researcher supplied a copy of the information packs, explained to the pharmacists the research that was being conducted, what was included in the pack and what would be expected should they wish to participate. Three pharmacists consented to either a focus group or an interview after receiving the packs at this stage. Approximately two weeks later reminder information packs were posted, via the course leader, to the remaining five pharmacists who had not consented. One more pharmacist consented to an interview resulting in a total of four pharmacists out of a possible eight. Figure 9.1 summarises the recruitment from HEI A.
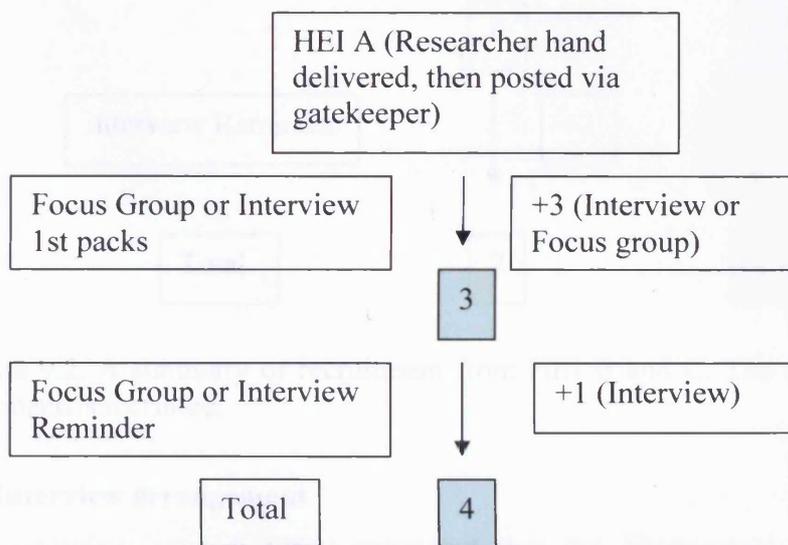
Figure 9.1. A summary of recruitment from HEI A. The numbers denote the number of pharmacists recruited.

9.3.2 HEI B and C

As there were insufficient numbers of pharmacists in HEI B and C to conduct a focus group (two in each HEI) they were only asked to consent to an interview. The course leaders at HEI B and C handed information packs (which included a letter inviting participation (Appendix 9.2.1), an information sheet (Appendix 9.2.2) and two copies of a consent form (Appendix 9.2.3)) to the pharmacists on their course on the first day of their respective training programme. As a result of the first distribution of packs no pharmacists consented to participate. Approximately two weeks later reminder information packs were handed out on another training day, again via the course leaders. As a result both pharmacists from HEI B and one out of the two pharmacists from HEI C consented. Figure 9.2 summarises the recruitment from HEI B and C.

Recruitment resulted in a total of seven from a possible 12 pharmacists consenting to Stage Seven (a).
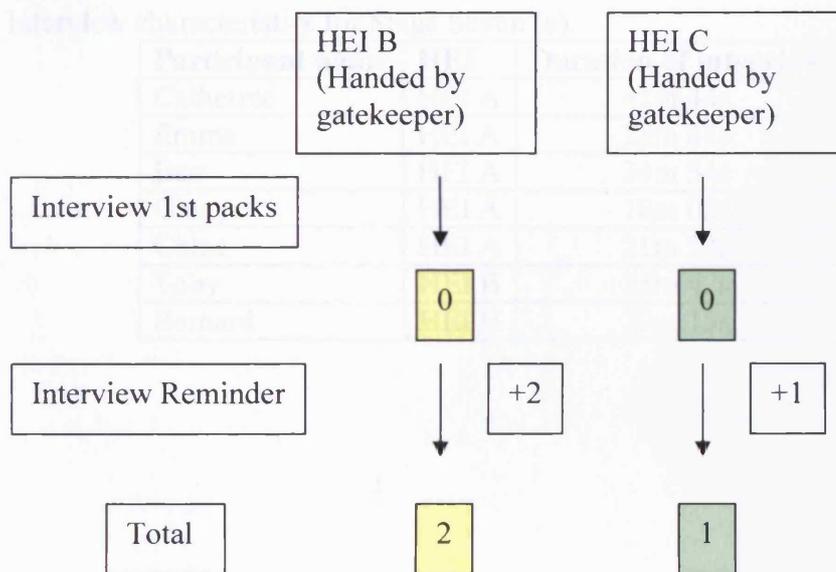
Figure 9.2. A summary of recruitment from HEI B and C. The numbers denote the number of pharmacists recruited.

9.4 Interview arrangement

The interview consent forms requested that the pharmacists specify if they agreed to be interviewed individually, in a group or had no preference. All seven pharmacists stated that they had no preference. An insufficient number of pharmacists (only three) from HEI A had consented to a focus group. Seven individual interviews were therefore arranged via the contact details the pharmacists had provided at a convenient time and place.

9.5 Interview schedule

An interview schedule (Appendix 9.3) was produced which was informed by the schedule used in the interviews with the first cohort (Stage One).

9.6 Demographic questionnaire

In the same manner as Stage One a brief self-completion demographic questionnaire was completed just before the interviews began. Table 9.2 details the information collected from those questionnaires.

9.7 Interview information

The interviews were semi-structured in nature and conducted in the manner described in Chapter Two. All interviews were conducted face-to-face at the participant's place of work and audio-recorded with a micro-cassette recorder. The duration of the interviews is shown in Table 9.3.

Table 9.2. Interview characteristics for Stage Seven (a).

Participant name	HEI	Duration of interview
Catherine	HEI A	41m 44s
Emma	HEI A	28m 44s
Ben	HEI A	34m 54s
Glenys	HEI A	18m 02s
Chloe	HEI A	21m 53s
Toby	HEI B	35m 42s
Bernard	HEI B	29m 13s

Table 9.3. Information collected from the demographic questionnaire before each interview in Stage Seven (a).

Participant Name	Age			Gender		Year of Registration			Sector of practice			Post-graduate qualifications		
	25-34	35-44	45-54	Male	Female	1975-84	1985-94	1995-04	Community	Hosp	Primary	Diploma	Masters	Other
Catherine	▓				▓			▓		▓		▓	▓	
Emma	▓				▓		▓			▓		▓		
Ben	▓			▓				▓		▓		▓		
Glenys		▓			▓		▓				▓	▓	▓	
Chloe	▓				▓		▓				▓	▓		
Toby			▓	▓		▓				▓				▓
Bernard	▓			▓				▓		▓		▓		

9.8 Themes emerging from the interview data

A number of themes emerged from the interviews in the same manner as those described in Chapter Four (section 4.11) with the first cohort of pharmacists:

9.8.1 Motivation for undertaking the role of a SP

A whole multitude of reasons were provided as to why the pharmacists were on the supplementary prescribing training programme, many of which were also identified by the pharmacists in the first cohort (Stage One). Reasons included that supplementary prescribing will:

- Help influence the correct use of medicines (Toby).
- Be the *'future route for development of pharmacy as a profession'* (Toby). *'If it [supplementary prescribing] does reach its full potential I think it's probably the greatest innovation in pharmacy since, I don't know, in my lifetime'*. (Ben).
- Help keep up-to-date with the developments within the pharmacist's field (Toby).
- Assist in developing a new role the pharmacist had recently undertaken (Bernard).
- Be of benefit to the pharmacy department in processing work more efficiently (Bernard and Catherine).
- Allow pharmacy to have a more active presence in the out-patient clinic (Bernard).
- Allow those pharmacists in senior positions to be an example to more junior colleagues and to understand what issues other pharmacists in their department would be facing when they take on the role (Catherine and Toby).
- Assist in the pharmacist's career development (Catherine, Glenys and Emma).
- Benefit patient care (Bernard).
- Be an extension of a role that pharmacists were doing already (Catherine and Ben).
- Improve the profile of pharmacy within the hospital setting (Catherine).
- Increase professional knowledge (Emma).
- Help free-up clinics and therefore to reduce hospital waiting times (Emma).
- Help 'optimise' the pharmacist's knowledge (Emma).
- Provide more of an insight into how GPs make prescribing decisions (Glenys).
- Allow the pharmacist to take responsibility for the care that they are providing (Chloe).
- Ensure that pharmacists do not get 'left behind' (Chloe).
- Avoid having to knock on GPs' doors to get a prescription signed (Chloe).
- Be undertaken as a more senior colleague was eager for the pharmacist to become a SP due to funding for the training programme being made available (Ben).

It was all of the pharmacists' own decision to undertake the course with the support of their organisation.

9.8.2 Supplementary prescribing in practice

The pharmacists in the second cohort intended to manage a variety of conditions through supplementary prescribing, in the same manner as the first cohort. Conditions included respiratory diseases such as chronic obstructive pulmonary disease or asthma, oncology such as colorectal or breast cancer, mental health such as schizophrenia, transient ischemic attacks, stroke, coronary heart disease and hypnotic withdrawal.

The way in which supplementary prescribing would be practised was not known at this time. Toby was unsure how supplementary prescribing would be implemented, either in the in-patient setting writing discharge notes, or in an out-patient clinic to monitor and assess patient therapy. Bernard, Catherine and Emma all envisaged supplementary prescribing in an out-patient clinic. However, the NHS Trusts employing these three pharmacists, at that time had not decided the details of how the role would be implemented. Ben, who worked in secondary care, was undertaking the training programme but with no idea of how he would be able to implement the role:

> BEN: Once I qualify there's nothing in place for me to do it [supplementary prescribing] at the moment so it's been just do the course we'll sort out the rest of it later. As opposed to we'll address a need for, is there a need for supplementary prescribers first? And if so then we can select people to go on them which would have been a better way of doing it from the hospitals point of view identify a gap and say right we prefer this as a course that churn out all these people to go on a course which is quite time consuming and labour consuming um and then having nothing to show for it at the end of it because there's there's nothing they can do with it.

Ben had ideas of how he would like to use supplementary prescribing within an out-patient clinic where each hospital consultant would have a prescribing pharmacist in their team. Ben could then manage the patients with more demanding medication issues.

Glenys and Chloe, in the same manner as Lynne in the first cohort, were working in primary care and were hoping to use supplementary prescribing in GP surgeries. However, as Glenys was managing a large number of surgeries she was unsure how the role could be used long term. Initially both Glenys and Chloe would work in their respective DSMP's surgery with wider implementation to other practices a possibility in the future.

9.8.3 Monitoring of conditions

The way that the pharmacists anticipated that they would be monitoring their patients was related to the conditions of patients they were to manage. Toby intended to conduct spirometry and to listen to patients' chests to detect wheeze. Bernard, Catherine and Emma on the other hand were not anticipating conducting physical monitoring, instead biochemical tests would be utilised. Emma would be assessing the patient's fitness for chemotherapy through monitoring side effects of the treatment.

9.8.4 Confidence to prescribe

The pharmacists were clear that they would only prescribe within their speciality and where they feel confident, a fundamental aspect of supplementary prescribing (DoH, 1999):

> CATHERINE: I wouldn't do something that I wasn't confident with.

> BEN: If you're not confident enough to do it then don't do it.

9.8.5 Previous experience in a prescribing or similar role

Some of the pharmacists had previous experience in a pseudo-prescribing role. These included a prescription transcribing role, adding medication to hospital charts under protocol, recommending treatments to doctors, dose adjustment in a warfarin clinic, writing prescriptions under doctor instructions in an out-patient clinic, amending prescriptions in relation to patient blood results and writing medication charts in hospital:

> BEN: I think that we [pharmacists] prescribe, well effectively prescribe as it is in hospital pharmacy now because I re-write charts I make, in the ward rounds when decisions are made I'm the one that re-writes them, I just get the doctor to sign them.

9.8.6 The supplementary prescribing training programme
9.8.6.1 Time to complete the programme

Toby, Emma and Catherine commented that the amount of time required to complete the training programme was immense:

> CATHERINE: It's not always easy within the rota finding the time to have a days study, at least half a day a week in clinic, some self-study time and to do my job. And that is becoming a bit of a balancing act already.

> EMMA: It's a bit daunting all the um the work we've gotto do. But you've just gotto take it one step at a time and tackle it each one. It's only like hard cause you're working as well.

Catherine also had the same problem as Helen in the first cohort in that the course training days were on the same day as her clinic time so that each week she would 'miss a lot of good clinic time'.

In contrast Bernard and Ben both felt that they had enough time to attend their training days. However, they had not begun their time in supervised practice at the time of the interviews. In primary care, both Chloe and Glenys felt that they were having sufficient release time from their respective Local Health Boards to attend course days and supervised time in practice.

9.8.6.2 Nurses and pharmacists – multi-disciplinary training

The pharmacists in the second cohort expressed a variety of opinions on the issue of both nurses and pharmacists training together. These include some positive:

> *TOBY: Very beneficial, very useful. I've always been a fan of multi-disciplinary training from from many years ago.*

> *BERNARD: I've no problem with it [multi-disciplinary training], it's the same qualification we're all after so there's no reason why we shouldn't be on the same course. It does perhaps seem very sort of reflective, um sort of very nurse orientating. .... So I have no problems all being on the same course but perhaps you could be a little bit more pharmacist friendly.*

> *CATHERINE: I think it's excellent. I think it's brilliant for multi-disciplinary team approach. Um, and that's fantastic. I think with any profession some people are more experienced than others and have a broader background knowledge. Um, so yeah I mean in general I think it's fantastic and at the end of the day we're all gonna be doing the same job so therefore the same course. I think when you, when we speak to different professions you can, you appreciate that you, each of you do have your own strengths and weaknesses.*

> *EMMA: Well I think it's a good thing I think. I mean um, I suppose it's different for us here [in primary care] because we're lucky cause we all work together very well anyway.*

and others that were not so supportive:

> *BEN: So there should be a separate course for pharmacists and nurses.*

> *GLENYS: I think its [supplementary prescribing training] also made more difficult by the fact that it's also multi-disciplinary as well. I don't think it, I mean it's good to sort of build up a bit of a relationship there but our [nurses and pharmacists] training needs are so so different that it's very difficult.*

> *CHLOE: I think it's it's quite hard on a on the course when you're sitting in the first few weeks anyway to see um nurses and pharmacists on the same course. I know they have to run it like that cause there's very few pharmacists*

The identified training needs of the two professions are different, a concept identified by many of the pharmacists. Toby found this of benefit:

> *TOBY: It's much much better to mix with other groups who can bring, it sounds like jargon but adult learning and you learn from each other is actually very true.*

Some of the areas where the pharmacists could benefit from the presence of the nurses included consultation and patient contact skills. In contrast nurses could benefit from the pharmacist's knowledge of pharmacology, therapeutics, and calculations. As such Toby stated that he was seen as a resource on his course so that nurses could ask questions and gain assistance. However, another interviewee commented:

> *BEN: But we [nurses and pharmacists] can learn from each other some things. You know the nursing side of how to take care of someone, um how to to monitor, the obs [observation] and things that we need to do, the basic stuff. Um, that I don't know how to do. But there's not very much that we gain from the nurses, they gain a lot more from us.*

And it was recognised by that:

> *CATHERINE: I think the course as it is is very good I just think you can't, a course can't be everything for all men can it?*

9.8.6.3 Reflection as a learning tool

Reflection, from the pharmacists' points of view was associated with continuing professional development:

> *TOBY: When we discussed about reflective learning actually on the course is really no more than we should be doing for CPD [Continuing Professional Development].*

> *BERNARD: I don't mind it [reflection], not really, cause we do it in our CPD [Continuing Professional Development] don't we?*

> *CATHERINE: Yeah that's quite a new concept to us old pharmacists like me. Um, I can see, I I I understand the logic behind it and I see it as a good thing. Um, but it is a different concept. It's only really through um the Society's CPD [Continuing Professional Development] and the portfolios that you're supposed to reflect.*

Some of the pharmacists (Chloe, Ben and Emma) stated that they reflected to some extent before the course but the manner that it was delivered was in a way 'formalising' its use. However, the way that nurses approach reflection may be different to the way that pharmacists do:

> *TOBY: Interestingly enough ah I reflect more on facts than the nurse model it seems to stress the emotions, feelings, the individual has in that. And I've instinctively found it easier or more more sensible to focus on facts because that's that's what we're delivering.*

9.8.6.4 Identified training needs

The pharmacists identified a number of training needs during the interviews. These included:

- Consultation skills (Toby, Glenys, Chloe and Bernard).
- Physical examination skills (Toby, Ben, Glenys, Chloe and Bernard).

> *BERNARD: I hope that I'm gonna get some experience of hands on with patients. Cause to me a patient is one thing and I handle their prescription chart and I handle their*

medication. I never touch a patient. Um, and I don't know how to do, I don't know how to take a blood pressure.

- Pharmacology relevant to the individual pharmacist's area (Bernard).

- General medicine refresher course (Catherine) because:

CATHERINE: When you become specialised in an area you can lose touch with what else is happening around.

- Decision making models (Emma).

- Diagnosis skills (Ben).

- Applying the theory of how to deal with patients in practice and the supervised time in practice (Glenys).

9.8.6.5 Negative comments on the supplementary prescribing training programme

Some negative comments concerning some aspects of the training programme were expressed. For example, one interviewee believed that:

TOBY: The calculations package that we were given to assess our competence, competency was insulting.

Catherine also did not feel that she gained a great deal from the face-to-face element of the course:

CATHERINE: If I'm honest I've been on the, study days I've been on so far I would say they've been more interesting than useful. Whereas I've enjoyed the hour lecture I've had I haven't thought well that's changed my practice. Um, you know which, which is not necessarily a bad thing.

When Ben was asked what his views were on the training programme (more specifically the taught training days) he stated:

BEN: Rubbish, waste of time.

9.8.7 Signing the first prescription

The pharmacists were asked during the interviews how they anticipated they would feel when they issue their first prescription. A mixture of responses was received:

BERNARD: A bit nervous, um apprehensive. Um, optimistic, I'm looking forward to it as well so despite all those fears.

CATHERINE: I've got no issues whatsoever with signing my name to a prescription. Um, you know cause I wouldn't do something that I wasn't confident with.

The knowledge a pharmacist has of prescription requirements may be of benefit:

EMMA: Well I don't mind that at all. I mean it's pharmacists you end up doing a lot of certainly you know, I wouldn't say unlawful but you know you do a lot of amending the prescriptions anyway by ringing doctors and clarifying things and. And also writing, writing prescriptions you you know from a dispensing point of view what you need on there. You know and actually from a clarity point of view you know I would be more clearer really because I I know what the queries are at this end [in the pharmacy].

Concerns regarding supplementary prescribing included making a mistake such as missing significant symptoms (Catherine and Emma). However, the responsibility and consequences of signing a prescription must also be accepted:

BEN: I don't think it's any different to what we do at the moment ..... I think signing it will be a bit strange but the, if you want to prescribe you have to take the responsibility that goes with it.

GLENYS: A bit scary, yeah. As I said I'm used to before writing it all out and sort of saying to somebody to sign it but that's a bit different isn't it from signing it yourself. Well I mean at the end of the day we are, you know as long as somebody's made the diagnosis, you're happy with that diagnosis then you should be able to do it. Um, but it will still be a bit funny signing, you know cause you just know all the the actually, the legal um ramifications of that what actually means.

Signing the first prescription was also likened to:

BERNARD: I guess I guess it's like the first time that you put your signature to checking a box of paracetamol, it's really nerve wracking and then you get used to it, like when I did it with warfarin. I used to dream about warfarin doses, I'm sure it'll be the same with supplementary prescribing but I'll get used to it.

CHLOE: I think the first one's gonna be. I suppose it's similar to dispensing your first prescription really, I was really, you know you do it as a pre-reg [pre-registration pharmacist] and you you dispense all the time and someone else checks it but the first one that you do is is you very very nervous about.

9.8.8 The future of supplementary prescribing

Independent prescribing was seen as a progression of supplementary prescribing. Toby made a distinction between diagnosis of symptoms either within or outside of the pharmacist's speciality. He did not feel comfortable making a diagnosis outside of his specialisation, full independent prescribing would therefore be 'one step too far'. However:

TOBY: In terms of the profession ah I think it's a natural conclu, ah move that if you're working within a condition you're going to be able to diagnose changes and diagnose different aspects of it which leads you onto treatment. So I I can see it definitely being turned into independent prescribing.

BERNARD: I guess it'll be nice if in the future doctors diagnose and pharmacists prescribe. That'd be nice in the future. Whether it'll happen and whether supplementary prescribing is the, is the bottom rung of the ladder that leads to that I don't know.

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BEN: I think independent prescribing is better than this [supplementary prescribing] because all we need as pharmacists is the diagnosis um and we need to have an understanding of the illness which we get with time and by viewing the observer.

Catherine stated that the CMP may also be an important factor in future development:

CATHERINE: I think supplementary prescribing is gonna work if the clinical management plans don't become or aren't more cumbersome then than I hoped they're going to be. Do you know what I mean? If it suddenly becomes a lot of work to do a clinical management plan then I wonder if some people will take the view oh they're just too much effort I'll just see the patient myself.

Independent prescribing may therefore be appropriate if the CMPs become too complicated. Some of the pharmacists were also cautious about taking the step further to independent prescribing:

EMMA: I don't know, I think personally for me I've got enough on just worrying about this one [supplementary prescribing]. I think get that one right as well. I don't know, I mean um. Yeah, I mean ah. I mean I think it's good to be to be cautious and just to trial these things [supplementary prescribing] properly isn't it.

TOBY: Ah, because along with the, the physical putting your pen on paper actually comes you know quite a heavy responsibility. And I'd like to walk before I can run.

Supplementary prescribing is also seen as a way of 'protecting' the pharmacists by limiting the scope of treatment. In contrast, independent prescribing may be more appropriate for areas such as medication review where it may be more difficult to produce a CMP:

CHLOE: I mean um at the moment you know obviously we haven't got ah independent prescribing which I suppose a lot of people would see to be and I think um in terms of ah supplementary prescribing you may see things that you want to do that you can't and if you're seeing patient for a specific condition and you see other issues that you can't address it's probably quite frustrating. Um, ah but at the same time I suppose it safeguards us as well in that we're only there to deal with one things and you can't sort of delve into what other things you'd like to do.

9.8.9 The CMP

Contrasting views were expressed on the use of the CMP in practice. On one extreme the CMP was viewed as limiting as only the conditions and medication listed could be managed or prescribed (Toby and Glenys), if a pharmacist was away on holiday it would be difficult to cover as another SP would not be named on the plan (Emma) and they would not be possible to use on an acute admissions ward unless a generic plan was produced (Ben). Ben also saw the CMPs as a way of:

BEN: CMPs yeah I mean which are quite restrictive um I think that you know it's not um ah, kind of dumbing down pharmacy cause you know you can only select within a certain dose range cause they don't trust you.

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On the other hand, the CMP was reassuring as any situation that is deemed to be outside of the plan could be referred back to the IP (Bernard and Chloe) and producing the plans would make the pharmacist think more about side effects and medication related issues (Ben). In addition, the CMP could provide direction and an understanding between the SP and IP (Catherine) and more consistency between HCPs in managing patients (Glenys). As mentioned above Catherine also believed that the CMP needs to be in a format that is not too 'cumbersome' and time consuming to use so that it would hinder progress of the supplementary prescribing role:

> *CATHERINE: If you can have a clinical management plan that's quite streamlined but efficient and effective then I think supplementary prescribing could be here to stay and worthwhile in many different settings.*

9.8.10 Barriers to supplementary prescribing

The pharmacists in the second cohort predicted barriers to the implementation of supplementary prescribing in the same manner as the first cohort. Some of those barriers were:

- The SPs will be 'treading on toes' of other HCPs who do not agree that pharmacists should be supplementary prescribing (Toby).
- Patients believe that it is the doctors who 'do everything' (Toby).
- There will be no backup when the SP goes on holiday to continue the role (Bernard).
- Having enough space / consulting room to see patients (Catherine).
- Having sufficient funding to implement the service (Ben).
- A strategy has not been put in place to decide how and where supplementary prescribing will be implemented (Ben).
- Time to undertake supplementary prescribing out of the working day along with the pharmacists other duties and backfill in order to continue the SPs work in the pharmacy department (Toby and Catherine).
- It will take time for the doctors to familiarise themselves with pharmacists prescribing (Emma).

9.8.11 Quality of patient care

Supplementary prescribing was predicted to benefit patient care in a number of areas. Bernard believed that it would improve the organisation of patient treatments in his out-patient clinic. Additional prescriptions which are issued by doctors without seeing the patient first would also be improved as Bernard would be in a position to consult with his patients face-to-face in order to optimise treatment. Supplementary prescribing was also expected to improve the workflow

through Catherine's hospital pharmacy department, to increase pharmacy profile within the hospital and reduce patient waiting times because:

CATHERINE: Well obviously patients are the drug exp, ah pharmacists are the drug experts aren't they? And and so arguably phar, patients are gonna have more of it, have their medication based on evidence based medicine. ..... you know there's probably a textbook list of things that pharmacists or nurses are better at doing than doctors. Um, you know and it is another service within the NHS, another resource.

Emma also felt that supplementary prescribing would ease the running of her out-patient clinic in that the IPs could attend to the more complex patients and the SPs could see the more 'straight forward' patients. Ben believed that pharmacists were better at prescribing than doctors due to their pharmaceutical knowledge which would therefore enhance patient care. As pharmacists would only have to concentrate on the medication side of therapy instead of the diagnosis and other non-medicine related tasks such as social care they would have more time to prescribe and monitor therapy more effectively. Pharmacists, in mental health where doctors rotate every six months would also provide more continuity of care. Another benefit to patient care mentioned by Toby was that pharmacists could spend more time with patients.

9.8.12 Patient acceptance of pharmacist prescribing

The general feeling was that patients would be accepting of the pharmacist managing their care instead of a doctor:

TOBY: So, some [patients] won't consent and that's fine because the supplementary prescriber bit is about agreement with a prescriber and a patient so the the ones who bite the bullet and try it ah will I think find it useful. And I think there'll be people who'll who'll quite happily say yeah I'd rather see ......It'd be good. Ah, I suspect that some of them will just say as long as somebody sees me who know what they're doing I'll take whatever.

CATHERINE: But no they [patients] are very accepting. Um, and I think as long as you explain to them who you are and what your role is and what your boundaries are to that role then they're fine.

CHLOE: I think as long as some patient. As long as they get seen quickly and get seen you know um get treated um a lot of them are quite open to that really.

9.8.13 Skills and knowledge pharmacists need to be a competent prescriber

The pharmacists were asked during the interviews what core skills and knowledge they believed they would need to be a competent prescriber. Those suggested were:

- Common sense (Toby).
- Maturity (Toby).
- An ability to think quickly in front of the patient (Toby).

- Clinical knowledge of the condition the pharmacist is managing (Bernard, Glenys, Chloe and Ben).

- Knowledge of other conditions that patients may have alongside the one being managed (Bernard).

- Knowledge of the legal aspects of supplementary prescribing (Bernard).

- An ability to perform physical assessments, if relevant to the area of prescribing the pharmacist is working in (Bernard).

- Knowledge of the drugs the pharmacist is prescribing (Catherine, Ben, Glenys and Emma).

- Communication skills (Catherine, Ben, Chloe and Emma).

- An ability to educate patients about their medication (Catherine).

- Legible handwriting (Catherine).

- An ability to keep calm and not get flustered (Emma).

- An ability to accept criticism (Emma).

- An ability to adapt and be flexible to respond to the patient's needs (Glenys).

- An ability to recognise the pharmacist's limitations and when they are out of their depth (Chloe).

9.8.14 Views expressed when quoted the heading 'pharmacists should focus on what they do best, not be dazzled by new ideas' (Jenkins, 2004).

All of the pharmacists disagreed with the heading above. The participants believed that the pharmacy profession and the NHS are always evolving and therefore pharmacist roles will also need to change, pharmacy cannot afford to think in this way. Ben suggested that some pharmacists may think in this way due to fear of progress and Bernard stated that pharmacy needs to look to the future and forget the past where the pharmacists were restricted to the dispensary, to do what is best for the patient:

> *CATHERINE: We are supposed to be the experts on drugs and we haven't um marketed ourselves very well at this over the last ten, fifteen, twenty, you know probably before I even started pharmacy. Um and it is about time that we got out there and got more pro-active because other specialities are doing what we could be doing. Um I mean nurses with supplementary prescribing are a good example. If we stayed in the dispensary and the nurses were out there you know, is that the best skill mix?*

9.8.15 Advice from the pharmacists in the first cohort

Catherine, Ben and Chloe all mentioned that they had received advice from colleagues who had been in the first training cohort. Both Catherine and Ben received advice to organise their time

supervised in practice early on in the training programme so as to ensure that they had enough time to complete all of the required hours. Chloe had advice to formulate generic CMPs in order to save time setting up the paperwork. This demonstrates that those pharmacists in the first cohort were advising others on how to maximise their time in training, how the profession can work together to assist colleagues in similar situations.

Stage Seven (b)

9.9 Interviews after training was completed

The pharmacists who had been recruited in Stage Seven (a) had provided the researcher with their contact details and permission to be approached directly for this present stage. Each pharmacist received an information pack (which included a letter inviting participation (Appendix 10.1), an information sheet (Appendix 10.2) and two copies of a consent form (Appendix 10.3)) by post after their training programmes were completed (the dates of which were obtained from the relevant course leaders). Figure 9.3 describes the recruitment procedure in this present stage.
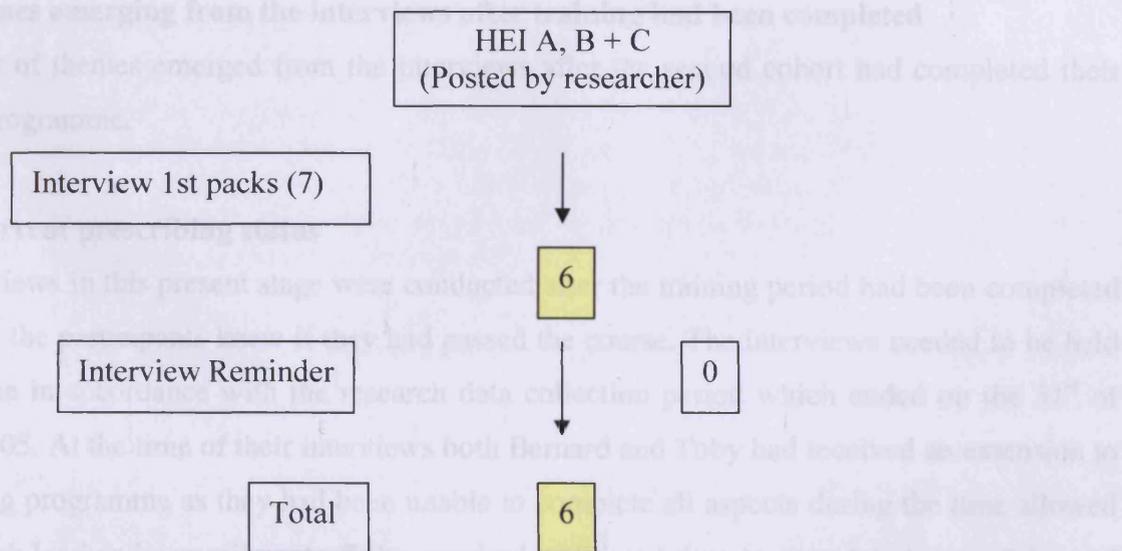
Figure 9.3. A summary of recruitment from HEI A, B and C for the interviews after training was completed (Stage Seven (b)). The numbers denote the number of pharmacists recruited at each stage.

The recruitment process resulted in six out of the seven potential participants consenting to an interview after their training.

9.10 Semi-structured interviews

The interviews were conducted at the pharmacists' place of work at a convenient time and in accordance with the method described in Chapter Two and in the same manner as the interviews conducted after training with the first cohort (Stage Four). The pharmacists were also provided with another copy of the self-completion demographic questionnaire that was used before their interview in Stage Seven (a) (Appendix 2.4) to enquire if any information had changed. None of the information had been amended. An interview schedule (Appendix 10.4) was produced before the interview which was informed by the schedules used in Stages Four and Seven (a). All interviews were conducted face-to-face at the participant's place of work and recorded with a micro-cassette recorder. The duration of each interview is shown in Table 9.4.

Table 9.4. Interview durations for Stage Seven (b).

Participant name	Duration of interview
Catherine	27m 08s
Emma	36m 09s
Ben	30m 46s
Chloe	22m 41s
Toby	41m 13s
Bernard	25m 56s

9.11 Themes emerging from the interviews after training had been completed

A number of themes emerged from the interviews after the second cohort had completed their training programme.

9.11.1 Current prescribing status

The interviews in this present stage were conducted after the training period had been completed but before the participants knew if they had passed the course. The interviews needed to be held at this time in accordance with the research data collection period which ended on the 31st of August 2005. At the time of their interviews both Bernard and Toby had received an extension to the training programme as they had been unable to complete all aspects during the time allowed due to work load and commitments. Toby required additional time to complete his portfolio and OSCE assessment whereas Bernard needed more time to fulfil his supervised time in practice. Both Catherine and Emma were continuing to attend the hospital out-patient clinics where they had been training; they were seeing patients and compiling a small number of CMPs but not working in the full capacity of a SP. Ben did not anticipate that he would be implementing supplementary prescribing within the next year and finally Glenys was ready to start discussions

with the GP practice in which she had trained, in order to decide how and in what area supplementary prescribing would be best utilised.

9.11.2 Barriers to implementation

The participants identified barriers that would impact on the implementation of supplementary prescribing within their area. The first barrier being time (Catherine and Ben) as the pharmacists' day-to-day duties would have to be fulfilled along with their role as a SP when they were out of the department. Linked with time is backfill:

> *TOBY: Backfill was one of the issues discussed with my consultant and it was a ready acknowledgement which cannot just drop you know a portion of your job.*

Funding must also be sought to fund the supplementary prescribing service:

> *BEN: That's one of the main things is trying to arrange the the funding for for it and I don't know I really don't know how what what the plan is for the department.*

Glenys anticipated that she would have problems obtaining prescription pads in primary care, in the same manner as the first cohort and Ben was concerned that his pharmacy department did not have a strategy in place to organise implementation. The participants did not anticipate there to be any problems with the use of CMPs in practice as template documents would be utilised and amended for individual patients:

> *BEN: For every patient I think it [CMP] will be unnecessary, um surely we could have very generic ones for, to treat to treat disease states, that that's gotto be the way forward otherwise we'll spend more time doing CMPs than we will do prescribing. Every time you see someone you have to come up with a CMP or revise it and get it changed and signed by three different people every time they want to change something on it. Um, it, we definitely need to have um more generic ones.*

> *GLENYS: I think is what we were talking about to use a template plan because I think the amount of work involved in writing an individual plan for every patient will be quite quite onerous really.*

All of the pharmacists apart from Ben stated that they were receiving all the support that they felt they required from their organisations to take supplementary prescribing forward:

> *BEN: Verbally quite a lot [of support]. Um, when it actually comes to implement it I don't know but I suspect um with everything else that's going on here it won't be as much as I'd need.*

9.11.3 Supplementary prescribing in practice

The participants all intended to manage the conditions they had alluded to in their first interviews in Stage Seven (a). These included chronic obstructive pulmonary disease, oncology, hypnotic

withdrawal, hypertension and mental health. The settings in which supplementary prescribing would be practised were in hospital out-patient clinics, community clinics and within a GP surgery.

When the pharmacists were asked how comfortable they felt to begin supplementary prescribing a number of responses were received as to how prepared they were to start:

BERNARD: With the exception of the work that we did on the CMP I would say I I didn't feel any better prepared for supplementary prescribing before the lectures than I was after the lectures.

CATHERINE: I think I've always got more to learn because there's so much of the medical side of it that I don't know and that you could be faced with any moment. You know so you know I'm, it'll be a long time before I feel I can face any any patient. I'm quite confident about it. I would go in there [clinic] and I'd at least in the initial stages deal with anybody.

EMMA: I feel quite happy about it [SP], yeah. Yeah I feel quite happy about it. Obviously I, you know I I know what I know and I know what I don't know, you know. So, when I don't know or I'm not sure I'll ask. Um, yeah I I'm much more confident and happy with it now than I was in the beginning.

BEN: Getting my stuff [prescriptions] checked initially just just to think that um, I'd want to be slightly more ah supervised for a while, audited maybe for a first x amount of time. Ah, and then have a feedback and then perhaps say right this was what you did well; this is what you haven't done so like a probationary period if you like.

GLENYS: I think um, although I'm quite confident in what I'm doing but I do appreciate that what my limitations are. I think it is very important to make sure that you know exactly what you're doing before you start doing something because I think um it's when you're not more aware when, rather than just giving advice to people actually doing something yourself and treating individual patient is is a lot more ah a lot more scary in in some respects.

However, all of the participants believed that supplementary prescribing would improve, or already had improved their job satisfaction. For example:

BEN: It [job satisfaction] would definitely increase, if it was to happen that you would have your own clinics you'd become um it would increase the job satisfaction, I mean it's much better talking to patients and prescribing than counting tablets. Ah, it will increase your job satisfaction massively yeah, huge huge difference. For the future I would apply for jobs that were, had a supplementary prescribing angle on them, that would be a positive thing for a job definitely.

9.11.4 Physical assessment

The pharmacists did not anticipate carrying out physical assessments on their patients in practice. This was either because the condition that they were managing did not require such assessment or they had decided they did not want to:

EMMA: We [pharmacist and DSMP] basically agreed that I didn't wanna, I didn't wanna go near physical assessment, and myself and the consultant, that's fine you know.

Toby recognised that pharmacists do not as a profession touch patients:

N1 Right, um when, one of the learning points I got out of this [supplementary prescribing] course was strengths and weaknesses of nursing and the pharmacy profession, and one of the weaknesses of the pharmacy profession is they do not routinely assess ah patients.

9.11.5 Relationship with their IP

Some of the participants expressed the view that their relationship with their IP had changed during their time supervised in practice. Toby and Bernard believed that spending time with their IPs had helped them to integrate more into their ward team and out-patient clinic respectively. Emma stated that she was also more integrated into her clinic team, was asked more questions by the team due to her pharmacy knowledge and that her relationship with her IP had changed to a more mutual partnership. Glenys felt that her GP surgery would work more closely with pharmacists after spending more time with them as they had recognised the pharmacists' knowledge to a greater extent. Catherine believed her relationship had improved:

CATHERINE: I have to say it [relationship] has improved. Um, you know he [IP] was always a very nice man and all the rest of it. Um, it's obviously more equal now than it was at the beginning. Um, I think it's mutual respect both ways cause I can see a lot more what they, what hassles and problems they have in clinic and you know he can see from my point of view what I have to go through so yeah I think it's definitely improved and it's quite a good relationship.

Ben was also very positive about his relationship with his IP:

BEN: Generally it's [supplementary prescribing training] helped with my relationship with that consultant anyway. We've got you know to learn things from each other and nothing to do with supplementary prescribing. Just the fact that we were given the opportunity to spend this time together I think I've learnt a lot from him and he may have learnt that, the skills that I have can be implemented in other parts of um of clinical practice which we are looking into now.....that was the number one thing, best thing about the course definitely.

9.11.6 Signing the first prescription

As in their first interview the pharmacists were asked how they anticipated they would feel when they were to sign their first prescription. The responses were as follows:

TOBY: When and if the first time, the time comes to sign a prescription I'll be hesitant, wary but I think comfortable. And I say that because there is, I think discussions with a couple of people and one conversation with one of the nurses, senior nurses who went through the first intake, ah an acknowledgement that signing takes responsibility, forces, makes the responsibility obvious.

BERNARD: Probably the same way I checked, I felt when I first checked a prescription and let it out with my signature on, checked it about a million times and was very very nervous about it. I'm sure I'll do the same then.

CATHERINE: It'll get a second check back in pharmacy um so no I you know I'm sure I'll think twice about when my names actually going on it but I've got no issues at the moment.

EMMA: I don't mind. I mean as a pharmacist working we, we're always changing things and you know, ringing doctors and changing things aren't you? Um, you know obviously haven't done it yet so. I don't know. Cause also I'm prescribing things that I know inside out anyway, I'm not worried about the drugs really, all that sort of thing.

BEN: A little surprised if I if I ever get round to doing it and proud, I'll definitely be a little bit proud. Just not for myself but for pharmacists as well but you know we are doing it. And obviously a little apprehensive hoping that everything goes well......definitely there'll be not dissimilar to the first time you check a script I suppose for the first time by yourself.

GLENYS: I imagine it'd be the same as dispensing my first prescription where you've been doing it as a pre-reg [pre-registration] for all that time and, but you're first one you actually are, you're checking it a hundred times and making sure it's ok and you're still sort of worry about that one going out. I think it'll be the same as that but.

9.11.7 The future of supplementary prescribing – independent prescribing

Independent prescribing was seen as the next step after supplementary prescribing to some but not all of the pharmacists:

TOBY: Probably a very very quick move to independent prescribing because the, the restrictions on supplementary prescribing are to do with clinical management plans and always having a um an independent prescriber you know to liaise with. Ah, I think independent prescribing rights remove that obstacle.

Bernard said that he felt 'nervous' about independent prescribing within his field due to the fact that any medication could be prescribed rather than just what was in the CMP. Both Catherine and Emma believed that there was not an immediate need within their organisation for independent prescribing but they could see the potential elsewhere, for example, in discharge planning. Supplementary prescribing was seen to be a logical step before independent prescribing in order to build a relationship with the IP and to appreciate the difficulties of prescribing.

9.11.8 Patients and supplementary prescribing

All of the participants spent time with their IP's patients during their time supervised in practice. It came to light in the interviews that patients were not aware of the role of a SP. The pharmacists also described during their interview how they explained to the patient why they were present at the consultation with their IP. The explanations did not include the words 'supplementary prescribing'. However, the pharmacists reported receiving positive feedback

from the patients they had consulted. Benefits to patient care was more time to spend with patients, the patients are never 'cut off' from their consultant, supplementary prescribing allows the IP to focus on the more difficult cases, closer monitoring of therapy and more detailed explanations of drug therapy, for example on possible side effects.

9.11.9 The supplementary prescribing training programme

How the pharmacists responded to the issue of the training programme varied, for example:

> *BERNARD: When I came out the other end I can't say I knew any more about supplementary prescribing that I knew when I went in. Other than you know it'd taken up a load of my time. I I didn't see the point, I don't see benefit at all to myself.*

> *BEN: No I didn't enjoy it [training] no. Um, I didn't enjoy most of the lectures, I didn't enjoy the coursework and I am someone who does enjoy doing things if, I would say I would have enjoyed it if it was something that interested me. Um, am I glad I did it? Yes, just because I've got the certificate and the the possibility to to do it but overall no I didn't enjoy it.*

In contrast, Catherine and Emma stated that they enjoyed their course. However, recommendations to improve the courses were:

- The duration of the course should be increased as the amount of work required was great for such a short period (Catherine). In contrast Emma believed the course duration was appropriate. All of the pharmacists believed there was an immense amount of work to complete on the course, a large proportion of which was carried out in their own time.
- Deadlines should be spread out throughout the course (Ben and Glenys)
- More taught time on the pharmacist's specific specialities (Catherine and Bernard)
- More time to be spend with their IP (Ben)
- More guidance on the written work that was to be completed (Glenys)

Every pharmacist believed that their time in supervised practice was the most valuable element of the course.

9.11.9.1 Nurses and pharmacists training together

The views of the participants regarding multi-disciplinary teaching were diverse. It was recognised that it was difficult catering for two professions on one course and that the learning needs of nurses and pharmacists are very different. For example, pharmacists need additional training on consultation skills whereas nurses need more training on pharmacology. The identified learning needs were consistent between sectors of practice. As a result some study

days should be divided to concentrate on the needs of each profession. For example, Catherine recognised that there are good and bad sides to multi-disciplinary teaching:

CATHERINE: It's great having a cross, multi-disciplinary approach um and you know that is very beneficial um you know to get on and to work with your colleagues and multi, multi team blah blah, And really I suppose if it comes out with one qualification in the end you can't have a two tier method of teaching you know, aiming one thing at pharmacists and one thing at nurses. So I suppose it has to be together but you know we're different professions and our strengths and our weaknesses are different.

9.11.9.2 Reflection

Reflection was seen as a difficult concept to grasp by the participants as it was a new concept to the pharmacy profession. Bernard felt that even though he was supportive of reflection within his continuing professional development, in terms of the supplementary prescribing course:

BERNARD: It'd [reflection] taken up a load of my time. I I didn't see the point; I don't see the point in these reflective exercises. I don't think that's benefited me at all.

The pharmacists were aware of reflection within their continuing professional development. However, neither Catherine nor Ben felt that they would adopt reflection into their practice. In contrast Glenys and Emma found reflection very 'useful'.

9.12 Summary of cohort two participation

Table 9.5 displays a summary of which stages the pharmacists from the second cohort of the supplementary prescribing training programmes in Wales, their IPs and patients participated in.

Table 9.5. A summary of which stage each recruited pharmacist, their patients and IP from cohort two participated in.

Stage	Catherine	Emma	Ben	Glenys	Chloe	Toby	Bernard
7a	✓	✓	✓	✓	✓	✓	✓
7b	✓	✓	✓	✗	✓	✓	✓
8	-	-	-	-	-	-	-
9 - IP	✗	✗	✗	✗	✗	✗	✗

✓ - Participated   ✗ - Didn't participate
- Could not participate (for example, as the SP role had not been implemented)

9.13 Discussion

The responses received from the pharmacists in the second cohort of trainee SPs have been discussed in this chapter. The same general barriers to implementation were identified such as funding and obtaining prescription pads, which demonstrated that issues had still not been resolved in certain areas of practice. For example, some participants from the first and second cohorts were from the same place of work. However, the pharmacists in this present stage still

had to face barriers to begin their new role. Varying opinions were expressed regarding the multi-disciplinary approach to teaching and reflection, in the same manner as the first cohort. The responses demonstrate that one course approach cannot suite all participants. The courses had also not been modified to a great extent from the first cohort. Independent prescribing was also seen as the way forward for the pharmacy profession and expected to benefit patient care.

Due to the time scale of this present study the interviews in Stage Seven (b) were conducted before the pharmacists knew if they had passed their training programme and hence before implementation could have been possible. It was therefore not possible to discuss how supplementary prescribing was utilised in practice and the impact the service would have on patient care in reality.

In the same manner as previous interviews in this present study the location and recording of the interviews generated some discussion and affected people in different ways (Warren, 2001). A few of the participants were conscious of being recorded. Both Bernard and Glenys commented that they did not like hearing their own voice being recorded and hence were aware during the interview that there was a recorder present. Bernard also made additional 'off record' comments after the recorder had been switched off making clear that he was selective regarding what was to be said on and off the tape. Warren (2001) recognises that this type of information is also important. However, as Bernard stipulated that he did not want his comments reported they have not been included in the analysis. Ben asked after his interview if he had spoken clear and slow enough as he was conscious that the researcher had to transcribe the tape. He had therefore changed his normal speech pattern to accommodate the recording. Finally, Glenys' interview, at her place of work was held in a shared office, the presence of other individuals possibly impacting on her responses as it was not a 'private' interview.

As noted in Chapter Three and by Wengraf (2001) the issues raised by the participants can be affected by whether or not the participants were known to the researcher before. A few of the pharmacists in the second cohort were known by the researcher therefore this issue must be considered, the extent of which, however is unknown.

It came to light during the interviews in Stage Seven (a) that the gatekeepers in HEI C had failed to hand out the initial interview packs to their pharmacists. This caused some confusion when the pharmacists received a second reminder pack with the phrase *'Another copy of the information*

provided was forwarded onto you previously, if you have responded please disregard this letter and I thank you for agreeing to participate' in the letter. This demonstrated that even though the gatekeeper had agreed to hand out the first pack it cannot be assumed that they would adhere to the researcher's request and that relying on a third part to aid in recruitment, can cause problems.

The semi-structured interviews conducted at the beginning and after the pharmacist's training programmes in the second cohort were conducted in the same manner as those with the first cohort of pharmacists in Wales. The same issues regarding the awareness of the participants of being audio-recorded were also noted as well as issues concerning relying on gatekeepers to aid the recruitment process. However, the interviews proved to be appropriate to explore the views of the pharmacists on a number of aspects of their role as a SP and the training programme. The findings demonstrate that some of the concerns, barriers and expectations of pharmacist SPs had continued through to the second cohort.

This chapter presents the last stages of the research which was conducted with the second cohort to undertake supplementary prescribing training in Wales. The next and final chapter of the thesis will provide a general discussion of the study as a whole.

9.14 Summary

- In summary the stages described in this chapter were comparable to those conducted during and after training with the first cohort (Stages One and Four respectively).
- The pharmacists in the second cohort were recruited in the same manner as those from the first cohort through the course leaders acting as gatekeepers.
- Seven pharmacists were recruited and interviewed during their training (Stage Seven (a)) and then six were interviewed after their training (Stage Seven (b)).
- Similar themes emerged form the interviews as those that had emerged from the first cohort interviews.
- The pharmacists still anticipated having to overcome a multitude of barriers in order to implement supplementary prescribing which demonstrates that some identified by the first cohort had still not been resolved.
- The opinions expressed regarding the training programme, reflection and signing the first prescription again, varied between individuals. The personal preferences, experiences and viewpoints make these comments very specific to the individuals who expressed them.

Chapter Ten – General Discussion

This final chapter draws together the major findings from the study, the methodological issues that arose, the potential limitations of the study, recommendations, possibilities for future work and allows the researcher to reflect on the study as a whole. A summary of the emerging themes from each stage of the research is provided in Annex A.

This study has demonstrated that supplementary prescribing is a positive development within pharmacy practice, to extend the pharmacist's role and to empower them to take ownership of their prescribing decisions. Participants from a number of specialities and sectors of practice were actively seeking to manage a wide range of conditions. The supplementary prescribing programme was a necessary element to achieve the prescriber status and a number of recommendations were provided in order to improve training for future cohorts. Both patients and independent prescribers alike were also supportive of an extended role.

A multi-method case study approach was adopted in this present study including semi-structured interviews, non-participant observation and the diary: diary follow-up interview method, methods adopted elsewhere in research on supplementary prescribing. For example, semi-structured interviews were utilised by Latif and colleagues (2004) in order to investigate the views of pharmacists on the supplementary prescribing role before and after their training. A case study approach including semi-structured interviews and observation has also been utilised to investigate how supplementary prescribing has worked in practice (Weiss, 2005).

In this present study a range of methods were utilised in order to investigate supplementary prescribing from a number of approaches, what is known as triangulation (Burgess, 1984). Different methods of investigation however, produce results in different forms so it is not possible to directly compare the results. Each set of results only provides a part of the whole picture (Barbour, 2001). The methods chosen however, allowed a number of aspects of supplementary prescribing to be studied. Direct observation of the pharmacist SP-patient consultations gave the researcher the opportunity to describe what is involved in such a meeting in practice rather than depending on others to describe. The interviews conducted were used to explore the pharmacists' views and experiences on a variety of aspects of their supplementary prescribing role and training and the diaries allowed an investigation of the pharmacists' activities whilst training as a SP.

The positive views expressed by the participants regarding the inception of supplementary prescribing were probably to be expected, as they were all involved in its implementation, practise or education. Both the pharmacists in the first and second cohorts presented a variety of reasons why they wished to undertake supplementary prescribing. This included that it will best utilise their knowledge, or act as a 'stepping stone' to independent prescribing, to legalise a role that they were already undertaking and to improve patient care. Interestingly, both benefits to patient care and better utilisation of HCPs' knowledge was also noted in the Crown Report (DoH, 1999) as predicted benefits of supplementary prescribing. In practice, the pharmacists expressed that they had indeed received positive feedback from their patients during the time supervised in practice and that they were happy for a pharmacist to manage their care. The pharmacists also believed that their relationship with their DSMP had also improved as they were spending more time practising together, could appreciate and utilise each other's knowledge to a greater extent and the pharmacists were having an increased input into patient care. The forging of stronger working relationships between HCPs can only be seen as a positive development within multi-disciplinary practise, which was as predicted by the Crown Report (DoH, 1999).

Since this study began, independent prescribing has moved a step closer. In March 2005 a consultation document was released by the MHRA and DoH (MHRA and DoH, 2005b) concerning the possibility of pharmacists undertaking an independent prescribing role. An IP was defined as 'a practitioner (e.g. doctor, nurse, pharmacist) responsible for the assessment of patients with undiagnosed or diagnosed conditions and for decisions about the clinical management required, including prescribing' (MHRA and DoH, 2005b p6). The RPSGB had already voiced their support for such an extended role when they responded to the original supplementary prescribing consultation document (MCA, 2002). The consultation on independent prescribing closed in May 2005. The current Health Minister John Reid stated that 'by allowing fully trained pharmacists to prescribe independently we can make better use of their considerable skills in pharmacology and therapeutics and offer people a more accessible service' (DoH, 2005c p1). Supplementary prescribing means that a pharmacist has to work within the confinements of a CMP, a limitation which is removed in independent prescribing. However, even though independent prescribing is believed to be of potential benefit in the hospital sector (Connelly, 2005), its use within community pharmacy is less clear (Moberly, 2005). Cotton (2006) also asks 'could independent pharmacist prescribing to a risk to our reputation?' (p38) where he believes a collaborative approach between all stakeholders such as GPs and patients be

utilised to maximise the benefits of this extended role. As a result of the DoH consultation, it was announced in November 2005 that the prescribing rights of pharmacists would indeed be extended (DoH, 2005e) from Spring 2006 allowing them to prescribe, within their own competence, any medicines (except for Controlled Drugs) for any medical condition. In order to undertake this further role pharmacists will need to complete some additional training. The nature of training, at this time is unknown. However, based on the feedback from the supplementary prescribing training programme it appeared that the pharmacists required more guidance on skills such as the more 'hands-on' aspect of patient care such as examining patients and communication more than the factual, and in most cases repetitive, pharmacology and prescription writing aspect, a view supported by the participants in Latif *et al.'s* (2005) study and by Lovejoy (2003). Skills such as monitoring patient care and, more specifically diagnosis for independent prescribing would therefore be required by pharmacists undertaking an independent role. In order to identify the needs of pharmacists to undertake independent prescribing then the RPSGB should endeavour to obtain feedback (for example, in the form of a survey) what it is that pharmacists need to feel competent to further their role in this manner. SPs may possibly be in the first group of independent prescribers. It is possible therefore for the RPSGB to identify SPs from the Pharmaceutical Register in order to explore their views to inform the curriculum to be developed for this additional training.

Even though positive views were expressed regarding the benefits of the supplementary prescribing role by all participants (including key informants, IPs and patient) the findings were less positive regarding implementation issues. Several barriers were identified by all of the pharmacist SPs which, in many cases did hamper developments in practice and have been identified elsewhere (Bellingham, 2005). Nevertheless, many of the pharmacists did manage to overcome these issues. For example, one pharmacist had delegated some of their daily duties to other members of their pharmacy department to free up time to attend their supplementary prescribing clinics. One pharmacist was practicing in their DSMP's GP surgery in order to ensure access to patient medical records and two of the pharmacists had overcome the delay in their prescriptions arriving by authorising prescriptions and then asking their DSMPs to sign them until they arrived, in order to get supplementary prescribing underway in their practice. By the end of the study the pharmacists' roles had evolved and had allowed them to take ownership of their prescribing decisions by allowing them to sign their own prescriptions, demonstrating that the barriers are not insurmountable and it is possible to begin supplementary prescribing.

Even though the methods used allowed for a significant amount of data to be collated several methodological issues arose during the study. These included problems encountered when utilising gatekeepers in order to negotiate access and to assist in recruiting the pharmacist SPs and the organisation of interviews at the pharmacist's place of work where the seating and privacy arrangements were out of the researcher's control. The researcher acknowledges that the course leaders, in organising a new training programme were very busy and that helping the researcher in their recruitment may not have been a major priority. However, in order to assist the gatekeepers in carrying out recruitment procedures on the researcher's behalf and passing on the correct information to potential participants perhaps a different approach might have improved recruitment. In further studies it would seem appropriate to provide more detailed instructions as to what information should be provided to the pharmacists in the form of written notes instead of a verbal explanation so that they may refer to them at a later date, including the need to avoid coercion when recruiting. Recruitment may also have been improved if the researcher could have been, where possible present at the beginning of the training courses to meet the students in a more formal manner. A brief presentation may have been useful to explain the research, to introduce the researcher and to detail what would be expected of the participants. The participants would then also have the opportunity to ask questions face-to-face with the researcher before making a decision. This strategy was attempted in HEI A at the beginning of the course but in an informal manner at the end of a lecture where little time was available and it was not possible to explain the research fully. However, it was recognised by the researcher that the face-to-face teaching element of the course was demanding and therefore it may be difficult to find enough time during a training day to undertake such a presentation.

The organisation of interviews at the participant's place of work was designed to minimise inconvenience. However, this resulted in interruptions, other individuals being present and inappropriate seating arrangements. On reflection, it may have been more appropriate to conduct the interviews at the University where a quiet room could have been arranged and the participants were not being distracted by their daily duties. More time could also have been spent on the interview instead of participants wishing to rush back to work. If additional funding was available then it may have been possible to pay the participant's expenses such as travel or locum cover to come to the University (or to an alternative location in North Wales). This would have provided an incentive to participate outside of working hours.

Interestingly, many of the participants appeared to be acutely aware of being recorded, either during their interviews or non-participant observation of consultations. This was brought to light by verbal comments such as *'I hate the sound of my voice on the tape'* or *'Is that ok?'* (referring to the content of the interview) and by looking and directing comments at the recorder during the interaction. The awareness of the audio-recorder may have impacted on the information divulged by the participants when the recorder was switched on, as many additional comments were received after recording was terminated. This was to be anticipated as it is only a natural reaction to be conscious of the nature of information divulged when it is being noted 'on record' and in a formal manner. The device used was a relatively large micro-cassette recorder which was placed between the participant and researcher and which had to be plugged into the main electricity supply (a difficult task on some occasions due to the location of the interview and lack of plugs, hence making the presence of the recorder more obvious). In hindsight, it may have been more suitable to use a smaller device such as a digital recorder or mini disc recorder which could have been less obtrusive and hence more discreet. In this study the micro-cassette was chosen as opposed to the micro-cassette for the face-to-face interviews due to ease of transcribing.

The amount of time between each interview in order to reflect and amend further interview schedules was variable. This was due to the researcher having to conduct interviews at times when it was most suitable for the participants, meaning that on a number of occasions some interviews had to be conducted straight after each other. This situation was unavoidable at times due to the interview time being determined by the participant and the distance to travel to the interview location. As a means of overcoming this problem then it may have been suitable for the researcher to request an alternative date in order to allow more time between interviews. At the time of the study the researcher was anxious to organise a date for the interviews in order to ensure data collection. However, on reflection alternative dates could have been organised which may have been beneficial as it would have been possible to reflect to a greater degree on the themes and organisation of previous interviews. This could then have been used to inform and improve further interview schedules and to determine additional topics for discussion.

It was the researcher's initial intention to conduct focus groups with the pharmacists during their supplementary prescribing training. Such focus groups would allow the pharmacists to interact with each other (Morgan, 1997) in order to compare and discuss experiences and opinions, which is not possible in individual interviews. However, in practice it was not possible to conduct focus groups due to the small numbers recruited and it was not possible to arrange a

convenient time to hold a group meeting. On reflection, the recruitment could have been increased by means such as financial incentives (if funding was available) and presenting the research to the pharmacists on the courses which have been described above. Perhaps in future studies, focus groups could be utilised as an alternative to the interviews, if sufficient numbers permit, especially if a time and place could be arranged that is convenient to the pharmacists, such as outside of work hours or within a training day at the HEI. It may have been more of an incentive for the HEIs to assist in the recruitment of participants and providing time and facilities to conduct the group if they were more formally involved in the research, as part of the research team. A collaborative research approach could then have been adopted with the HEIs contributing to the research questions that they would like to have addressed, such as feedback on specific aspects of their training programme. However, this approach is disadvantageous in one respect as the pharmacists may feel obliged to participate and less able to speak freely about the course in the presence of their course leaders. Another approach, for example, if there are insufficient numbers in each HEI to conduct a focus group, as was the case in HEI C in this study is to conduct focus groups with pharmacists from a mixture of training programmes. The diversity of training approaches and experiences would also contribute to the discussion as the pharmacists could compare each others courses and perhaps decide which approach, or combination of approaches would meet their needs the greatest. Again, this approach would involve the participants spending more time travelling which may pose logistical problems. But if funding was available to pay expenses then it may be possible.

To encourage the pharmacists to complete their diary entries the researcher telephoned or emailed the participants on an approximately fortnightly basis depending on which method they preferred. In previous studies this strategy has proved successful (Frankland, 2002) and indeed in this study the pharmacists were happy to be contacted. However, the degree to which the contact contributed to the participants' motivation to complete entries is unknown. The pharmacists were also asked to complete entries which they chose and for which they had time, which the researcher believed would be more manageable as they already had to complete their training and time in practice. In hindsight, because only 41 entries were received in total over three months then it may have been more appropriate to request that the participants complete a daily entry like health diaries (Richardson, 1994). Also, returning their entries more frequently, such as fortnightly to correspond with the researcher making contact may have encouraged completion. This may increase the burden on the participants but may result in a greater number of entries and over a longer period of time.

In order to recruit patients for the non-participant observation stage of the research it was necessary to obtain the consent of the supplementary and independent prescriber. The manner in which the patients were recruited then depended on the individual pharmacist. The intention was to forward information packs to the patients before their next appointment. However, this was not possible for one of the pharmacists as she wished to post the information packs and the reception staff failed to do this for her. On reflection, a more efficient manner to recruit patients would be for the researcher to specify that all pharmacists hand the information packs to their patients at their previous appointment. This would mean that the pharmacist had met the patient face-to-face in order to deem them suitable to be observed and could explain about the research verbally. The patient would then take the information pack home for consideration. If the packs were posted then the opportunity for the pharmacist to explain the research is lost and the patient is unable to ask questions, on a face-to-face basis.

Burgess (1984) notes that one way to combat issues of validity is to use 'multiple strategies of field research' (p144). Triangulation is either within methods or between methods where different types of data and methods can be adopted (Smith, 2002c). Between methods triangulation was therefore adopted in this present study where a number of different types were utilised. Stake (2000) describes triangulation in terms of case study research, to 'reduce the likelihood of misinterpretation' (p443). It is used to provide multiple perspectives of a case, in this context, the recruited pharmacists as they developed as supplementary prescribers.

Overall, the methods adopted facilitated the collection of data over a period of 22 months where each participant contributed to the research to varying degrees. The method of recruitment for the pharmacists in the first and second cohort training programmes in Wales involved the use of separate information packs for each stage. This meant that the participants were provided with a large amount of paperwork, especially as the information sheet detailing 'what is an interview' was the same for each pack. The large amount of information provided and the researcher contacting the potential participants at each stage may have deterred some from participating further, resulting in 'research fatigue' (Elliott, 1997). On reflection, it may have been easier and less troublesome if the pharmacists agreed at the very beginning of their training programmes to participate in a number of stages with the use of only one information pack. This would have ensured consistency of participation and less 'paper chasing'. In fact, it was a requirement of the North East Wales LREC approval that the interviews at the beginning and end of training, diaries and follow-up interviews (Stages One to Four) for cohort one be combined in one information

pack. This meant that these pharmacists only had one instead of four consent forms to complete. In practice, the use of individual information packs were used as it was believed at the beginning of the study that allowing the pharmacists to participate in individual stages would allow for a greater degree of flexibility, and that asking for participation in a number of stages at one time may have deterred some due to the perceived commitment. In hindsight, this may not have been the case as the results demonstrate that many pharmacists did not participate in some of the later stages anyway. In addition, completing one consent form to agree to a number of stages does not commit the individual to take part in every stage, as it was made clear that the pharmacists were free to withdraw from the study without a reason, at anytime. The researcher would therefore suggest that one combined information pack would be more suitable for such a study with multiple stages.

Limitations

The recruitment procedure resulted in only eight from 27 participants from the first cohort and seven from twelve from the second cohort participating. Due to time, logistics and funding it was not possible to conduct research with additional HEI supplementary prescribing training programmes. However, the main aim of qualitative research is not to generate results that can be extrapolated to a wider population but to explore the views of a small number of individuals (Silverman, 2001). This means that the results are only applicable to those recruited pharmacists, their specific area of practice and the HEI that they attended. The findings cannot therefore claim to be valid for the whole pharmacist SP population. As this is an exploratory qualitative study the aim was not to collect results that could be extrapolated outside of the immediate participants, which are in contrast to the aim of a large-scale quantitative study (Babbie, 2001).

Reliability must be considered in qualitative field research (Babbie, 2001) as a 'potential problem' as external reliability refers to what extent a study can be replicated. Bryman (2001) notes that a social situation cannot be completely replicated. For example, in this present study the opportunity to conduct research with the first and second cohort of pharmacists in Wales during their supplementary prescribing training will not occur again. It is the validity, not reliability that is strength of qualitative methods (Mays and Pope, 1995). However, research on the first cohort of other training programmes outside of Wales should also be conducted in a similar manner as this study in order to investigate if pharmacists in similar situations have experienced issues and concerns of the same nature outside of Wales.

Qualitative research 'provides narrow grounds for strict comparison of cases' (Stake, 2000 p444). Due to the various backgrounds, experiences and characteristics the recruited pharmacists and their circumstances cannot therefore be readily compared as each had their own journey to take and problems to face in order to become a SP. Each pharmacist must therefore be seen as a distinct entity or case. The validity of the results in this present study was also increased as the same issues emerged in each interview stage. The generation of similar themes and issues from one cohort to the next increases the validity of the findings (Bryman, 2001).

In addition, it is recognised in qualitative research that the researcher, when they enter the field of enquiry cannot be 'neutral' (Flick, 2002) as it is the researcher that is the 'main instrument of collecting data' (p54). It is also the researcher that decides within the case study what will be reported (Stake, 2001). Reflection on the part of the researcher on how their presence has influenced the data is an important part of qualitative research as 'no research is free of the biases, assumptions, and personality of the researcher' (Sword, 1999 p277). The researcher must therefore deal with their pre-conceptions, what they think they already know (Gillham, 2000) and understand that they are there and that data must look beyond them. Awareness of the researcher's presence is known as reflexivity (Finlay, 2002). The presence and behaviour of the researcher will therefore affect how the participants react to the questions posed to them. The results are produced jointly between the two parties, what Finlay (2002) calls 'co-constituted'. The researcher therefore acknowledges that their presence and interactions with the participants may have influenced the views and opinions expressed, the extent of which is unknown. The fact that the researcher knew some of the participants before the research began may also have impacted on the data collected, as the relationship that the researcher has with those individuals will be different to that of someone who they have never met before. This may influence how comfortable and willing some individuals are to express certain, perhaps controversial views.

Recommendations

The following lists the recommendations that have come to light throughout the research in order to improve future training programmes, to assist in ensuring that supplementary prescribing may be implemented in practice and to suggest future work. The recommendations for the programme providers, policy makers, SPs and future work are given below.

Programme providers

The results that emerged throughout the research provided a number of recommendations that can be made to the supplementary prescribing programme providers. Recommendations include:

- An All Wales training programme should continue to be facilitated in order to promote consistency of approach and to maintain relations between HEIs.

- The course providers should periodically review their programmes in order to obtain feedback and identify from their participants where improvements could be made. The courses will then continually evolve and ensure that they meet the needs of further potential SPs. Recommendations to improve training have been suggested within this present research study.

- The course providers should consider if an all multi-disciplinary programme is beneficial to the participants. In order to fulfil the specific needs of each profession it is recommended that some of the taught elements of the course should be held separately for nurses and pharmacists and some held jointly.

- The HEIs should continue to provide ongoing training and support after the course has been completed. For example, in the form of newsletters or workshops.

SPs – before, during and after their supplementary prescribing training

Recommendations to pharmacists wishing to undertake the role of a SP are listed below. Tips to assist future and present SPs could potentially be included in the WAG supplementary prescribing newsletter in order to be made available to a wide range of professionals:

- In order to assist efficient implementation, the pharmacists should identify where work needs to be carried out before or early in their training. This would mean that strategies were in place early on to avoid delay.

- Pharmacists should endeavour to utilise the experiences and knowledge of SPs who have already undertaken training to determine strategies to ensure implementation and to complete training successfully. Tips on ensuring implementation have been provided in this research study from qualified SPs.

- During the supplementary prescribing training it is recommended that pharmacists organise their time very carefully to ensure that they have enough time to complete their training within the time provided.

- While practising it is recommended that pharmacists make patients aware of what supplementary prescribing is and their informed agreement sought before the SP takes over their care. Patient information leaflets such as those produced by the College of

Pharmacy Practice (Faculty of Prescribing and Medicines Management, 2003) should be utilised in order to inform their patients about the role.

Policy makers such as the WAG

In order to ensure that supplementary prescribing can be utilised to its full extent to benefit patients and to promote pharmacy to patients and other HCPs the following recommendations to policy makers can be made:

- Pharmacists should be supported to ensure that strategies are in place to implement supplementary prescribing before they undertake training. Funding should be made available to provide extra resources such as locum cover to undertake some of the pharmacist's day-to-day duties.

- Funding should be made available to support the supplementary prescribing role (either from individual NHS trusts or Local Health Boards or centrally from the WAG) in order to ensure access to patient medical records is possible by developing and providing the correct information technology and ensuring that prescription pads for those pharmacists in primary care are available for when the course is completed. Support should also be provided in evidence-based medicine, clinical governance and continuing professional development (NPC, 2006) for example, in the form of newsletters, publications and events or workshops (NPC, 2006).

- The awareness of both other HCPs and patients of supplementary prescribing needs to be raised. For example, greater publicity outside of pharmacy avenues such as increased publications targeted to other HCPs highlighting the benefits to patient care.

- The awareness of patients and the general public on the services provided by pharmacists and their extended role needs to be increased. Publicity should be made available in easily accessible formats such as notices in GP surgeries and pharmacies.

- In order to facilitate multi-disciplinary care then pharmacists, doctors and all other HCPs need to work in partnership. For example, the placement of the community pharmacist and doctor in one health care centre will promote communication, shared patient management and improved relationships between professions.

- The RPSGB, at this time is responsible for registering pharmacists as SPs on the Register of Pharmaceutical Chemists. The RPSGB should have a pro-active role in maintaining the role of the SP. For example, separate groups within the RPSGB for SPs and independent prescribing pharmacists could be used as a resource to develop practice.

Direction of further research

As supplementary prescribing is a relatively new area within the pharmacy profession it is expected that the number of research projects in this area will increase. As Tomlin (2005 p183) noted, there is 'a lot of interest in supplementary prescribers and those working in this way should expect to be part of research projects looking at roles and how they develop'. At the time of the study's inception little research had been conducted on this area.

Kay and Brien (2004) reviewed the literature published on supplementary prescribing practice and concluded that, in 2004 only one study in the United Kingdom evaluated the clinical outcomes of a SP managed patient care compared to standard care. In essence the literature that has been published in the United Kingdom only contains a theoretical argument of how supplementary prescribing may benefit patient care in so far as evidence from well designed trials is lacking. More research should be conducted 'to assess the viability of their practice by measuring clinical, humanistic and economic outcomes' (Kay and Brien, 2004 p303).

Further research is recommended in the following aspects of supplementary prescribing:

- An economic analysis of supplementary prescribing should be carried out to ascertain the prescribing costs and trends of SPs in order to evaluate the financial impact of additional non-medical prescribers. This may include an analysis of prescribing analysis and cost (PACT) data.

- In light of the barriers to implementation identified research should be conducted in order to investigate the implementation issues that are experienced by both primary and secondary care SPs on a nation-wide scale. A survey could be distributed to SPs (nurses and pharmacists), DSMPs and policy makers to investigate the problems that SPs have experienced to determine where and what strategies need to be put in place to ensure that supplementary prescribing becomes an established part of the health care system.

- Research should be conducted with IPs such as further interviews in order to investigate their views on the extension of the pharmacists' role, including IPs from all over the United Kingdom, from primary and secondary care. The participants should include IPs who acted as mentors during the supplementary prescribing training programmes and those who did not. By exploring a sample of all IPs then a general view of doctors on pharmacists undertaking a traditionally doctor orientated role could be explored.

- Patient views on being managed by a SP in comparison to the more traditional route of a doctor should be explored further. A qualitative approach, more specifically individual

interviews with a sample of patients managed by SPs would be well suited to discuss their experiences and opinions.

- The effect of supplementary prescribing on patient care (clinical outcomes) should be explored to investigate if the management of medical conditions has been affected, or indeed improved. For example, randomised controlled trials on medical outcomes to compare pharmacist versus the more traditional doctor managed route. Research on patient views and how supplementary prescribing may have changed service delivery was identified by the Task and Finish Group for Supplementary Prescribing in Wales.

- This present study was based in Wales where every course was multi-professional in nature using an All Wales syllabus adopted by all five HEIs. A large-scale research study to investigate in detail what it is that the pharmacists who are undertaking the training require on such a programme should be conducted. A consensus of the needs and recommendations could then be obtained and hence a nation wide standard could be adopted by the HEIs. For example, a survey of all pharmacists in the United Kingdom who have completed supplementary prescribing training to investigate their learning needs before they started the course, whether these needs were addressed during the course and any recommendations they could provide on how to improve the training.

- This present study included a description of pharmacist SP-patient consultations through non-participant observation. However, the number of consultations recorded (two) did not allow for in-depth analysis to be carried out. Additional recorded non-participant observations should be conducted in order to facilitate the use of DA. DA could be utilised to explore the pharmacist-patient interaction in greater depth, within the context of the pharmaceutical consultation.

In conclusion, the findings presented in this thesis provide an insight into the development of supplementary prescribing by pharmacists in Wales. The findings must be viewed with consideration of the limitations of the study presented above. However, this is an exploratory study and should be viewed as such. A number of pharmacists in Wales have embraced supplementary prescribing which is now beginning to make an impact on patient care. This is a significant development for the pharmacy profession with a restructuring of practice as we know it. Although pharmacist prescribing is not seen as a major step forward for the profession, it is viewed as tangible, and an enhancement of the current role. The role may further be enhanced as additional pharmacists qualify as SPs and increase the profile of pharmacy as more and more people become aware of the expertise and abilities of the profession. Independent prescribing

will also extend the role further and empower those pharmacists with the expertise to fulfil this role to an even greater degree. In addition, a new proposal has been announced suggesting that patients be allowed to bypass their PCT and decide who should provide for their health needs in an attempt to reduce the monopoly of GPs in this sector (Corrigan, 2006). This would mean that other 'primary care providers' such as pharmacists would be in a position to extend their role even further. These are exciting times for pharmacy as a whole which will prove to demonstrate the skills and knowledge that pharmacists have and their potential to manage patient care to their utmost ability.

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Annex A – Summary of emerging themes

The following table summarises the themes that emerged from each stage of the research and the corresponding research questions. The stages are given in bold and the objectives in italics.

Research questions	Themes
Key informant interviews	
To explore the views of a number of key informant interviewees on supplementary prescribing and their role in its implementation and training.	
What was the interviewee's role in the implementation and training of supplementary prescribing?	Description of their role
Where were the training programmes for pharmacist SPs in Wales to be held and how were the courses to be structured?	Description of the training programmes – reflection, duration, time in supervised practice with DSMP, assessment strategies, multi-disciplinary training,
How many pharmacists were to undertake supplementary prescribing training in Wales and from which sector of practice?	16, 8 and 4 pharmacists in each HEI included in the study
How was supplementary prescribing envisaged to work in practice?	List of conditions to be managed Sectors of practice – easier to implement in secondary care
Which patients and conditions were envisaged to be managed in practice by supplementary prescribing pharmacists?	List of conditions to be managed
What issues / barriers to implementation of supplementary prescribing did the participants identify?	Barriers – backfill and staff release, access to patient records, lack of communication, lack of support, finding a DSMP and remuneration in community pharmacy, lack of awareness of the role by individuals and organisations
What were the views and opinions of the interviewee on the role of the SP?	Positive views on supplementary prescribing – great opportunity for the pharmacy profession
	Supplementary prescribing will benefit patient care – closer monitoring, more time, increased convenience
	Independent prescribing by pharmacists (supplementary prescribing is a stepping stone)
	Supplementary prescribing will legalise a role that some pharmacists already undertake
	Supplementary prescribing will result in an increased responsibility for the individual pharmacist
	Supplementary prescribing will best utilise pharmacists' skills and knowledge
	Supplementary prescribing will aid in recruitment and retention of staff

Research questions	Themes
	Themes to explore with trainee SPs - Motivation to become a SP, course requirements, views of SPs on the role and its limitations and how supplementary prescribing will work in practice
	Supplementary prescribing as part of the development of the pharmacy profession – segregation of the profession

Stage One – Interviews during training (Cohort one)	
To explore the views of a sample of pharmacists in the first and second cohort to be trained as SPs in Wales and their motivation for undertaking supplementary prescribing, and their pre-conceived ideas and views on the new role.	
What was the motivation behind the pharmacists undertaking the training programme to become a SP?	Motivations to become a SP – Supplementary prescribing will utilise the pharmacist's skills to a greater extent, to legalise a role already undertaken, to make a difference to patient care
What were the views of the pharmacists on supplementary prescribing and its limitations?	Positive opinions expressed by participating pharmacists
	Supplementary prescribing will benefit patient care – e.g. improved access to HCPs, more time, improved monitoring
	Supplementary prescribing is a stepping stone to independent prescribing
	Concern that supplementary prescribing won't be implemented in community pharmacy
	Barriers to implementation – funding, new pharmacy contract, access to patient records, information technology (mostly in community pharmacy)
	Limitations – CMP is restrictive and time consuming but is also reassuring
To describe where the pharmacists aimed to implement supplementary prescribing in their practice and the conditions that they envisaged managing.	
How was supplementary prescribing envisaged to work in practice?	List of conditions to be managed and sectors of practice – the pharmacists visions of their new role – out-patient clinics, GP surgery clinics, community pharmacy
What expectations did the pharmacists have of their new role?	
To identify any recommendations that the pharmacists could suggest to improve their supplementary prescribing training course.	
What would the pharmacists like to see on the prescribing course in order to become a competent SP and to meet the learning outcomes set by the RPSGB and the All Wales Curriculum?	Recommendations for course improvements – e.g. ongoing training an support, increased duration, role playing, training with additional IPs and more time spent on CMPs and clinical assessment
	There will always be course improvements – the first cohort are 'guinea pigs'
	The time and commitment to undertake training and to practice was immense

Research questions	Themes
	Multi-disciplinary training – contrasting views, nurses and pharmacists have different learning needs and approach patients differently, 'one size fits all' approach to training
	Reflection – nurses have more experience, pharmacists find it harder to grasp
Stage Two and Three – Diary and diary follow-up interviews	
To explore the day-to-day activities of the trainee SPs through the use of diaries and follow-up interviews.	
What day-to-day activities do trainee SPs undertake during their training period time supervised in practice?	Patient monitoring – physical / non-physical
	Patient counselling
	Communication with HCPs and patients
	Recommendations to HCPs on medication issues – e.g. dose amendments
In which settings and conditions were the pharmacists gaining experience?	Location of activities – e.g. GP surgery, hospital out-patient clinics, in-patient wards
What represents a 'typical day' in the working life of a trainee pharmacist SP?	Activities – supervised time in practice / day-to-day duties
What additional information can the pharmacists provide with respect to their diary entries (Stage Two) via the related follow-up semi-structured interviews (Stage Three)? This is to clarify the events and to elaborate on the meaning of the occurrences to the participants	Expansion of some diary entries
What problems and barriers were the trainee prescribers faced with during their training?	Barriers – time
What kind of interventions were the pharmacists performing with regards to the care of their patients during their training?	Patient monitoring
	Amending medication doses
How have their activities and how has their role as a pharmacist changed as a result of the supplementary prescribing training?	Relationship with DSMP has evolved
	Increased input into patient consultations
	Experience in additional areas of practice
	Relationship with patients evolving – e.g. 'more than just over the dispensary hatch'
	Reflection – adoption into practice by some participants

Research questions	Themes
Stage Four – Interviews after training (Cohort one)	
To describe where the pharmacists aimed to implement supplementary prescribing in their practice and the conditions that they envisaged managing.	
Had participants implemented, or were the pharmacists in the process of implementing supplementary prescribing into their practice?	Only one pharmacist had implemented the role
Which patients were having, or were intended to have, their conditions managed through supplementary prescribing?	Conditions to manage – intended and in practice (same as those intended in Stage One)
	Signing the first prescription
How had the participants' views and perceptions of the supplementary prescribing role changed since the interviews conducted during training?	Reflection – incorporation into practice
	Development of the pharmacists' role – e.g. approaching patients in a more holistic manner
	Improved job satisfaction
	Similar views expressed to Stage 1
How did the participants envisage the role of the SP pharmacist in the future?	Supplementary prescribing – a stepping stone to independent prescribing
To determine what barriers if any, the pharmacists encountered in order to implement supplementary prescribing into their practice.	
What barriers had the pharmacists experienced with regards to implementing their role as a SP?	Greater in community pharmacy –Funding, Lack of implementation strategy, Access to patient notes, Information technology, Being in the first cohort, Time, Obtaining prescription pads, Space,New pharmacy contract, Lack of awareness, CMPs
To identify any recommendations that the pharmacists could suggest to improve their supplementary prescribing training course.	
What barriers or problems had the pharmacists experienced with respect to the supplementary prescribing training?	Time
What recommendations, if any, did the participants have on possible amendments to their supplementary prescribing training programme?	List of suggested improvements such as more training on clinical assessment
	First cohort – there will always be changes
	Most valuable aspect – time supervised in practice
	Multi-disciplinary training – contrasting training needs of pharmacists and nurses
Stage Five – Non-participant observation of pharmacist SP-patient consultations	
To describe what was involved in a pharmacist SP consultation through the use of non-participant observation.	
In which settings did the SP-patient consultations take place?	GP surgery and hospital out-patient clinic
What is involved in a supplementary prescribing consultation?	Purpose of consultation
	Introduction of pharmacist to patient
	Individuals present – family members, other HCPs
	Interruptions to consultations
	Awareness of participants of the presence of the researcher

Research questions	Themes
How long were the pharmacist SP-patient consultations?	Average 13 min 50 sec
How did the pharmacists and patients interact during their consultation?	Questioning behaviour
	Non-verbal behaviour
	Information supplied – medication and non-drug advice
What information was discussed during the consultations?	Medication related issues – e.g. side effects
	Non-drug related issues – e.g. information leaflets provided and family related issues
What interventions did the SP make during the consultations?	No physical assessments
	Issue of prescriptions
How many questions did the patient ask during the consultations?	Input of patients – less than pharmacist and fewer questions
How was the CMP used in practice?	CMP not explained to patient to a great extent
Stage Six – Interviews with pharmacist SPs (Cohort one), DSMPs and patients	
To investigate the views of the DSMPs of the recruited pharmacists on supplementary prescribing.	
What were the views of the IP on pharmacists taking on a supplementary prescribing role?	Positive views expressed
	Utilisation of pharmacists' skills to benefit patients
	Training needs of pharmacists vs nurses
	Benefits of supplementary prescribing to the IP – reduce workload, utilise pharmacist knowledge
	CMP – ensure professional accountability
	Characteristics required to be a competent prescriber – e.g. communication skills, keep up-to-date, scientific knowledge
How was or how did the IPs envisage supplementary prescribing working in practice?	Conditions to be managed
What was their experience of mentoring a pharmacist through the training programme?	Awareness of supplementary prescribing before mentoring
	Time and commitment
	Time supervising in practice
To investigate the views of patients of the recruited pharmacists on supplementary prescribing.	
What were the views of the patients on being managed by a pharmacist SP?	Lack of patient awareness of supplementary prescribing and the CMP
What advantages and disadvantages did the patients see in pharmacist supplementary prescribing?	Pharmacists are more 'down to earth' compared to doctors
What was their opinion on pharmacists taking on a prescribing role?	Positive but lack of awareness – views expressed on pharmacy in general
How much of an input did the patients have into the decision to be managed by a SP and into the formation of the CMP?	None

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Research questions	Themes
To determine what barriers if any, the pharmacists encountered in order to implement supplementary prescribing into their practice.	
Why, if appropriate had implementation of supplementary prescribing not been possible?	Current prescribing status – all three participants were prescribing
	Barriers – time and workload, obtaining prescription pads, number of SPs, lack of support, information technology, space
What were the views of the pharmacist on their prescribing role?	Enjoyment of the role – job satisfaction
	Use of the CMP – reassuring, just a legal document
	Benefits to patient care – e.g. more time, reduced waiting times, evidence based medicine, continuity of care
	Feelings when signing the first prescription – varying views
	Evolving relationships with other HCPs
	Awareness of supplementary prescribing by other HCPs and organisations
	Future of supplementary prescribing – independent prescribing
	Tips to other pharmacists to implement supplementary prescribing
To describe where the pharmacists aimed to implement supplementary prescribing in their practice and the conditions that they envisaged managing.	
How many patients were being managed through supplementary prescribing and what conditions did they have?	Numbers of patients managed and conditions
How, if possible had supplementary prescribing been implemented into practice?	GP surgery / hospital out-patient clinic – description of pharmacist's role
Stage Seven (a) – Interviews during training (Cohort two)	
To explore the views of a sample of pharmacists in the first and second cohort to be trained as SPs in Wales and their motivation for undertaking supplementary prescribing, and their pre-conceived ideas and views on the new role.	
What were the pharmacists' views on undertaking the role of a SP and its limitations?	Motivation to become a SP
	Only prescribe within competence
	Predicted feelings of signing a prescription
	Future of supplementary prescribing – independent prescribing
	The use of the CMP – limitations and advantages
	Supplementary prescribing will benefit patient care
What previous experience did the pharmacists in the study have of a prescribing (or similar) role?	Pseudo-prescribing role – e.g. amending drug charts, prescribing under protocol
What were the pharmacists' motivations for undertaking the supplementary prescribing training programme?	Motivations to become a SP – e.g. benefit patient care, legalising a role already undertaken, keep up-to-date, improve status of pharmacy, empowerment
To describe where the pharmacists aimed to implement supplementary prescribing in their practice and the conditions that they envisaged managing.	
How did the pharmacists envisage supplementary prescribing working in practice after training had been completed and the conditions to be managed?	List of conditions to be managed and sectors of practice – the pharmacists visions of their new role – out-patient clinics, GP surgery clinics

Research questions	Themes
	Lack of implementation strategy
	Patient monitoring skills
	Barriers to implementation
To identify any recommendations that the pharmacists could suggest to improve their supplementary prescribing training course.	
What would the pharmacists like to see on the course in order to become a competent SP and to meet the learning outcomes?	Recommendations to improve future courses
	Time and commitment to undertake the course
	Multi-disciplinary training – identified training needs, interaction of HCPs
	Reflection
	Training needs – consultation and examination skills, decision making skills
Stage Seven (b) – Interviews after training (Cohort two)	
To describe where the pharmacists aimed to implement supplementary prescribing in their practice and the conditions that they envisaged managing.	
How many patients were managed through supplementary prescribing, what conditions did they have and the interventions undertaken?	None by the pharmacists in the second cohort
How comfortable did the pharmacists feel to be able to prescribe after their training had been completed?	Confidence to prescribe
	Physical assessment required
	Anticipated feelings of signing the first prescription
How did the pharmacists envisage the role of a SP in the future?	Independent prescribing
How had the pharmacists' role changed in comparison to when they were not trained to prescribe?	Reflection – incorporation into practice
	Relationship with DSMP had evolved – closer working relationship, mutual recognition of skills
To determine what barriers if any, the pharmacists encountered in order to implement supplementary prescribing into their practice.	
What barriers did the pharmacists face in order to implement their role as a SP?	Barriers – Funding, time, backfill, obtaining prescription pads, lack of implementation strategy, support
To identify any recommendations that the pharmacists could suggest to improve their supplementary prescribing training course.	
What recommendations, if any did the participants have on possible amendments to the supplementary prescribing training programme?	Recommendations – e.g. more time with DSMP, increased duration of course
	Multi-disciplinary training
	Reflection

List of appendices

The list of appendices and each individual appendix is presented in portable document format (pdf) on the enclosed compact disc. An example of a letter inviting participation, information sheet, consent form and interview schedule is provided as a paper copy (those noted with a *).

Appendix 1: Key informant interviews

       1.1 Key informant interviews letter *

       1.2 Key informant interviews information sheet *

       1.3 Key informant interviews consent form *

       1.4 Key informant interviews interview schedule *

       1.5 List of quotes used as feedback in HEI third interview

Appendix 2: Focus group during training. Cohort one. (Stage One)

       2.1 Focus group during training letter

       2.2 Focus group during training information sheet

       2.3 Focus group during training consent form

       2.4 Demographic self-completion questionnaire

       2.5 Focus group guide

Appendix 3: Stages one to four

       3.1 Stages one to four letter

       3.2 Stages one to four information sheet

       3.3 Stages one to four consent form

Appendix 4: Interviews during training. Cohort one. (Stage One)

       4.1 Interviews during training letter

       4.2 Interviews during training information sheet

       4.3 Interviews during training consent form

       4.4 Interviews during training interview schedule

Appendix 5: Diary and follow-up interview. (Stage Two and Three)

       5.1 Diary and follow-up interview letter

       5.2 Diary and follow-up interview information sheet

Appendix 9: **Focus group or interviews during training. Cohort two. (Stage Seven (a))**

9.1 Focus group during training

9.1.1 Focus group during letter

9.1.2 Focus group during information sheet

9.1.3 Focus group during consent form

9.2 Interviews during training

9.2.1 Interviews during training letter

9.2.2 Interviews during training information sheet

9.2.3 Interviews during training consent form

9.3 Interview during training interview schedule

Appendix 10: **Interviews after training. Cohort two. (Stage Seven (b))**

10.1 Interviews after training letter

10.2 Interviews after training information sheet

10.3 Interviews after training consent form

10.4 Interviews after training interview schedule

Appendices examples

The example appendices included in paper format are:

1.1 Key informant interviews letter

1.2 Key informant interviews information sheet

1.3 Key informant interviews consent form

1.4 Key informant interviews interview schedule

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Nov 2003. Ver 1
Key Informant Interview.

Health and Medicines Research Group
Welsh School of Pharmacy
Cardiff University
Redwood Building
King Edward VII Avenue
Cardiff
CF10 3XF

Date

Dear Sir / Madam,

Pharmacy is going through a period of change at the present time with the development of supplementary prescribing. This is a key opportunity for pharmacists to extend their services to patients and their professional responsibility. My name is Rhian Jones and I am a member of the Health and Medicines Research Group at the Welsh School of Pharmacy. We are very interested in conducting research in this area and would like to invite you to participate in our study. I would therefore like to meet for an interview to discuss your involvement in supplementary prescribing and any information that you may have regarding the development of this role.

An information sheet containing details of what would be expected of you and a consent form is enclosed. Please consider whether you would be willing to participate. If you are willing to be interviewed and to discuss supplementary prescribing by pharmacists please read the information sheet and form carefully. A copy of the form should then be signed and returned in the envelope provided. The other copy of the form is for your own records.

I will be in touch in due course in order to arrange a mutually agreed time and place to hold the interview, either over the telephone or face-to-face.

Thank you for your time and support.

Yours sincerely,

Rhian Jones

Welsh School of Pharmacy
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Nov 2003 Ver 1
Key Informant Interview

Investigation of Pharmacists as Supplementary Prescribers.
Participant Information Sheet

You are invited to participate in the above research study. Before you decide whether or not to participate please take the time to read the following information. It is important that you understand what is involved and the reasons behind doing the research. You are free to discuss the information with others if you so wish and please do not hesitate to ask any questions that you may have.

Thank you for reading this.

What is the purpose of the study?
You have been invited to be interviewed as part of a larger study conducted by the Health and Medicines Research Group at the Welsh School of Pharmacy. The study is part of a research project for a Doctor of Philosophy (PhD) degree qualification and is being conducted by myself, Rhian Jones. The aim of the study is to describe the process of implementation and development of the new role of pharmacists as supplementary prescribers. The interview will provide useful information on the implementation process from those who are involved.

At what stage of the research will I be participating?
This is the first stage of the study into supplementary prescribing by pharmacists. At this stage information is being gathered from individuals who may be involved in the implementation process of supplementary prescribing or from those who will be undertaking the new role.

What is an interview?
An interview is used to generate thought and discussion between the interviewer and the interviewee. An interview schedule will be used during the session which will contain a set of questions to be asked or topics to be discussed. You are free to elaborate on these topics as the purpose of the interview is not to restrict your answers. Certain issues arising during the course of the discussion will be investigated further. At this point I may ask you to elaborate or clarify what has been said. The interview will take approximately 30 to 60 minutes.

1

Why have I been chosen?
The reason that you have been chosen for an interview is because of your possible involvement in supplementary prescribing by pharmacists.

Do I have to take part?
It is up to you to decide whether or not to take part. If you do decide to take part please read and sign the consent form enclosed. One copy should be returned in the envelope provided. The other copy of the form is for your own records. If you decide to participate you are still free to withdraw at any time before the interview and without giving a reason. If you feel you require more information please feel free to do so, this does not commit you to having to participate. Please feel free to contact myself at anytime should you have any questions to ask, either before or after the interview.

What will happen if I decide to take part?
If you decide to take part I will contact you shortly to arrange a convenient time to hold the interview either over the telephone or by meeting face-to-face.

What will happen at the interview?
During the course of the interview I will ask a series of open questions. The interaction will be audio recorded by a recording device in order that it may be transcribed and analysed.

How will my views be used?
It is important to realise that the information collected during the discussion will be treated in a way to preserve anonymity and confidentiality. However, as I am a pharmacist I am bound by the Royal Pharmaceutical Society Code of Ethics to report any information that may come to light that indicates any unethical or unlawful behaviour by a pharmacist. If this situation should arise it will be discussed with a research colleague who is also a pharmacist as to whether to inform the society or not.

The information generated during the interview will be used to inform the study and will be combined with results from other sections of the research. The results will be distributed through various sources including conference proceedings, papers, abstracts and posters. The results will also be included in the PhD thesis at the end of the period of study. A brief summary report will be available for each participant. If you require a summary of the results please feel free to contact me on the details below. It will not be possible to identify any individuals or organisations from the distributed information.

Will my views be kept confidential?
All of the information gathered during the interview will be kept confidential as stated above. Your name and address will be needed in order to contact you. This will not be kept with the information from the interview and will not be kept for any longer than is necessary. Your details will only be seen by the research team. The tapes and transcribed material that result from the interview will also be kept secure by the research team and will not be shared with others. Your details and the tapes collected during the interview will be destroyed after publication of the final research paper.

Will my expenses be paid?
Reasonable travel and out of pocket expenses will be paid for attending the interview as appropriate.

Who can I contact for more information?
I am more than happy to discuss any issues that you may have regarding the research project. My contact details are –
Miss Rhian E Jones
Health and Medicines Research Group
Welsh School of Pharmacy
Cardiff University
Redwood Building
King Edward VII Avenue
Cardiff
CF10 3XF

Telephone: 029 20 876432
E-mail: JonesRE4@cardiff.ac.uk

Thank you for taking the time to read this information.

Welsh School of Pharmacy
Head of School Professor Stephen Denyer BPharm PhD FRPharmS

Ysgol Fferylliaeth Cymru
Pennaeth yr Ysgol Yr Athro Stephen Denyer BPharm PhD FRPharmS

<u>Jan 2004 Ver 2</u>
<u>**Key Informant Interview**</u>

Participant identification number:

CONSENT FORM

Title of Project:	Investigation of Pharmacists as Supplementary Prescribers.

Name of Researcher:	Miss Rhian E Jones Health and Medicines Research Group Welsh School of Pharmacy Cardiff University

Please read the following statements. If you agree with the statements below please initial each box and sign the disclaimer below.

1. I confirm that I have read and understand the information sheet dated Nov 2003 (Version 1) for the above study and have had the opportunity to ask questions.

2. I understand that my participation is voluntary and that I am free to withdraw my consent at any time before the interview, without giving any reason.

3. I understand that the researcher is under a professional obligation to report any unethical or unlawful practice by a pharmacist that may be divulged during the course of the interview.

4. I agree to be interviewed by the researcher concerning the development of supplementary prescribing by pharmacists at an agreed place and time or over the telephone.

5. I agree that the interview may be audio recorded.

1

_____ _____ _____
Name of Participant   Date   Signature

_____ _____ _____
Researcher   Date   Signature

One copy to be returned to the researcher; One copy for the participant

Before the interview starts –
I would like to thank you again for taking the time to come to the interview and participating in my research. First of all, if I can give you a brief overview of the research. I am conducting research on the implementation and development of supplementary prescribing by pharmacists in Wales within a chosen training site. You have been asked to take part in an interview due to your involvement in the training of SRxers.

Please feel free to speak freely. I would like to assure you that all of the transcribed material resulting from this discussion will be anonymised and kept confidential. One last point, if the tape recorder beeps this just means that I need to change the tape.

To begin the interview –
I have a short list of questions that I would like to ask you. If I can just start by asking you to describe how the course for pharmacists supplementary prescribers is being taught by the (HEI).

Probes –	Number of days contact time	Mentorship
	Funding	Clinical Management Plan
	Conditions being managed	Supervision
	Distance learning	Assessment
	Where is the training to be held?	Pharmacists + / or nurses
	When did the course start?	Duration of the course
	When is the first cohort to finish?	Nursing / pharmacy school
	Reflection	

Questions / Topics –
Training Programme
1) If you could please describe your role in the training / teaching of pharmacists to become supplementary prescribers at (HEI)?
2) How did you become involved in SP by pharmacists? *Pharmacist?*
3) How many pharmacists are estimated to be trained in each cohort at (HEI)?
4) How many cohorts of pharmacists have started / planning to start their training at (HEI)? *When does the next cohort start?*
5) How is it decided which pharmacists were to be included on the course?
6) Could you discuss any feedback on the course that has been received from the pharmacists who are undertaking the training and their role as supplementary prescribers?
7) What are your feelings on pharmacists and nurses training together? *Feedback / benefits / disadvantages / learning needs*
8) Have there been any problems or obstacles to overcome as part of providing this course?

Pharmacist prescribing in practice
9) In which sector of practice do the pharmacists who are being trained by (HEI) practice in?
10) What types of conditions do the pharmacists being trained envisage to be managing once they have completed their training?
11) How do you envisage supplementary prescribing by pharmacists working in practice?

Personal opinion
12) What is your opinion of pharmacists' role being extended in order to allow them to prescribe? *Limitations*

13) What do you think of the idea of pharmacists taking on more responsibility for the care of the patient?

14) Which sector of pharmacy do you think would benefit more through SP?

15) What issues do you think need to be resolved in order for SP to be implemented / ongoing problems that need to be resolved?

16) How do you think SP will impact on the quality of care provided to patients?

Research

17) What research is being carried out at (HEI) on supplementary prescribing that you may know of?

Competence

18) What skills, knowledge and attributes do you think pharmacists need to be competent prescribers?

Finally –

1) Would it be alright if I contact you during future stages of the study?

2) Are there any other issues you would like to mention before we finish the interview?