

MEDICINES USE REVIEWS (MURs)
A CASE STUDY IN TWO COMMUNITY PHARMACIES

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Abstract

The Medicines Use Review and Prescription Intervention (MUR) service was commissioned as part of the 2005 community pharmacy contract for England and Wales. The aim of the MUR service is to improve patients' knowledge and use of medicines and to reduce avoidable medicines waste. MURs form part of a Government strategy that aims to improve patients' adherence to medicines in order to optimise health gain and reduce cost associated with unused medicines. MURs are also seen as a 'concordance review' and pharmacy's professional bodies acknowledge the service as a means to further the professional role of community pharmacists. However, it remains uncertain from studies investigating the outcomes of MURs, the extent to which the service is benefitting patients. One significant drawback to previous studies is the lack of in-depth investigation of the MUR consultation and the patients' perspective of the service.

This thesis provides valuable insights into what occurs during an MUR consultation and investigates the patient's perspective of the service and that of the pharmacy staff. This work also explores whether the MUR policy aims are being realised in practice and translated into more effective use of medicines. Ten weeks of fieldwork observations were undertaken in two English community pharmacies. One-week placements were made over a 12-month period between November 2008 and October 2009. Observations were made of all pharmacy activities, including fifty-four MUR consultations. Thirty-four patients subsequently agreed to be interviewed about their experience of the MUR. Eight patients were observed to decline the offer of an MUR, of which three patients were interviewed about the reasons why they declined. After the pharmacy observations were completed, five pharmacists and twelve support staff interviews were held to discuss professional perspectives of MURs.

The findings from this study suggest that the MUR service is a modern and developing service but one that remains unestablished. Patient awareness of MURs was poor and nearly all MURs were initiated by the pharmacist; no patients were referred from the GP. Pharmacy staff did not actively seek to recruit patients who may benefit most from an MUR and the majority were invited in ad hoc manner. Patients were given little time to consider whether to take part in an MUR and were insufficiently informed of their purpose or personal value. MURs were framed as a monitoring activity and most patients reported that the MUR did little to improve

their knowledge of their medicines and rarely affected their use. They perceived their GP to have the main authority over their medicines. Patients considered that significant medicine-related problems would be best resolved by talking to the GP rather than with the pharmacist during an MUR. In effect, a supplier induced demand for MURs was observed. Nevertheless, all patients reported feeling comfortable speaking to the pharmacist during an MUR and most described the consultation in positive terms. Most patients viewed the pharmacist as a knowledgeable expert and some felt reassured about their medicines following an MUR.

Observations of the MUR consultation revealed pharmacists were subordinate to the 'technology' of the MUR form and adhered to its 'tick-box' format. Pharmacists used predominantly closed questions which enabled the MUR form to be completed efficiently, but this forestalled wider discussion of the patient's health and medicines. The MUR service was at odds with the intention to create a patient-centred service. When complex or indeterminate issues were raised, these were often circumvented or the patient referred to the GP. Pharmacists reported in their interviews that they welcomed MURs and the resultant potential to raise their profile with patients. However, they were unclear about what they wanted to advise during an MUR and how patients might gain maximum benefit from the review. They also reported concerns over patient recruitment, organisational pressures to pursue a target number of MURs and difficulties integrating MURs within their existing activities. MURs were pragmatically accommodated alongside existing duties without additional resource. Support staff reported feeling discomfort when they were left to explain to patients and customers why the pharmacist was absent during an MUR and described using various strategies and personal judgements to deal with waiting patients.

This study has important implications for patients, professionals and policy makers. Patients should be aware that the MUR service is funded by the NHS and is available for them to use. More support from GPs is needed to identify patients who may most benefit from an MUR. This study highlights the need for consultation and communication skills training for pharmacists, so they are able to effectively elicit patient beliefs, concerns and preferences about medicines during the MUR. Organisations also need to reconsider the way they motivate pharmacists to undertake MURs to avoid unintended consequences for patient care. Policy makers should reconsider strategies that are based on rationalised policies as a means to improving patient adherence to medicines. Effective services need to be responsive to the

Abstract

patient's individual circumstance and preference. Further research is needed into MURs in a wider and more diverse range of pharmacy settings in order to explore these issues further.

Publications arising from the study

Papers

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Other publications

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Contents

Acknowledgments.....	i
Abstract.....	ii
Publications arising from the study.....	v
Contents	vii
List of Tables.....	xii
List of Figures	xii
List of terms and abbreviations.....	xiii
1. CHAPTER ONE Introduction.....	1
2. CHAPTER TWO Literature review	3
2.1 Introduction.....	3
2.2 The United Kingdom health care system.....	3
2.3 Community pharmacies in England	4
2.4 The 2005 community pharmacy contract.....	5
2.4.1 Structure of the 2005 community pharmacy contract.....	5
2.4.2 The Medicines Use Review and Prescription Intervention service	7
2.4.3 Situating MUR services.....	9
2.5 ‘Traditional’ patient-pharmacist interactions in community pharmacies	10
2.6 Historical role development of pharmacists.....	12
2.7 Professionalising agendas and the extended role	14
2.8 Pharmacists’ extended role activity and user attitudes	15
2.8.1 Critique of pharmacy’s role extension	16
2.9 The rationalisation of health services.....	17
2.10 Health Policy and professional agendas	20
2.10.1 MUR policy perspectives.....	21
2.10.2 Compliance and adherence	22
2.10.3 Medicines and the cost to the NHS.....	22
2.10.4 Adherence to prescribed medicines	23
2.10.5 Support from health care professionals	24
2.10.6 Medication reviews by pharmacists	24
2.10.7 Community pharmacy medication reviews: the international perspective.....	26
2.11 MURs and the patient agenda	29
2.11.1 The complexity surrounding medicine taking	29
2.11.2 Patient attitudes towards medicines	31
2.11.3 Lay testing of prescribed medicines.....	31

2.11.4	Concordance	33
2.12	Research into MURs	35
2.12.1	GPs and stakeholder views	35
2.12.2	Pharmacists' perspectives of MURs.....	36
2.12.3	Barriers to extended role activities	37
2.12.4	MUR barriers.....	38
2.12.5	Evidencing the outcomes	41
2.12.6	Patient perceptions of the MUR service	42
2.13	Summary.....	44
2.14	Research aims and objectives.....	45
3.	CHAPTER THREE Methodology and Methods.....	46
3.1	Introduction.....	46
3.2	Part One: Methodology	47
3.2.1	Health services and pharmacy practice research	47
3.2.2	Positivism and Interpretivism.....	47
3.2.3	Ontological positions.....	48
3.2.4	Ontological and epistemological assumptions underpinning the study	48
3.2.5	Qualitative research methods.....	49
3.2.6	Observational research	50
3.2.7	Interviews	53
3.2.8	Rigour and qualitative enquiry	56
3.2.9	Ethical issues	58
3.3	Part Two: Methods	60
3.3.1	Introduction.....	60
3.3.2	Ethical and Research and Development approvals	60
3.3.3	Overview of proposed plan of fieldwork.....	60
3.3.4	Pharmacy recruitment planning.....	61
3.3.5	Recruitment and access	62
3.3.6	Pharmacy staff recruitment	64
3.3.7	Observations	65
3.3.8	Recruitment of patients	68
3.3.9	Observations of MURs.....	68
3.3.10	Arrangement of patient interviews.....	69
3.3.11	Patients declining the invitation for an MUR.....	70
3.3.12	Pharmacist and pharmacy staff interviews.....	70
3.3.13	Protocol changes.....	71
3.3.14	Data management	71

4	CHAPTER FOUR The Pharmacy	74
4.1	Introduction.....	74
4.2	Multiple pharmacy study site	75
4.3	Independent pharmacy study site	77
4.4	Pharmacy and pharmacist activities	79
4.4.1	Pharmacist involvement in dispensing prescriptions	79
4.4.2	Pharmacist activities over-the-counter (OTC)	83
4.4.3	Pharmacist engagement in management and administrative roles	84
4.4.4	Prescription medicines and pharmacist counselling	85
4.4.5	Pharmacist-customer interactions over-the-counter (OTC).....	89
4.4.6	Summary	91
4.5	MUR targets.....	92
4.6	Identifying and inviting patients for an MUR.....	94
4.7	Pharmacist preparation before the MUR	97
4.8	Observations after the MUR	98
4.9	The use of information collected during the MUR	99
4.10	Summary.....	100
5	CHAPTER FIVE The MURs.....	103
5.1	Introduction	103
5.2	Participants and characteristics of MURs	103
5.3	Structure of the MUR consultation.....	103
5.3.1	Introducing the MUR.....	105
5.3.2	Sequencing of the MUR.....	109
5.3.3	Ending the MUR consultation.....	127
5.4	Summary.....	129
6	CHAPTER SIX Patient perspectives of MURs.....	131
6.1	Introduction	131
6.2	Participants	131
6.3	The patient and the pharmacy	132
6.3.1	Frequency of and reasons for pharmacy use	132
6.3.2	Patient expectations of the pharmacist	132
6.3.3	Pharmacists' role in relation to prescribed medicines	134
6.4	Patients perceptions of MURs	136
6.4.1	Awareness of the MUR service.....	136
6.4.2	The invitation	137
6.4.3	Patient perceptions of MURs	145
6.4.4	Contextualising the MUR within the patient's wider health care	151

6.4.5	Professional boundaries	155
6.4.6	Opinions of the pharmacist	156
6.5	The MUR and its aims	157
6.5.1	Establishing the patient's actual use, understanding and experience of taking their medicines	158
6.5.2	Identifying, discussing and resolving poor or ineffective use of their medicines	160
6.5.3	Identifying side effects and drug interactions that may affect patient compliance	161
6.5.4	Improving the clinical and cost effectiveness of prescribed medicines and reducing medicine wastage.....	163
6.5.5	MURs as a means to improve patient knowledge and use of medicines.....	165
6.6	Improvements	168
6.7	Summary.....	169
7	CHAPTER SEVEN The views of pharmacy staff	172
7.1	Introduction.....	172
7.2	Participants.....	172
7.3	The pharmacy staff perspective of MURs.....	173
7.3.1	MUR training	173
7.3.2	Selection and invitation.....	176
7.3.3	Recruitment anomalies	178
7.3.4	The invitation	180
7.3.5	Pharmacists' views and perceived value of MURs	184
7.3.6	Integration of MURs into the existing workload	187
7.3.7	Organisational pressure	190
7.4	The absent pharmacist	195
7.4.1	Support staff strategies during the pharmacist's absence	198
7.5	MUR information and patients' wider care	201
7.6	Indeterminate issues and relationship with GPs	202
7.7	Summary.....	204
8	CHAPTER EIGHT Discussion	207
8.1	Introduction.....	207
8.2	Summary of findings.....	209
8.3	MURs: a modern and developing service	210
8.3.1	Contextualising the patient perspective	210
8.3.2	Communicating the purpose of MURs	212
8.3.3	Challenges of implementing a new service	214
8.3.4	Supplier-induced demand	217
8.3.5	MURs and professional role extension.....	219

8.4	From policy to practice	221
8.4.1	MURs and rationalisation	221
8.4.2	Unintended consequences	222
8.4.3	Pharmacists as street-level bureaucrats	227
8.4.4	Translation of MURs policy aims and intentions in practice	228
8.5	Strengths and limitations.....	231
8.5.1	Strengths	231
8.5.2	Limitations	232
8.6	Practice Implications.....	234
8.6.1	Practice implications for patients.....	234
8.6.2	Implications for health care professionals	235
8.6.3	Implications for organisations	237
8.6.4	Implications for policy makers and administrators	238
8.7	Future research.....	239
9	CHAPTER NINE Concluding remarks	243
REFERENCES	248
APPENDIX ONE	Literature review search strategy	288
APPENDIX TWO	Original MUR form and ‘Version 2’ MUR form	289
APPENDIX THREE	Approval letters for the study	293
APPENDIX FOUR	Independent pharmacy recruitment letter.....	311
APPENDIX FIVE	Pharmacist and support staff information sheets and consent forms	312
APPENDIX SIX	Pharmacy study poster	317
APPENDIX SEVEN	Patient information sheet and consent forms	318
APPENDIX EIGHT	Topic guides	328
APPENDIX NINE:	List of patient medications	331
APPENDIX TEN	Paper arising from the study	335

List of Tables

Table 1: Demographic data and some characteristics of the MUR consultations	104
Table 2: Questions asked by pharmacists and patients in 54 MURs	115
Table 3: Job roles of staff interviewed	173

List of Figures

Figure 1: Range of community pharmacy Enhanced services	6
Figure 2: Medication review classification	9
Figure 3: Current medication review classification	10
Figure 4: Patients' questions about their medicines	33
Figure 5: Schematic diagram of the multiple pharmacy.....	76
Figure 6: Schematic diagram of the independent pharmacy	78

List of Terms and Abbreviations

ACT	Accredited Checking Technician
ADR	Adverse Drug Reaction
AURs	Appliance Use Reviews
CHD	Coronary heart disease
DH	Department of Health
EHC	Emergency Hormonal Contraception
GP	General Practitioner
HEI	Higher Education Institution
HMR	Home Medication Review
LHB	Local Health Board
MCA	Medicines Counter Assistant
MTM	Medication Therapy Management
MUR	Medicines Use Review
NHS	National Health Service
NICE	National Institute of Health and Clinical Excellence
NMS	New Medicines Service
NSF	National Service Framework
OTC	Over-the-counter (in relation to medicines and advice)
PCO	Primary care organisation (PCT's in England and LHB's in Wales)
PCS	Prescription Collection Service
PCT	Primary Care Trust
POM	Prescription Only Medicine
PMR	Patient Medication Record
PSNC	Pharmaceutical Services Negotiating Committee
QOF	Quality and Outcomes Framework
R&D	Research and Development department
REC	Research Ethics Committee
RPSGB	Royal Pharmaceutical Society of Great Britain
SAC	Stoma Appliance Customisation
UK	United Kingdom
WHO	World Health Organization

CHAPTER ONE

Introduction

This thesis contributes to a better understanding of patient and pharmacy staff perspectives of the UK community pharmacy Medicines Use Review (MUR) service (DH 2005a). It describes an in-depth investigation conducted in two English community pharmacies and explores how the MUR service is being integrated into ‘real life’ practice. Using qualitative methods, this study explores the extent to which MURs are achieving their policy aims and intentions.

There is a compelling need to understand what is happening currently in practice and what MURs are actually achieving for patients. The patients’ perspective of the MUR service and their views on the consultation is under-reported. In Chapter Two, I consider and present the literature about the MUR service and related research. Relevant background information about community pharmacy, the role of the pharmacist, and the MUR service is initially described. The different agendas that are being promoted about MURs are then discussed. This chapter concludes with defining the research aims and objectives of this study.

Chapter Three, is divided into two parts. In the first part of this chapter, I discuss the ontological, epistemological and methodological approach that has underpinned this study. In the second part of this chapter, I describe the method that was adopted for this study. Two research methods were used in this study. Ethnographically-oriented observations were used to understand the context in which MURs were being performed. Interviews with patients and pharmacy staff confirmed and extended this understanding. A detailed rationale for using these methods is laid out along with the ethical considerations that shaped the research design.

The findings of this study are presented in Chapters Four to Seven. In Chapter Four, I present the findings of my fieldwork observations in the two study pharmacies. I outline the activities of the pharmacist and pharmacy staff and the different types of interactions they had with patients and customers. I also present the context of how MURs were managed in the pharmacies and the processes that led to patients being offered an MUR. This chapter

provides an essential backdrop against which the MUR service is being implemented. In Chapter Five, I present my findings from the observed MUR consultations. A detailed description of what happened during the review, the nature of the patient-pharmacist interaction and an analysis of the consultation is presented.

In Chapter Six, the patients' perspective is presented. I report their opinions and feelings about being approached in the pharmacy through to their reflections on what they perceived the purpose of the MUR to be. The findings from the interviews with patients who declined the invitation for an MUR are also presented. In Chapter Seven, I explore the perspectives of the pharmacists and support staff of the MUR service. I report on how they perceive the service and how they manage MURs alongside the other services provided. These findings confirm and extend the fieldwork observations made in the pharmacy.

In Chapter Eight, the findings from this study and the literature are drawn together and a discussion of these findings and their significance is presented. A reflection of the strengths and limitations of this study is given as well as consideration of the practice implications of this study. Finally, the chapter ends by suggesting avenues for future research. In the final chapter of this thesis, Chapter Nine, I present my concluding remarks for this study.

CHAPTER TWO

Literature review

2.1 Introduction

The purpose of this chapter is to review the literature relevant to this study. The literature review strategy can be found in Appendix One. The MUR service represents a new 'extended role' activity for community pharmacists. In order to understand the context in which this role developed, I briefly present the historical developments that have led to these extended roles. I then provide an outline to the 2005 Community Pharmacy Contractual Framework, hereafter referred to as the 'pharmacy contract', along with a description of the MUR service. The different and sometimes conflicting policy, professional and ideological agendas are then discussed in order to demonstrate their influence on the MUR service. The chapter concludes with an outline of the aims and objectives of this study.

2.2 The United Kingdom health care system

Patients access health services in the UK largely through the National Health Service (NHS). This is typically free at the point of use, however, patients pay subsidies for certain services such as dental and optical treatments. The NHS is funded through general taxation and operates within a framework that overtly acknowledges limited resources but aims to provide equitable access to health care (Elliot and Payne 2005; Ham 2009). The purchasing of health services is the responsibility of Primary Care Organisations (PCOs) (Primary Care Trusts in England, Health Boards in Scotland, Local Health Groups in Wales and Primary Care Partnerships in Northern Ireland) (Ham 2009). Although this responsibility is being reviewed in light of recent NHS reforms to allow General Practitioner (GP) led commissioning (Mannion 2011). Broadly, there are three levels of care provided to patients in the UK: primary, secondary and tertiary. Primary care includes medical services provided by GPs and dentists. Pharmaceutical care is provided mainly through community pharmacies which are mostly privately owned businesses contracted to dispense NHS prescriptions (Noyce 2007). Secondary care (hospital based care) is accessed via the GP. Tertiary care, typically involves specialised consultative care, usually on referral from primary or secondary medical care personnel. This

care involves advanced medical investigation and treatment such as cancer management or other complex medical and surgical interventions.

2.3 Community pharmacies in England

In 2010, there were 10,691 registered community pharmacies in England which dispensed 813.3 million prescription items: an increase of 41.8 million (5%) from 2008-09 (NHS Information centre 2010). It has been estimated that over 80% of the income of community pharmacies is from dispensed NHS prescriptions (Noyce 2007). Approximately 1.8 million people visit a pharmacy in England every day and it has been estimated that 99% of the population, including people living in the most deprived areas, can access a community pharmacy within 20 minutes by car and 96% by walking or using public transport (DH 2008). There has been a trend over time towards the corporatisation of community pharmacy (Bush et al 2009; Gidman 2010). ‘Multiples’ are pharmacies that form part of a chain corporate structure and are defined in the UK as owning 6 pharmacies or more with groups of 5 or fewer regarded as ‘independent’ pharmacies (NHS Information Centre 2010). Approximately 62% of pharmacies in England are multiples. This compares with 17% in 1969 and 34% in 1995 (Hassell and Symonds 2001). Each community pharmacy is to be operated by a pharmacist and most pharmacists (71%) work within this sector. Amongst other roles, pharmacists are required to perform a ‘clinical check’ on prescriptions received. This is a legal requirement and requires the pharmacist to assess the appropriateness of the drug, the dose and the strength prescribed. They can delegate other stages of preparation or counselling to pharmacy support staff. A final accuracy check is typically undertaken by the pharmacist but this can be undertaken by Accredited Checking Technicians (ACTs) trained to perform this task. However, the pharmacist is legally responsible for each medicine dispensed and supplied.

Community pharmacists are aided by support staff who typically include dispensing assistants or dispensers and Medicines Counter Assistants (MCAs). Dispensers support the pharmacist in the assembly of prescribed medicines including the generation of labels and can be involved in providing advice when handing out dispensed prescriptions. Dispensers are involved in a range of pharmacy support activities including receiving prescriptions from patients and ordering pharmaceutical stock. The MCAs’ main role is to support the delivery of services and the retail functions of the pharmacy. Their activities include the sale of non-prescription medicines according to protocols and under the supervision of the pharmacist, as well as advising

patients on self-limiting illnesses and basic healthy lifestyle. They may also be involved with the receipt of prescriptions and handing out of dispensed prescriptions.

2.4 The 2005 community pharmacy contract

The 2005 community pharmacy contract built on policy and professional ambitions to improve services to patients, reward for the quality of the services provided, to harness the skills of pharmacists and support staff in addition to providing minimum standards for pharmacy (Bellingham 2004; PSNC 2004). This differs from the previous contract from 1987 which focused on dispensing a high volume of prescriptions (Bellingham 2004). The reforms made to the contract have been welcomed by pharmacy representative bodies and leaders who have long-held ambitions to shape community pharmacy services for the future (PSNC 2004). The 2005 pharmacy contract received significant support from pharmacy contractors who voted in favour of the proposed changes (Anon 2004).

2.4.1 Structure of the 2005 community pharmacy contract

The 2005 pharmacy contract differed from previous contracts as it moved away from remunerating pharmacies almost completely based on the number of prescriptions dispensed. The 2005 contract is made up of three different service levels. Essential and Advanced services form part of the national pharmacy contract in England and Wales and remunerate ‘nationally agreed’ pharmacy services. Enhanced services have their service specifications agreed nationally but are commissioned locally by PCOs (Noyce 2007; PSNC 2009).

Essential services are offered by all pharmacy contractors. These are: dispensing of medicines; repeat dispensing (the management of repeatable NHS prescriptions); disposal of unwanted drugs; promotion of healthy lifestyles; signposting (provision of information on other health and social care providers); support for self-care (provision of advice and support to help people care for themselves or their families) and clinical governance requirements (to improve the quality of care provided) (PSNC 2009).

Advanced services are optional for community pharmacies and typically require pharmacists to undertake additional training before they can be offered. The first Advanced service was commissioned in 2005 and is the ‘Medicines Use Review and Prescription Intervention’ service.

Other Advanced services include Appliance Use Reviews (AURs), which improve the patients' knowledge and use of any 'specified appliance' (such as catheter or incontinence appliances) and Stoma Appliance Customisation (SAC) which aims to ensure proper use and comfortable fitting of stoma appliances (PSNC 2011a). The New Medicine Service (NMS) which aims to provide support for people with long-term conditions on a newly prescribed medicine is set to be the fourth Advanced service scheduled to be introduced in October 2011 (PSNC 2011b).

Lastly are the 'Enhanced' services. Pharmacies are able to apply to their local PCO to perform these according to needs of the local community. The wide range of services indicates the broad scope of community pharmacist activities (Figure 1).

- Anticoagulant monitoring service
- Care home service including care home staff training
- Clinical medication review (typically within GP practice, intermediate care facility or patient's home and with access to patient notes)
- Head lice prescribing and supply service
- Minor ailments service
- Out of hours dispensing
- Prescribing (supplementary or independent prescribing)
- Substance misuse services (needle and syringe exchange, supervised consumption)
- Sexual health services (Chlamydia screening and treatment, emergency hormonal contraception (EHC))
- Vascular services (screening, BP measurement, diabetes screening service, weight management services, stop smoking service)

Figure 1: Range of community pharmacy Enhanced services (PSNC 2011c)

2.4.2 The Medicines Use Review and Prescription Intervention service

The MUR service is the first NHS funded service that remunerates community pharmacists for undertaking a documented face-to-face consultation with a patient specifically to discuss their medication. In England, over 2 million MURs were conducted in the 2010-2011 financial year at a cost of £58.8m (PSNC 2011d). Patients are eligible for the service if they are taking two or more medicines for long term conditions and who have been using the pharmacy for the dispensing of prescriptions for at least the previous three months. Local PCOs also have been empowered to identify specific patient target groups, such as patients with asthma, based on the needs of the local community. Currently, each pharmacy is entitled to claim £28 reimbursement from the NHS for each MUR performed. Since 2006, payments for MURs have been capped at a maximum of 400 (originally 200) MURs each year. Similar medication reviews form part of community pharmacy services in Australia (Commonwealth Department of Health and Aged Care 2001), the United States (DaVanzo et al 2005; Thompson 2008), Germany (Blenkinsopp and Celino 2006) and more recently in New Zealand (Lee et al 2009).

MURs are typically performed annually and can be prompted either by a request from a patient who meets the eligibility criteria for an MUR, pro-actively by the pharmacist or a referral from the GP. A ‘Prescription Intervention’ can also trigger an MUR in response to a ‘significant problem’ with a patient’s medication. This is most likely to occur as part of the dispensing process. A significant problem has been described as an intervention which requires more than brief advice which a pharmacist would make as part of the essential level dispensing service (PSNC 2009). Whether the MUR is an annual review or a Prescription Intervention MUR, the consultation needs to be performed in a consultation room. The specifications for these rooms have been left deliberately flexible in order for pharmacy contractors to work within the physical limitations of their pharmacies (Buisson 2005). Performing MURs offers the pharmacist an opportunity for a private and more detailed discussions about the patients’ medicines rather than the brief counselling interaction that typically occurs on the shop floor. The underlying purpose of the MUR service is described in the following section.

2.4.2.1 Aims of the MUR

The MUR involves completion of a national standard form (Appendix Two). A 'Version 2' form is currently used after the Department of Health (DH) and Pharmaceutical Services Negotiating Committee (PSNC) sought to streamline the original MUR form following feedback from GPs and pharmacists (PSNC 2007). Information that the pharmacist is expected to elicit from the patient in order to complete this includes whether they use the medicine as prescribed, whether they know the medicine's purpose, if the formulation is appropriate and reported side effects. The format of the form is 'tick-box' allowing a yes/no response to questions. The DH has set out the underlying purpose of the MUR service which '*aims, with the patient's agreement, to improve his or her knowledge and use of drugs*' (DH 2005a: 2). This purpose is to be achieved through:

- a) Establishing the patient's actual use, understanding about and experience of taking his or her medications;*
- b) Identifying, discussing and resolving poor or ineffective use of medicines by the patient;*
- c) Identifying side effects and drug interactions that may affect patient compliance and*
- d) Improving the clinical and cost-effectiveness of prescribed medicines thereby reducing the wastage of such drugs.*

(DH 2005a: 2)

Furthermore, the MUR service specification provides guidance on what is expected from the pharmacist:

"The pharmacist will perform an MUR to help assess any problems patients have with their medicines and to help develop the patient's knowledge about their medicines."

(PSNC 2009)

In the following section, I situate the MUR service firstly in relation to other medication review services that the patient may receive and secondly with other patient-pharmacist interactions that typically occur in the pharmacy.

2.4.3 Situating MUR services

In the UK, the first recognised requirement that medication reviews should be carried out appeared within the National Service Framework (NSF) for Older People which was the “*first ever comprehensive strategy to ensure fair, high quality, integrated health and social care services for older people*” (DH 2001: i). This strategy suggested that all people over 75 years should have their medicines reviewed at least annually and those taking 4 or more medicines every 6 months. These reviews typically occurred with the patients’ GP at the surgery. Clarity over what constituted a medication review was provided by the medicines partnership (Figure 2).

<i>Level 0 - Ad hoc (Unstructured, opportunistic review)</i>
<i>Level 1 - Prescription review (Technical review of a list of patients' medicines)</i>
<i>Level 2 - Treatment review (Review of medicines with patient's full notes)</i>
<i>Level 3 - Clinical medication review (Review of medicines with patient's full notes and with the patient)</i>

Figure 2: Medication review classification: Task Force on Medicines Partnership and the National collaborative Medicines Management Services Programme (2002: 6)

Reforms to the General Medical Services Contract in 2006 led to medication reviews becoming a formal part of the Quality and Outcomes Framework (QOF) (DH 2004). With only level 1 and 2 reviews being specified within the early QOF framework, medication review activity could be undertaken without the patient being present. The lack of a patient-centred approach to medication reviews and the introduction of MURs led to a clarified framework (Clyne et al 2008). Three new classifications for medication review have been proposed (Figure 3).

Prescription review - Intended to identify prescription anomalies such as duplicate prescribing and does not require the patient or their clinical notes to be present at the review (includes Prescription Intervention MURs).

Concordance/compliance review - Addresses patient medicines-taking behaviours and designed to discover patient views of their medicines and their willingness to take them (includes MURs).

Clinical review - Includes consideration of both prescribed and purchased medicines and must be undertaken with the patient and with their clinical notes to enable a holistic view of the appropriateness of the medicines in relation to their conditions.

Figure 3: Current medication review classification (Clyne et al 2008)

MURs have been recognised as a *concordance / compliance* review. Under these reviews the practitioner should explore patients' actual medicine taking. Patients should also be able to ask questions and the respect for the patients' beliefs about medicines is central to the medication review process (Clyne et al 2008). With *prescription* and *clinical* reviews typically occurring at the GP's surgery under the QOF framework, there is little understanding of how MURs delivered from community pharmacies have been contextualised by patients. Likewise, there has been no research comparing MUR activity with other interactions that occur in the pharmacy. These 'traditional' patient-pharmacist interactions are discussed next.

2.5 ‘Traditional’ patient-pharmacist interactions in community pharmacies

Most patient-pharmacist interactions in community pharmacies occur on the 'shop-floor' when the pharmacist supplies dispensed medicines to patients. This encounter, described in the UK as 'counselling', typically seeks to ensure that the directions on the labels of dispensed products are understood (RPSGB 2009). Variations in how pharmacists provide information on prescribed medicines have been reported. For example, information on directions, medicine name, and indications for use were given more frequently than information on side effects,

cautions and interactions (Laaksonen et al 2004; Puspitasari et al 2009). However, the community pharmacists' consultative role remains underdeveloped and the concept of 'patient counselling' poorly defined (Pilnick 2003). Studies assessing counselling performance have revealed that pharmacist counselling is usually based on a one-way communicative and information deficit model, where the pharmacist provides information to the patients without actively engaging them in the process (Heath 2003; Pilnick 2003; Rutter et al 2004). Shah and Chewning (2006) found that the definition of patient counselling varied across studies with half conceptualising patient-pharmacist communication as information provision. Pharmacists' attitude to focus upon pharmacological knowledge without consideration of the patient as an individual has been suggested to devalue patients' personal understanding of their own situation and negatively affect care (Ramalho de Oliveira and Shoemaker 2006). The predominantly information-based focus of patient-pharmacist interaction means that counselling in the pharmacy context carries a somewhat different meaning to that in other settings, such as psychotherapy, where there is a process of subjective scrutiny and greater engagement with, and contribution from, the client (Greenhill et al 2011; Pilnick 2003; Shah and Chewning 2006).

Another patient-professional interaction relates to over-the-counter (OTC) sales of medicines. These are initiated by the patient and can involve the request to buy a medicine or to seek advice on treating an ailment. The pharmacist here offers of a professional opinion about a course of action, whilst allowing the final decision about how to manage the condition to lie with the patient (Owen et al 2000). This contrasts with counselling offered on dispensed medicines where patients' information needs may be assumed to have been addressed by the GP and where patients lack interest in receiving further information on their subsequent refill prescriptions (Hassell et al 1998; Hirsch et al 2009; Puspitasari et al 2010). Although OTC interactions potentially offer more scope for the pharmacist to explore patients' perspectives and concerns, they are usually problem-specific and have attracted criticism as lost opportunities to discuss wider health issues (Hassell et al 1998; Smith et al 1990). Most OTC sales of medicines are routinely undertaken by MCAs. MCA-patient interactions have been shown to be complex, characterised by multiple discourses in which both parties commit to legitimise the MCA as a medical advisor (Banks et al 2007). MCAs play a gatekeeper role and pharmacist involvement typically occurs when MCAs want more specialist advice or if requested by a patient (Ylännne and John 2008).

MURs present an opportunity for pharmacists to extend their currently limited counselling role by engaging in wider discussions of patient beliefs and concerns about their medicines. However, as Latter et al (2000) suggest, the extent to which patients are able to participate may be influenced by previous expectations about the roles and relationships that have been formed during patient and health-professional interactions. This was found in their study of nurses' contribution to medication education. Advice here was found to be limited to simple information giving about medicines such as the name, purpose and number of tablets with little evidence of assessment of health beliefs, establishing patient learning needs, mutual goal setting and shared decision-making. The author concluded that nurses considered that patients did not wish to know more about their medicines and that they did not expect nurses to provide further advice. This raises questions about MUR activity and how the patient and pharmacist are interpreting this role in practice.

In this section, I have provided an outline of the 2005 pharmacy contract and of the MUR service. I have briefly discussed the aims of the MUR and the wider context in which MURs lie within the scope of medication review activity provided by others. I have also described some of the existing patient-pharmacist interactions that occur in the pharmacy. In order to better understand how the role of the pharmacist has developed, the next section briefly describes the historical context which has brought about these changes.

2.6 Historical role development of pharmacists

Hepler and Strand (1990) have described three periods that reflect the pharmacy profession's distinctive function, obligations and social role. The first period is defined as the '*traditional stage*' of the pharmacist's professional development. This occurred as pharmacists entered the twentieth century performing the social role of apothecary together with the knowledge and the skills needed to compound a drug product (Mrtek and Catizone 1989). The second period involved a '*transitional stage*' (1940-1970) that was facilitated by the realisation that compounding medicines from their constituent ingredients was in decline due to the developments of industrialisation and large scale manufacturing by the pharmaceutical industry. It has been noted that over the past 60 years the pharmacy profession has lost three of the four functions that have traditionally been the mainstay of its work; drug procurement, storage and the compounding of medicines. Dispensing of medicines according to a

prescriber's instruction is the only prominent remaining function (Harding and Taylor 1997; Mrtek and Catizone 1989).

The creation of the NHS in 1948 was another major factor in determining the course of UK community pharmacy practice. Prior to 1948, dispensing accounted for less than 10% of community pharmacy's income. This situation changed following 1948 as dispensing activity grew quickly because most of the population obtained free or subsidised medicines following consultations with doctors (Anderson 2001). Previous activities such as dispensing private prescriptions, counter prescribing activities and sales of proprietary medicines declined and the increase in prescription numbers effectively meant that pharmacists moved from the front of the shop to the dispensary in order to prepare and label medicines. Consequently, pharmacists faded from public view as their purpose quickly became accuracy checking prescriptions that had been assembled by others (Anderson 2001).

As a result of the '*transitional stage*' pharmacists were seen to have lost control over many of the qualities that pharmacy had relied upon for its professional existence. This gave rise to assertions that pharmacy was an '*incomplete profession*' due to "*its failure to gain control over the social object [the drug] which justified the existence of its professional qualities in the first place*" (Denzin and Metlin 1968: 378). Growing attention focused on 're-professionalisation' towards a more clinical role for pharmacists (Birembaum 1982; Edmund and Calnan 2001; Gilbert 1998). This has resulted in the final stage for the profession which has been described as the '*patient care*' stage where pharmacists find themselves faced with new patient-oriented roles. MURs are one such extended role. There is a strong political desire for patients to adhere to their medicines and to reduce the cost associated with avoidable medicines wastage and the MUR service is part of a strategy to address this. The MUR service has therefore evolved from several political and professional motivations to re-professionalise and take advantage of community pharmacists potential. Pharmacy's professional agenda to extend the role of the community pharmacist is discussed below.

2.7 Professionalising agendas and the extended role

Macdonald (1995) has used the term '*professional project*' for occupational groups who are involved in a strategy of professionalisation. A professionalising project aims to convince the state and the public that the work of the occupational group is reliable and valuable. Work by the occupational group that promotes 'mystical' or 'esoteric' knowledge can be said to increase the knowledge gap between them and the clients they serve, creating dependency and an opportunity for autonomous work (Harding and Taylor 2001). Medicine and law represent the typical current model of an established profession and so provide an authoritative example and benchmark for other occupations embarking on professional projects (Etzioni 1969; Johnson 1972).

Historically, pharmacists in their original role as compounders of medicines controlled an exclusive field of knowledge that was seen as 'mystical'. However, as discussed in the previous section, the 'transitional' stage for the pharmacy profession (Hepler and Strand 1990) led to the profession of pharmacy to embark on a process of re-professionalisation (Edmund and Calnan 2001). Concerns over pharmacists' deskilling and dissatisfaction with their public image as commercially motivated 'shopkeepers' also influenced this process (Eaton and Webb 1979; Francke 1969; Hughes and McCann 2003). Professional initiatives have sought ways for pharmacists to move away from the mechanical aspect of dispensing and sale of retail products towards extending the pharmacists' role in more patient-centred and advisory services (Cipolle et al 1998; Hepler and Strand 1990; Nuffield Committee of Inquiry into Pharmacy 1986; Noyce 2007; Roberts et al 2006; RPSGB 1996; RPSGB 1997a; Simpson 1997; Tully et al 2000). However, extending the role of community pharmacists has not always been welcomed by other professions such as medicine. The reasons for this have been because of the perceived potential threat to the autonomy of the medical profession and its contribution towards blurring of professional boundaries (Britten 2001; Hughes and McCann 2003; Macdonald 1995).

2.8 Pharmacists' extended role activity and user attitudes

Over the last 20 years, community pharmacists have diversified their practice to become involved with many services including health promotion activities, prevention of illness (e.g. smoking cessation, immunisation, travel services), contraception and sexual health advice, screening for ill health (e.g. blood pressure, blood glucose, cholesterol levels, Chlamydia screening), HIV prevention through syringe and needle exchange schemes and supporting patients with long-term conditions (e.g. diabetes, asthma, hypertension) to manage their conditions better (Anderson et al 2008; Noyce 2007). Anderson et al (2008) in their review on the contribution of community pharmacy to improving the public's health indicated that there is a substantial body of evidence for pharmacists' positive contribution, both in the UK and internationally. Changes to UK legislation have provided opportunities for pharmacists to extend their role to prescribing activity. However, community pharmacist involvement is uncommon and overall pharmacist prescribing activity in other settings represents an extremely small proportion of total primary care prescribing (Guillaume et al 2008). Concerns have been raised by the medical profession to extending prescribing rights to those who may lack appropriate training in diagnosis (Avery and Pringle 2005). However, a study has found that the barriers to pharmacist prescribing tend to be logistical and organisational rather than arising from inter-professional tensions (Lloyd et al 2010).

Despite the range of activities undertaken by community pharmacists, peoples' use of pharmacies remains predominantly for prescription supplies and purchase of OTC medicines (Anderson et al 2004). Peoples' perception of the pharmacist's role has been portrayed as one of 'drugs experts' rather than experts on health and illness (Anderson et al 2004). Consumers have expressed high levels of satisfaction with services such as EHC and Chlamydia screening (Anderson et al 2004; Eades et al 2011). Consumer views of public health activities in community pharmacy indicate they view pharmacists as appropriate providers of public health advice but their lack of regular involvement in the patients health care means they hold mixed views on the pharmacists' ability to do this (Anderson et al 2004; Eades et al 2011). The need for pharmacy services has been shown to be determined by the individual's subjective evaluation of the perceived value and appropriateness for the service (Hassell et al 1999). Patients have also expressed concern where the pharmacist would have access to selected information from medical records (Iverson et al 2001). There has been little research into

whether patients perceive a need for the MUR service or to what extent this is being accepted and valued by patients.

2.8.1 Critique of pharmacy's role extension

New patient-centred roles offer pharmacy the prospect of an enhanced professional status. However, it has been suggested that this can occur only if knowledge is utilised with the skill, judgement and experience necessary to practice at an appropriate level of competency as determined by academics, regulators and the public (Macdonald 1995; Mrtek and Catizone 1989). Patient-centred roles have the potential for increasing the level of ‘indeterminacy’ in pharmacists’ work. This refers to the component of the work which is based on specialist knowledge, its interpretation and the use of professional judgement. It contrasts with ‘technicality’ which refers to those aspects of the work which can be subject to routine, formulaic practices (Jamous and Peloille 1970). According to Jamous and Peloille (1970) professional status is associated with the capacity of occupations to maintain indeterminacy in their practice; increasing technicality is therefore associated with a reduction in professional status. Using medicine as an example, doctors are viewed as professionals as they ‘believe what they are doing’ and trust personal, over book knowledge (Freidson 1994).

Dingwall and Wilson (1995:125) have argued that the social object of pharmacy is the “*symbolic transformation of the inert chemical into the drug*”. Harding and Taylor (1997) go further by additionally recognising that pharmacists transform these into ‘*medicines*’. Harding and Taylor have highlighted problems associated with the extended role as a means of enhancing professional status and argue that re-professionalising strategies to extend the pharmacist’s role are “*fundamentally flawed*”:

“The extended role, intended as a model for professional development, may ironically be considered to have a de-professionalising effect, in that by focusing on activities other than dispensing, the centrality to pharmacy of the dispensing process is not recognised. Further, the social object of pharmacists’ activities i.e. the medicine, no longer forms the focal point for many of the new roles.”

(Harding and Taylor 1997:557)

The delegation of the dispensing task to other staff members means that pharmacy becomes no more than an “*exchange of prescription form and drug with no apparent input from a professional*” (Harding and Taylor 1997:557). They further argue there is no appreciation of professionalisation as a process. Success, which they view as being dependent upon promoting pharmacists’ activities as ‘mystical’ and their knowledge as ‘esoteric’, is eroded along with their professional identity. Furthermore, the routine nature of some of the services which have been implemented reduces the scope for professional judgement during patient / customer-pharmacist interactions. This has led to extended services being reduced to “*no more than asking structured, formulaic questions*” (Harding and Taylor 1997:556). The rationalisation of health services is discussed in the following section.

2.9 The rationalisation of health services

Policy analysis theory offers two main perspectives for policy implementation approaches. The ‘top-down’ approach sees implementation as a rational process that can be pre-planned and controlled by the central planners responsible for developing policies. (Barrett and Fudge 1981; Hogwood and Gunn 1984). The ‘bottom-up’ approach (Barrett and Fudge 1981; Hjern and Porter 1981; Lipsky 2010) sees policy change as a much more dynamic and interactive process and emphasises the need to understand the context of people’s work in order to understand why policies do not achieve expected outcomes. For effective policy implementation to occur, a balance should be made between the decisional ‘top down’ perspective and action-oriented ‘bottom up’. This is typically a negotiative process, involving exchange and ‘bargaining’ among a range of actors (Barrett and Fudge 1981).

Health policies that are predominantly based upon rational theories of decision making have been argued to be flawed. North (1997) argues that this is because human cognition is unable to deal with the vast quantity of information that confronts policy makers and the resultant policy, oversimplifies complex processes. Ritzer goes further and has coined the term ‘McDonaldization’ to describe how routine processes and their rational implementation not only affect policy, but are widespread in various institutions including politics, commerce, science and education, the leisure industry and even within the family (Ritzer 2008). Ritzer defines this process as the “*McDonaldization of society*” which he defines as:

"The process by which the principles of the fast-food restaurant are coming to dominate more and more sectors of American society as well as the rest of the world."

(Ritzer 2008: 1).

Ritzer chose the term 'McDonaldization' because the restaurant chain McDonalds serves as a contemporary example of such a process. Ritzer argues that economic success has come from the rationalisation process. Businesses like McDonalds, that have fashioned themselves on rational ways of working, have become successful because of greater consumer accessibility, convenience and uniformity of products and services (Ritzer 2008). Ritzer describes his McDonaldization model to include four intertwined dimensions: efficiency (choosing the optimum means to a given end), calculability (an emphasis on the *number* of products sold and the *speed* at which services are offered over their quality), predictability (the assurance that products and services will be the same over time and in all locations) and control through technologies which are constructed ultimately to replace people in order to eliminate uncertainty, unpredictability and inefficiency over the work performed (Ritzer 2008). Large scale manufacturing of pharmaceuticals over the past half century has had important implications for pharmacy practice and the professional role of pharmacists. Pharmacists' activities themselves can also be viewed as increasingly becoming rationalised resulting in deskilling of the pharmacist.

Ritzer does warn that although 'rational systems' appear to offer organisational success, they tend to spawn irrationalities that "*limit, eventually compromise and perhaps even undermine their rationality*" (Ritzer 2008: 141). He explains that this is predominantly the result of the whole process denying human reason in situations that require common-sense. A side effect of an over-rationalised system can lead to a deskilled workforce or worker burnout. Commentators have speculated that the dimensions of McDonaldization are evident in what has been referred to as the modern-day 'McPharmacy' (Bush et al 2009; Harding and Taylor 2000). Here, corporate focus is on standardising and rationalising the activities of pharmacies leading them to function more rationally, predictably and so more profitably. One irrational outcome however, was the subsequent deskilling of the pharmacy's workforce. Harding and Taylor (2000) question whether there was a need for the pharmacists' unique skills and knowledge in this environment.

Pink (2009) also provides useful insights into how people's involvement and engagement in a service or activity is influenced by their motivation. He argues that the performance of many skilled tasks provide people with "*intrinsic reward*". That is, he explains, the joy of the task is its own reward. Pink identifies three elements underlying such intrinsic motivation: *autonomy*, the ability to choose how tasks are completed; *mastery*, the process of becoming adept at an activity and *purpose*, the desire to improve the world. Controversially, Pink argues that the introduction of external reward or punishment for not completing a task often leads to poorer performance. The reason for this is that the external reward led to a detrimental effect on the inherent intrinsic reward. Subjects lost intrinsic interest in the activity and so reduced their motivation to engage effectively. It is currently unknown to what extent pharmacists' motivation is affected by the rewards or punishment they are subject to or to what extent the MUR service has been rationalised and what, if any, the irrational outcomes of these processes are.

In this section, I have described how the profession of pharmacy has moved through three distinct periods as outlined by Hepler and Strand (1990) and how this has influenced the pharmacist's functions and professional practice. I have looked at the professionalising agenda that has produced an extended role for pharmacists and also the concerns expressed by some commentators about the implications of this agenda. The rationalisation of services that has come to dominate work has important implications for pharmacy. The 'top down' rational approach to policy making without feedback on what is actually happening in practice potentially can lead to services to become irrational and ineffective. In this thesis, I provide a better understanding of these issues in relation to the MUR service. In the following section, I turn attention to the MUR service to highlight the different policy and professional perspectives that are being promoted. I explore the tensions between the different policy agendas for MURs, both as a means to increase adherence and so reduce avoidable medicine wastage versus the patient-centred and concordant model. I begin by providing a brief account of health policy development.

2.10 Health Policy and professional agendas

There have been many attempts to define what a policy is, however, there is little agreement on the meaning of the word (Ham 2009). North (1997:23) describes a ‘policy’ both as “*a statement of the current view of an issue and an attempt to standardise future action or responses in relation to that issue*”. Health policy development and implementation involves complicated processes engaging civil servants, managers, elected members of an authority, professional bodies and pressure groups (Ham 2009). Furthermore, once a policy decision has been reached this can change or be adapted. This may arise following incremental adjustments following a review of the policy, feedback during its implementation or more unusually a major change in the policy’s direction (Ham 2009; North 1997). There may also be prioritisation of services based upon the cost and effectiveness of a service (Elliott and Payne 2005). UK health policy has undergone major reforms which have affected community pharmacy. Service development has become increasingly aligned with the political agenda of redesigning care around the patient and providing greater choice (DH 2000a; DH 2000b; DH 2003a; DH 2003b; DH 2005b; Forster and Gabe 2008; Ham 2009; Laine and Davidoff 1996) as well as personal responsibility through encouraging greater involvement of patients in their medicines management (Ham 2009; NICE 2009; North 1997). However, it has been argued that underlying these policy initiatives, there is a concern to reduce financial costs and shift the burden of responsibility for health care from the state onto the individual consumer; this sidesteps the responsibility for tackling the wider causes of ill health and inequality (Kendall and Moon 1997).

Lipsky (2010) provides an analysis of actors on the front-line in public organisations. He defines ‘*street-level bureaucrats*’ as public service workers (such as police officers, teachers, health and social workers) who interact directly with people to deliver government policy. Actors who make policy decisions are rarely also responsible for its implementation (Ham 2010; Lipsky 2010). Street-level bureaucrats are therefore often expected to carry out work that is rationalised or highly scripted to achieve the policy objectives. However, paradoxically, in practice, the tasks they are required to perform require improvisation and responsiveness to the individual case. Street-level bureaucrats have substantial discretion in the execution of their work but typically work in environments that are not conducive to the adequate performance of their jobs. They face high demand for their services and lack the organisational

and personal resources necessary to do the job effectively. This forces them to invent routines for mass processing to control the stress and complexity of day-to-day work.

Lipsky (2010) argues that the decisions of street-level bureaucrats and the coping strategies they use, such as routinising and simplifying their job to deal with the uncertainties of their work, effectively became the public policies they carry out. The actions of these front-line workers have substantial and sometimes unexpected consequences for the actual direction and outcome of public policies. Lipsky's arguments have the potential for helping us to make sense of the impact of rational policy making on the relationship between service provider and consumer. There are no studies that have explored how the MUR policy is being interpreted and implemented in the real world setting of a community pharmacy and how this may impact on pharmacists' professionalisation. This study aims to provide insights that fill this gap. In the next section, I describe two perspectives that are influencing the direction of the MUR service.

2.10.1 MUR policy perspectives

One aim of MURs that has been promoted by the DH is that they should improve the "*clinical and cost-effectiveness of prescribed medicines thereby reducing the wastage of such drugs*" (DH 2005a:2). MURs have also been described as a "*structured adherence-centred review*" (PSNC 2009). There is an assumption that patients are willing and able to undertake an MUR which would result in cost savings through better adherence to medicines and a reduction in avoidable waste. MURs have also been promoted as a concordance-based review (Clyne et al 2008). Whilst this may be a more effective means of taking on board the perspectives of the patient, there is little known about how the service is operating or whether pharmacists are performing MURs based on the principles of concordance (NICE 2009; Pollock 2005; RPSGB 1997b). In the following section, I discuss these differing perspectives to highlight the potential tensions that exist. The first MUR perspective that I consider is that of a political and professional agenda associated with biomedicine (Engel 1977; Nettleton 2006; North 1997) which seeks to promote adherence to medicine taking.

2.10.2 Compliance and adherence

The terms ‘compliance’ and ‘adherence’ are often used interchangeably in the medical consultation and patient satisfaction literature (Cribb and Barber 2005; Horne et al 2005; Lask 2002; RPSGB 1997b). Compliance is typically used to define the extent to which the patient’s behaviour matches the prescriber’s recommendations (Conrad 1985; Hulka et al 1976). However, the use of the term is declining as it implies lack of patient involvement. Adherence, an alternative term, attempts to emphasise that the patient is free to decide whether to adhere to the doctor’s recommendations and has been described as the *‘extent to which the patient’s behaviour matches agreed recommendations from the prescriber’* (Horne et al 2005:33). Adherence to medicine taking is promoted as a means to avoid lost opportunities for health gain, unnecessary suffering and even death (DH 2001; Horne et al 2005; Pirmohamed et al 2004; Sackett and Snow 1979; Trueman et al 2010; Winterstein et al 2002). The consequences of non-adherence include a waste of scarce and expensive health care resource and also the incurring of personal and societal costs, for example, complications from chronic disease or formation of resistant infections (Ernst and Grizzle 2001; Horne et al 2005; Johnson and Bootman 1995; WHO 2003). One reason why there is an overt health policy strategy to ensure adherence is the costs associated with prescribed medicines.

2.10.3 Medicines and the cost to the NHS

Medication is the most common form of medical intervention provided by the NHS for the prevention and treatment of ill-health (Clyne et al 2008; Taskforce on Medicines Partnership 2002). Approximately £10 billion per year is spent by the NHS on medicines which accounts for 18% of NHS expenditure (Clyne et al 2008). In England, there has also been a steady increase in the number of prescription items dispensed in primary care: an increase of 58% over the last 10 years (NHS Information centre 2010). Most reviews agree that between one third and a half of medicines prescribed long-term to treat chronic illnesses are not being taken as recommended (Horne et al 2005; RPSGB 1997b; WHO 2003). It has been estimated that annually over £100 million worth of dispensed NHS medicines go unused and are ultimately discarded (McGavock 1996; RPSGB 1997b; Trueman et al 2010). Interventions to improve medicine adherence have therefore been seen as a way to better manage health budgets

(WHO 2003). With the ever increasing costs associated with prescribed medicines, non-adherence has major relevance to the health policy makers.

2.10.4 Adherence to prescribed medicines

Patient non-adherence has been classed as intentional, unintentional or both (Horne et al 2005; Horne and Weinman 1999; NICE 2009). Unintentional non-adherence occurs when patients experience difficulty in following treatment recommendations due to individual constraints such as inadequate treatment understanding, forgetfulness or physical difficulties that prevent them from using their medication effectively. Problems of accessing prescriptions or the cost of medicines may be further causes of patient non-adherence. However, there is recognition that patients may intentionally decide not to take medications as instructed (Horne et al 2005; Horne and Weinman 1999; NICE 2009). This intentional non-adherence arises from beliefs, attitudes and expectations that influence patients' motivation to begin and persist with the treatment regimen. These behaviours relate to how patients perceive their medicines and are further discussed in section 2.11.

Despite extensive research into patient non-adherence, the most effective interventions to tackle these issues have not led to large improvements in adherence and treatment outcomes but such interventions are acknowledged as being costly (Elliott et al 2005; George et al 2008; Haynes et al 2002; Kripalani et al 2007; Pellegrino et al 2009). Many interventions are built predominately on an information deficit model (Heath 2003; Dunbar et al 1979) where it is assumed that patient's behaviour can be corrected by providing the right information. Combinations of educational and behavioural strategies have been considered to be most effective (George et al 2008; Horne et al 2005; Horne and Weinman 1999). Sackett et al (1985) acknowledged that the prescribing of a medicine is a 'therapeutic experiment', the outcome of which is influenced by actions of the practitioner, in selecting an appropriate diagnosis and treatment, as well as the patient in adhering to the regimen. Current national guidelines on medication adherence have been provided to health care professionals in the UK to help patients become involved in making informed decisions about their medicines and how they can support patients to adhere to their prescribed treatment (NICE 2009). These guidelines recognise that professionals should identify whether the non-adherence is intentional or

unintentional and address these accordingly. The following section looks briefly at the role of health professionals in adherence related activities.

2.10.5 Support from health care professionals

The medical consultation between the patient and the prescriber has been shown to influence patient medicine taking behaviour (Cox et al 2007; Horne and Weinman 1999; Horne et al 2005; NICE 2009; Pollock 2005; Stevenson et al 2004). Patients tend to adopt a passive role rarely offering their opinion or initiating discussion about any aspect of the treatment (Barry et al 2000; Barry et al 2001; Cox et al 2007; Makoul 1995; Pollock 2005; Stevenson et al 2004). Patients report their doctor to be their best source of information about medicines (Makoul 1995). Some patients see their doctor as the only source of information about medicines (Britten 2008). Some people actively prefer the doctor to provide information and to trust what they consider to be expert judgement (Britten 2008; Lupton et al 1991).

Community pharmacists may be suited to supporting patients with their medicines as it has been argued that there may be less 'social distance' between pharmacist and patient, compared with patient and doctor (Blaxter and Britten 1996; Turner 1995). Therefore, there may be an opportunity for the patient to discuss medicine related problems with the pharmacist as a result of this more symmetrical relationship (Bissell and Traulsen 2005). Likewise, pharmacists have been described as a 'bridge' or 'translator' between lay and professional care (Blaxter and Britten 1996). Despite this, people may not want additional information from the pharmacist because they feel that they have been given this by their doctor and some studies suggest that patients would much prefer to discuss their medicines with doctors rather than pharmacists (Stevenson et al 2004). Nevertheless, medication reviews have been described as a cornerstone of modern medicine management (Taskforce on Medicines Partnership 2002) and there is an increasing body of evidence supporting pharmacists undertaking medication review activity in the community.

2.10.6 Medication reviews by pharmacists

Before the advent of the 2005 pharmacy contract, a growing body of evidence suggested community pharmacists could play a greater role in the patients' management of their

medicines (Chen et al 1999a; Chen et al 1999b; Chen et al 2001; Hepler and Strand 1990;). Some studies showed improvements in adherence and clinical outcomes such as control of blood pressure (Blenkinsopp et al 2000; Lee et al 2006) and heart failure (Goodyer 1995). Other studies found the pharmacist intervention to be acceptable to the GP and were able to demonstrate cost savings (Krska et al 2001; Nathan et al 1999; Sorensen et al 2004; Sturgess et al 2003; Zermansky et al 2001). Domiciliary visits by pharmacists have also shown to lead to better compliance, drug storage practices and a reduced tendency for patients to hoard drugs (Begley et al 1997; Lowe et al 2000). An Australian study of home-based medication reviews demonstrated a reduction in hospital admissions of 25%, and also a reduction in out-of-hospital deaths (Stewart et al 1998). Later studies also showed cost benefits of a pharmacist intervention with newly prescribed medicines (Elliott et al 2008).

Despite this positive evidence, medication reviews by community pharmacists have come under increased scrutiny. One study published at the time when the MUR service was launched suggested that pharmacist medication reviews may have negative outcomes including increased hospital admissions, home visits by GPs and contribute to patient anxiety regarding their treatment (Holland et al 2005). Furthermore, in another study that explored patient-pharmacist discourse, pharmacists were found to provide advice that was not requested by the patient and that the medication review had the potential to threaten the patients assumed "*competence, integrity and self governance*" (Salter et al 2007). It has been suggested that medication review services by pharmacists should focus on at-risk populations rather than the older population in general (Lenaghan et al 2007).

Prior to the start of the MUR service, a large randomised controlled trial (MEDMAN) was conducted, the results of which were particularly revealing (The Community Pharmacy Medicines Management Project Evaluation Team 2007). Patients with Coronary Heart Disease (CHD) were randomised to either a community pharmacy medicines management service (comprised of the pharmacist assessing patients' medication compliance and lifestyle (e.g. smoking habits, exercise and diet)) or their usual GP-based care. Findings from this study showed that the intervention did not demonstrate any significant change in patients' management of CHD, as indicated by the number of patients prescribed aspirin, or reported lifestyle measures. However, the cost of the intervention was more than that of standard care (Scott et al 2007). The lack of observed change was explained by the high proportion of

patients already receiving appropriate treatment. The author suggested that this ceiling effect might have been avoided if pharmacists had targeted patients whose treatment was outside recommended guidelines.

Patients' views were also explored as part of the same project. A survey indicated that the pharmacist intervention was associated with a positive change in patient satisfaction and found that those who had the intervention were more willing than control patients to ask the pharmacist questions they felt unable or were unwilling to ask a GP. However, patients continued to prefer a GP-led service (Tinelli et al 2007). Interviews with 49 participants also indicated that patients hold positive views of the intervention (Bissell et al 2008). Pharmacists were found to provide a source of reassurance about illness and treatment. However, many respondents were unsure or had anxieties about pharmacists taking a more proactive role in making recommendations about changes to their treatment. In the following section, the international perspective on community pharmacists medication reviews is explored.

2.10.7 Community pharmacy medication reviews: the international perspective

Several countries have developed the community pharmacist's role towards reviewing patients' prescribed medication. Alongside the UK, Australia, the United States (US), New Zealand and more recently Switzerland have the most established services. However, there is recognition that these medication review services vary in their comprehensiveness, minimum competency requirements for pharmacists, levels of inter-professional collaboration and remuneration (Chen and De Neto Almeido 2007; McClure 2007; Roberts et al 2006). Patient views of these services have also been under researched.

Introduced in 2001, the Australian Home Medicines Review (HMR) service is one of the longest established community pharmacy medication review service (Commonwealth Department of Health and Aged Care 2001). The HMR service was developed following negotiation by the pharmacy profession with the Australian Government to incorporate new, remunerated professional services into community pharmacies in order to better utilise the skills of pharmacists and for the community pharmacy network in Australia to remain viable (Roberts et al 2006). Unlike the MUR service, HMRs are undertaken within the patient's home and GPs

are remunerated for identifying patients for the service. Greater collaboration between pharmacists and GPs, as seen in the HMR service, has been suggested to have more impact on improving patient outcomes, such as reductions in hospital admissions, than pharmacists working in relative isolation (Chen and De Neto Almeido 2007; Chen et al 1999a; Chen et al 1999b; Chen et al 2001; Koshman et al 2008). However, like the MUR service, initial provision was slower than expected, with only 6.17% of GPs referring patients for a HMR up to May 2003 (Rigby 2003) and only approximately 10% of the eligible general population receiving them (Roughead 2005). On-going facilitators for practice change have been identified and include improved relationships between pharmacists and GPs, better remuneration and pharmacy layout and improved team working (Roberts et al 2006).

In the US, Medication Therapy Management (MTM) services provided by community pharmacists began to develop in the 1990s to assist GPs in managing clinical services and contain cost outcomes of drug therapy. MTM services have been described as a partnership between the pharmacist, the patient or their caregiver, and other health professionals and are designed to optimise therapeutic outcomes by improving adherence to medicines, enhance patient understanding of their medication and to reduce adverse drug events (DaVanzo et al 2005; Thompson 2008). Community pharmacists in the US, as in many other developed countries, have historically been paid primarily for the dispensing and supply of medicines with the provision of information for prescription medicines typically supplied through patient information leaflets (Svarstad et al 2003). Formal MTM services were introduced more widely across the US in 2006 following reforms resulting from the Medicare Prescription Drug, Improvement, and Modernization Act of 2003 (Barnett et al 2009; Pellegrino et al 2009; Thompson 2008). This act required insurers to offer a MTM program to a target population of high-cost patients who are users of the social insurance programs ‘Medicare’ and ‘Medicaid’. The targeted population include those patients receiving multiple medicines who are likely to spend more than US\$ 4000 per year on these and those with several chronic conditions. These reforms have led to greater opportunities for community pharmacists to be reimbursed for medication management services (Pellegrino et al 2009; Barnett et al 2009).

Few studies have quantified changes in the provision of pharmacist-provided MTM services over time. One study found that over a 7-year period, MTM had evolved from the provision of information for acute medications towards a more consultative service for patients receiving

chronic medications (Barnett et al 2009). It has been suggested that this change is associated with increases in pharmacist reimbursement costs and pharmacist-estimated cost savings. However, it remains uncertain if this shift is a result of clinical need, documentation requirements, or reimbursement opportunities. Variations in the requirements of MTM programs have also been shown to exist between insurers as it is they who determine the education, skills and experience of MTM providers (Bluml 2005; Cameron 2005; DaVanzo et al 2005). Nevertheless, each MTM service is designed to be a face-to-face consultation that is tailored to individual needs. It may involve assessment of physical and overall health status, and identification, assessment and resolution of medicine related problems as well as the monitoring of laboratory results if these are available. This, therefore, has the potential to be a more comprehensive review than the UK MUR service. The value of MTM services has yet to be fully assessed (The Lewin Group 2005). However, one study conducted in a clinic setting suggested that medication costs for older people could be reduced following a pharmacist MTM intervention (Stebbins et al 2005). Another study, that employed a pharmacist self-rated scale to measure the perceived value of MTM consultations, suggested that these services avoided GP and emergency room visits as well as hospital admissions (Barnett et al 2009).

In New Zealand, Medicines Use Review and Adherence Support services (MURs) were introduced in 2007 and aimed to support adherence to medicines for selected patients (Lee et al 2009). Earlier community pharmacist involvement was through Pharmaceutical Review Services (PRS), which were funded by the Government from 1998 to 2004 and involved pharmacists undertaking a clinical review of medicines collaboratively with the patient and GP with access to clinical notes (Anon 2000). The New Zealand MUR has several similarities to the UK model. The MUR is a structured consultation involving review of a patient's medication, identifying any practical or medication-related problems, and providing relevant information about these. Similar to the UK model, an MUR accreditation training course provided by the New Zealand College of Pharmacists must be completed before the service can be offered. One difference is that MURs are not nationally funded as they are in the UK and local schemes must be agreed with the local health authorities (Lee et al 2009). New Zealand MURs are reported to be provided in some parts of New Zealand however, there is a paucity of information on these services or patient views of them.

More recently Swiss community pharmacies have been given reimbursement opportunities to offer Polymedication-Checks that have been fashioned on the UK MUR (Messerli et al 2011) and other countries developing medication review services include Finland, Portugal, Canada and Germany (Blenkinsopp and Celino 2006; McClure 2007). In less developed countries there are less well evolved programmes and in these countries, insufficient training of professionals and lack of pharmacists have been cited as barriers for pharmacists' involvement in medication review services (Silveira de Castro and Correr 2007). In this section, I have discussed community pharmacy medication reviews models occurring in other countries. The most effective of these appear to be those where there is greater collaboration between pharmacists and GPs built into the service, as in Australia. I have also considered the adherence-centred agenda and evidence for the pharmacists' contribution to this through patient medication reviews. However, as indicated, the effectiveness of these reviews has been challenged. The questions that are required to be asked as part of the MUR service are focused primarily to address unintentional non-adherence by reinforcing the prescriber's instructions. Nevertheless, respect for the patients' perspective is also promoted as part of the MUR and this somewhat contrasting parallel agenda will be discussed further in the following section.

2.11 MURs and the patient agenda

The importance of recognising patients' beliefs and preferences about their medicines and their effect on patients' behaviour has stimulated the promotion of interventions that encourage patients' involvement in their care and for patient-centred services (Elliott et al 2005; Haynes et al 2002; Kripalani et al 2007; Horne et al 2005; Horne and Weinman 1999; Laine and Davidoff 1996; NICE 2009; Vermeire et al 2001). Patients' medicine taking behaviour and attitudes towards medicines is complex and I discuss these issues below.

2.11.1 The complexity surrounding medicine taking

Holme Hansen (1988) described modern drug therapy as being based upon technical-biological knowledge associated with the biomedical model of health care (Engel 1977; Nettleton 2006; North 1997) whereas patients' commonsense drug use is based on their experiences and evaluation. Williams and Calnan (1996) describe the patient more as a 'consumer' rather than

a passive recipient of care. Indeed, the rise of consumerism in the UK has been suggested to influence how health services are delivered (Hibbert et al 2002; Morgall and Almarsdóttir 1999; Nettleton 2006; Rycroft-Malone et al 2001):

"The structure of lay thought and perceptions of modern medicine is complex, subtle and sophisticated, and individuals are not simply passive consumers who are duped by medical ideology. Rather they are critical reflexive agents who are active in the face of modern medicine and technological developments"

(Williams and Calnan 1996:1613).

Patients' understanding of their illness and related attitudes toward their medicines have been shown to affect the way they take their medicines (Vermeire et al 2001). Donovan and Blake (1992) questioned the concept of compliance as a paternalistic model of medical decision making. Their study involved observations of rheumatology clinic consultations and interviews with patients. They suggested that patients make reasoned decisions about their treatment that can be different from the treatment plan advised by the doctor. Many patients made 'reasoned' decisions when they did not comply with their medicine regimen. For example, patients balanced their perceived need for relief from pain and stiffness with taking fewer tablets to reduce their fears of side effects. Apparently irrational acts of non-compliance (from the doctor's point of view) were found to be a very rational action when seen from the patient's perspective.

Adams et al (1997) explored patients' attitudes to their asthma medication. Two main groups, 'deniers' and 'accepters' of their condition, were found. Those who resisted their diagnosis were shown to rely on their reliever medication rather than take prophylactic medicines which they associated with having asthma. This was in contrast to those who accepted their diagnosis and used both the reliever and preventer as prescribed. In another study, Horne and Weinman (1999) suggested that the nature and perceived severity of a medical condition affects the level of adherence and that patients engaged in an implicit cost-benefit analysis when assessing whether and how to take a medicine. Patient attitudes towards medicines are further discussed in the following section.

2.11.2 Patient attitudes towards medicines

When asked about their medicines, people tend to report concerns rather than positive views because of the taken-for-granted perspective about the necessity, effectiveness and safety of modern prescribed medicines (Britten 2008). Aversion to medicine taking has been found to be widespread and people often take medicine as a 'last resort' (Britten et al 2004; Conrad 1985; Donovan and Blake 1992; Gordon et al 2007; Pound et al 2005) despite acknowledging the necessity of their medicine to live as normal a life as possible (Townsend et al 2003). Patients' aversion to medicines has been shown to affect their medicine taking behaviour. Patients report taking the perceived minimal effective dose, cut out doses from their prescribed regimens and stop taking the medicine altogether (Britten 1996; Pound et al 2005).

People have concerns about taking medication generally, especially concerning the side-effects, and the inconvenience of taking the medicine at the prescribed times and frequency (RPSGB 1997b; Bissell and Anderson 2003; Grime and Pollock 2003; Pound et al 2005). Medicine taking amongst the older population and those with long-term conditions, has been shown to be diverse and affected by perceptions of how effective medicines are, whether they are likely to lead to dependence and whether they cause side-effects (Britten 1996; Britten 2008). This may lead to patients 'testing out' their medicines and these issues are discussed below.

2.11.3 Lay testing of prescribed medicines

From the social science literature, it is clear that patients continually test out, form impressions and adjust their medicine taking according to their own set of health beliefs and do not merely follow 'doctor's orders' (Banning 2008; Britten 1996; Cohen et al 2001; Pollock 2001; Pound et al 2005; Townsend et al 2003). Once outside the surgery, patients will often modify or even reject their prescription medicine (Britten 2008). Patients might adhere to a regular regimen in treating one condition whilst adopting a flexible regimen for others (Banning 2008; Townsend et al 2003). Patients' decisions to take or not to take a medicine have not been shown to follow medical logic, but to be based upon 'rational' decisions when viewed from the perspective of their individual beliefs and preferences. (Adams et al 1997; Conrad 1985; Donovan and Blake 1992; Donovan 1995; Nichter and Vuckovic 1994; Pollock 2001). Patients carry out their own 'cost-benefit' analysis of each treatment, weighing up the

costs and risks of each treatment against the benefits as they perceive them (Donovan and Blake 1992; Donovan 1995; Pollock 2001). People therefore tend to experiment with medicines as a resource to use in the most pragmatic and effective manner (Blaxter and Britten 1996; Donovan and Blake 1992; Donovan 1995).

Pound et al's (2005) analysis of lay experiences of medicine taking for chronic illnesses, noted that people's motivation to minimise medicine intake included a desire to reduce adverse effects, addiction and to make the regimen more acceptable to their daily routines. Patients used medicines strategically to alleviate symptoms that they attributed to a disease. For example, they might omit doses if they intended to drink alcohol, replace or supplement medicines with non-pharmacological treatments or restrict medicine use for financial reasons. One of the key conclusions the author made was that people do not take their medicines as prescribed not because of failings in patients, doctors or systems, but because of concerns about the perceived toxicity of the medicines themselves. By examining what is known about lay evaluation of medicines, Britten (2008) has compiled an underlying list of questions that are asked by patients (Figure 4).

The questions that patients may want answers to are often indeterminate in nature and require effective communication and interpretation on the part of the health care professional. The concordance model offers a way of developing the consultation so that the issues patients may wish to raise can be discussed in a more equal and meaningful way and this is discussed in the following section.

What will happen if I don't take anything for this problem?

How can I manage this problem myself?

Can I take a natural or non-pharmaceutical remedy for it?

Is this medicine really necessary and, if so, what benefits will it bring?

How can I tell if it's working?

What is the minimum effective dose?

What are the known side effects of this medicine?

(How) will this medicine impact on my daily life?

How much does it cost?

Figure 4: Patients' questions about their medicines (Britten 2008: 58)

2.11.4 Concordance

Patient-centred approaches to health care consultations have become increasingly prominent to policy makers and professionals and stress the importance of understanding patients' experience of their illness as well as relevant social and psychological factors (Laine and Davidoff 1996; Stevenson et al 2000a; Stevenson et al 2004). The concept of concordance has developed over the last decade as a means to enhance patient-centredness. This notion evolved following an investigation into the extent, causes and consequences of patient non-compliance with prescribers' instructions. The term appeared in a report by the Royal Pharmaceutical Society of Great Britain (RPSGB) and was defined as:

Concordance is based on the notion that the work of the prescriber and patient in the consultation is a negotiation between equals and the aim is therefore a therapeutic alliance between them. This alliance, may, in the end, include an agreement to differ. Its strength lies in a new assumption of respect for the patient's agenda and the creation of openness in the relationship, so that both doctor and patient together can proceed on the basis of reality and not of misunderstanding, distrust and concealment.

(RPSGB 1997b:8)

A core feature of a concordant consultation is that it enables a two way flow of information. It is assumed that professional understanding and appreciation of patient perspectives is a pre-requisite for the professional to be able to assist the patient to make an informed choice about their treatment (Cribb and Barber 2005; NICE 2009; Pollock 2005). Non-compliance with medicines may be the outcome of a prescribing process that failed to take account of the patient's beliefs, expectations and preferences (Donovan 1995; Horne et al 2005; McGavock 1996; NICE 2009). Roter et al (1998) conducted a meta-analysis of 153 studies which evaluated a range of interventions intended to improve compliance. The author suggested that interventions that addressed patient satisfaction, empowerment, understanding of illness, quality of life, functional status and psychological well-being would be most effective. Likewise, Vermeire et al (2001) suggested that the traditionally paternalistic approach to try to improve adherence to medicines should be abandoned in favour of a partnership where decisions about treatment are shared with the patient after being appropriately informed.

Despite promoting greater patient autonomy, in practice, this has proved problematic (Dieppe and Horne 2002; Pollock 2005). The agenda has been shown to conflict with the traditional 'compliant' (doctor or pharmacist knows best) model of health care (Pollock 2005). Some commentators have suggested that until doctors and health policy makers accept the patients' right to decide whether he or she will take a medicine, the change from compliance to concordance will be cosmetic and fundamentally, the paternalistic approach will remain but will be concealed (Dieppe and Horne 2002; Heath 2003; Leontowitsch et al 2005).

In this section, I have discussed lay beliefs about medicines and how patients operate with different priorities and perspectives concerning their health and medicines. Concordance has been promoted as a means for patient-centredness and could form part of the pharmacist's role extension or professionalisation project. However, these perspectives conflict with the more dominant rational and adherence-centred model promoted to reduce costs associated with wasted medicines. This leads to questions about what perspective pharmacists are adopting when performing MURs in a 'real world' setting of a community pharmacy. This thesis investigates the issue of how pharmacists are interpreting and implementing the MUR service and how well complex issues of patients' medicine taking are discussed within these consultations. In the following section, I will review the literature on the MUR service and

highlight current gaps in the literature in order to establish where our understanding of the MUR service lies.

2.12 Research into MURs

In this section, I discuss the research that has been undertaken into the MUR services. I start by discussing the view of GPs and other stakeholders before discussing what is known of pharmacists' views and MUR implementation. I then examine the body of literature that has sought to evidence outcomes from the MUR and finally, detail what is known about patient views of MURs. I conclude this chapter by stating the aims and objectives of this study.

2.12.1 GPs and stakeholder views

Effective PCO coordination has been suggested as vital for delivering the benefits of the 2005 contract to patients (Noyce 2007). Early studies indicated that PCOs viewed MURs as having considerable potential but raised concerns that there was slow adoption and implementation in pharmacies (Blenkinsopp et al 2007a; Blenkinsopp et al 2007b; Hall and Smith 2006). The majority of PCOs sampled in an evaluation of the pharmacy contract (Blenkinsopp et al 2007a), revealed they reported using newsletters and other publicity to encourage the roll out of MUR services amongst community pharmacists. However, few reported doing anything to involve patients. One PCO reported that only 50% of the pharmacies in their region were accredited to deliver MURs and so they had to be careful about managing public expectations. Concerns over the value of MURs have been raised in a recent Government pharmacy White Paper (DH 2008). This has indicated that pharmacies are being remunerated for MURs which are not targeted at patients who may potentially benefit most. Recent changes to the MUR policy, including the introduction of national target groups, are to be implemented in October 2011 (PSNC 2011e).

GP views of MURs have been mixed but generally it has been found that their views are not positive (Blenkinsopp et al 2007a; Bradley et al 2008a; Elvey et al 2006; James et al 2007; Wilcock and Harding 2007). GPs have reported that they would view MURs to be more valuable if pharmacists focused on adherence and the reduction of waste from unused patient medicines (Celino et al 2007; Patel and Rosenbloom 2009; Wilcock and Harding 2007).

However, at present they largely consider MURs to provide little benefits to them or to patients and have expressed concerns over pharmacists advising patients, during an MUR, on clinical matters which GPs regard as inappropriate (Blenkinsopp et al 2007a; Bradley et al 2008a; Celino et al 2007; Wilcock and Harding 2007).

GPs have expressed negative views about pharmacists informing them about patient reported adverse drug reactions (ADRs) where they (GPs) consider them to be tolerable or inevitable. Wilcock and Harding (2007) have suggested that GPs may be 'missing the point' of MURs because one would expect ADRs to be discussed by the pharmacist as part of a concordant approach to treatment. Other concerns expressed by GPs have included duplication of work, MURs being conducted in isolation from them, the potential increase in their workload which does not contribute to their Quality and Outcomes Framework (QOF) measures, and MUR forms being overcomplicated and unavailable in an electronic format (Alexander 2006; Blenkinsopp et al 2007a; Bradley et al 2008a). Relationships between GPs and pharmacists have been reported to have been negatively affected by MURs (Bradley et al 2008a). This has been seen as a barrier for pharmacists to undertake the service or implementing it effectively. This issue as well as the pharmacists' perspective of MURs is discussed in the following section.

2.12.2 Pharmacists' perspectives of MURs

Pharmacists' perspectives of MURs have been more thoroughly investigated than patient views. Studies suggest that pharmacists perceive MURs to help improve patients understanding and correct use of medicines, have improved patient-pharmacist relations as well as increasing patient awareness of their accessibility (Alexander 2006; Bradley et al 2008a; Urban et al 2008). MURs are seen to provide an opportunity for an extended professional role, enabling better use of the pharmacists' skills and as a way to enhance relationships with patients (Cowley et al 2010; Harding and Wilcock 2010; Latif and Boardman 2008). However, despite support from most pharmacy contractors when they agreed to the 2005 pharmacy contract (Anon 2004), there have subsequently been concerns that contractors have lost out financially (Gidman 2010). The uptake of MURs was slow after the service was introduced with only 7% of available funding spent in the first year (Blenkinsopp et al 2007b; Blenkinsopp et al 2008). This was viewed by some as giving PCOs a windfall to help fund the NHS financial deficit

(Gush 2006; Anon 2006a). Furthermore, several barriers have been reported to implementing and delivering the service.

2.12.3 Barriers to extended role activities

Many barriers have been acknowledged to community pharmacists' involvement in medicine management services. These include a lack of time, a lack or poor use of staffing within the pharmacy and remuneration for undertaking such activities (Amsler et al 2001; Bradley et al 2008b; Krska and Veitch 2001; Lounsherry et al 2009; Niquille et al 2010; Rutter et al 2000), a lack of awareness among other health care professionals and the general public about the pharmacist's skills and attributes (Krska and Veitch 2001; Rutter et al 2000), a lack of privacy or availability of a consultation room within the pharmacy (Amsler et al 2001), potential conflict with other health professionals (Bradshaw and Doucette 1998; Krska and Veitch 2001; Ruston 2001; Mottram 1995; Wilcocks and Harding 2007) and issues around training (Bradley et al 2008b; Ruston 2001).

Pharmacists' attitude towards extending their role has also been cited as a further barrier. One study of community pharmacists' attitudes towards clinical medication reviews reported a perceived lack of mandate and legitimacy over this work and doubts about the adequacy of skills and experience to provide the service (Bryant et al 2010). The authors suggested that this may have resulted from a perceived lack of support from GPs, concerns over boundary encroachment and a lack of mandate from patients. A lack of readiness to change by community pharmacists and a perceived lack of workable strategies to adopt these newer roles have also been reported (Bryant et al 2009; Farris and Schopflocher 1999; Odedina et al 1996). Pharmacists' attitudes have also been proposed as barriers to becoming involved with health promotion activities and pharmacists have been described as being reactive rather than proactive in their approach (Anderson et al 2003).

2.12.4 MUR barriers

Similar barriers to the effective implementation of the MUR service have also been reported and these are discussed below.

2.12.4.1 Consultation room

Early studies of MUR activity identified the lack of a consultation room as a barrier to conducting MURs (Ewen et al 2006; Hall and Smith 2006; Latif and Boardman 2008). One study found practical problems with consultation areas particularly in smaller pharmacies (Rapport et al 2009). The author suggested that while pharmacists may be keen to enhance their professional self-identity through the use of a consultation facility, the limitations of space meant they were typically “*shoehorned*” and filled with retail stock items. This threatened the desired enhancement of professional status. In contrast, it was found that large multiple pharmacies were reported to have more comfortable and professional looking rooms.

2.12.4.2 Pharmacists' training and accreditation

Pharmacists' training and accreditation for undertaking MURs has been criticised for being a bureaucratic exercise which focuses on process rather than on consultation and the decision making skills needed for an effective service to patients (Alexander 2006; Foulsham et al 2006; Harding and Wilcock 2010; Wilcock and Harding 2008). In an early survey study of pharmacists' perceptions (Ewen et al 2006), two thirds of respondents reported that they thought the accreditation training prepared them for providing the service. However, half of the respondents at the time had not undertaken an MUR in their pharmacy. In a later study using qualitative interviews, most pharmacists reported the accreditation had not prepared them for face-to-face consultations or ways to keep the consultation within time constraints (Urban et al 2008). Another qualitative study that used focus groups and telephone interviews (Khudeja 2009) found that the range of accreditation training methods influenced what pharmacists understood the term MUR to mean. There have also been suggestions that pharmacists are unsure about the difference between MURs and a clinical medication review (Connelly 2007). However, it remains unclear from the literature how pharmacists are interpreting the MUR policy and how this is influencing their practice.

2.12.4.3 Time and staffing

Lack of time, increase in workload and staffing pressures have been identified as barriers that pharmacists face when implementing MURs (Bradley et al 2008a; Foulsham et al 2006; Gidman 2011; Latif and Boardman 2008; Rosenbloom and Graham 2008; Wang 2007). Most MURs have been reported to be incorporated into the daily work of the pharmacy without additional pharmacist cover (Blenkinsopp et al 2007a; Bradley et al 2008a). However, some pharmacists have reportedly stopped offering the service because of a lack of organisational support (Rosenbloom and Graham 2008). An MUR consultation has been estimated to average 51 minutes in which 22 minutes is spent with the patient and the rest on preparation for the MUR and completing associated paperwork (Blenkinsopp et al 2007a). The pharmacist's absence during an MUR has reported to have had a negative impact on patients waiting for their prescriptions (Blenkinsopp et al 2007a; Urban et al 2008). Concerns over the pharmacists' inability to supervise sales of medicines during this time have also been raised (Moss 2007). In one study critiquing the original MUR form, pharmacists and GPs reported that this was too time consuming to complete, that not all sections were relevant and too much information was being recorded (Thomas et al 2007a). Some commentators raised concerns that MURs were being performed within an overly short time frame and this was devaluing the usefulness of the service (Anon 2006b; Goldstein et al 2006). To date no observational studies have been undertaken to contextualise the issues that pharmacists face when implementing the MUR service or the impact of this on patients' views of the MUR consultation.

2.12.4.4 Patient recruitment

Pharmacists have reported recruitment of patients for MURs to be difficult and it remains unclear whether this is due to a lack of patient demand or the pharmacists' inability to communicate the MUR as a useful and relevant service (Bassi and Wood 2009; Hall and Smith 2006; Thomas et al 2007b). Some reports suggest that patients have been suspicious of the pharmacists' intentions and so have declined the invitation on the grounds that they felt no need for an MUR (Moss 2007; Urban et al 2007; Wang 2007). Appointment systems set up in pharmacies have been reported to fail due to patients' non-attendance, despite pharmacists using measures such as telephone reminders. This has led to pharmacists reporting feeling rejected and de-motivated to arrange further appointments (Blenkinsopp et al 2007a; Urban et al 2008). The problem of recruitment has led some commentators to suggest changing the name of the service to 'medicines check-up' or 'medicines MOT' to better communicate to

patients what an MUR involves (Donyai and Van den Berg 2006; Van den Berg and Donyai 2009). However, because of the lack of research into patient perspectives and the way they are offered, it remains uncertain why patients decide to accept or decline the invitation.

2.12.4.5 GPs perception as a barrier

GPs lack of support for the MUR service appears to be a barrier to pharmacists' implementation of the service. Over 80% of pharmacists providing MURs reported that the service had no effect on their relationship with local GPs. Only 12% of respondents indicated that it had improved their relationship with the GP (Blenkinsopp et al 2007a). Pharmacists reported that they felt GPs were cynical about the value of MURs and tended to see them merely as a way to increase pharmacist income (Urban et al 2008). Concerns have been raised about whether the GP was reviewing the MUR form and them not being including in the patients' medical notes. This has de-motivated some pharmacists who believed that the time and effort spent performing the MUR had been wasted (Anon 2006a; Harding and Wilcock 2010; Trueman et al 2010; Urban et al 2008; Wilcock and Harding 2008).

2.12.4.6 MUR pressure and targets

The annual cap on MUR activity has been reported to contribute to organisations setting arbitrary targets which has led to several reports of pharmacists feeling pressurised to perform MURs (Bassi and Wood 2009; Blenkinsopp et al 2007a; Bradley et al 2008a; Harding and Wilcock 2010; Murphy 2007; McDonald et al 2010a; McDonald et al 2010b; Trueman et al 2010; Urban et al 2008; Wilcock and Harding 2008). Organisational pressure within multiple pharmacies appears to be the main driver for MUR activity and may be one reason why there has been large variation in the number of MURs performed with fewer MURs conducted by independent pharmacies compared with multiples (Blenkinsopp et al 2007a, Bradley et al 2008a; Harding and Wilcock 2010). The pressure that pharmacists are under to deliver an arbitrary target number of MURs has led to reports of pharmacists inviting patients who they think are on simpler medication regimes that can be performed quickly rather than those patients with more complex regimes who may benefit most (Bradley et al 2008a; Wilcock and Harding 2008; Harding and Wilcock 2010).

PCTs have expressed views that MURs are not being targeted to "*local needs and patient priorities*" and that the quality of reviews is "*inconsistent*" (DH 2008: 29). The extent to which

these commercial pressures have undermined pharmacists' professional judgement and autonomy over their work is yet to be determined as well as what effect this has had on patient outcomes. In this section, I have described some of the barriers faced by pharmacists delivering the MUR service. In the following section, I focus on the research that surrounds the value of the MUR.

2.12.5 Evidencing the outcomes

Patient outcomes resulting from MURs have been mixed. The most convincing outcomes have been from studies that have investigated a particular group of patients. MURs performed with patients with asthma have suggested the most benefit (Bagole et al 2007; Desborough et al 2008; Portlock et al 2009). For example, Portlock et al's (2009) study of 965 patients with asthma identified that 30% of patients had not seen their GP or practice nurse for a review in the previous 12 months. The level of adherence to medicines in this group was lower than those who had an MUR. The two most common interventions that pharmacists made in the MUR were patient education and device check. In another study, Wilcock and Harding (2008) aimed to quantify the effects of performing an MUR on GP prescribing for patients with CHD. MUR forms ($n = 1948$) from 23 community pharmacies were reviewed as well as dispensing data from the patient's medication record (PMR). The study found over half of the MURs performed by the pharmacist (54%) had identified patients with an actual or potential risk of CVD. Of these, a quarter resulted in a prescribing recommendation of which over half appeared to have been acted upon by the GP. However, these studies do not reflect current practice as MURs are not typically restricted to patients with certain medical conditions. Furthermore, in several of these studies pharmacy staff were given additional training (Portlock et al 2009; Cree 2010) or were provided with additional supporting material, such as questions to assess asthma control, that tailored the MUR to the medical condition (Bagole et al 2007; Colquhoun 2010a; Colquhoun 2010b). These additional resources do not form part of the national MUR service.

Studies that have not targeted particular groups of patients have shown more variation in their outcomes. A study by Youssef et al (2010) found only 3% of the pharmacists' recommendations from an MUR appeared to have resulted in an intervention that eventually led to a change in the patients' prescription. However, in another study two thirds of MURs

(from a group of 120 patients) resulted in resolution of drug-related problems compared with just 3% in a control group (Mohammad 2008). The different criteria used by researchers to measure outcomes make comparisons between studies difficult. Moreover, studies conducted before 2007 investigated use of the original MUR form (Blenkinsopp et al 2007a; Bradley et al 2008a; Mohammad 2008; Wilcock and Harding 2008) and this has now been replaced by the new version. One study that has tried to identify criteria for assessing the quality of MUR referral documentation used the original form and the author suggested that further piloting is needed against the new form (James et al 2008). There also appears to be wide variations in the completeness and legibility of MUR forms and disparity in the recommendations made to GPs (MacAdam and Sherwood 2011; NPA 2010; Ruda and Wood 2007). One study found that few MUR forms contained references relating to non-prescribed medicines or supplements which are supposed to be discussed as part of an MUR (John et al 2009).

2.12.6 Patient perceptions of the MUR service

Patient surveys have been used to investigate satisfaction with the MUR service. However, as with much of the methods that have measured patient satisfaction with pharmacy or health services, there is a lack of consistent instruments. Moreover, the concept of 'satisfaction' fails to capture the problematic nature of health service delivery to patients who may not behave as a typical 'consumer'. Satisfaction surveys may therefore be limited and may even lead to misleading 'evidence' (Avis et al 1997; Naik et al 2009). Several studies have attempted to determine to what extent patients' knowledge of their medicines had improved as a result of the MUR service. Statements such as "*I learned more about my medicine(s) after the MUR with the pharmacist*" have been used and have received positive responses (Patel and Lefteri 2009; Portlock et al 2009; Youssef 2008; Youssef 2009; Youssef et al 2010). Patients in these studies appeared to rate the MUR service highly (Bagole et al 2007; Kumwenda and James 2008; NPA 2010; Portlock et al 2009; Youssef 2008; Youssef 2009; Youssef et al 2010) and in one study reported that they used the service to gain more confidence about their asthma treatment (Portlock et al 2009). However, it remained unclear how the interaction was handled and in what ways patients improved their confidence. Furthermore, these seemingly promising results do not explain how this was achieved, what patients had actually learnt or indeed if they wanted to know more at the beginning.

An ongoing national multidisciplinary audit involving four stakeholders (community pharmacy, general practice, PCOs and patients who had recently had an MUR) indicated that patients hold positive views of MURs (RPSGB 2010). From the 3016 returned patient surveys, half of the patients indicated they had received recommendations to change how they took their medicines and of these 90% were likely to make the change(s). Over three quarters indicated the MUR had improved their medicines knowledge and 85% of patients scored the MUR as high on a ‘usefulness’ scale. However, there has been little investigation into why some patients report they do not find the MUR useful. This raises questions as to what is happening during the MUR consultation. Likewise, in other smaller surveys (Krska et al 2009; Patel and Lefteri 2009), there were indications that the MUR had not met patients’ needs about their medicines and that not all of their medicine problems had been discussed. With no direct observation of MURs, the authors suggest that more research is needed to find out why some patients who undertake an MUR are not deriving benefits.

Qualitative approaches to the study of patients’ views have provided richer insights (Blenkinsopp et al 2007a; Greenhill et al 2011; Iqbal and Wood 2010). Blenkinsopp et al (2007a) explored patients’ views of MURs using two focus groups with 10 patients who had an MUR. Patients were identified by pharmacists through community pharmacies and were paid £50 for participating. The focus groups revealed that many patients took part in their MUR out of politeness with some having concerns about the pharmacists’ workload and ability to spend time with them. During the MUR, patients reported feeling being tested but talked favourably about the amount of time the pharmacist spent with them. However, the findings revealed that the majority of the patients would not volunteer for another annual MUR. Furthermore, Iqbal and Wood (2010) found through their telephone interviews with patients ($n = 23$) that over half found their MUR to be useful but only a minority could remember all of the recommendations made by the pharmacist.

The lack of context in which MURs are carried out and insight into what happens before and during the MUR, limits the understanding one can achieve through survey and interview methods of enquiry. More recent work has reported on observations of pharmacist consultations more widely, including MURs, using the Calgary-Cambridge consultation guide (Greenhill et al 2011). This study indicated that some skills such as listening effectively, eliciting patient perspectives and creating a patient-centred consultation were poorly represented.

However, to my knowledge, there have been no studies investigating MURs as they happen in a community pharmacy setting and how these come about during the everyday activities of the pharmacy.

2.13 Summary

In this chapter, I have presented an overview of how historical developments in UK community pharmacy have led to initiatives to re-professionalise community pharmacist activities. I have also described the MUR service and the research that has been conducted in this area. Pharmacists potentially have a valuable contribution to make in medicines management services but the literature in this area is inconclusive. Few studies have highlighted outcomes from MURs and what patients take away from the consultation. There has been little research investigating live practice such as the processes that lead up to and shapes the MUR consultation, how the pharmacist within an MUR consultation identifies and addresses patients' medication issues and whether MURs cater for individual patient beliefs, concerns and preferences. Consequently, there is a need for research that investigates the implementation of the MUR service within pharmacies and the behaviours of both pharmacist and support staff within a 'real world' practice setting. Detailed below are my research aims and objectives. The following chapter describes the methodological approach undertaken and outlines the method for this study.

2.14 Research aims and objectives

This research is timely as questions, both within and outside the profession, are being asked as to the value of community pharmacists' involvement in medication management services (DH 2008; Holland et al 2005; McDonald et al 2010b; Salter et al 2007; Salter 2010; The Community Pharmacy Medicines Management Project Evaluation Team 2007). There is a lack of research that has sought to investigate 'live practice' of pharmacists delivering MURs, has observed the MUR consultation and how patients interpret the service. The aims and objectives of this study therefore reflected these gaps in the literature and are detailed below:

Research aims

The aim of this research is to investigate patient and pharmacy staff perspectives of the MUR service and implementation in the real world setting of community pharmacy.

Research objectives

To observe and report how the MUR service is being implemented and managed alongside existing service provision.

To describe what happens during an MUR and how the patient-pharmacist interaction is managed.

To determine the views and perspectives of patients who had undertaken an MUR with the pharmacist and also those who declined the offer for an MUR.

To better understand pharmacist and support staff perspectives of MURs and the challenges they face in practice.

To investigate whether the aims of the MUR service to improve patients' knowledge about their medicines and use are being realised in practice.

CHAPTER THREE

Methodology and Methods

3.1 Introduction

This chapter is divided into two parts: methodology and methods. In the first part, I discuss the methodological approach that underlies the research study. Methodology, as Grix contends, is essentially concerned with the logic of enquiry and:

“...in particular with investigating the potentialities and limitations of particular techniques or procedures. The term pertains to the science and study of methods and the assumptions about the ways in which knowledge is produced.”

(Grix 2002:179).

With this in mind, in this section I begin by briefly outlining the ontological and epistemological position(s) underpinning this study and provide a rationale for using qualitative methods. Ethnographically-oriented fieldwork observations and interviews with participants were the two qualitative research methods that were chosen to answer the research aims and objectives and each method will be discussed. Consideration is also given to how the study demonstrated rigour. Finally, the ethical issues relating to the study are discussed. In the second part of this chapter, I provide a detailed description of the methods of data collection that were used, the decisions that informed the design of this study and a description of how the data was analysed.

3.2 Part One: Methodology

3.2.1 Health services and pharmacy practice research

Health services research has been defined by the Medical Research Council as: "*the identification of the health care needs of communities and the study of the provision, effectiveness and use of health services*" (Clarke and Kurinczuk 1992:1675). This study aims to investigate patient and pharmacy staff perspectives of the MUR service and how this service is being managed in practice. It can therefore be considered pharmacy practice research. There are many different approaches to pharmacy practice research (Mays 1994; Smith 2002). Underlying each of these are differing philosophical assumptions about the nature of knowledge and how we can acquire this. Broadly, there are two contrasting approaches to health services research: positivist and interpretive (Blaikie 2010; Bowling 2009; Smith 2002) and these are discussed briefly below.

3.2.2 Positivism and Interpretivism

Positivistic and interpretive approaches hold different epistemologies which mean they hold different philosophical positions about the kinds of knowledge that are possible and claims about how what is assumed to exist can be known (Blaikie 2010). A positivist epistemology assumes that there is an objective reality, which can be measured, studied and understood largely through scientific investigation (Benton and Craib 2001). Much of the early pharmacy practice research held positivistic positions which like much early health research has been the dominant approach underpinning medical and scientific achievements (Benton and Craib 2001; Bond 2000; Smith 2002). However, positivistic approaches take less account of the role of social factors or individual subjectivity (Bowling 2009; Pope and Mays 2006; Smith 2002).

Health services research has much to benefit from the knowledge generated through more interpretive strategies (Pope and Mays 2006; Stevenson et al 2000b). Interpretivist accounts hold that the study of social phenomena requires an understanding of the social world and how people have constructed and brought meaning to it. These interpretivist traditions were formed as a reaction to positivism and hold differing epistemological assumptions. They strongly believe that there is a fundamental difference between the subject matter of the

natural and social sciences (Benton and Craib 2001). Before positioning my own research on this landscape, I briefly describe below some relevant ontological issues.

3.2.3 Ontological positions

Ontology is concerned with the nature of what exists (Benton and Craib, 2001). The epistemological positions mentioned above are dependent upon the ontological viewpoint that is taken. For positivistic research, there is adherence to a *realist* ontology. This assumes that both natural and social phenomena have an existence that is independent of the human observer (Blaikie 2010). In contrast, the interpretivist tradition adheres more closely to an *idealist* ontology. This position assumes that we have no way of understanding the world other than through the lens of our own understanding and experience (Blaikie 2010).

A useful amalgamation of both positions has been proposed, known as ‘subtle realism’ which integrates insights of both idealist and realist ontologies (Hammersley 1992). As Hammersley proposes, individual subjective perceptions do not preclude the existence of an independent and observable reality (Hammersley 1992). The subtle realist position therefore shares with realism that it is possible for the researcher to acquire knowledge about the external world as it really is and this is independent of the human mind or subjectivity. However, Hammersley simultaneously holds that the researcher is unable to capture the social world and reflect this back to an audience like a mirror. Instead, he argues the researcher is constantly engaged with representations or constructions of the external world (Hammersley 1992).

3.2.4 Ontological and epistemological assumptions underpinning the study

For this study, an interpretivist epistemology was considered the most appropriate standpoint. As mentioned above, the interpretivist approach aims to understand individual events in relation to the individuals involved and to attempt to reconstruct the subjective experience of the participants without ‘distorting’ the world around them (Denzin and Lincoln 2008; Weber 1949). The underlying purpose of this research rests on creating a deeper contextual understanding of the MUR service, the meanings and interpretations that the participants bring and to consider these in the totality or network of their own statements and beliefs.

This ontological viewpoint is one that aligns with the subtle realist position described above. This standpoint is increasingly being seen as a valuable approach to health care research (Murphy et al 1998) and one that resonates well with the present study. I do not preclude the existence of an independent and observable reality. Fieldwork observations in the ‘real world’ would therefore be a way to attain firsthand knowledge of the phenomena that I aimed to research. Likewise, I accept that the observations undertaken and the information that the participants in the interviews revealed are not simple factual accounts. The research findings are based on interpretations and representations of events and that the knowledge about these phenomena is influenced by aspects of our social selves. Indeed, had my professional background not been as a pharmacist, or even if I had been from a different kind of society holding different ideologies, I may well have come to different conclusions. It is with this backdrop that I proceed to provide a methodological position for this study and a rationale for choosing my selected research methods.

3.2.5 Qualitative research methods

There have been widespread debates regarding the relative merits of quantitative and qualitative strategies for researching society (Hammersley 1992; Bryman 1988; Bryman 2008; Silverman 1997). Qualitative methods are exploratory, inductive in nature and are oriented to answering ‘why’ and ‘how’ questions whereas quantitative methods better investigate processes that are particularly appropriate to answering ‘what’ or ‘how many’ questions (Bowling 2009; Bryman 2008). Bowling (2009) suggests that qualitative methods have advantage over quantitative methods in situations where there is little pre-existing knowledge, when the issues are sensitive or complex and where the maximum opportunity to pursue an exploratory approach is desired. As Silverman (1997) asserts, the choice of research method should aim to collect data that is most appropriate to answering the research aims and objectives.

Qualitative research is a naturalistic method of enquiry which means that its strength lies in investigating people in their typical social environment with minimal disruption to the setting (Bryman 2008; Bowling 2009; Denzin and Lincoln 2005; Murphy et al 1998). There are numerous qualitative methods of enquiry including ethnography, grounded theory, case study, action research, phenomenology and ethnomethodology (Bowling 2009; Bryman 2008;

Charmaz 2006; Denzin and Lincoln 2005). Typically a qualitative approach attempts to understand the complexity of events when they are seen in context. It can therefore be used to clarify the “*social, cultural and structural contexts associated with organisational problems and dilemmas*” (Miller et al 2004:332). As Bryman states: qualitative researchers ‘*express a commitment to viewing events and the social world through the eyes of the people that they study*’ (Bryman 2008:385).

The research method chosen for this study was determined by how much was known about MURs, how they were being implemented in pharmacies and how they were being received by patients in practice. It was clear from the literature that an in-depth understanding of the issues relating to the conduct of MURs within a pharmacy practice setting had not been established and that patients’ perspective of the MUR consultation was scarce. Furthermore, investigating how the MUR policy was being realised in practice and what the views of the people directly involved with the service were, was a critical part of the study. A qualitative approach was therefore deemed suitable to provide these insights.

In this section, I have described my ontological, epistemological and methodological position underpinning this research. In the following section, I discuss the two qualitative research methods that were adopted for this study: observations and interviews.

3.2.6 Observational research

Historically, the ethnographic method became prominent in the Western world in the late nineteenth and early twentieth century in order to study distant (usually non-Westernised) cultures. Ethnography primarily has its roots in anthropological research and is a method that allows data to be collected ‘firsthand’ to provide a very detailed, in-depth description and analysis of everyday practices (Denzin and Lincoln 2008; Hammersley 1992; Lincoln and Guba 1985; Lofland et al 2006; Murphy and Dingwall 2003a). Fieldwork observation is the classic method of enquiry for ethnographic research and is increasingly being used in health services research. According to Smith (2002:161) the objective of qualitative observational studies is to provide an insight into participants’ behaviour and to consider these against the background of ‘*constraints, difficulties or facilitative aspects of their environment*’.

Observational techniques are used to investigate social practices and typically require the researcher to spend considerable time in the field and sometimes to participate in the naturally occurring activities of the social grouping under study in order to generate rich data (Emerson 1981; Okely 2004; Silverman 1993). Observational research that involves ‘hanging out’ with the people and phenomena under investigation is sometimes referred to as ‘participant observation’. Here, the researcher acts as the primary instrument for data collection and witnesses the events and phenomena they seek to understand personally and directly (Lofland et al 2006). The purpose of the participant observer has been succinctly summarised:

“The participant observer gathers data by participating in the daily life of the group or organization he studies. He watches the people he is studying to see what situations they ordinarily meet and how they behave in them. He enters into conversation with some or all of the participants in these situations and discovers their interpretations of the events he has observed”.

(Becker 1958:652)

Fieldwork observations provide the researcher with an opportunity to document actual events and behaviours within the context of how they happened. They allow for the generation of rich data and an exploration of ‘real life’ behaviour without relying upon accounts by other individuals (Bryman 2008; Lincoln and Guba 1985; Okely 1994; Lofland et al 2006). However, although observations cannot provide a simple copy of phenomena, they offer the potential for the phenomena under study to be subject to analysis with a ‘single transformation’ or representation by the researcher (Murphy and Dingwall 2003a). Other methods of inquiry such as interviewing have been said to involve at least two of these transformations: the researcher who chooses the question to ask and the respondent who reconstructs their original experience in the course of replying (Murphy and Dingwall 2003a). The minimisation of the chain of transformation is why observational research techniques have been described as the “gold standard” for qualitative research (Murphy and Dingwall 2003a). Furthermore, direct immersion into the everyday processes allow for a greater understanding of the rules, conventions and practices that govern the participants social worlds.

Observations are a useful method to explore health professional activities and behaviours (Smith 2002; Mays and Pope 1995). Non-participant observations in the pharmacy have been used to investigate OTC pharmacist-customer interactions in order to better understand customer views (Bissell et al 1997; Hassell et al 1998; Hibbert et al 2002; Wilson et al 1992). As mentioned in Chapter Two, there is little published research on the nature of MUR interactions. One study has used observations of MURs as part of a study of appointment-based consultations to analyse pharmacist-patient communication (Greenhill et al 2011). Observation methods have drawbacks including the time that it consumes and the resources that are required (Murphy et al 1998). Other issues raised include the heavy reliance upon the researcher's interpretation of what has been observed and the assumptions that the researcher brings; although this can be considered a strength given the skill and insightfulness of the researcher (Miles and Huberman 1994). Changes in participants' behaviour because they are aware of being observed can also be a drawback (Lincoln and Guba 1985; Smith 2002; Pope and Mays 1995). These issues are explored fully in Part Two of this chapter (section 3.3.7). In the following section I discuss structured and unstructured observation methods.

3.2.6.1 Structured and unstructured observations

Observations can be structured or unstructured. Emerson (1981) draws attention to the differences between the two. Structured observations are typically focused and selective and can be used to test hypotheses. The focus of structured observations is determined beforehand with a pre-specified procedure for what and when to observe. Observations here are predetermined into quantifiable pieces of information (e.g. type of behaviour, events) that can then be aggregated into variables allowing the data to be conceptualised in terms of frequency distributions of events under study (Emmerson 1981). This technique follows more closely the principles and assumptions of quantitative research. In contrast, unstructured observations are made without pre-determined categories or questions in mind. There is therefore no narrowing or restriction upon the observer's participation in the setting (Emmerson 1981; Lofland et al 2006; Murphy and Dingwall 2003a). Silverman (1993) notes that one of the strengths of undertaking unstructured observation is that it avoids the premature definition of variables which may deflect attention away from social processes which are important to the participants themselves. Smith also contends that structured observations "*grossly ignore the complexity*" of interactions (Smith 1975:203) whereas

unstructured observations support the ‘open-endedness’ of field research in order to study matters where little is known.

Unstructured observations were therefore used in this study as this was deemed the most appropriate way to answer the research aims and objectives. Careful consideration was given to the perspective or viewpoint I adopted during fieldwork. Researchers are typically open to two opposing, although not mutually exclusive, orientations when undertaking observation research. Davis (1973) metaphorically referred to these two stances as creatures. The first group, the ‘Martians’, attempt to distance themselves from the social setting, seeking to understand with fresh eyes the phenomena under study. The second, the ‘Converts’, strive to immerse themselves more deeply, and through this, develop intimate familiarity with the social setting. Lofland et al (2006) suggest that the distancing stance may be appropriate if there is existing familiarity with the setting; conversely, a researcher who is not familiar should employ mechanisms to reduce the distance between the participants and themselves. In Part Two of this chapter (section 3.3.7) I describe the perspective that I adopted. In this section, I have discussed the first research method that was used in this study. The second research method that was used was interviews with participants and this method of enquiry is discussed in the following section.

3.2.7 Interviews

Qualitative research interviews are used to discover what people think of the world they live in, to evaluate their experiences and to uncover why they behave the way they do (Murphy et al 1998). Murphy and colleagues put this simply when they stated “*If you want to understand what people do, believe and think, ask them*” (Murphy et al 1998:112). People possess self-consciousness and are able to reflect on themselves, their situation and their relationships; interviews enable the investigation of these subjective experiences and attitudes (Kvale 1996). They are therefore particularly useful for getting the story behind a participant’s experiences. Qualitative interviews are also social encounters between two or more persons leading to negotiation for the purpose of a ‘focused interaction’ and are one of the most common and powerful ways that we can understand people (Silverman 1993; Fontana and Fray 2008). They therefore offer the prospect of authentic insights into the participants’ perspective (Silverman 1993).

Qualitative interviews have been used for a wide range of purposes and according to Smith (2002) are the most commonly employed approach in health and pharmacy practice research. Qualitative interviews have been used to explore various aspects of community pharmacy including how patients or customers have evaluated the services they have been offered (Anderson et al 2004; Bissell and Anderson 2003; Bissell et al 2008; Eades et al 2011; Morris et al 1997; Williamson et al 1992). However, there are limitations to using this method which will be expanded upon below.

3.2.7.1 Interviews as a method of enquiry

As with all research methods interviews do have limitations and they are not a simple neutral exchange of asking questions and getting answers. Scheurich (1995) points out that the interviewer is a person who is historically and contextually located, with personal conscious and unconscious motives, desires and biases. Moreover the researcher does not have direct access to another's experience but, as Riessman (1993:8) claims: "*we deal with ambiguous representations of it*". Interviews are artefacts that rely upon the interviewer and interviewee to co-construct the experience. As a consequence interviews do not offer a literal description of the respondent's reality. They do however provide a situated account that reflects each party's expectations and experiences (Dingwall 1997; Goffman 1983; Murphy et al 1998; Silverman 1993).

3.2.7.2 Types of interviews

There are a range of interview methods and techniques. One of the most common methods is the one-to-one encounter between the researcher and interviewee. Group discussions with participants or 'focus groups' capitalise on the dynamics of communication between the research participants. The interaction that occurs is a crucial feature because the interaction between participants highlights their view of the world, the language they use about an issue and their values and beliefs about a situation (Kitzinger 1995). This enables the researcher to exploit peer interaction and explore the dynamics of the discussion that occurs between participants in ways that are not possible with one-to-one interviews (Greenbaum 1998; Kitzinger 1995). However, the one-to-one interview method was chosen for this study as this provided opportunities to explore in-depth individual experiences and perspectives.

3.2.7.3 Structured, unstructured and the semi-structured interview

Interviews, according to Fontana and Fray (2008), can range from being structured, semi-structured or unstructured. There are also a range of interview forms that can be used to investigate participants' perspectives or biographical accounts such as the biographical narrative, biographical narrative integrative method and free association narrative interview (Hollway and Jefferson 2000; Riessman 1993). Structured interviews involve asking respondents the same series of pre-defined questions to which participants have a limited set of response categories. Within these interviews the researcher treats respondents in a like manner, aiming to be as neutral as possible with little flexibility in his or her approach. In contrast, unstructured interviews, sometimes referred to as in-depth or open ended interviews, attempt to elicit the views and issues of greatest significance to the participant without imposing any personal notions that may limit the field of enquiry (Fontana and Fray 2008; Pope and Mays 1995).

The semi-structured approach is one which allows flexibility within the interview while ensuring that each interview covers a range of core topics (Bryman 2008; Fontana and Fray 2008; Smith 2002). A list of questions sometimes known as an interview or topic guide is usually employed to achieve this (Bowling 2009; Bryman 2008). Additional questions may be asked which allows the researcher to probe or follow up leads mentioned by the participant. The semi-structured interview also allows scope for the participant to raise issues of personal relevance and concern and has been recommended in situations where there is a fairly clear focus to the interview (Bryman 2008; Smith 2002). The semi-structured approach was deemed the most appropriate method for these reasons when interviewing participants about the MURs service.

In the preceding sections, I have described the two research methods used in this study: observations and interviews. The combination of both methods is an effective method for penetrating and understanding participants' perspectives. Comparatively few community pharmacy practice studies have combined observation and interview techniques. Observational data have been recognised as a valuable means of checking the credibility of respondents' accounts at interview (Bowling 2009; Voysey 1975). This combination of research methods can provide valuable insights into patients' perceived 'need' and perspectives of pharmacy services. The application of observations and interview techniques in this study

aimed to develop a deeper understanding of the complexities surrounding the MUR service and to enhance the validity of the conclusions (Bryman 2008; Smith 2002). I now turn attention to discussing the concept of rigour in qualitative studies and how this was achieved in the present study.

3.2.8 Rigour and qualitative enquiry

Qualitative research has been criticised for lacking scientific rigour (Pope and Mays 1995). Pope and Mays (1995) list three commonly heard criticisms. The first is that qualitative research is simply an assembly of anecdotes that are subject to researcher bias; secondly, qualitative research lacks reproducibility and lastly, qualitative research lacks generalisability. In the following section, I discuss the concept of rigour as it applies to qualitative research. I will initially discuss the two concepts that have been associated with ensuring rigour in quantitative studies: validity and reliability.

3.2.8.1 Validity and reliability

Reliability has been defined as whether a research study is replicable or the extent to which results are consistent over time and provide an accurate representation of the total population under study (Golafshani 2003). Validity refers to whether the means of measurement are accurate and whether they are actually measuring what they are intended to measure (Golafshani 2003). Both terms are essential criteria for demonstrating rigour in quantitative research. However, these measures have been criticised in their applicability to qualitative research (Golafshani 2003; Lincoln and Guba 1985; Marshall 1985). The term ‘trustworthiness’ has been used for issues conventionally discussed in terms of validity and reliability. However, it is acknowledged that trustworthiness is always negotiable and open-ended and is not a matter for claiming final proof (Seale 1999). Lincoln and Guba (1986) have presented criteria that are more applicable when assessing the ‘rigour’ of a qualitative research study. These include the concepts of credibility and transferability (Lincoln and Guba 1986).

The credibility of a study relies upon the ability of the researcher to be sensitive to the data and the extent to which the findings that are presented are convincing to the reader (Creswell and Miller 2000). The measures undertaken in this study combine periods of direct observation of the phenomena and interviews with the participants under study. The

comparison or triangulation of different data sources has been acknowledged as a means to improve the credibility of qualitative research (Lincoln and Guba 1985). Another way of establishing the credibility of findings is to actively search for evidence that does not support the themes being generated (the deviant case). In grounded theory, in particular, the deviant case is used to challenge and extend theory and explanation so that all of the data is accounted for (Bryman 2008; Charmaz 2006). The inclusion of disconfirming or negative evidence points to an awareness of, and sensitivity to, the multiple perspectives that are experienced by the participants (Miles and Huberman 1994).

Transferability is the extent to which the findings are transferable to other settings. This construct does not aim for random sampling and probabilistic reasoning which are commonly associated with the generalisability of quantitative research. In this study, there are no claims about statistical representation or generalisation to a larger population. The use of a qualitative study design is for the purpose of understanding and explaining. Eisner (1991:58) contends that a good qualitative study can help us "*understand a situation that would otherwise be enigmatic or confusing*". The principle aim of this study was to achieve a better understanding of what people think of MURs and consider how the service is integrated into the daily working practice of pharmacy. Nevertheless, Murphy et al (1998) have argued that although direct comparability between settings is impossible, some similarities do exist. In order for the reader to evaluate the possibility of such transfer, the researcher must provide a detailed portrait or 'thick description' of the original setting in which the research is conducted (Geertz 2000).

In this section, I have reviewed the different criteria which help ensure the quality, integrity, and relevance of qualitative research. These are important concepts that allow the reader to determine the rigour of this study. In the next section, I discuss the ethical issues arising from this study.

3.2.9 Ethical issues

Ethical theory can be seen to fall into two broad and distinct, but not mutually exclusive, approaches. These are the consequentialist and deontological approach (Murphy and Dingwall 2001). Consequentialist principles focus on the outcomes of the research and stress that research can be justified if outcomes outweigh any potential harm. A risk-benefit analysis strategy is therefore applied. This approach contrasts with deontological principles which focus on the inherent rights of the research participants. This means that there is respect for peoples' values and autonomy but also that people should be treated equally (Beauchamp et al 1982). The operationalisation of these principles has led to a set of guidelines which are now widely accepted by research governance committees and institutions (Murphy and Dingwall 2001). One prominent guideline is that participants are to be adequately informed about their involvement in research and to have time to consider written information about the study and whether they want to participate. This posed problems of investigating MURs as they happen in a 'real world' practice setting. Full details of the methods used in this study are outlined in Part Two of this chapter. However, I detail below some decisions that resulted from ethical issues arising from this study.

3.2.9.1 Ethical decisions in the field

In a qualitative research study, overcoming ethical conduct cannot be guaranteed simply by requiring all participants to sign a consent form. Rather, it has been recognised that the researcher should identify and minimise or eliminate any risks to participants (Murphy et al 1998). Several ethical implications arose from observing both shop floor interactions and ad hoc MURs. It has been acknowledged that in '*complex and mobile settings it may be impractical to seek consent from everyone involved*' (Murphy and Dingwall 2001: 342). In this study, the placing of posters in the pharmacy aimed to promote awareness of the research among patients and customers.

Previous research and personal experience indicated that patients were mainly being recruited by an ad hoc direct invitation (Hall and Smith 2006; Latif and Boardman 2008; Moss 2007; Urban et al 2007; Wang 2007). This meant that patients were being put 'on the spot'. Consideration was given to whether patients may be put under pressure, both by the pharmacist in requesting an MUR, a service with which they were unfamiliar and not expecting,

and then by the further request to take part in the research. Research governance requirements usually call for patients to be adequately informed and to have time to consider written information about the study and whether they want to participate. This posed problems as the primary objective was to investigate 'live practice'. Investigating MURs that were being performed on an ad hoc basis would mean that patients would not have the time to read or reflect on all of the information provided. This is normally considered a prerequisite by research ethics committees for properly informed consent.

Fully informed consent is sometimes acknowledged as being impractical in advance of a qualitative research study (Murphy et al 1998). To address the issue of patients being 'put on the spot' the pharmacist or staff member invited the patient for an MUR and if they agreed, the pharmacist invited them to take part in the study and introduced the researcher who then provided a verbal summary. Video or audio-recording the MUR would have provided an objective record of the consultation (DuFon 2002). However, compromises were made as it was felt that this would be too intrusive and might cause anxiety to patients. This was because most patients would not be expecting an MUR and therefore would not have had adequate time to consider participating in the study. To protect patients' right of self-determination, the option to withdraw from the study was given including the deletion of all notes relating to the observed MUR. Patients were also given the option to reply by post should they wish to decline the invitation for their follow-up interview (Latif et al 2010).

3.3 Part Two: Methods

3.3.1 Introduction

In the second part of this chapter, I provide a detailed account of the methods used in this study. I detail how I recruited the study pharmacies, the process that was undertaken during fieldwork and how the participants were recruited. Lastly, a description of the data management and analysis is given.

3.3.2 Ethical and Research and Development approvals

This project was approved by the Nottingham Research Ethics Committee on 9th July 2008 (ref 08/H04080/92). Research and Development (R&D) approval was obtained from Nottinghamshire County Teaching PCT. Indemnity sponsorship arrangements were obtained from the University of Nottingham. Approval letters for this study can be found in Appendix Three.

3.3.3 Overview of proposed plan of fieldwork

Following ethical and R&D approval, two pharmacies, a multiple and an independent, were recruited purposefully via personal contacts. Consent was obtained from the pharmacists and support staff for five weeks of observations in each pharmacy. One-week placements were arranged over a 12-month period between November 2008 and October 2009. Ethnographically oriented unstructured observation methods notes were made of all pharmacy activities, including all activities relating to MURs. All pharmacists and support staff were requested to identify and invite patients for MURs as per normal practice and to introduce the research to all those who accepted the offer of an MUR. All such patients agreed to be included in the research and for their MUR to be observed.

After the MUR, patients were invited to take part in an interview about their experience. Each placement week was therefore followed by a period of approximately three weeks for reflection, arrangement and conduct of interviews with patients. This allowed data collection and analysis phases to proceed in parallel. At the end of the observational period within the pharmacies, pharmacists and staff were invited to take part in interviews about their

experience of the MUR service. In the next section, a detailed description of methods is given starting with consideration of issues about the recruitment of the study pharmacies

3.3.4 Pharmacy recruitment planning

Deciding upon the sample of pharmacies to research was an important step in the design of this study. It was clearly not practical or efficient to qualitatively explore large populations and so consideration was given to the number of pharmacies that would be approached. This study could have been undertaken in one pharmacy. However, two pharmacies were selected which allowed for the incorporation of a comparative dimension to the study findings. The choice of pharmacies aimed to investigate MURs in two contrasting and diverse settings to enable the collection of the richest possible data (Lofland et al 2006). Although other pharmacy parameters could have been used, such as levels of affluence, urban or rural locations or size of pharmacy, the decision to explore in a multiple and independent was influenced by existing research indicating that there were marked differences in implementation issues between the two (Blenkinsopp et al 2007a; Bradley et al 2008a). There were several reasons why the decision was taken to conduct this study in two rather than in several pharmacies. Recruitment of community pharmacies to the study was anticipated to be challenging. The literature indicated that independents, in particular, have lower MUR adoption rates (Blenkinsopp et al 2007a; Bradley et al 2008a). Indeed, the independent pharmacy recruited for this study was the only one, out of the ten pharmacies approached, that met the minimum selection criteria for this study. This is discussed further in the following section.

Undertaking a qualitative study in only two pharmacies had several methodological advantages. The aim of quantitative sampling is different to the approach taken in a qualitative sample. Whereas the former aims to draw on a representative sample of the population, so that the results then can be generalized back to the population, the essence of the latter is to achieve an in-depth holistic understanding of complex social phenomena which is aimed at studying people in their natural settings (Marshall 1996). This enables explanation and understanding of how people experience the world and how it works and not merely recording how often something happens (Hammersley 1992; Bryman 1988; Bryman 2008; Silverman 1997). This study, like many other qualitative studies, was not designed to be generalisable to the larger population (Golafshani 2003) or to describe the service provision in several different

settings. Rather, the study sought an opportunity to learn and understand about the MUR service as it naturally occurs in the real world practice of community pharmacy. The aim therefore was so to develop a detailed knowledge of two extended case studies rather than more superficial knowledge of a larger number of pharmacy sites. The extended time spent in each pharmacy allowed for the recording of a more naturalistic attitude of staff in the pharmacies as they increasingly became used to the presence of the researcher. Furthermore, undertaking qualitative observations typically results in a large amount of data being collected and this was evident in the present study. Careful consideration of how many pharmacies that took part was needed to avoid the volume of data collected becoming unmanageable. It is however, acknowledged that adopting only two study sites has limitations and this issue is discussed in Chapter Eight (section 8.5.2).

Inclusion into the study was dependent upon the pharmacy actively providing the MUR service to patients. Easterbrook and Matthews (1992) found that the main reason for studies being abandoned was difficulty in recruiting participants. Careful consideration was therefore given to the minimum number of MURs undertaken by pharmacies to ensure recruitment of a reasonable number of participants to the study. It was anticipated that 30 to 40 patients would be recruited and that this would be sufficient to allow a wide range of patients' perspectives to be incorporated within the study. Pharmacies conducting a minimum of three MURs per week were considered for inclusion. With pharmacies anticipated to perform at least three MURs a week, ten weeks of planned observations would allow for the targeted number of 30-40 participants. As a contingency, a third pharmacy would have been used if MUR activity and patient recruitment proved to be less than anticipated in the initially selected pharmacies. The extended period of fieldwork observations also intended to reduce the extent to which participants modified their behaviour as a result of a heightened awareness of the observer and allowed familiarity with the people and the setting.

3.3.5 Recruitment and access

Gaining access to the field has been described as the most difficult phase in the entire process of an ethnographic study (Agar 1996; Gobo 2008; Lofland et al 2006; Murphy et al 1992; Van Maanen and Kolb 1985). In primary care settings this can be complex, requiring the recruitment of organisations, practitioners and patients. Murphy et al (1992) point to two

broad categories of stakeholders or groups who might be affected by a proposed research study: the participants who are directly involved in the research process and external stakeholders who are not directly involved but who may be 'gate keepers' to an organisational setting. Remarking on 'getting past the gatekeepers', Van Maanen and Kolb observe that:

"Most fieldworkers would probably agree that gaining access to most organizational settings is not a matter to be taken lightly but one that involves some combination of strategic planning, hard work and dumb luck".

(Van Maanen and Kolb 1985:11).

Individualised approaches were used to identify and negotiate with the external stakeholders of the multiple and independent pharmacies and these are discussed below.

3.3.5.1 Recruitment and access: the multiple

One chain pharmacy was approached through local contacts. This was a pragmatic choice and an approach that can facilitate access to study participants (Agar 1996; Murphy et al 1992; Van Maanen and Kolb 1985). Permission was sought from the Company's Clinical Services Manager who had overall responsibility for the provision of clinical services within the pharmacies. Through a process of negotiation and assurances of anonymity for the Company, a pharmacy was selected and permission was sought from the manager and pharmacist to conduct the study. Pharmacies that the researcher had previously worked in regularly or extensively were avoided to reduce the potential of being mistaken, by pharmacy staff, for the pharmacist on duty. The pharmacy selected was one that I had previously worked in as a pharmacist. However, this had been on an occasional basis and several years previously. A visit to the pharmacy was made prior to the start of the study in order to further explain the details of the study to the pharmacy staff.

3.3.5.2 Recruitment and access: the independent

A list of all the independent pharmacies that were in the Nottingham and Nottingham county PCT areas was used to identify five pharmacies that were performing MURs. Identification of the pharmacies was aided by local pharmacist contacts who suggested pharmacies that were actively offering the service to patients. Five invitation letters were sent during August 2008 inviting the pharmacy to the study (Appendix Four). All five pharmacies were contacted by telephone several days later to see whether they were willing to partake in the study. All five pharmacies reported either not regularly performing MURs at the minimum of three MURs per week or reported being 'too busy' to participate. Another five independent pharmacies were identified, this time by a member of the University's pharmacy academic team who was involved with undergraduate community pharmacy placements. Again recruitment letters were sent and the pharmacies subsequently contacted. Only one pharmacy was performing the minimum number of MURs required for inclusion to the study and expressed interest in taking part in the study. As with the multiple, an assurance of anonymity was provided for the pharmacy. A visit was also made prior to the start of the study to further explain the details of the study to the pharmacy staff.

3.3.6 Pharmacy staff recruitment

An important aim of this research was to investigate how the MUR service was being integrated amongst the other services offered at the pharmacy. This meant that all staff involved with pharmacy activities were eligible and were invited to take part in the study. Suspicions, lack of adequate information or inaccurate assumptions have been suggested as reasons why participants decline to take part in research studies (Agar 1996; Murphy et al 1992). A central objective during the recruitment period and during the initial stages was to therefore avoid what has been described as 'irrational' refusals (Murphy et al 1992). This was achieved through explaining to each participant what the study involved and identifying and discussing any concerns that participants may have had about the study. Pharmacists and support staff were provided with an assurance of anonymity and that a non-judgemental approach would be taken when observing their activities. A participant information sheet was provided to all participants and written consent to take part in the study was obtained (Appendix Five). No staff member declined to take part in the study.

3.3.7 Observations

One week before the study began, pharmacies were requested to display study posters prominently within the relevant pharmacy areas to promote patient awareness of the study (Appendix Six). Fieldwork observation in the multiple and independent were alternated in order to facilitate comparison of the findings between the two pharmacies. Observations were made during the pharmacies' opening hours and at weekends if the pharmacist indicated that there was a possibility that MURs would be conducted. In the following section, I discuss the role adopted in the field, how field notes were recorded and the process involved in observing the MURs.

3.3.7.1 The role of the researcher

Careful consideration was given to constructing the role that I would eventually adopt in relation to the fieldwork setting, pharmacy staff and patients. Gold (1958) classifies four roles that could be adopted within the field which include the complete participant, participant-as-observer, observer-as-participant and the complete observer. The complete or covert participant is described as a fully functioning member of the social setting and as such the researcher's identity is unknown to the members. The participant-as-observer adopts the same role as a complete participant; however their identity is overt and is known to the members of the social setting. These two positions were untenable since, as part of the study, I wanted to observe MURs between the pharmacist and patient. An observer-as-participant role was therefore adopted. This provided flexibility and involvement within the research setting when this was necessary but aimed to minimise participation in the social activities of the pharmacy.

My professional identity was also carefully considered when the pharmacist introduced me to patients. The identity of researchers with a professional background is a particular concern when performing research in this area as respondents who are asked to take part in research about the use of medicines may feel they are being tested (Stevenson et al 2000b). The researcher was therefore introduced to patients as a 'student from the University'. This facilitated participants to talk with more freedom without feeling guarded.

3.3.7.2 Reflexivity

The concept of reflexivity is concerned with the impact the researchers prior assumptions, viewpoints and framework have on the research findings (Schwandt 1997) or more generally the reciprocal impact of the researcher and the research field (Denscombe 2003). My professional background as a pharmacist will have shaped what was observed and my interpretations of those observations. It was therefore critical to understand how my background influenced the phenomena that I perceived and the way in which data were gathered and analysed. This was achieved through ongoing reflections upon my personal impressions and feelings which were recorded in personal memos and with regular discussions with supervisors.

My dual identity as a researcher and as a pharmacist offered several advantages. I used my contacts within the field to gain easier access and membership to the group as I could converse about pharmacy issues. However, this sometimes led to unexpected tensions which became evident during fieldwork. It was decided at the beginning that I would introduce myself to the pharmacist and staff as both a pharmacist and researcher and it was made clear from the outset that I would undertake no pharmacist or other pharmacy work activities. I would therefore be considered in this respect as an outsider or a ‘professional stranger’ who was detached from the work commitments of the group (Agar 1996). This, however, did not mean that I had no influence on the setting or participants. On the contrary, because of my presence within the pharmacy I noticed what is commonly referred to as the ‘Hawthorne effect’.

3.3.7.3 The Hawthorne effect

The Hawthorne effect typically arises from the awareness of research participants that they are being studied which leads to changes in the participants’ behaviour, usually for the better. This leads to the participants responding to the conditions of the data collection process rather than the phenomena the researcher is intending to study (Pope and Mays 1995; Smith 2002; Stevenson et al 2000a; Stevenson et al 2000b). This was most noticeable when the pharmacists in both pharmacies occasionally apologised on days when no MURs were performed. My presence as an observer appeared to encourage MUR activity despite requesting that pharmacy staff should identify and invite patients for MURs as per normal practice. This

occurred more frequently in the independent pharmacy where there was less organisational pressure than the multiple to perform MURs.

Observing the patient-pharmacist interaction may have also altered what would have normally occurred. To minimise the influence of the researcher on the behaviour of the participants, fieldwork observations were spread over a period of 12 months and it was anticipated that during this time the pharmacists would become accustomed to being observed. Although my presence appeared to encourage MUR activity or at least pharmacist awareness of MURs, I felt the impact was minimal. As Strong (1979:229) contends "*the daily business of life has to get done*". On reflecting upon my background as a pharmacist, I was aware that I would already be accustomed to the environment and so have some level of 'field blindness'. A 'Martian' stance (Davis 1973) was sought when observing the routine activities that occur in the pharmacy. However, for most of the time it was necessary to adopt the 'Convert' stance (Davis 1973) in order to observe and better understand MURs from the participants' viewpoint.

3.3.7.4 Field notes

Observations were made of all pharmacy activities including dispensing prescription medicines, OTC consultations and sales as well as MUR consultations. Observation notes were also made of the pharmacy's working environment, events and people, work patterns, conversations between patients and staff members and all activities relating to MURs. Recording field notes without drawing attention to this activity is a common problem experienced by ethnographers (Agar 1996; Gobo 2008; Lofland et al 2006; Smith 2002). Recording field notes was, as far as possible, done inconspicuously to avoid raising staff anxieties, self-consciousness or even threatening access arrangements. Field notes were recorded by pen and paper and occasionally through use of a personal digital recording device when outside the pharmacy. Memo writing was a critical aspect of recording findings. Key words and phrases used by participants were recorded during fieldwork and a full account of the observations were written up and reflected upon as soon as practicable. This provided a running log of observations. Casual or "*informal discussions*" (Lofland et al 2006: 88) which involved asking questions in situ, helped to clarify and confirm observations. These too were later reconstructed from memory and recorded. The removal of identifiable information was made at the earliest possible stage substituting names for pseudonyms and altering non-relevant information.

3.3.8 Recruitment of patients

Pharmacists and staff were asked to carry on their daily activities as ‘normal’ during the course of the fieldwork observations. Observing this process allowed valuable contextual data and information about the decisions that were made leading up to offering an MUR to a patient. All pharmacists and support staff were requested to identify and invite patients for MURs as per normal practice and to introduce the research to all those who accepted the offer of an MUR. All such patients agreed to be included in the research and for their MUR to be observed, at which point I was introduced to explain what was involved. Despite a few occasions where the pharmacist had forgotten to introduce me to the patient, I was able to ‘sit in’ on all MURs taking place when I was observing in the pharmacy.

3.3.8.1 Patient exclusion criteria

Patients who were not eligible for an MUR and those under the age of 18 were excluded. No patients under 18 were offered an MUR by the pharmacist or staff during the study period. Since translation resources were not available, it was decided that interviews would only be conducted in English and so patients who were insufficiently fluent in the English language would also be excluded. Ultimately, no patients were actually excluded on this basis.

3.3.9 Observations of MURs

Before the MUR, a verbal summary of the research aims along with an information sheet was provided to the participant (Appendix Seven). Written consent for allowing the MUR to be observed was taken before the MUR began (Appendix Seven). On a few occasions when the pharmacist had already started the consultation written consent was taken after the MUR. The researcher sat in the corner of the consultation room viewing both patient and pharmacist during the MUR and made written notes of the MUR consultation. Audio or video recording the MUR consultation would have provided verbatim data. Nevertheless, it was decided that hand written notes would be used to record the MUR consultation because this method was deemed to be the least intrusive (Latif et al 2010).

During the MUR, linguistic (e.g. content of talk / coherence) and extra-linguistic (e.g. speaking rate, interruptions) features were noted. Non-verbal communication, such as patient's expression and body language, were also recorded as were the physical proximity and layout of the room. After the MUR, observations were made of the patient and pharmacist and how they both resumed their respective roles when they left the consultation room. Informal discussions between the pharmacist and support staff were also recorded after an MUR to provide further contextual insights.

Patients were invited for an interview about their experience of the MUR once the pharmacist had ended the consultation and had left the consultation room. If patients expressed interest, they were contacted several days later by telephone and asked if they were willing to continue with the study. If so, an interview was arranged. Participants were given the option to reply by post (using a pre-paid envelope that was supplied) should they subsequently decide to decline the invitation for an interview.

3.3.10 Arrangement of patient interviews

Interviews with patients were arranged and conducted after each week's observations within the pharmacy. Options were offered to conduct the interview within the patient's home, at the pharmacy or if they wished at another convenient location and at a time according to their preference and convenience. All interviews took place at the pharmacies except for two that were conducted at the University of Nottingham. Checks were made to ensure participants were willing to continue to take part in the study and that there was continued acceptance for me to use the collected MUR observational data. Written consent was taken before the interview and permission to audio-record the interview was sought (Appendix Seven). Patients were reminded that they were not obliged to respond to any questions they were not comfortable with and that the interview could be terminated at any time they wished.

3.3.10.1 Interview format and topic guide

Semi-structured interviews were conducted to investigate patient experiences of the MUR consultation. This allowed the opportunity to consider the interview in relation to the observations. Also discussed were patients' beliefs, concerns and understanding about their medicines and the wider involvement of pharmacists and GPs in their health care. Using open

ended questions and a conversational style, the interviews aimed, as far as possible, to avoid imposing the researcher's framework of meanings onto patient accounts (Britten 1999). A topic guide was initially developed following a literature review. It was then developed and tailored to the specific details and context of the MUR which preceded it (Appendix Eight). The topic guide was therefore used to stimulate an open discussion of topics and issues that were most salient for respondents rather than to impose the researcher's framework of understanding (Charmaz 2006). This inductive approach is considered to be good qualitative practice (Charmaz 2006; Ziebland and McPherson 2006). After the interview, personal reflections were recorded on how the interview went. For example, how nervous, confident or relaxed the participant appeared.

3.3.11 Patients declining the invitation for an MUR

Patients who declined the invitation for an MUR were also approached after their interaction with the pharmacist or support staff and offered an interview regarding the reasons why they declined. It was anticipated that these interviews would be shorter (as the patient did not have an MUR) and so a telephone, instead of a face-to face interview, was proposed. Patients were informed that they did not need to decide immediately and an information sheet including the researcher's contact details were supplied should they wish to take part in the study (Appendix Seven). Patients were given the option to reply by post should they wish not to be contacted further. For patients who agreed to take part, a semi-structured telephone interview was arranged at a time that was convenient to them. Permission was sought for the interview to be audio recorded. Oral consent was taken before the interview commenced and the patient was requested to post a written copy of the consent form back to the researcher in a pre-paid envelope.

3.3.12 Pharmacist and pharmacy staff interviews

After the observational fieldwork had been completed, pharmacists and support staff were invited to take part in an interview to explore their perceptions of the MUR service. One pharmacist interview occurred after the 4th week of observation within the pharmacy as there was a concern that she would shortly leave employment. Topic guides were developed to explore pharmacist and support staff perceptions of the MUR service (Appendix Eight). As with

the patient interviews, staff interviews were individually tailored to clarify, confirm and extend the observational data. Interviews were semi-structured and took place at a time and location that was convenient to the participants. Written consent was taken before the start of the interview and permission sought for the interview to be audio-recorded. All pharmacist interviews, except one, were conducted at the pharmacist's work place. One pharmacist interview took place in their home. All support staff interviews occurred at the pharmacy where they worked except for two; these were conducted at the University of Nottingham.

3.3.13 Protocol changes

It is rare to find qualitative projects without unforeseeable problems and there were many instances where I had to make adjustments to the planned strategy during my time in the field. Three modifications to the research protocol were required and made during fieldwork. One protocol change was the addition of a telephone interview option for patients who had completed an MUR. Originally it was anticipated that all interviews would be arranged face-to-face. However, during fieldwork it was found that this was not always practicable and so a telephone option was incorporated into the study design. Another protocol amendment involved withdrawing the planned focus groups or interviews with the local GPs in order to focus on those areas that were considered under-researched. The final protocol amendment was seeking permission to employ a professional transcriber to aid transcription of some of the interviews. Protocol amendment approval letters can be found in Appendix Three.

3.3.14 Data management

The alternation of fieldwork periods in each pharmacy along with regular patient interviews facilitated an iterative process of data collection and analysis. Full accounts of all the observations were written up and all of the interviews with patients and pharmacy staff were transcribed verbatim. N-Vivo8, a leading qualitative data analysis software programme, was used as a tool for the storage and management of the multiple forms of data sources. Richards and Richards provide a comprehensive overview of the advantages and disadvantages of using qualitative software packages (Richards and Richards 1998; Richards and Richards 1991). A point worthy of note here is that no software can perform qualitative data analysis which must still be done by the researcher and this process is described in the next section.

3.3.14.1 Data analysis

Data analysis started during the early stages of data collection. The principle of constant comparison was used as a framework for thematic analysis (Creswell 2007). This is a widely applicable method for identifying, analysing and reporting patterns and themes within the data and may be judged appropriate when the research question has a relatively narrow focus (Ziebland and McPherson 2006). Analysis began with repeated listening to the interviews and reading and re-reading the observation notes. Sections of the data representing an idea, opinion or attitude were categorised as statements or words which were collected under different headings or ‘codes’ (Pope et al 2000). Codes were created as far as possible in terms of the categories and concepts of the research participants. As more information was added to the code, these were constantly compared to the original data source to ensure it was grounded in the data. Regular meetings with supervisors provided multiple perspectives and interpretations. This enabled more credible identification of key concepts and themes.

Once all of the observation notes and interview data had been coded the ‘one sheet of paper’ (OSOP) analysis as described by Ziebland and McPherson (2006) was used to progress the analysis of the data. This involved reading through each code category in turn and noting, on one piece of paper, all the issues that were raised by the coded extracts. Axial coding was used in order to further analyse the data. Axial coding has been described as putting the fractured data back together in new ways by “*making connections between a category and its subcategory*” (Strauss and Corbin 1990:97). This facilitated comparison of similar categories to find out ‘what’s going on in the data’ (Ziebland and McPherson, 2006). This process involved making connections between categories and subcategories in order to create a more precise and complete explanation about the phenomena under study. The OSOP method allowed negative evidence or deviant cases that did not fit into the emerging story, to be identified. These were paid particular attention and were accounted for in the analysis. There were constant reflections throughout this whole process as well as conferring with supervisors which encouraged the application of an attitude of critical appraisal towards the findings. The analysis was enriched by going back to the literature to see where and how other research and theories fitted and how it could further inform the analysis and testing of findings.

In this chapter, a detailed description of the methodology and methods used in this study has been provided. The following four chapters will present the findings of this study.

CHAPTER FOUR

The Pharmacy

4.1 Introduction

In the following four chapters, I present the results of this study. This chapter will focus on the pharmacy environment and contextualise how patients act within this and how they use the services of the pharmacy. The findings from the observations of the MUR consultations themselves will be reported in Chapter Five. The inferences made from these two chapters will lay the foundation for Chapters Six and Seven which provide further explanatory insights into the perspectives of patients and pharmacy staff of the MUR service.

In this chapter, I ‘set the scene’ by providing an overview of the range of services and interactions from the two pharmacies and contextualise how the MUR service was being implemented in the midst of these activities. This is important to understanding how the MUR service was received and viewed by patients. A ‘thick description’ (Geertz 2000) of the two study sites will initially be provided and then the different patient-pharmacist interactions that were observed will be discussed. A description of how the pharmacies had implemented the MUR service will then follow together with findings on pharmacists’ motivation to engage with MURs. Next, the initial processes of the MUR will be reported including the way patients were identified and invited for an MUR and the preparations that the pharmacist had to make before the start will then be described. The chapter will conclude by presenting the observations made after the MUR, in particular, the workload that mounted during the pharmacists’ absence. This chapter therefore provides a backdrop to how the MUR service fits into the overall running of the pharmacy and so enables the service to be better put into perspective. To begin, the following sections will describe each of the two pharmacy settings.

4.2 Multiple pharmacy study site

The multiple pharmacy was located in a relatively affluent town, situated along a busy high street, much of which is pedestrianised. Several GP surgeries were located within a short walk of the pharmacy. The pharmacy was medium-sized compared to other pharmacies that form part of the organisation and was open weekdays and Saturday from 9am to 5.30pm. When entering the pharmacy there were many noticeable professional looking promotional displays. The pharmacy sold a wide range of retail merchandise including cosmetics, toiletries, baby / child, electrical and gift items.

The health care counter was found to the side of the dispensary from which customers could buy health care products either through self selection or by asking a MCA for more potent 'Pharmacy only' medicines that were located behind the medicines counter out of reach of the public. A variety of health related posters, leaflets and books was displayed around the dispensary including the promotion of the MUR service. The dispensary was located at the rear of the shop and dispensed approximately 1600 to 1700 prescription items a week. Pharmacy staff working within the dispensary were clearly visible preparing prescription medicines when viewed from the shop floor. Two pharmacists were employed at the pharmacy. One was full-time and had recently qualified as a pharmacist. The other worked part-time and had been practising for over 20 years. This arrangement changed midway through the study when an ACT joined the team and the pharmacist hours reduced accordingly. Two dispensers were employed to assist the pharmacist in the dispensary and two medicines counter assistants managed requests for OTC medicines. A trainee pharmacist (pre-registration graduate) also worked in the pharmacy.

Whilst this was a medium-sized retail shop, pharmacy activities were concentrated in a relatively small area in and around the dispensary (Figure 5). The dispensing area did not naturally lend itself to private discussions as people could be overheard when speaking to the pharmacy staff. A number of staff target boards located within the dispensary, stair ways, offices and the tea room area displayed how well or poorly the pharmacy was performing. A target board for MURs was displayed in the dispensary. The consultation room was located a short distance away from the dispensary and had been specially installed to provide MURs.

The room was well lit and contained no furnishings except for two chairs and a small table. The room was seldom used other than for MUR consultations.

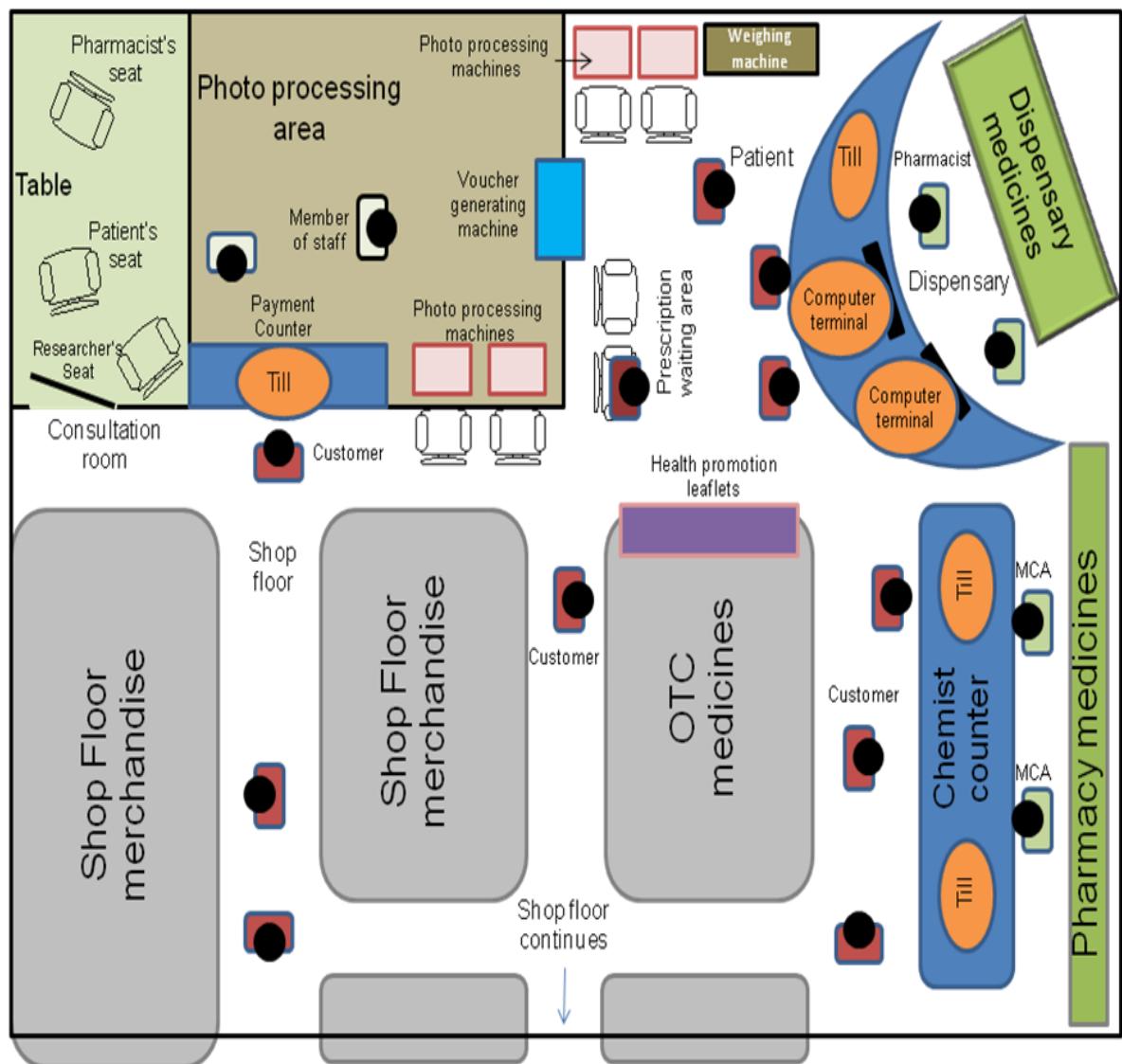


Figure 5: Schematic diagram of the multiple pharmacy

4.3 Independent pharmacy study site

The independent pharmacy was located in a similarly affluent but residential suburb. The community was served mainly through a single GP practice located across the road from the pharmacy. The pharmacy opening hours were similar to that of the multiple, but closed at midday on Saturday. Inside, the size of the shop floor was smaller than the multiple and so was the range of retail items stocked. Retail items were individually priced with the name of the pharmacy on the price sticker. Retail items sold from the pharmacy included cosmetics, toiletries and nappies with jewellery and greeting cards on standalone displays. Unlike the multiple, there were no target boards displayed in the dispensary or other areas of the pharmacy.

Health care products could be found near to and on top of the health care counter which was located to the rear of the shop and manned by a MCA. Medicines were available on open displays. However, as in the multiple, Pharmacy-only medicines were kept behind the medicines counter out of reach of customers. The dispensary was situated behind the medicines counter toward the rear and on a raised platform. When viewed from the shop floor, the heads and shoulders of the staff working in the dispensary could be seen but not the dispensing process. The number of prescription items that was dispensed was approximately the same as in the multiple pharmacy (1600-1700 per week). Only one pharmacist was employed in the pharmacy with a regular locum pharmacist or the pharmacist-owner covering any days off. The pharmacist had worked for the owner for several years and was both the pharmacist and manager of the pharmacy. Support staff included three dispensers and one MCA. Job roles appeared to be less rigid and compartmentalised than in the multiple. This meant that dispensers were occasionally seen serving customers on the medicines counter.

Being in a smaller catchment area with less passing trade, the staff appeared to be more acquainted with the relatively fewer people who entered the pharmacy compared with the multiple. The independent pharmacy's softer furnishings such as a carpeted floor, chairs with cushions for patients to sit on and the soft sound of a radio playing in the background created a more homely, less formal, atmosphere. As in the multiple, there was no obvious place for patients and pharmacists to sit and have a private discussion (Figure 6). The consultation area where MURs were performed was located next to the dispensary and had been adapted from

an existing general purpose office. The room had a window with net curtains allowing privacy and was again rarely used for discussions with patients other than MUR consultations. The room was large enough for two people to sit around the computer screen. However, when three people were sitting in the room, for example when the pharmacist had invited two patients together for an MUR (husband and wife), access to the door was restricted and the room appeared cramp. Other items in the room included a water cooler, shop merchandise and display items as well as several piles of invoices that had been placed on shelves.

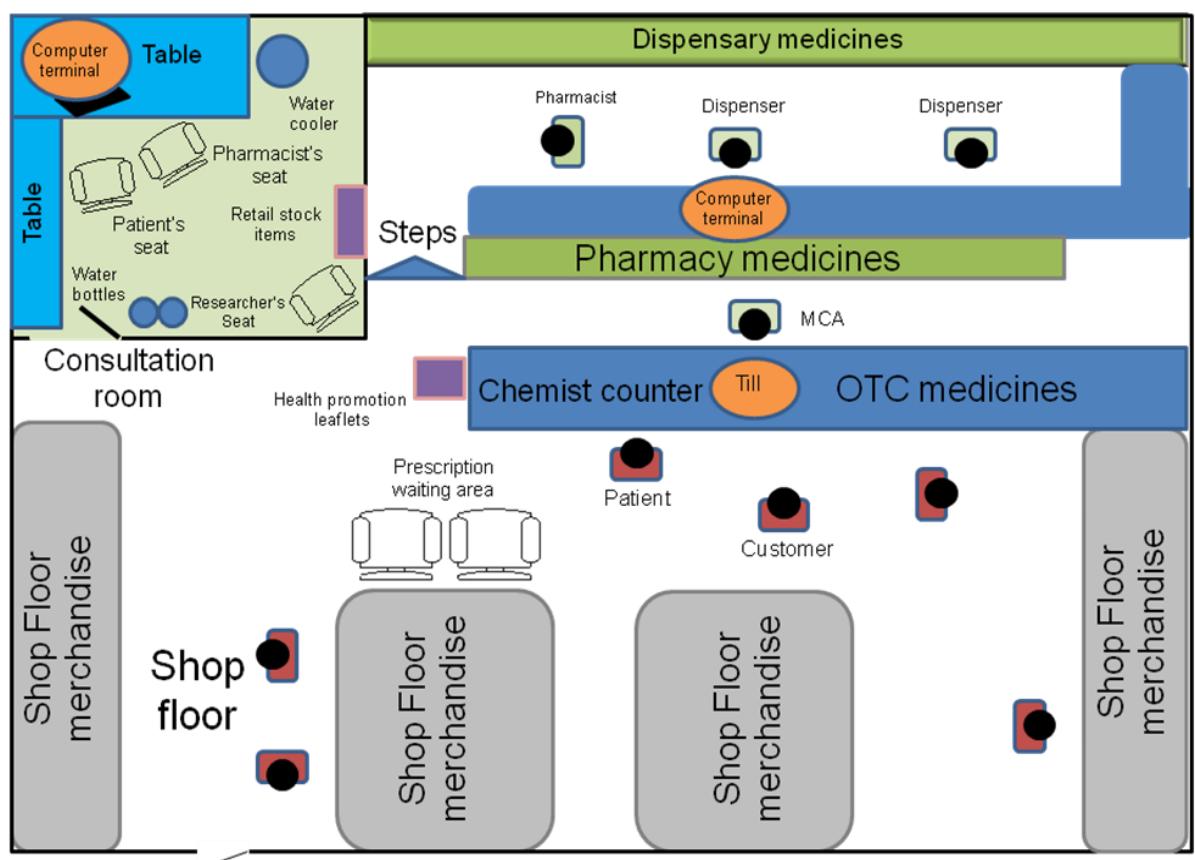


Figure 6: Schematic diagram of the independent pharmacy

4.4 Pharmacy and pharmacist activities

In order to better understand the context in which MURs were offered and undertaken in practice it is helpful to consider this in relation to the other patient services that were provided by the pharmacies. Dispensing prescriptions and managing requests for OTC products to treat minor ailments were the mainstay work of the pharmacy's health care areas and pharmacists were heavily committed to these activities. Understanding the pharmacists' involvement in these activities is fundamental to how they managed and delivered the MUR service. Pharmacists and support staff involvement in the activities of the pharmacy is described in the following three sections.

4.4.1 Pharmacist involvement in dispensing prescriptions

While the dispensing staff managed the bulk of the assembly work, the pharmacist was observed to be involved in all aspects of the dispensing process from receiving prescriptions from patients or their representatives, producing labels, selecting the medicines from the shelves and accuracy checking the final assembled prescription. In both pharmacies, these processes were markedly routinised. In the multiple, the proximity and visibility of the pharmacist to patients meant that they were engaged consistently with bringing in and handing out prescriptions. The pace of work of the pharmacists was dependent upon the rate at which prescriptions were presented at the pharmacy:

Around 10 am there seemed to be a rush of people to the dispensary. There were 4 to 5 patients or their representatives around this area. Jane [pharmacist] who was bringing in the prescriptions said to the patient "I've got four or five in front; it will be about 15 minutes". The male patient (aged around 50) did not seem to mind and went. The patient behind him was next and Jane said "how long will you give us? Can you give us about 20 to 25 minutes?". Jane then took a prescription charge from the man. Having brought in three or four prescriptions in this way Jane asked Jeff [sales assistant] "can

you go upstairs and find Carol [dispenser] we've got a rush on". After a few moments Carol appeared and started dispensing the items.¹

Observation Wk. 5 Multiple

Pharmacists appeared to have little control over their own work flow and so MURs were pragmatically accommodated during times when the pharmacy was less busy. Similar circumstances were evident in the independent. The pharmacist here was not only responsible for accuracy checking of prescriptions brought into the pharmacy, but also prescription supplies to several nursing homes:

In the morning, there were lots of boxes of delivery items on the floor of the dispensary. The 'nursing home bench' was overflowing onto the floor with prescription items in trays...the dispensing benches were also noticeably cluttered with prescriptions that had been dispensed for the nursing homes...

Observation Wk. 5 Independent

Supplies of prescriptions to nursing homes took priority over most other pharmacy activities including MURs. Likewise, prescriptions that were to be delivered to patients' homes also took priority. This was because the delivery driver would often wait in the dispensary for the pharmacist to complete accuracy checking of the prescriptions before they could be delivered:

Rebecca has a certain workload that others depend upon. In particular the driver, John, who comes to the pharmacy midmorning for deliveries. He requires prescriptions to be ready for him to deliver. If items that are to be delivered are not ready he will wait...John has two other pharmacies to serve alongside this one. Rebecca is aware of this and so when he is present she prioritises this work so that he is not standing around waiting...There does seem to be pressure to ensure things are ready for John, his work is dependent upon Rebecca...She does mention before he leaves that she has not checked the nursing home yet and so instructs him to return.

Observation Wk. 3 Independent

¹ The extracts from the observation notes that are presented in this thesis are taken from detailed notes written up after each observation, rather than verbatim quotes. Pseudonyms have been used in quoted extracts to maintain respondents' anonymity.

Pharmacists work was predominantly reactive and there was often no planning for MUR activity. MURs within both pharmacies were therefore offered to patients when convenient to the pharmacist. Therefore most MURs were performed opportunistically and ad hoc. The extent to which pharmacists could engage with non-dispensing activities, such as MURs, was in part determined by the number of prescriptions received. The lack of patient-induced demand for MURs meant that when the pharmacist was busy dispensing prescriptions, MUR activity was abandoned with no obvious consequences to the care of patients:

In the afternoon Jane [senior pharmacist] decided that the work load was too much as there was still 'PCS'² prescriptions to do. She told Kate [junior pharmacist] that "we need to catch up and so just book MUR appointments". There was no negotiation. Subsequently no MURs were performed that afternoon. The front dispensing bench had several tubs containing prescriptions to be checked by the pharmacist. Overall the pharmacist appeared busy in the afternoon with dispensing and checking...Speaking to Jane later that afternoon, she mentioned that three MURs had been booked [for that day]. However the patients had not turned up for appointments...

Observation Wk. 2 Multiple

The importance that pharmacists attached to performing MURs seemed to be significantly lower than the more immediate and 'reactive' services such as dispensing prescriptions and responding to OTC requests for advice. Appointments were seen as a way to manage work load better but as the extract above indicates, patients were reported not to turn up to these.

Dispensing activity occupied much of the pharmacists time. However, their availability to provide advice to all support staff was critical to the smooth running of the dispensary:

A lady (aged around 50) came in to the dispensing area...Jane [pharmacist] was working on the front with Dawn [dispenser]. The lady said to Dawn "I'm running out of my pregabalin". Dawn asked for the lady's name and brought up her PMR [patient medication record]. Dawn having looked on the record said "you should have more than a week left". Jane who was standing beside Dawn then looked at the computer

² PCS stands for 'prescription collection service'. This service involves collecting prescriptions from the GP surgery on the patients' behalf and pre-preparing them before the patient arrives at the pharmacy.

screen and took over from Dawn who then went into the back of the dispensary. This was perhaps because it was the pharmacist who was perceived to deal with this situation. Jane said "you will need to order a prescription, if we do supply it, then they [GP surgery] won't give it [prescription] and so we'll be stuck"...the pharmacist was able to identify when the prescription was dispensed, how many were being used and so how many were left. This was accurate to the day. The patient accepted what the pharmacist said and left...

Observation Wk. 4 Multiple

Ambiguities or issues that dispensers were unable to tackle themselves were discussed with or handed to the pharmacist who was seen as a problem solver. In the above case it was the pharmacist who decided what the patient should do. Interestingly, the pharmacist referred the patient to the GP surgery instead of contacting the GP surgery personally to resolve the matter. The pharmacist's remit and involvement with the patient's care will be further explored in section 4.4.4.1. However, the smooth operation of dispensing activities was dependent upon a pharmacist being present. When the pharmacist was absent during an MUR, activities in the dispensary appeared to 'grind to a halt'. This point is expanded further when the findings from the observations taken after the MUR consultations are reported (section 4.8). Likewise, some dispensing activities in the multiple were solely managed by the pharmacists. Such activities included supplies of medicines to patients experiencing drug addiction (often referred by the staff as 'addicts'). Such patients would normally attend daily and be requested by dispensers to wait until the pharmacist was available. They often took priority over other patients or their representatives who were waiting to collect their prescription:

Two of the regular addicts (man and a woman in their thirties) came in to the pharmacy...There is an older woman sitting down on the chair waiting for her prescription...The man sat next to her...The woman addict leans over the front dispensing area and picks up a pharmacy dispensing stamp, and stamps it on the bench. The man said "they'll blame me for that!". His voice is loud and is overheard by Jane [pharmacist] who comes out from the back of the dispensary and acknowledges them by saying "hiya". The man responds: "have you not done them yet?" He says this twice to which Jane replied "just finishing them off"...

Observation Wk. 2 Multiple

The times that patients with drug addiction came in for their supply of medication varied and there was an expectation that they would be served without delay. The reliance therefore upon the pharmacist being available for these patients and for other dispensing services meant that in the multiple, there was an acknowledgment that two pharmacists were normally required to be on duty in order for any MUR activity to take place. This allowed one pharmacist to be available for 'routine' services. However, in the independent there was no such 'luxury' of a second pharmacist and so MUR activity was observed to be fitted around the existing service provision.

4.4.2 Pharmacist activities over-the-counter (OTC)

Sales of OTC medicines to treat minor ailments were routinely undertaken by MCAs who advised patients directly. OTC medicines could be requested by patients by name or supplied through a recommendation. Pharmacists' involvement occurred when counter staff felt more specialist advice was required or if there was a request to speak to the pharmacist directly:

During the afternoon a woman of about 35 years came in with a toddler. She approached the chemist counter and spoke to Cath [MCA]. She explained that her child had "fell down and hit his head". Cath asked "how old is he" to which the woman replied "18 months". Cath said "I'll speak to the pharmacist". Cath walked into the dispensary and asked Rebecca what to recommend. Rebecca told Cath "don't give Calpol as it may masks the signs of something more serious, do you want me to have a look?" Cath replied 'yes'...After a few moments Rebecca came down out and the lady explained that "he had fallen down and hurt his head"... Rebecca said "he looks OK, as I was saying to Cath, don't give him Calpol as pain is a good indicator that something is wrong, he seems okay at the moment, just keep an eye on him"...

Observation Wk. 4 Independent

In both pharmacies, MCAs typically directed customers to the pharmacist when the customer sought a recommendation for a baby or child, when a patient reported a medical condition or took a medication or regarding certain medicines seen as the responsibility of the pharmacist (e.g. supplied of EHC, anti-migraine and obesity medicines). In these situations the customer

was asked to wait until the pharmacist became available which was usually a short while after the request to be seen. Patients appeared to use the pharmacist as an accessible source of information. As with dispensing activities described earlier, the need for the pharmacist to be available was also applicable to certain sales of OTC medicines. With support staff potentially requiring the pharmacists input at any time, MURs were seen by some support staff as problematic in circumstances when the pharmacist was needed.

4.4.3 Pharmacist engagement in management and administrative roles

Pharmacists in both settings were observed undertaking managerial and administrative roles alongside the responsibilities already described. In the independent pharmacy, the pharmacist was responsible for activities such as ‘banking the takings’, payment of wages and arrangement of staff holidays. Administrative tasks were often done amid health care activities:

Rebecca [pharmacist] spent time banking. She has created a spreadsheet with help from her brother and fiancé. It is a simple chart with takings from the pharmacy and costs. Rebecca was entering the takings into the dispensary computer screen. This was done in between prescriptions. She mentioned to me, in an informal discussion, that she is about “three weeks behind in banking”...

Observation Wk. 1 Independent

Within the multiple pharmacy, pharmacists too had managerial responsibilities. The more experienced pharmacist was responsible for organising staffing, completing paperwork associated with claiming payment for services provided from the pharmacy, completing audits and other miscellaneous activities arising from the day-to-day running of a community pharmacy. The time needed to undertake these activities was on the whole unscheduled and had to be accommodated within the working hours of the day. Pharmacists were expected to undertake these duties as part of their role. However, as they were carried out in between the everyday provision of services to the public there appeared to be little free time to plan for MURs. The ‘fire fighting’ mentality adopted in both pharmacies, where the more urgent and pressing activities took priority, left little room for lower priority activities such as MURs.

Pharmacists were observed to have little control over their workload both in its intensity and variety. Pharmacists were integral to the processes that allowed the dispensary and retail medicines counter to function efficiently. With no additional staffing, pharmacists' pragmatically accommodated MUR activity into their workload. In the following three sections, I turn attention to the various patient-pharmacist interactions that occurred on the shop floor of the pharmacy. This will lay the foundation for Chapter Six, where patient experiences and expectations of pharmacy services will be presented. Investigating shop floor interactions will also facilitate comparison of patient-pharmacist interactions during MURs and other interactions in the pharmacy.

4.4.4 Prescription medicines and pharmacist counselling

Observations of patient behaviour revealed that most came to the dispensary to fill prescriptions and they could frequently be seen waiting for them. Patients were occasionally seen taking their prescription elsewhere if the medicine was not stocked by the pharmacy:

A middle aged male patient hands a prescription to Dorothy [dispenser]. She says "we don't have this one in; I can order it for you for this afternoon". Patient takes the prescription back and says "I'll go somewhere else". Dorothy says "OK". This did not seem to bother the patient too much. He can perhaps go to another pharmacy...

Observation Wk. 1 Multiple

Patients appeared accustomed to the supply driven environment that the pharmacies offered. Prescriptions in bags which were ready for collection could be seen from the shop floor. This reinforced the pharmacy as a place geared towards filling prescriptions rather than discussing them or allowing consideration of other issues that the patient may want to discuss. The multiple pharmacy displayed prominent 'IN' and 'COLLECT' signs directing patients to where to present their prescription and where to collect. Likewise, within the independent patients were seen to observe their prescriptions going into the dispensary and minutes later are presented to them complete. When patients were offered an MUR this was largely unexpected. Patient views of how they felt about being invited for an MUR are discussed in Chapter Six section 6.4.2.

When patients or their representatives arrived in the pharmacy, initial interactions were mostly with pharmacy support staff and interactions were frequently about when the patients' prescription would be ready to collect. Phrases such as "*are you waiting or calling back?*", "*it'll be 10 minutes, do you have any shopping to do?*" were frequently used by the pharmacy staff. Patients collecting medicines were seen providing their name and address to confirm the prescription belonged to them. After confirming these details the prescription was handed to the patient which concluded the interaction. Most interactions observed followed this etiquette with the assumption that patients did not have problems with or were content with their supplied medicines. When the pharmacist or staff sought to provide advice, patient-staff interactions were brief; the information provided was typically generic in nature and often well scripted:

Rebecca [pharmacist]: This is a new item isn't it?

Patient: Yes [mentions it is for his shoulder].

Rebecca: Yes, yes, ok then [patient describes his shoulder pain. However Rebecca, by turning sideways provides a cue that she is ready to go back to the dispensary].

Rebecca: It can cause drowsiness.

Patient: That's what the doctor said. Is there enough to last me for a fortnight?

Rebecca: If you take less than 8 a day, then yes. Bye.

Observation Wk. 2 Independent

The above extract illustrates a unilateral approach to counselling (Pilnick 2003). This has been described as a routine way of providing information about medicines in accordance with the standard clinic protocol and which does not acknowledge, or is sensitive to, prior client knowledge (Pilnick 2003). Information about drowsiness was transmitted without first establishing whether the patient understood or was knowledgeable about this. Advice on newly prescribed medicines or changes to the patients' medicines doses that had been identified by pharmacy staff were often communicated to patients in an instructional manner. Interactions of this kind were frequently short with information imparted to the patient with little two-way communication:

[I observed a male patient aged about 75, asking for his prescription].

Jane [pharmacist]: There's a note on your prescription that your metformin [diabetic medicine] has been reduced from three times a day to twice a day. Is that right?

Patient: Yes.

Jane: Do you know about that?

Patient: Yes.

Jane: I wanted to make sure.

Observation Wk 3 Multiple

Although patients were free to ask questions of the pharmacist or whoever was giving out the prescription, the routine purpose of this encounter was to supply the medicine and so the scope for providing advice to patients was limited. Patients appeared comfortable with, or at least to accept, this arrangement and any instructions given. Questions asked by the pharmacist such as "*have you had this before?*", "*has the doctor gone through this with you?*" or "*do you know your dose of [medicine] has been increased?*" received minimal responses from patients. There was little exploration by the pharmacist of patients' understanding or use of their medicines in this interaction. Moreover, observations of the trainee pharmacist revealed that their training and socialisation was predominantly in the assembly of dispensed prescriptions:

Producing labels for walk-in prescriptions, producing labels for PCS prescriptions, finding the medicine on the shelf and placing a sticker on the box, putting away stock, filling up, date checking, disposing of unwanted medicines, bringing in and handing out prescriptions to patients, often without talking to patients other than asking for their names and addresses. This what made up the trainee pharmacist's core activities...

Observation Wk. 4 Multiple

Pharmacists' interactions with patients were minimal. Occasionally the prescription was seen to be handed to patients' representatives. Patients did have the opportunity to ask questions during this encounter and most of these were observed to be about clarifying the practicalities of taking the medicine. Answers from pharmacists were brief, focused and tailored to what had been asked with little exploration of the issue. In the main, pharmacists reinforced the doctors' instructions when providing advice on prescribed medicines. The information or

advice giving role, as will be discussed in section 4.4.5, differed when pharmacists were observed to provide advice during OTC consultations. Here, pharmacists appeared to have a stronger sense of autonomy over their work resulting in their interactions with patients being more conversational and patient-centred.

4.4.4.1 Pharmacist remit and autonomy

Most of the prescriptions presented by patients at the pharmacy were unproblematic. However, occasionally patients did present with prescriptions with anomalies. Most of these cases concerned a medicine that the patient was expecting but which had not been issued on the prescription. Patients were usually referred back to the GP surgery in order to rectify the problem:

A man (aged around 70) asked about his medicines that he had collected from the pharmacy earlier that day. Referring to his paper prescription order slip he mentions that the surgery has not put tramadol [painkiller] on his prescription...Jane looks through a pile of completed prescriptions and finds the prescription in question and shows this to the patient...she says that the surgery has "not put the tramadol on the prescription". She offers to photocopy all the prescriptions for the patient to show to the surgery "as evidence". The patient accepts the offer. The tramadol was not on the prescription and the pharmacist did not supply this...The man went away with a photocopy of the prescriptions presumably back to the surgery to get a prescription for his tramadol...

Observation Wk. 2 Multiple

Pharmacists communicated to patients through their actions that they were heavily reliant upon exactly what had been issued or written on the prescription. Pharmacists were observed to be cautious about making any changes to prescriptions without being authorised to do so by whoever had prescribed the patients' medicine. On occasions, the pharmacist would take ownership and contact the surgery on the patients' behalf:

During the afternoon, Rebecca [pharmacist] whilst labelling a prescription noticed that the patient had a prescription for 54 tablets of prednisolone with a dose of 8 tablets a day. She wondered if this was a week's supply and asked the patient who was unsure.

Rebecca said that she would "check". She rang the patient's surgery and said that she needs to talk to the doctor about the amount of prednisolone prescribed. The receptionist mentioned that the doctor had put in his 'notes': 7 days of antibiotics and seven days of prednisolone. Rebecca on hearing this said that she would give 56 instead of 54 and said on the phone smiling "on your head be it". This was an indication that responsibility rested with the surgery and not her. Commenting on this after she mentioned to me and said that "community pharmacists can't change the quantity of the items, even if it's two".

Observation Wk. 3 Independent

Pharmacists were not often seen to exercise personal judgement relying instead on referring patients back to the GP or contacting the surgery themselves. Pharmacists' lack of communication with the patient's GP or other health care provider meant that they often relied upon patients to return to the GP to resolve the issue. The pharmacists' mindset and approach to responding to patient problems with their medicines had important implications for how they dealt with medication issues during the MUR.

4.4.5 Pharmacist-customer interactions over-the-counter (OTC)

The wide range of medicines and retail products available from the pharmacies meant that there was an apparent freedom for customers to take the initiative and ask about a variety of health issues. In doing so, OTC interactions tended to be more conversational than interactions when handing out medicines and were focused and tailored to what the customer had requested:

A woman aged around 55 years came to the dispensing counter.

Customer: Which is better? [Holds up two antifungal products].

Jane [Pharmacist]: Is the inside moist or dry?

Customer: It's dry.

Jane: It's best to go for the cream; if it was moist you could have used the powder to dry it up, if it's dry use the cream.

Customer: Do you want to look? [Jane goes around the front of the dispensary].

Jane: It looks moist, so use the powder. The powder will dry it out, and you can use it in the socks as well.

Observation Wk.3 Multiple

Despite working in a retail environment, pharmacists did not appear to be influenced by commercial interest. Pharmacists relied on their own experience and personal preference when choosing to recommend a medicine for patients. One pharmacist was observed referring a customer to a 'competitor' when a certain product was not available despite there being alternatives available to her:

Customer [man aged about 70]: I've got arthritis in my leg and foot, is there anything?
Jane [Pharmacist]: Arnica gel is good [Jane walks over with the customer and looks on shelf]. We've got the cream but not the gel. The gel is better, go to Holland and Barrett and ask for the gel. [Customer leaves. On walking back to the dispensary Jane said to me "my husband uses that, and I've used it and its quite good, the gel is better for him..."]

Observation Wk. 3 Multiple

OTC interactions appeared to be more open and conversational in nature than counselling on prescribed medicines. In fielding enquiries directly from customers, the pharmacist often needed to establish something about the customer's circumstances and an understanding of the problem before recommending a treatment. The interactional focus was more person-centred and consumer-led as the following extract illustrates:

[A woman aged around 50 approaches the dispensary and asks to speak to someone about a new anti-obesity drug].

Customer: How does it work?

Rebecca [Pharmacist]: It removes the excess fat from the diet.

Customer: It goes straight through does it? [Yes]. I don't want to use it then because I use cod liver oil.

Rebecca: When do you take the cod liver oil?

Customer: In the morning.

Rebecca: And when do you have your breakfast?

Customer: Straight after [the cod liver oil].

Rebecca: Well you can take these after an hour after breakfast. Have your cod liver oil first and then your breakfast and then about an hour later take the capsule.

Customer: I don't have to take it in the morning do I?

Rebecca: No. You can take it at lunchtime and in the evening...

Customer: Fine, do I need to tell the doctors?

Rebecca: No, you can just buy it...

[Discussion continues, after which patient purchases the medicine].

Observation Wk. 5 Independent

The extract illustrates that the pharmacist was prepared to support the patient to make an adjustment to the dose of the medicine according to the woman's needs. However, the pharmacist neglected to enquire into the woman's lifestyle or other matters that may have been relevant to her weight management. Nevertheless, many OTC interactions served to address specific customer-initiated requests for advice and resembled what Pilnick describes as a 'stepwise' counselling approach. This has been described as an approach to patient counselling that provides a means for explicitly negotiating issues of knowledge and resultant competence. Knowledge and competence are explored in the encounter and the responses to these sequences which are received from patients or carers are potentially the most indicative of active involvement in the counselling process (Pilnick 2003). OTC interactions served to address specific customer-initiated requests for advice. The shop-floor environment allowed this but was not conducive for more detailed discussions.

4.4.6 Summary

Patient-pharmacist shop floor interactions were predominantly initiated by patients requiring a prescription to be filled or through a customer enquiry. Opportunities for the pharmacist to invite or enable the provision of additional support or advice on prescribed medicines were limited. The real life constraints of a busy dispensary meant that patient-pharmacist encounters were brief. Pharmacists were not expected, nor did they feel they had the remit to provide counselling that went beyond simple ad hoc advice and confirming the doctors' instructions. Overall, the pharmacist's involvement with the patient's prescribed medicines was a technically oriented role with little scope for any indeterminacy.

Observations of OTC interactions found that pharmacists could provide customised information in responding to patient requests for advice about minor ailments. In these circumstances, patients appeared both familiar with, and accepted, the role of the pharmacist

as an accessible adviser. The autonomy and willingness of the pharmacists to accommodate patient preferences during OTC discussions was in contrast to interactions when handing out dispensed medicines where patients' information needs were assumed to have been addressed by the GP. Nevertheless, problems were usually specific and there were no obvious opportunities to discuss wider health issues. In the rest of this chapter, I will focus upon how the MUR service was being implemented in the study pharmacies. I will begin by reporting on what appeared to lie behind pharmacist motivation to perform MURs and, in particular, the impact of targets on pharmacists' engagement.

4.5 MUR targets

Pharmacist motivation to undertake MUR activity was primarily target driven with the multiple pharmacy displaying stronger signs of a target-driven culture than the independent. Within the independent the pharmacist was aware of the owner's intention to perform MURs. However the pharmacist was not overly concerned with the number they needed to perform. Likewise, the locum pharmacist working at the independent was not observed carrying out any MURs during fieldwork observations. She revealed in informal discussions that she did not perceive undertaking MURs as part of her role when working at the independent, leaving this to the pharmacist who regularly worked there. Within the multiple the situation was markedly different. The cap of 400 MURs was viewed as a target. An MUR 'support pack' was available and included guidance on ways in which MURs could be done "*efficiently and effectively*". Inside the pack, recommendations were made on how to achieve the target which included suggestions for performing two MURs a day in order to spread the workload so that the pharmacy can carry on "*business as usual*". Within the dispensary there was a prominently displayed MUR target board detailing how many MURs had been performed in that financial year and how many were required to reach the target of 400:

The MUR target board which had numbers from 400 to 1 was in three different colours, red, amber and green. The red was to the beginning and the green towards the end numbers. They crossed out the numbers as they perform the MURs, and they had crossed out approximately 150 MURs... On the side of the chart was a box that was for the number that was needed to be achieved weekly to meet 400.

Observation Wk. 4 Multiple

In the multiple, the pharmacists periodically talked about how many MURs they had performed. On one occasion the pharmacists discussed that they needed to perform 50 a month over the next 4 months to reach 400. In an informal discussion with the manager, she indicated that they were behind on MURs and that she wanted to be in a position next year that by "*January they should have completed the 400*". Tea room conversations about MURs between the manager and other non-pharmacy staff members also emphasised targeted measures. The manager in response to the question of how many had already been performed commented that "*they've got 200 or something to go*". Pharmacists revealed, during informal discussions, that they felt pressurised to meet MUR targets. Reports were also available that showed a list of the Company's neighbouring pharmacies. The report showed how many MURs had been performed in each of these pharmacies and again was colour coded with green / amber and red. On one occasion a box of merchandise was received from 'Head Office' in which were T-shirts and other material promoting the service. Although the pharmacy's manager was a non-pharmacist she nevertheless recognised the importance of achieving the maximum allowance. This was demonstrated from the start of my observations:

In the morning the pharmacy's manager approached the dispensary and I took the opportunity to introduce myself to her. I briefly explained the purpose of my project which she replied "it's not just about the numbers I want them to be of quality not quantity". She followed this up immediately by saying "but they still should do 400, but they should be quality".

Observation Wk. 1 Multiple

As can be seen from the extract the manager had a clear measurable target that needed to be reached but acknowledged that there should also be benefit to the patient. Pressure to attain 400 MURs was seen to come mostly from the area manager who periodically visited the pharmacy. In one discussion the pharmacist mentioned that they had done seven MURs today and will "*hopefully get 400 by April*" for which the area manager replied with a half-hearted smile "*no you will get 400 by April*". One visiting trainee pharmacist from the US commented upon the service and how it was being delivered:

"Pharmacists therefore do MURs to avoid the negative reaction rather than doing it for something positive".

Observation Wk. 1 Multiple

Pharmacist appeared to be motivated by the desire to avoid negative repercussions rather than because they perceived this as something positive for their patients. This issue is further discussed in Chapter Seven section 7.3.7. The following two sections will present the findings relating to how patients were identified and invited and the reasons patients gave when they declined the invitation for an MUR.

4.6 Identifying and inviting patients for an MUR

Patients seldom asked for an MUR and so were identified by pharmacy staff and offered an MUR during the time they came to the pharmacy to have their prescription filled. Most patients were therefore recruited ad hoc and were asked either by the pharmacist or support staff if they had time to spare to "*go through their medicines*". Both pharmacies had previously tried making appointments with patients but these were seen to be problematic when staff reported that many patients did not attend. Particularly in the independent, patients whom the staff appeared to have a good relationship were typically selected for MURs. When a candidate was identified, the deciding factor did not appear to be whether the patient could potentially benefit from an MUR but rather if they had completed an MUR within the previous 12 months and so they were not considered eligible for another.

When patients were invited to take part in an MUR, staff did this by asking whether they would like a medication review where the pharmacist will "*check your medicines*". The MUR was promoted as a quick chat that "*complements what the doctor does*". One dispenser in the multiple mentioned how she persuaded patients:

In a naturalistic interview with Dawn [dispenser] and Jane [pharmacist]...Dawn revealed when offering a patient an MUR: "I don't give them an option, I just say 'have you got 5 minutes for the pharmacist to speak to you'".

Observation Wk. 3 Multiple

Patients appeared to accept the invitation for an MUR because they were asked by the pharmacist or support staff with whom they had a good relationship. Most patients did not seem to have been previously aware of the service and some responded with surprise. Some patients questioned how long it would take or mentioned that they had already had a review with their GP. Patients' response to MURs did not seem to be strongly motivated by self interest or the prospect of personal benefit. MUR activity occurred in the consultation room and was hidden from public view; the MUR was therefore not an activity that patients were familiar with or expected to be offered by the pharmacy.

Patients on the prescription collection service (PCS) were particularly targeted as their prescriptions were assembled and stamped indicating the patient was a candidate for an MUR:

I spoke to Kate who said that generally PCS patients are identified first. When dispensing their prescriptions the PMR is checked and they see if the MUR is due and if they've not had one then they are asked. This is then recorded on their PMR.

Observation Wk. 1 Multiple

As the extract illustrates, patients were selected by screening when their last MUR happened. There was little evidence for a needs-based assessment through talking to patients and identifying whether an MUR was required. Moreover, some patients groups who may potentially benefited more appeared to be actively avoided:

Kate then revealed that she does not like doing MURs on patients who have depressive or psychological illness as it is "difficult to talk to patients if they've got depression". She also added that if they're on medication for mental illness, they would probably be under specialist care.

Observation Wk. 4 Multiple

The avoidance of patients who had certain medical conditions was expressed by four of the five pharmacists in their interviews and this is discussed further in Chapter Seven. One pharmacist commented in an informal discussion that she avoided performing MURs on patients who appeared confused:

I asked if Jane [pharmacist] had ever had any feedback from a medicines use review and she said that she had not. She said that most patients come in for reassurance "I don't get involved; I usually say see the doctor". She did not feel that it was her place to make recommendations. She then said "I won't do them if they are confused". This surprised me as she acknowledged that these were the ones that needed it. She then said to me they would probably "take half an hour and that they'll probably end up more confused".

Observation Wk. 5 Multiple

The findings from staff interviews will explore further the approach staff took when identifying patients for an MUR. However, it is worthy of note here that patients who may potentially benefit most were not actively being identified and this potentially limited the benefits of the service to patients. Another method that was found to be employed by the multiple was to send out invitation letters directly to patients. This was of a generic nature indicating to patients that they may benefit from a free "check-up" on their medicines. The letter did specify the terms under which the patient would qualify for an MUR. Although I did not know the number of letters sent out to patients by the Company, two patients were observed bringing in the letter and showing the pharmacist. However, on one of these occasions it was apparent that the letter had caused confusion:

In the morning a woman (aged about 70) came in with a letter (she was accompanied by a man of about the same age). The woman explained that the letter had arrived in the post and was about a medicines use review. She showed the letter to Jane [pharmacist] who checked her PMR and said to them "you've had yours done" and "it's not now due till next July".

Observation Wk. 1 Multiple

Although the woman did not appear annoyed at having received the letter, the extract illustrates that she had been unaware of when or whether she had had an MUR. Another patient was asked by the same pharmacist on the same day "*Have we reviewed your medication?*" to which the patient responded by a confused look. This was followed immediately by the pharmacist saying "*Have we taken you in there?*" pointing to the consultation area, to which the man responded "*Yes, I enjoyed it*".

In most cases, support staff did not appear to be informed of what the outcomes of MURs were; this was not due to the information being confidential but rather the benefits to patients were not emphasised to them to any great degree after the MUR:

After the MUR Grace [dispenser] said "it wasn't really a big review was it". The pharmacist replied "not really, he knew some but had forgotten why he was taking his cholesterol tablets, so that was good". The pharmacist then turned to me and said "I suppose that's the reason why you do these MURs".

Observation Wk. 2 Independent

Support staff who were involved with recruiting patients for MURs were largely unaware of the intended purpose or potential benefits an MUR could bring to patients. Interviews with dispensers and MCAs confirmed their lack of awareness of what occurs during an MUR and this may have contributed to the vague way they offered the service to patients. These issues will be further discussed in Chapter Seven.

4.7 Pharmacist preparation before the MUR

Pharmacists within both the multiple and independent pharmacies were observed making preparations before the MUR. In the multiple, the paper based MUR form and lack of access to the computerised patients medication record (PMR) in the consultation room meant that the pharmacist needed to print the patient medication history prior to each MUR that was performed. The consultation room in the independent was equipped with a computer and so the MUR form was available electronically. In the independent, the consultation room was multi-purposed and so often it needed to be 'set up' before an MUR. People working within the room would be told to leave and the tables cleared of any clutter before the patient could be invited in. Chairs would also have to be arranged within the room and sometimes brought in from the pharmacy's shop floor:

...Rebecca led him to the consultation room. He had a little trouble getting up the step into the dispensary...There were 2 chairs in the room they both had wheels; Rebecca

brought up the wicker chair from the shop floor...Because the chair was quite big we momentarily had problems shutting the door.

Observation Wk. 2 Independent

Preparing the consultation area before the MUR took a few moments but supported the notion that the pharmacy was not set up to perform MURs as a routine activity. Within the multiple, there were also issues of the number of patients who could sit in the consultation room. There were frequently only two chairs within the room which meant that if two people were invited or decided to sit in, another chair would need to be brought in. This generally was not problematic. However, it did present a hindrance on one occasion when I took a woman to the consultation area with her and her husband, to obtain consent to observe the MUR:

I walk her over to the consultation area and she asks if her husband can sit in as well, I agreed and say that I would need another chair. Not wanting to trouble me, he said that "it doesn't matter". We went in and he remained outside...

Observation Wk. 2 Multiple

The details of what occurred during the MUR will be presented in the following chapter. The following section will report on the observations made *after* the pharmacist had completed the MUR, left the room and returned to the dispensary.

4.8 Observations after the MUR

Once the MUR had been completed the pharmacists were observed returning to the dispensary to be greeted with several prescriptions that were ready to be checked and patient queries that had accumulated whilst the pharmacist had been away. With pharmacists so heavily involved with the dispensing process, the ACT working in the multiple did not appear to free up pharmacists time. The trainee pharmacist commented during an informal discussion that the ACT does not help maintain work flow as the prescription "*still needs a clinical check*". Problems with work piling up were more noticeable when the pharmacist worked alone. The following extract illustrates the reception the pharmacist in the independent received having spent 40 minutes completing two consecutive MURs:

The mood was particularly ‘cold’ and unreceptive. Lucy [dispenser] said “we’re not doing anymore!”...Lucy had been quite keen initially to recruit patients...and had been involved in identifying the couple just seen...There were empty boxes on the floor, boxes of stock yet to be put away and the general feel of the dispensary was that it was disorganised. The amount of yellow tubs indicated that patients had either decided to call back or had been asked to call back; the checking bench was full of tubs...

Observation Wk. 3 Independent

The ‘frosty’ reception was later found to be due to the problems faced by the support staff because of the volume of patients who had been waiting for their prescriptions. Pharmacists in the multiple also had to contend with similar situations when they were the sole pharmacist performing MURs. The findings from the pharmacist interviews are presented in Chapter Seven. The next section will briefly discuss how the information collected during the MUR was used during the dispensing of patient’s prescriptions.

4.9 The use of information collected during the MUR

Information collected during the MUR was not seen to be referred to in either pharmacy during the provision of dispensing prescriptions or other services for patients. Within the multiple, completed paper MUR records were often placed in a large pile of completed forms ready to be filed in alphabetical order into folders that were kept on a dispensary shelf. Despite the MUR regulations stating that patients should receive a copy of the MUR form, there were indications that this did not always happen:

They [MUR folders] were in alphabetical order, so the first folder was marked A-F, the second G-M etc...I notice that within the folders there were some MURs with triplicate pages which indicated that the patient had not received their copy of the MUR form. Kate [pharmacist] said she usually gives the patient a copy of the form there and then...

Observation Wk. 4 Multiple

In an informal discussion with the second pharmacist she revealed that “We used to send out the patient’s copy. Then we asked the patient whether they wanted one and now we just keep it”. The only information placed on the patient’s PMR was the date the review had been

undertaken. In the independent, MUR forms were completed electronically. However, these were not seen to be referred to during the dispensing process. In an informal discussion the owner mentioned that the MUR provided a record of what was discussed and recommended. Despite this the only data that was seen to be referred to in both pharmacies was the date on which the patient had their previous MUR so that they did not offer the patient another until it was due. Likewise, there were no instances where the pharmacist was observed discussing with any patient an MUR that had been conducted previously. Some patients visited the pharmacy in subsequent observation weeks. There was no evidence to suggest they were treated any differently to other patients or were observed to have any follow-up discussion resulting from an MUR.

4.10 Summary

This chapter has provided a contextual backdrop to how MURs were being incorporated alongside the other activities of the pharmacy. Fieldwork observations highlighted pharmacists' accessible and reactive nature to requests from patients, customers and pharmacy support staff that enabled the services of the pharmacy to run efficiently. Pharmacists' duties were seen to have a high degree of technicality associated with them with most of their time being oriented around the dispensing process. Given the nature of their routine work, there was little need for the exercise of professional judgement. When the pharmacy was less busy the pharmacists were seen to be catching up with administrative and management responsibilities. In practice, the pharmacists' workload was being dictated to them and they were seen to have little control over the intensity or variety of work tasks that were presented. Pharmacists therefore pragmatically accommodated the MUR service in between their existing service provision.

The observations also highlighted how patients tended to use the pharmacy. This was for the collection of their prescriptions and for advice on treating minor ailments. Most patient-pharmacist interactions within the pharmacy occurred on the shop-floor with pharmacists' advice about prescribed medicines typically given in an instructional manner. Pharmacists' discussions with customers about the treatment of minor ailments were found to have more of a two-way dialogue. This greater level of engagement reflected the customer's pro-active approach to seeking treatment and the greater scope for pharmacists to exercise professional

judgement in relation to OTC medicines and recommendations. However, opportunities for the pharmacist to discuss prescribed medicines with patients were limited and pharmacists were cautious about making suggestions or recommendations that deviated from the doctor's instructions. They preferred instead to refer patients back to the GP to resolve any issues. The pharmacy was therefore observed to be a place where patients received, rather than discussed, their prescribed medicines. As will be seen in Chapter Six, patients constructed their views of MURs based upon their existing expectations and experience of the roles and responsibilities of the pharmacist.

This chapter also revealed how MURs were being managed and implemented in the study pharmacies. Most MURs were observed to be performed opportunistically when convenient to the pharmacist and when the pharmacy was not busy. The process of identifying patients for an MUR did not appear to be tapered according to patient need or benefit but based upon the minimum selection criteria. These processes did not actively seek to ascertain whether patients could potentially benefit from an MUR; nor was the core message that the MUR should be an activity for the sole benefit of the patient effectively conveyed. Moreover, the primary motivation for pharmacists to conduct MURs, particularly in the multiple, was driven by Company targets and financial interests. Various strategies had been adopted by the management to encourage pharmacists to engage with the service. The most noticeable effect of these strategies was the perceived pressure that was placed on pharmacists to achieve a targeted number of MURs. This had a significant impact in the way MURs were viewed and performed by pharmacy staff and is further discussed in Chapter Seven.

The pharmacist's absence during an MUR meant that in practice, work flow was impeded during this period. Problems with work piling up were more noticeable when only one pharmacist was on duty. It was against this backdrop that MURs were being accommodated. MURs were observed to be a proactive activity which meant that, other than the pressures to achieve the MUR target, they could be undertaken at the convenience of the pharmacist and not necessarily to that of the patient. Lastly, there was little referral to previous MURs when a new MUR was performed or referral when providing other services from the pharmacy such as dispensing of patient prescriptions. The MUR was effectively a 'standalone' service rather than one that made a contribution to the other care provided in the pharmacy.

This chapter has illustrated some of the difficulties that pharmacists faced in implementing the MUR service. The next chapter will detail what happened during the MUR and how the patient-pharmacist interaction was managed.

CHAPTER FIVE

The MUR

5.1 Introduction

In this chapter, I present the findings from the 54 MURs that were observed and outline how the MUR was performed and structured. I investigate how the MUR was introduced to the patient, the nature of the information exchanged during the patient-pharmacist interaction and how complex issues that arose during the MUR were managed. Lastly, I present how the MUR was concluded.

5.2 Participants and characteristics of MURs

In total, 54 MURs were observed (33 from the multiple and 21 from the independent). Demographic data for these patients and some characteristics of the MUR consultations are presented in Table 1.

5.3 Structure of the MUR consultation

Four pharmacists, two from each pharmacy were observed undertaking MUR consultations. Although, each pharmacist adopted different approaches, similar patterns were identified through the analysis of the MURs. As part of the MUR service, a nationally standardised form was required to be completed during the consultation (Appendix Two). Information that the pharmacist was expected to elicit from the patient and record on the form included whether they used the medicine as prescribed, whether they knew what they were using the medicine for, if the formulation of the medicine was appropriate and reported side effects. The format of the form was ‘tick-box’ which allowed for a yes / no response for each response. Paper MUR forms were used within the multiple and a computer-based electronic form in the independent.

Table 1: Demographic data and some characteristics of the MUR consultations (n = 54)

Outcome measure	Independent Pharmacy	Multiple Pharmacy
Number of MURs observed	21	33
Patient Gender		
Men	7	8
Women	14	25
Mean age of patients (range)	65 (46-81)	72 (40-89)
Method of invitation		
Ad hoc	17	31
Appointment	4	2
Mean number of medicines per patient ¹ (range)	8 (2-17)	6 (2-11)
Number of MURs conducted by pharmacists		
Jane (Employee pharmacist)	-	19
Kate (Employee pharmacist)	-	14
Rebecca (Managing Pharmacist)	20	-
Rose (Owner and pharmacist)	1	-
Number of patients interviewed	17	17
Number of patients reporting in the interview having had an MUR previously	5	7

¹This is the total number of prescribed and OTC medicines (including herbal and vitamin supplements) that the patient reported taking during the MUR and at interview. On a few occasions the patient had revealed at their interview a medicine that had not been identified by the pharmacist during the MUR. A full list of medications recorded can be found in Appendix Nine.

The structure of the MURs broadly followed a pattern directed by the pharmacist asking the patient questions that enabled completion of the MUR form. The consultation would typically begin with an initial statement from the pharmacist explaining what they intended to do and what the MUR involved. A question-answer sequence would then follow where the pharmacist would ask the patient questions to enable the MUR form to be completed and lastly, the pharmacist would make a summary statement to conclude the MUR. In the following sections, these processes are described in more detail.

5.3.1 Introducing the MUR

Once both the pharmacist and patient were seated in the consultation room, the pharmacists began with an initial statement explaining the purpose of the MUR and what this would involve. This set the agenda and provided a cue for what patients could expect to happen during the encounter:

Rebecca: This should be nice and quick, it's called a medicines use review and we go through what you're on. My name is Rebecca you've probably seen me. You're on three medicines is that right?

MUR 11- Cilla 55yr F. Independent

Kate: This is to check your medicines that you're on and that they're not interacting with anything over-the-counter...

MUR 30 - Michael 65yr M. Multiple

The activity and purpose of the MUR appeared to be determined by the pharmacist from the onset. On several occasions the pharmacists mentioned that the MUR would not take up too much of the patient's time. As discussed in the previous chapter (section 4.6), the pharmacy staff typically invited patients for an MUR using general or unspecific statements relating to "going through" or "checking" the patients' medicines. Occasionally, the pharmacists would indicate in their opening explanation that the MUR was to check whether the patient understood the medicines they were taking and resolve any problems they had. However, many patients did not appear to have time to reflect on what the pharmacist had said or take the opportunity to speak and set out their own agenda. Pharmacists did sometimes indicate to the patient that MURs should be a routine activity, the reason why this had not been achieved was sometimes explained to patients:

Jane: This is called a medicines use review check up, it's done regularly but it's not always quiet enough to do it.

Konnie: Yes.

Jane: We can sign you off and go through your medicines...

MUR 19 - Konnie 40yr F. Multiple

Rose: We should be doing this with all our patients, but I have not had time.

Terrie: That's fine.

MUR 7 - Terrie 54yr F. Independent

As these extracts illustrate, pharmacists occasionally mentioned to patients that MURs were an activity that the pharmacy should be performing but because of time constraints this was not always possible. In these cases, the MUR was therefore framed as an activity that occurred when convenient to the pharmacy rather than at the convenience of, or in response to, the clinical need of the patient. The purpose that patients later attributed to their MUR was in part constructed through the description that the pharmacist provided at the beginning of the consultation and this is further explored in the following chapter (section 6.4.3). Some patients having heard the pharmacist's description of the MUR pre-empted the activity by mentioning they already had a review with their doctors:

Summer: I've just had a review at my doctors.

Jane: It complements what the doctor does. We look at what medication you're on at home and your understanding of them. I'll do it as quick as I can.

MUR 22 - Summer 62yr F. Multiple

Howard: I've just told your friend here and I have a review with the hospital every three months.

Rebecca: We need to check how or why you're taking it...

MUR 20 - Howard 52yr M. Independent

A few patients challenged the reason for their MUR mentioning they already had a medication review with their doctor. In these cases, the pharmacist sidelined their concern and continued the MUR unabated. Pharmacists justified the MUR to patients based upon their own purpose and agenda. Likewise, on occasions when the patient revealed that they had previously had an MUR, the pharmacist would assume that patients knew the purpose of the exercise. They again did not consider whether the MUR was necessary or established whether this was going to benefit the patient:

[Dawn (dispenser) had invited the patient for an MUR to which the lady responded 'I've had one'. Dawn told Kate [pharmacist]: "It's been a year since the last one" to which Kate replied to the patient "We do it every year". Patient and pharmacist go into the consultation room].

Kate: You've had one before, so you know what to expect. Just to go through your tablets.

Autumn: I've had it before.

Kate: I see that you're taking blood pressure tablets...

MUR 33 - 'Autumn' 85yr F. Multiple

Jane: This is an annual review.

Mia: I did it before.

Jane: So we're just updating then.

MUR 32 - 'Mia' 66yr F. Multiple

Where patients indicated that they had taken part in an MUR before, this utterance was seen to inform the pharmacist rather than taken as a cue to explore whether another MUR was necessary. In response to the knowledge that the patient previously had undertaken an MUR, pharmacists were not observed to investigate or follow up any earlier actions resulting from these. Fieldwork observations found that within the multiple, completed MUR records were filed in the dispensary and pharmacists were not observed referring to these. Instead, pharmacists printed a copy of the patients' PMR which enabled them to see a list of the patients' current medications. Given that pharmacists typically did not refer to previous MURs, there were rarely any review or follow-through actions from previous consultations. Only on one occasion was the pharmacist observed to refer to a previous MUR. This was on hearing that the patient's medical condition had changed:

Rebecca: So you had your MUR in March.

Morris: I hadn't started with my heart problems then [the pharmacist looks at the previous MUR].

Rebecca: This is your old one [MUR form] you said that the pump leaked?

Morris: [The patient explains that he doesn't need the pump anymore as he has had a stent to alleviate his angina]. Brilliant it was...

MUR 10 - Morris 79yr M. Independent

On the whole, the pharmacist's introduction to the MUR set out their agenda for the MUR but did not invite patients to set theirs. One case emphasised the extent to which the agenda for the MUR activity was dominated by the pharmacist. Here, Rebecca had invited a patient for a blood pressure check as well as an MUR. However, it was noticed that the patient recently had an MUR:

Brian: ...[The patient explains that he has had codeine and has a problem. He also takes Naprosyn and asks if this should be taken with food. He asks when to take the omeprazole].

Rebecca: The Naprosyn's after [food] and take the omeprazole not at the same time as the Naprosyn. When are you suffering most from the heartburn?

Brian: Mealtimes...

Rebecca: [Rebecca looks at the computer] It seems we have done one [MUR] already this year. Unless there is a reason, it's really only done yearly.

Brian: I might have had one during my birthday...[Rebecca turns to me and say "false alarm I'm afraid"]

[Rebecca immediately abandons the MUR and proceeds to take blood pressure].

Observation Wk 3 Independent

On realising that the patient had a previous MUR within the last twelve months, Rebecca abruptly stopped the medicine consultation. The national policy guidelines on how frequently MURs can be performed appeared to prevent Rebecca from continuing this consultation. The patient's heartburn or codeine problem was consequently not explored.

Most patients' appeared comfortable with, or at least accepted, what the pharmacist had said during the introduction. The pharmacist would follow their introductory statements by next confirming what medication the patient was taking. This would prepare them to discuss with the patient each medicine in a systematic way. This process will be described in the next section.

5.3.2 Sequencing of the MUR

The unspecific agenda provided by the pharmacist for the MUR activity meant that few health or medication related issues were initiated by the patient during the MUR. Consultations were immediately led from the onset by the pharmacist asking a series of closed questions to complete the MUR form. This resulted in a question-answer sequence where the pharmacist would ask the patient questions about their prescribed and OTC medicines. This enabled the MUR form to be completed quickly.

5.3.2.1 Establishing the patients medication

Pharmacists adopted differing approaches to establish the patients' current medicine regimen. This depended upon whether the pharmacist was completing a paper or an electronic MUR form. In the multiple, paper forms were available. Pharmacists would refer to a pre-printed PMR as a guide to what had been prescribed. The pharmacists would therefore either start by talking about one medicine or confirm with the patient all of their current medicines so they could be talked about sequentially:

Jane: ...Now you're on paracetamol, Slow K, valsartan, Fortipine, simvastatin and Calcichew [this is Calcichew D3 forte]. You have six items yes?

Nicola: Yep.

Jane: ...We'll go through your medicines one by one.

MUR 31- Nicola 68yr F. Multiple

Once medications had been identified, the consultation then proceeded with the pharmacist asking questions about each one in turn to complete the MUR form.

In the independent, the MUR form was available electronically. Rebecca was required to select medications from the PMR and then transfer the details onto the MUR form. Unlike the paper based version, this process saved the pharmacist having to type each medicine directly onto the form. However, there were a few instances where this process hindered the pharmacist from exploring opportunities to address patient concerns that arose during this stage. As the following extract illustrates, some patients revealed information that was not followed through since Rebecca's immediate preoccupation was to establish a list of medicine for the MUR form:

Rebecca: ...We're going to look at everything you're on... so you're on felodipine 2.5's?

Annabel: Yes.

Rebecca: Was it increased to 10?

Annabel: It's come down to 2.5 as I felt dreadful and I got headaches so it came down to 2.5.

Rebecca: Right, the omeprazole, and the cetirizine you take that...

MUR 17 - Annabel 61yr F. Independent

Rebecca's aim at the initial stage was to select current medication details and transfer these to the MUR form. On seeing the higher strength of felodipine she enquired about this. In responding, the patient made an offer to address a potential concern in stating a side effect from her tablets. Since the pharmacist did not respond immediately to take up the initiative to explore the issue further, the window of opportunity to explore this concern was closed. The opportunity to discuss the side effect from the felodipine did not present itself later when the pharmacist returned to ask about that medicine:

Rebecca: The felodipine, do you take that every day?

Annabel: Yes

Rebecca: The omeprazole you're on that one twice a day?... I've put here that the doctors reduced the felodipine; you know what you're doing. [Annabel talks about husband's hospital visit].

Rebecca: ... you don't have any side effects?

Annabel: No

Rebecca: So there are no issues to share with your doctor...

MUR 17 Annabel 61yr F. Independent

The previous brief reference to the doctor reducing the dose of felodipine was not raised and the chance to fully explore and address this potentially significant subject was lost. The question-answer sequence will be further discussed in the next section.

5.3.2.2 Seeking answers to fill in the MUR

The closed question-answer sequence was typical and formed the body of the MUR. Pharmacists were observed asking the patient to confirm whether the medication they took was the same as that which was on the medication record, if they knew what this was for, if side effects were reported by the patient and if they could swallow or take their prescribed medicine. This was the information needed to complete the MUR form. During the question-answer sequence, patients typically offered minimal responses to the closed nature of the pharmacist's questions:

Jane: The feldene, how often do you use it? (Patient says that she uses it when she gets arthritis in her neck).

Jane: So you know what it's for?

Iris: Yes.

Jane: You don't get any irritation?

Iris: No.

Jane: The cetirizine you know what that's for?

Iris: A rash....

MUR 11- Iris 65yr F. Multiple

As this extract illustrates, pharmacists through their questioning checked whether patients knew what the medicine was for and identified potential side effects from medicines and enquired whether these were present. Most of the patients knew what their medicine had been prescribed for, had few problematic side effects and had little to no issues administering their medicines. The pharmacists asked about each medicine sequentially. Jane, an employee pharmacist working in the multiple, was observed to have the most mechanistic approach compared with the other pharmacists. In an informal discussion after one observed MUR, she commented that she performed her MURs in such a way that the patients were "*in and out*". As will be discussed further in Chapter Seven, Jane was the more senior pharmacist and 'bore the brunt' when the targeted number of MURs was not achieved.

Occasionally patients seized the opportunity to discuss extraneous issues such as the treatment of minor ailment. Pharmacists typically closed down such requests preferring to resolve them through discussions on the shop floor:

[Jane enquires about the patient's Uniphylline tablets]

Mia:... I want some cough medicine.

Jane: Is it a dry cough or is it on your chest or throat?

Mia: Both.

Jane: I'll write down the name now in case I need to rush out. [Jane writes on a bit of paper... hands this to the lady].

Jane: You alright swallowing the Uniphylline?

MUR 32 - Mia 66yr F. Multiple

Rebecca: ...I have a list of four medicines [the pharmacist lists these], do you take anything else?

Renata: No, but I will tell you, I have bridges rubbing on my face (she explains that it is uncomfortable)...

Rebecca ...if that's what you're on, we've got Rinstead Pastilles or Bonjella, we'll have a quick look on the way out...

MUR 13 - Renata 81yr F. Independent

OTC recommendations were typically dealt with after the MUR and when the patient had left the consultation room. Although OTC medicines are to be recorded as part of the MUR, discussions regarding the management of minor ailments are not. The completion of the MUR form appeared to take precedence over these enquiries.

When pharmacists asked patients whether they were taking the medicine and whether they understood why the medicine had been prescribed, patients offered little challenge to the pharmacists' questions and appeared to answer them straightforwardly:

Rose: Does the patient take the medication [Preservative free eye drops] as prescribed? [Pharmacist reads off the MUR form].

Terrie: I do, I use it every 2 hours.

Rose: That's not on our records so I'll put 'every 2 hours'. Does the patient know why they are using the medication? [Again reads off the MUR form].

Terrie: Yes.

Rose: Why? I need to ask you [she says this softly but in a firm manner].

Terrie: I had an acoustic tumour and it protects the cornea following the acoustic neuroma.

Rose: I'll put in here 'drops provide tears and protection' and I don't need to give any information, and it's appropriate.

Terrie: Very.

MUR 7 - Terrie 54yr F. Independent

Rose was the owner of the independent, and was observed undertaking only a single MUR. She frequently mentioned to me that pharmacists made the service “*too clinical*”: “*It’s all about compliance and concordance*”. Rose was observed to have an overt strategy, similar to Jane, which focused on seeking answers directly to complete the MUR form. As illustrated above, the use of the statement “*I need to ask you*” enabled Rose to dominate the consultation and serve her agenda to complete the MUR form. A common trait that was observed in many MURs was the selective interpretation in what pharmacists recorded. In the preceding extract Rose had simplified the patient’s account of the use of the eye drops in order to succinctly record the information on the form. Patients were often told that the purpose of the MUR was to “*check*” their medicines. In their manner of asking and recording information, the pharmacists were seen to be merely monitoring what had been prescribed:

Rebecca: ...Do you know why you're taking the simvastatin?

Geri: For the uh high cholesterol.

Rebecca: It's a new one isn't it?

Geri: I'm hoping to come off that.

Rebecca: You know why you're taking the felodipine?

Geri: High blood pressure...

MUR 12 - Geri 74yr F. Independent

This extract further illustrates the way pharmacists overlooked patients perspectives of their medicines. As will be detailed later, more indeterminate matters (in this case, Geri’s desire to “*come off*” her cholesterol tablets) were sidelined in favour of the next routine question. However, not all MURs followed this simple question-answer sequence. In the independent, the MURs performed appeared to be less hurried affairs than in the multiple. Invited patients

appeared to have developed good relationships with pharmacy staff through their regular use of the pharmacy. Most patients in the independent were offered a cup of tea at the beginning or during the MUR which several accepted and this created a more relaxed atmosphere.

During most MURs, pharmacists focused upon patients' medicines with little exploration of the illness that they were used to treat. Pharmacists used the question-answer sequence in order to check that patients were using the medication as intended by the prescriber. However, they were frequently observed embedding advice about side effects on medicines in their discourse with patients:

Kate: ..With the ramipril you can sometimes get a dry cough, do you get this?

Autumn: No, only when I've got a cold.

Kate: And the amlodipine can sometimes cause ankle swelling.

Autumn: I only get that when I get arthritis...

MUR 33 - Autumn 85yr F. Multiple

Kate sometimes enquired about the patients' medical condition such as whether the patient's blood pressure was "stable". In informal discussions it was revealed that she found that simply asking the requisite questions in a systematic way was clumsy and commented that she aimed for a "*conversation*" with the patient. In order to achieve this she would try to group medicines for a particular condition together.

Pharmacists routinely dominated the MUR consultation with nearly half of all patients observed not to ask any questions during the encounter. The number of questions that were asked by both the patients and pharmacists are presented in Table 2. Although these were polite encounters, pharmacists did not facilitate opportunities for the consultation to be centred on what the patient might have found useful or interesting. The MUR was therefore not focused on how the patient could better manage their illness with the aid of medicines but whether the medicines were being used in a way that was acceptable to the pharmacist. All pharmacists were observed to fill in the MUR form whilst simultaneously talking to patients.

Table 2: Questions asked by pharmacists and patients in 54 MURs

Outcome measure	Independent Pharmacy	Multiple Pharmacy
Mean number of questions asked by the pharmacist during the MUR ¹	10	14
Number of patients who did not ask any questions during the MUR	12 (57%)	13 (39%)
Of the remaining patients, average number of questions asked per patients (range)	2 (1-4)	3 (1-9 ²)

¹The number of direct questions asked by pharmacists is presented here. However, pharmacists also used statements in an interrogative fashion to confirm that patients were taking a particular medicine or taking a particular dose. These have not been included in the count.

²There was one MUR where a patient and a carer were both present. Nine questions were asked; the carer asked five questions (one about his own health) and the patient asked four questions.

Patients did not appear to mind this even when this need to record the information displaced the pharmacist's attention from themselves:

Eve: [The patient explains that she has marks on her legs]...and there's a bit on my body, it's not itchy.

Eve's husband: It's up and down with temperature.

Eve: I thought I'd got....I'll let you get on [patient indicates that she is disturbing pharmacist as she is typing...].

Rebecca: You can tell me...

MUR 2 - Eve 75yr F. Independent

As the extract shows, the patient politely stopped the flow of the conversation as she observed the pharmacist was busy typing on the computer. Although the pharmacist did invite the patient to continue her focus remained on the computer.

5.3.2.3 Information exchanges

The following three sections will investigate information exchanges during the MUR. Pharmacists tended to use a ‘unilateral’ approach to patient counselling (Pilnick 2003) which involved delivering advice without first establishing whether the client is knowledgeable about the issue in question. Information was delivered in a way that was similar to their interaction with patients while handing out dispensed medicines. Pharmacists were seen to provide advice when they thought the medicine could be taken in a better way. For example, pharmacists advised taking aspirin “*after food*” to prevent indigestion or asked patients who were on medicines to reduce cholesterol and which had the potential to cause muscle ache, whether they suffered from such side effects. In the relatively few instances in which patients requested advice or information, the pharmacists’ did appear to respond adequately:

Renata: I have some antihistamines... that's ok isn't it with the co-proxamol?

Rebecca: If they're the one-a-day ones then they're fine with everything that you're on...if you have dry eyes, and you find that you are using the drops more, than it might be the antihistamines that are doing that.

Renata: That's worth knowing...

MUR 13 - Renata 81yr F. Independent

Occasionally there was evidence to suggest that patients responded positively to the information provided indicating that they found this useful. Like the example above, these situations were predominantly about practical advice on a particular issue for which the patient sought clarification. For example, several patients enquired about whether doses of different medicines could be taken at the same time. The structured format of the MUR consultation did not naturally facilitate this and patients appeared to have to seize opportunities to ask their questions. For example Nicola, the only patient who was observed to ask for a ‘review’, had to wait until the end of the consultation in order to ask her own question:

Jane: ...Do you have any questions?

Nicola: In the morning, I take all three together.

Jane: [Looks at the MUR] The Slow K, Fortipine and the Calcichew.

Nicola: I take them all in the morning.

Jane: They're all fine to take all together, is that alright. Do you have any queries on your health?

Nicola: That's what I wanted to check... [talks briefly talks about a tumour that she has had].

Pharmacist: Great, so you're getting on fine, I'll put this on your record, that you've had one and I'll see you.

MUR 31- Nicola 68yr F. Multiple

The removal of the question '*What would the patient like to get out of the review?*' from the 'Version 2' MUR form denied patients an opportunity to set their agenda at the start of the consultation. Despite pharmacists' dominance over the consultation, enquiring about patient's medicines encouraged patients to tell the 'story' behind why or how a medicine had been initiated. However, pharmacists were cautious of prying into patients' medical affairs:

Rebecca: ... and you mentioned that it's every six weeks [Zometa]

Connie: Yes every six weeks and I'm managed by the [names hospital] breast cancer clinic. I used to get Zoladex from the hospital.

Rebecca: I don't want to pry and excuse me if I haven't got the jist or anything. [Patient tells pharmacist about the cancer pain that she is experiencing and pain from her ostomyelitis].

Rebecca: So you're cancer is of the pelvis and spine?

Connie: Yes, and I needed some heavy painkillers.

Rebecca: When I first saw your Oxynorm dose I thought it was high.

Connie: The other lady pharmacist...thought that I was a drug dealer but I need them.

Rebecca: so you're on Oxynorm, five every two hours?

MUR 21 – Connie 49 yr F. Independent

On several occasions, such as above, patients spoke of their illness and pharmacists took the opportunity to obtain relevant information. However, they typically directed the conversation back to filling in the MUR form. The format of the MUR discouraged wider discussions of the patients' health and illness:

Rose: The Gaviscon, do you take two-spoons at night? [Pharmacist enquires why]

Terrie: Yes ...for silent reflux. It occurs when tiny particles of acid make their way up the oesophagus, damaging the vocal chords...They don't know if it's silent reflux or an ulcer.

Rose: I'm going to put here 'nerves not kicking in properly'. I don't need to give you any more information, but you probably know that it forms a raft on the contents of your stomach and so it prevents the reflux... [Conversation turns to the next medicine].

MUR 7 – Terrie 54yr F. Independent

The above extract illustrates that the pharmacist's conversational turn aimed to promote her agenda of completing the MUR form rather than adapting her response directly to what the patient said. Rose appeared to lack curiosity about the uncertainty expressed by the patient about her diagnosis and failed to explore this. Adhering to the questions listed on the MUR form meant that the opportunity was lost for a discussion that the patient might have found useful. Instead the pharmacist remained focused on the medicine and her remit to provide information about how the medicine worked rather than tailoring the conversation so that it was more patient-centred. Most patients appeared to accept the information provided by the pharmacist about a particular topic. Only on a couple of occasions did patients resist the pharmacist's instructions or advice:

Kate: With ramipril it's better if you take it in the morning.

Anthony: I usually take ramipril and eye drops at night.

Kate: Better off taking it in the morning. Your blood pressure is higher in the morning so it's more effective.

Anthony: I take the ramipril in the evening so I don't forget. So I know what I'm doing.

Kate: So long as you don't forget. It's better to take it in the morning. Take it after breakfast.

Anthony: Probably throws me out [mumbles to himself].

MUR 5 - Anthony 74 yr M. Multiple

In this MUR Kate was persistent that patient took his ramipril medicine in the morning. Her position remained unchanged despite the patient providing a logical argument as to why he took his medicine in the evening: in this case he took his ramipril when he administered his eye drop. Kate did not appear to acknowledge this preferring instead to adhere to her

pharmacological understanding of how she thought the medicine worked best instead of responding and tailoring her response according to the patients' circumstances.

5.3.2.4 Circumventing indeterminacy in the MUR

It became apparent during some MURs that patients used their medicines differently to the way they had been instructed by the doctor. Patients were observed to adjust their medicine taking according to their own set of health beliefs and did not merely follow 'doctor's orders'. However, when enquiring how the patient took their medicines, pharmacists tended to close down or circumvent circumstances where the patients had deviated from the prescribed course. They typically addressed these issues by reinforcing the prescriber's instructions:

Jane: The flecainide [used to treat heart arrhythmias], you take two twice a day?

Konnie: I take one twice a day.

Jane: The doctor's got you down as two twice a day [looks at the prescription].

Konnie: I take one in the morning and one at night.

Jane: You need to have a word with the doctor...

MUR 19 - Konnie 40yr F. Multiple

Esther: ...I find sometimes at night if I take three paracetamol for the pain it works [and takes away the pain].

Rebecca: You shouldn't really do that.

Esther: I find if I take three when the pain is bad it gets me to sleep.

Rebecca: Well, it's best to take two.

Esther: I don't do it often.

Rebecca: The fluoxetine, are you taking that 2 a day?

Esther: I've cut it down to one a day, but if I feel down I step it up to two a day, I adjust it to what I feel like...

Rebecca: And doctor [names doctor] is happy with that?

Esther: Yes.

Rebecca: I'll put on here [types on computer] 'doctor is aware that patient changes the dose'. The main thing is that the doctor is aware, I think that's fine.

MUR 18 - Esther 61yr F. Independent

As the extracts illustrate the pharmacists dealt with more complex issues in a succinct and an apparently superficial manner to allow the review to continue. Pharmacists would frequently record the issue on the MUR form and the advice given to indicate that the matter had been highlighted and addressed. Patients sometimes provided assurances that their doctor was aware of the deviation from the prescribed dose which appeared to appease the pharmacist. The consequence of this was that there was rarely any agreed change to the way the patient used their medicines. Another area of indeterminacy that arose during several MURs was when patients expressed aversion to taking medicines. The grounds for these concerns were rarely explored or uncovered and at times they were ignored totally by the pharmacist:

Kate: ...I'm surprised they've not put you on lansoprazole...

Megan: To be honest I don't want to take any more...I'm fed up, I'm not a pill taker at all...

Kate: Do you retain water?

Megan: Yes...once I've got off to sleep, then it's time to get up again [to go to the toilet...].

Kate: The Calcichew?

Megan: That I don't mind taking, the rest I could put them in the bin.

Kate: Do you take paracetamol...

MUR 9 - Megan 73yr F. Multiple

Jane: Do you have any questions?

Charlie: I don't like medicines; I don't like taking them voluntarily.

Jane: OK.

Charlie: ...they might take the ramipril off.

Jane: Might take you off that one, seems good one less to take. OK any questions or concerns? [Patient does not respond] so I will sign you off then.

MUR 4 - Charlie 68yr M. Multiple

Pharmacists tended to show little curiosity as to why patients had an aversion to taking medicines. Patients desire to be self-reliant and not dependent on their medicines was at odds with the professional view the pharmacists held about adherence to prescribed medicines. On

the few occasions when the pharmacists did respond to patients' concerns about their aversion to medicine taking they tended to adopt a 'biomedical model' approach to the situation. This meant that pharmacists focused primarily on patients' adherence to medicines:

Rebecca: So why come off the temazepam? [If it is working].

Polly: They're addictive, and I don't want to, when I don't take it then I don't sleep

Rebecca: Discuss it with the doctor, but if it's working then why not keep carrying on?...

MUR 16 - Polly 58yr F. Independent

Geri: I don't like taking tablets. I wish I didn't.

Rebecca: The main reason why you're on these [blood pressure medicines and tablets for prevention of osteoporosis] is to prevent you from going onto other things [more medicines] and to prevent you from getting worse...

MUR 12 - Geri 74yr F. Independent

All pharmacists appeared to lack awareness of lay perceptions of health and medicines sticking instead to their well versed pharmacological knowledge. Despite more complex patient concerns being circumvented, MURs did expose pharmacists to individual patients for greater length of time compared with their 'traditional' interactions that occurred on the shop floor.

5.3.2.5 Lack of medical information

Pharmacists' lack of involvement in indeterminate issues may have resulted from a lack of medical background about the patient. Observations of MURs revealed that pharmacists sometimes had to contend with having incomplete information about the patient's medical condition and the medicines that they took. Pharmacists therefore relied on the patient to inform them. This had the potential for the MUR to improve and extend the pharmacists' knowledge of the patient:

Rebecca: How long have you been on the anti-TNF?

Howard: Two and a bit years [Rebecca types the response onto computer]

Rebecca: It's another reason, is good for us to know as I didn't know until you told me...

MUR 20 - Howard 52yr M. Independent

Jane: ...And you're starting on bendroflurazide?

Ashley: No, that was once a day...

Jane: And you're starting on lisinopril?

Ashley: He said that one's going to increase; my blood pressure keeps going up, he said it's the wine.

MUR 27 - Ashley 67yr M. Multiple

It was clear from the MURs that pharmacists relied upon their knowledge of medicines to make inferences about illness for which the patient was being treated. They also relied upon the patient to reinforce gaps in their knowledge of the individual's medical history.

5.3.2.6 Patients' disposition during the MUR

As indicated, most patients appeared to feel comfortable in the consultation and were unperturbed about discussing their medicines-related issues with the pharmacist. A few patients expressed appreciation for the hospitality that the pharmacy provided; this was more noticeable in the independent:

Rebecca: You're both going so well, see you next year...

Adam: This is how private patients are treated [says this to wife].

MUR 3 - Adam 79yr M. Independent

[There is an interruption by Lucy (dispenser) who brings in the tea]

Daisy: I've been given the once over [Lucy hands Daisy tea].

MUR 1 – Daisy 79yr F. Independent)

Most patients appeared at ease with answering the pharmacist's questions. However, a few patients appeared to become confused when asked questions about their medications:

Rebecca: ...And the simvastatin do you know why you're taking that? [The patient is hesitant and does not respond, he seems to have become flustered at the question].

Rebecca: That's for your cholesterol; I'll put some hints on here [the MUR form] so that you can remember...

MUR 6 - Wilson 75yr M. Independent

Such episodes of confusion appeared to last only a few moments and may result from the ‘monitoring’ or ‘testing’ element that patients reported during their interviews. This is explored further in Chapter Six (section 6.4.3). Furthermore, there were a couple of patients who did not appear at ease during the MUR. One patient from the multiple appeared very anxious from the start of his MUR and gave a minimal response to the pharmacist’s questions:

[The patient looks very afraid and is smiling nervously. His arms are folded...]

Kate: How often do you get the blood pressure checked? Is it stable at the moment?

Jimmy: Yes [continues to smile awkwardly].

Kate: With the ramipril sometimes you can get a dry cough, you don’t get anything like that?

Jimmy: No. The last time I got the flu was when I was a teenager. Now I’m 70 [nervous laugh].

Kate: You’ve got a good immune system, hope it keeps like that.

MUR 21 - Jimmy 71 yr M. Multiple

As can be seen from the extract Kate’s use of closed questions called for minimal responses from the patient. Kate’s enquiry into whether the patient’s ramipril was causing a side effect appeared to have been misunderstood by the patient. His response indicated that he had associated the enquiry about the cough for an enquiry about when he last had the flu. Kate instead of clarifying her question agreed with the patient to allow the MUR to continue. Having asked her questions, Kate concluded the review swiftly. Afterwards I mentioned that the patient looked nervous to which she replied: “he’s very sweet and I didn’t want to confuse him”.

5.3.2.7 Interruptions

Ten out of the 54 MURs consultations were interrupted by support staff. This happened to all four of the pharmacists during their MUR consultations with patients. The most common reason for the interruption was that the pharmacist was required to clinically check a prescription for a patient who was waiting:

Michael: My blood pressure was up...

[There is a knock at the door, it is Dawn [dispenser] and she has a prescription in a tub to be checked].

Kate: Is Jane [pharmacist] not down yet?

Dawn: No she's doing Sophie's [employee trainee pharmacist] review [I take the medicine and the prescription and hand this to Kate who puts it on the table and looks at the medicine and the prescription and puts her initials on the label. She hands this back to me to give to Dawn. The consultation continues and the patient continues to talk about his blood pressure. He did not seem to mind the interruption].

MUR 30 - Michael 65yr M. Multiple

[There's a knock at the door and Helen [dispenser] has a yellow basket with a prescription for Rebecca [pharmacist] to check. Helen mentions to Rebecca "she's waiting" indicating the patient on the shop floor is waiting for her prescription].

Rebecca: Usually we don't like to be interrupted, it must be busy [says this to patient].

Polly: Don't worry, you know me well enough. It's not gonna bother me. [Rebecca completes checking the prescription which is for an inhaler. She mentions to Helen the dosage to be relayed to the patient. Helen leaves].

Rebecca: Where were we?

MUR 16 – Polly 58yr F. Independent

Pharmacists accommodated interruptions as they were aware of the consequences of their absence on other pharmacy services. MCA also interrupted MURs to seek advice:

Rebecca: and the Fybogel sachets?

Primrose: I'm trying not to take those.

Rebecca: Fine OK [There is a knock at the door and Cath [MCA] asks if she could sell some Phytex paint. This was for a customer who had requested the item the day previously and which Rebecca had subsequently ordered. Rebecca agrees].

Rebecca: I'm just trying to find morphine [on the medication record], oh yes it was a long time ago...

MUR 19 – Polly 56 yr F. Independent

On two occasions Rebecca left the consultation room altogether to respond to the request of the dispenser to “*do some [prescription] checks*” and returned a few moments later to continue the review. Patients did not appear to mind the interruptions and appeared happy to continue their review once the pharmacist was able to return their focus back to the consultation. Further interruptions occurred when the pharmacist was required to refer to a reference book. No reference books or patient information leaflets were kept in either the multiple or independent consultation rooms and so were unavailable if the pharmacist needed them:

Rebecca: ...Do you know what the strength of it is [Zometa]

Connie: [patient indicates he is not sure]

Rebecca: I'll just get my reference [Rebecca leaves the consultation area... Rebecca returns with the BNF a few moments later]

Rebecca: So you're on Oxynorm...

MUR 21- Connie 49yr F. Independent

Kate... I see you take amantadine

Cady: is that one for Parkinson's disease?

Kate: I don't know...

[Kate then asked me to get the BNF... I left the room for a few moments and went to the dispensary and asked for the BNF. When I returned, the conversation turned to glucosamine]...

MUR 17 - Cady 74yr F. Multiple

Patients whose MUR had been interrupted did not express any resentment or appeared to mind. The pharmacist was prepared to tolerate interruptions to their consultations indicating their desire to maintain the flow of dispensing and shop floor services. Such interruptions signalled to the nature and status of the MUR consultation and how pharmacists were pragmatically accommodating the service. In the following section, I consider the MUR in relation to other services provided from the pharmacy.

5.3.2.8 MURs: a distinct activity

As discussed in the previous chapter (section 4.9), the information collected during the MUR was poorly integrated into the provision of dispensing prescriptions or other services. Referral back to previous MURs was rare and so any matters arising from the MUR that the pharmacist felt subsequently required attention during the dispensing process, were recorded directly onto the patient's PMR. For example, a patient's request for 'loose' tablets instead of a standard blister pack was recorded by the pharmacist on the PMR as a reminder to staff, for when the patient's next medicine was dispensed. The detachment of MUR activity from routine dispensing work was made apparent on one occasion when a patient revealed during her MUR that she had copious amounts of the medicine 'Polytar liquid' at home:

Rebecca: And all the lotions, you're OK to apply them?

Polly: Yes. I tick everything else [besides the Polytar] but they still give me the Polytar. I've got bottles of the stuff at home.

Rebecca: Mention it to us or we can put 'not dispensed' beside it [on the prescription].

Polly: I don't tick it, never, they still give it. But now that I've said this they probably won't do it [laugh].

MUR 16 - Polly 58yr F. Independent

As the extract illustrates, Rebecca was informed that the patient had an excess supply of the medicated shampoo at home. Despite this, on returning to the dispensary and finding the patient's prescription ready to be accuracy checked, Rebecca proceeded and supplied the medicines including the Polytar liquid. Once the patient had left the pharmacy, I enquired whether she had been supplied the Polytar; instantly recognising what she had done, Rebecca put her hand to her mouth indicating surprise that she had supplied the Polytar. MURs were isolated events with little integration into the patient's routine pharmaceutical care during dispensing or any wider liaison with the patient's GP. Pharmacists' views on the integration of information collected during MUR with dispensing are explored in Chapter Seven (section 7.5). The final section will consider how the MUR was concluded.

5.3.3 Ending the MUR consultation

The MUR consultations ended once the pharmacist had completed the MUR form. At the end of their consultation, half of the patients were provided with the opportunity to ask questions about their medicines or their health. Jane was the most consistent in asking this with three quarters of her patients being invited to raise concerns:

Jane: Do you have any concerns about your medicines? Any concerns about your health?

Oprah: No.

Jane: I'll sign you off on the computer then and we're done for the year.

MUR 12 - Oprah 89yr F. Multiple

Rebecca: Do you want to know anything more?

Wilson: I'm quite happy.

Rebecca: It was longer last time, the form's ['Version 2'] shorter now so that we talk about what needs to be sorted out. This is the action sheet, that's for me, we did the review and everything is fine...

MUR 6 - Wilson 75yr M. Independent

Few patients opted to take up this invitation. Most patients were recruited to take part in an MUR on an unexpected and ad hoc basis and may not have had sufficient time to think of concerns and questions they may have had about their medicines (Table One). As a result, some patients reported feeling unprepared for the consultation. The consequences of this will be explored further in the following chapter (section 6.4.2). When patients did take the opportunity to ask questions these were not always fully addressed within the MUR:

Jane: Have you have any concerns about your medicines at all?

Konnie: As I increased the dose [of citalopram] I get shaky...

Jane: It usually takes a couple of weeks to settle, that's quite interesting for me to hear that. Do you have any other problems?

Konnie: I want to stop smoking.

Jane: It's difficult [Jane advises Konnie not want to be over ambitious as her dose of antidepressants is still being increased and that she should wait until she is stabilised]...

You need to be psychologically prepared for it. I think you're doing the right thing. Wait for everything to settle down. Okay I'll mark you off...

MUR 19 - Konnie 40yr F. Multiple

Jane showed little curiosity to explore further into the patient's side effect from her citalopram. The scope for managing or being able to influence the care of the patient's prescribed medicines was limited. Likewise, although sympathetic to the patient's request to stop smoking, Jane had not suggested a further review of this or had invited the patient back once she had been "stabilised". In contrast to Jane, Kate rarely provided patients with the opportunity to ask questions at the end of the MUR:

Kate: Do you take anything over-the-counter?

Faith: No.

Kate: That's pretty much it, you don't take anything else?

Faith: No.

Kate: So you know what you're doing with your medication, and you've had your annual check up, and I'll leave it to my colleague... [Pharmacist leaves].

MUR 20 – Faith 88yr F. Multiple

As the extract illustrates Kate assumed at the end of most of her MURs, that the patient was sufficiently knowledgeable about her medicines to allow her bring an end to the consultation. Most MURs ended with few outcomes for patients and when a problem with medicines did arise, this was often dealt with by referring the patient back to the GP. Kate occasionally provided the patient with a copy of the MUR form or informed them that this would be posted to them. However, on most occasions Jane and Kate took the MUR form away with them. They did so in order to complete the patient and prescriber's details that appear on the MUR form (Appendix Two). Jane rarely offered patients a copy of the MUR form. She mentioned, in an informal discussion, that she did not have time to fill out the paperwork during the consultation and did not offer to post these as she found this created a "backlog" of MUR forms. Patients therefore did not always receive a copy of the MUR form. In the independent, Rebecca usually printed the electronic copy of the MUR form once the consultation ended. She offered the form to the patient which most accepted.

5.4 Summary

In this chapter, I have presented the findings from the 54 MURs that were observed during fieldwork. All the pharmacists adhered to a format for conducting MURs which was largely determined by the structure of the MUR form. Pharmacists enquired into patients' reported adherence with each of their medicines, their understanding of what the medicine was for, reported side effects and whether the patient was able to administer the medicine successfully. Patients did not ask many questions but when they did, the pharmacist appeared to respond to these adequately. The MUR service had enabled the pharmacists to talk about medicine-related issues which would have otherwise not have been actively discussed with the patient. Compared with the 'usual' care the patient received on the shop floor this interaction was private and more comprehensive. Most patients appeared comfortable during the MUR and the pharmacist's enquiry into their use of medicines allowed the scope for some patients to discuss other and sometimes sensitive topics privately.

Although pharmacists filled their obligation of asking the questions about the patient's medicines use, they appeared to be subordinated to the 'technology' of the MUR form. Pharmacists dominated the consultation through their professional discourse providing information in an instructional manner in a way that was similar to their interaction with patients while handing out dispensed medicines. Questions such as to whether the patient could swallow tablets, when there was no reason to suspect they could not, meant that pharmacists failed to tailor the MUR to the individual patient. Pharmacists tended to take an inflexible view in circumstances where medication was being used in ways other than had been prescribed. They chose not to speak to the GP directly but relied on the patient to do this. This reduced the scope for possible inter-professional collaborative work or for pharmacists to enhance the public's view of their professional role. The suggestions and information they imparted was to 'correct' patients' use of medicines rather than to understand their perspectives and assist them to make an informed choice about the individual use of their medicines.

In responding to the pharmacist's questions, patients often contextualised their medicine use by speaking about their illness. However, pharmacists rarely responded to the opportunity to explore or learn about the nature or significance of patients' understanding of their medicines and illness. There was a lack of evidence that pharmacists were aware of lay beliefs about

medicines. For example when patients overtly expressed an aversion to taking medicines, exploring the grounds for these concerns was not undertaken but rather pharmacists mainly exhorted patients to take their medicines as prescribed. Because of the narrow scope of the MUR, pharmacists focused predominantly on medicines and relied heavily on the prescriber's instructions to circumvent or close down more indeterminate or contentious medicine-related matters.

During the MURs patients concurred with or minimally acknowledged the pharmacist's utterances and the closed format of the consultation, left patients little scope for a more open discussion of their health and medicines. The pharmacist somewhat superficially confirmed that the patient was taking their medicines and were content when the patient agreed, when asked, if they knew what they were for. Patients did sometimes seize opportunities to ask questions, though these were mainly about practical issues for which they sought reassurance. Patients expressed varying degrees of individual need, yet pharmacists treated them in a standard fashion. This left an impression that the pharmacist was 'checking' or 'monitoring' patients medicine use. MURs were driven by professional conceptions of what should be achieved and there was little evidence of the consultation being responsive to patient cues or to help patients identify issues that would benefit from the pharmacists' input. Patients were not asked at the beginning what they wanted from the MUR. The lack of freedom to set their own agenda led them to be passive recipients of the service. The next chapter will develop the topics introduced in this and the previous chapter to explore patients' perspectives of the MUR.

CHAPTER SIX

Patient perspectives of MURs

6.1 Introduction

This chapter builds on the previous two by presenting the findings from the patient interviews. I begin by considering the context in which the participants visited the pharmacy and why they decided to accept or decline the invitation for an MUR. Following this, I describe how they perceived the MUR experience and how they contextualised this within their wider health care needs. I then investigate patient accounts further by identifying whether or not the aims of the service are being realised. Lastly, the suggestions made by the participants for improving the service are presented. Patients provided a range of views about the MUR service. Sometimes patients liked certain aspects of the MUR service whilst disliking others: a complex picture therefore developed and the different perspectives are represented in this chapter.

6.2 Participants

Thirty four patients (11 men and 23 women) who were observed having an MUR and three patients (one man and two women) who had declined the offer were interviewed. Interviews with patients typically took place a week after their observed MUR or their declination of an MUR. All but two interviews took place at the pharmacy where the MUR was performed, with the remaining two taking place at the University of Nottingham. Patients who had declined the invitation were interviewed by telephone which lasted between 10 to 20 minutes. Patient interviews about their experience of their MUR lasted between 20 minutes and one and a quarter hours (typically 45 minutes) and all were audio recorded.

6.3 The patient and the pharmacy

6.3.1 Frequency of and reasons for pharmacy use

Patients reported visiting the pharmacy between a few times a week to once every two months and used this particular pharmacy for pragmatic reasons such as close proximity to where they lived. The pharmacy was perceived as the place to collect their prescribed medicines but respondents also mentioned visiting the pharmacy to obtain OTC medicines and advice for treating their minor ailments such as sore throats or flu. Some patient accounts recognised the dual nature of the pharmacy to provide both professional and retail services:

Researcher: ...How often do you use the pharmacy when you pop in?

Renita: Well every time I've got a prescription really....they do a toothbrush which I can only get in here as well.

Patient interview 9 - 53yr F. Independent

Nicola: Well I'm in here probably every day, couple of times a week...I am a bugger for bargains, if there's a bargain I'll pick it up...

Patient interview 16 - 68yr F. Multiple

Whilst obtaining prescribed medicines was the main reason for using the pharmacy, patients also bought OTC medicines and retail items. This finding, although seemingly obvious, is important as patients' perceptions of what the pharmacy and the pharmacist offered did not include the MUR service or descriptions of any similarly related activities. The following two sections explore this further and considers patient expectations of the pharmacist and views on the pharmacist's role in relation to prescribed medicines.

6.3.2 Patient expectations of the pharmacist

Most patients viewed the pharmacist as a useful contact and felt that it was comforting to know that they were available when they needed them. Several patients commented that the pharmacist could provide "*confidential*" and "*unbiased*" opinions and information:

Ashley:...[doctors] we need them and they've got to be there, but they don't always talk the same language as Joe public...the pharmacist, if you've been taking your prescription there regularly, they become 'morning, you alright'. A doctor's not like that. There you've got 10 minutes, sit down, tell me, I'll do this...[pharmacists] they're there and they're easier to talk to and communicate with...you basically feel you've got a friend for life...

Patient interview 14 - 67yr M. Multiple

Researcher: ... What sort of relationship do you have with the pharmacist?

Daisy: Yes I'm alright with Rebecca, I mean, if you want to ask her any questions you can. I believe if you wanted to ask her something confidential she would keep it secretive it wouldn't be spread around...

Patient interview 2 - 79yr F. Independent

The pharmacist was viewed as a trusted and accessible source of information, someone who was less busy than the GP and who could be approached informally but also confidentially. Some patients commented that they used the services of the pharmacist when they perceived that the issue over their medicine or health was not significant enough to bother the GP. Pharmacists were seen to help decide whether or not it was necessary for the patient to consult their GP and so prevent them from making a wrong judgement:

Harry: ... so rather than waste the doctor's time, if I come here and she'll say "go to your doctors", that's fine I accept that, and you go...she might just say "oh take this and you'll be alright"...I would accept what she said.

Patient interview 1 - 75yr M. Independent

Other than the MUR, patients did not describe the pharmacist's role to extend to private discussions in the consultation room. The fieldwork observations supported this with MURs being the only reason for pharmacists having a 'sit down' discussion with a patient about their medicines. The MUR was therefore viewed as an unusual activity for patients in the pharmacy. Patients were asked about the advice they sought from the pharmacist. Their responses indicated that the pharmacists' perceived mandate was strong when providing advice on

treating minor ailments and on which OTC medicines could be safely used with prescribed medicines:

Researcher: ... What sort of advice do you ask in the pharmacy?

Wilson: Well it's usually related to the drugs. If I'm doing this, will it react with so and so...once my wife got a rash on the back of her neck. She came in and asked for advice, they know her medication here; advised her what to get. It worked very well.

Patient interview 4 - 75yr M. Independent

Pharmacists' remit for providing advice on prescribed medicines was more limited and these existing perceptions influenced how useful they perceived the MUR service.

6.3.3 Pharmacists' role in relation to prescribed medicines

In contrast to patients' positive views about the pharmacist's ability to provide advice on the treatment of minor ailments, the extent of their involvement with the patient's prescribed medicines was perceived to be confined to a supply role:

Researcher: ... who do you think has the main authority [over prescribed medicines]?

Daisy: Well it's got to be the doctor hasn't it...I mean, she's the only one that knows all the illnesses and everything. She's got your medical records hasn't she?

Patient interview 2 - 79yr F. Independent

When asked who they thought had the main authority over their prescribed medicines, most patients indicated that it was the GP / doctor who was responsible for prescribing for the illness and who also had access to their medical records. Nearly all patients perceived that the pharmacist held a subordinate position to the medical profession. The pharmacist was acknowledged to be an expert about medicines rather than prescribing or managing the patient's illness. Nevertheless, the pharmacist was seen by some as an important failsafe to ensure patients were aware of changes to medicine regimens or in the event that the GP had made an error:

Charlie:...I thought the pharmacist had two roles really. One to dispense what the doctor prescribed...the second was sort of 'wrong-stop' just in case it was obvious that the doctor had got it wrong...I mean anecdotal evidence would suggest that it does occur sometimes.

Patient interview 4 - 68yr M. Multiple

Pharmacists were perceived to be lower in the professional hierarchy, being consulted for issues that were perceived to be too trivial to warrant a visit to the GP. The use of the pharmacist provided patients with an alternate source of professional advice. In extending the professional hierarchy, one patient who was receiving specialist care from a rheumatology clinic felt that his GP lacked sufficient knowledge to treat his pain:

Howard: ...It's purely because the GP probably wouldn't know what to do, because of the combinations [of medications]...I go straight to the hospital, it's easier...

Researcher: ...You wouldn't even consider going to your GP first?

Howard: No unless it's out of hours.

Patient interview 16 - 52yr M. Independent

This extract is revealing as the patient's choice of health professional was determined by their perception of who would be best to help them. The specialist nature of Howard's treatment meant that he saw the GP as subordinate to his consultant in the professional hierarchy. Likewise, patients perceived the pharmacist role to be subordinate to that of the GP. As we shall see, the perceived role the pharmacist held had important implications when patients' constructed their experience and attached value to the MUR service. Significantly, the patient's depiction of what they expected from the pharmacist did not include reference to them reviewing prescribed medicines. These attitudes were evident when the patients were asked about their awareness of the MUR service.

6.4 Patients perceptions of MURs

6.4.1 Awareness of the MUR service

Patient awareness of what the MURs could potentially offer them was poor. Although the MUR service had been available since 2005, patients who had not previously been approached had not heard of, or were only vaguely aware of, the service:

Researcher: ... Have you heard about these medicines use review before?

Terrie: No. I haven't...

Researcher: I think there are probably posters out...

Terrie: You don't look actually, I mean if you're involved with it you look, but you know when you're sort of focused, in a hurry, you want your prescription...I wouldn't hesitate to ask if I needed any sort of wider information.

Patient interview 3 - 54yr F. Independent

Most patients who had not previously had an MUR lacked awareness of the service or confused the service with other services provided from the pharmacy such as minor ailments services³. However, not all patients were unaware of MURs. A couple of patients reported seeing advertisements in the pharmacy or had spoken to others who had a review:

Researcher: ... Have you ever heard about the service?

Alison: Yes...I wondered why I haven't had one actually...everyone was having one...

Researcher: Where did you hear this from?

Alison: Oh I don't know, I think I just picked it up on the grapevine you know, friends who've had it and I've seen signs about it I think...

Researcher: ...Is there any reason why you didn't come and ask for a review here?

Alison: Um, because I didn't think I needed one really I guess. I see the doctor quite often...

Patient interview 7 - 46yr F. Independent

³The minor ailment scheme is an Enhanced service that allows patients to consult the community pharmacist rather than the GP for a defined list of minor ailments. The scheme allows patients who are exempt from NHS prescription charges to receive treatment from an agreed local formulary free of charge from the pharmacy.

Researcher: ...So you've actually heard about medicines use reviews?

Summer: I did, can't remember, probably at the counter.

Researcher: ... But you've never had one in the past?

Summer: No, I haven't had one; I just made a mental note because if I hadn't gone into my doctor, I perhaps would have requested one.

Patient interview 12- 62yr F. Multiple

Twelve out of 37 patients who were interviewed reported having had a prior MUR. However, when asked about their previous MUR, most patients could remember few, if any, details:

Researcher: Do you remember about [previous MUR]?

Wilson: I can't off hand; I seem to get roped into so many things...

Researcher: ... Were you aware that the pharmacy actually offers these reviews to you?

Wilson: No I wasn't, it's useful to know that, I wasn't aware of it till it happened.

Patient interview 4 - 75yr M. Independent

Patients who had reported having a previous MUR did not portray this as an opportunity to discuss concerns or medication issues with the pharmacist. This is unsurprising given the fact that their previous MUR consultation may have also been dominated by the pharmacist asking closed questions. Most MURs were brief encounters taken up with the completion of the MUR form and pharmacists did not communicate effectively to the patient that the MUR was supposed to be for their benefit. Before exploring patient views of the MUR, the next section focuses on participant views on being invited or the reasons why they chose to decline the invitation for an MUR.

6.4.2 The invitation

6.4.2.1 Reasons for accepting an MUR

Patients were asked to describe how the pharmacist or the pharmacy staff invited them for an MUR. Their accounts supported the observations. Patients reported being asked if they were willing or wanted to participate in an MUR and if they had some “*time to spare*”:

Researcher: Do you remember how you were approached initially?

Primrose: The lady came up to me and said would I mind going through my medication with um the pharmacist and just to kind of make sure that we both knew why this medication was being prescribed. And it was just something that um chemists are having to do now.

Patient interview 17 - 56yr F. Independent

Most patients were invited in an ad hoc way when collecting their prescription. However, this meant that patients did not expect to sit down and discuss their medicines with the pharmacist:

Researcher: Were you expecting a review?

Alison: No...just picking up my medicines.

Patient interview 7 - 46yr F. Independent

Nick: No [laugh] no, Jane [pharmacist] just collared me [laughter].

Patient interview 13 - 80yr M. Multiple

One patient described how her particular MUR invitation came about:

Polly: Well I came in here to collect my ordinary prescription... and I had with me my sponsor form for my 'Race for Life' and I asked if anyone would be prepared to sponsor me...Lucy [dispenser] said 'I'll do you a swap. If you do the review for me I'll sponsor your Race for life'. So that's how it came to be...I was brought in here and I was offered a cup of tea...

Patient interview 15 - 58yr F. Independent

The extract illustrates the opportunistic approach pharmacy staff took in order to recruit patients for an MUR. The ad hoc approach used by the pharmacy staff appeared to take a couple of patients by surprise. They revealed that because they were caught unaware they unthinkingly agreed to the invitation:

Researcher: ...Were you expecting a review last Friday?

Queenie: No, no I was completely gobsmacked when she asked me...I don't know why I said yes, I just said yes automatically I think, yeah...I think she threw me a bit so I just said yes automatically and had no idea what was coming.

Patient interview 10 - 81yr F. Multiple

Not all patients were positive in response to the offer of an MUR. Some reported that if they did not have the time they would have declined the invitation:

Researcher: ...Would you have preferred maybe some prior notice about the review?

Moya: No, no doesn't matter really, if we hadn't had time that day, then we would have said "well I'm sorry but it's not convenient" and then we'd have to come back some other time.

Patient interview 10 - 79yr F. Independent

Although most patients felt that the ad hoc approach taken by the pharmacy was acceptable some indicated that they would have liked some prior notice:

Konnie: ... I was kind of not expecting it...if it's supposed be beneficial for us, we need to be given a bit of time about what we want to know...I would have asked about my anti-depressants, can I take them together? Does it matter what time of the day I take them?...although my doctor's very good, she just gives you the prescription...what would happen if I wanted to half the dosage... I can't really make an appointment to just go and ask my doctor this. You kind of wait until the next time and then, if you're going in for something else you forget.

Patient interview 11 - 40yr F. Multiple

The lack of prior notice appeared to unsettle a few patients who then felt less engaged to talk to the pharmacist during the MUR. Konnie, in particular, recognised that the MUR was supposed to benefit her and revealed questions that she would have liked to have asked the pharmacist if she had been given the opportunity to think about the review beforehand. As the extract illustrates, these were complex issues which were not addressed through the structured format of the MUR consultation.

When patients were asked why they accepted the invitation for an MUR they reported a range of reasons. Most patients reported being indifferent when asked how they felt about being invited for an MUR. They generally accepted the invitation because they were asked by the pharmacist or staff with whom they had a good relationship. Even though patient awareness of the MUR service was poor, patients did not appear to feel threatened by the invitation:

Researcher: Why did you agree to that review, was there any reason?

Eve: No, I just thought she asked.

Patient interview 5 - 75yr F. Independent

Researcher: ...but why did you agree?

Iris: Well I suppose I agreed, uh I don't really know, suppose because she asked me the question [laughs]...I suppose it's good. I mean she said to me some people are probably taking medicines and they don't even know what they're taking them for. So I think it could be quite useful really.

Patient interview 7- 65yr F. Multiple

Patients generally appeared to accept the invitation for MURs because they felt obligated or were willing to help the pharmacist. Several patients had the impression that the MUR was an activity the pharmacy needed to undertake. In accepting the invitation for the MUR their responses did not seem to be strongly motivated by self interest or the prospect of personal benefit. Several patients accepted the invitation because they were curious or acknowledged that it was good to keep up to date with their knowledge of their medicines. A couple of respondents revealed that they welcomed the opportunity to raise a concern about specific issues with their medicines:

Researcher: Why did you agree?

Howard: Just out of interest, you know to keep up my own knowledge and make sure I hadn't missed anything...

Patient interview 16 - 52yr M. Independent

Researcher: What do you think their intention was at the time?

Summer : Um to review the medicines that I'm on, I was quite happy to do that 'cause I've just had a review with my doctor and I have one or two issues that I've had with my medication in terms of side effects....so I was quite interested actually on your [pharmacist] take on my medication.

Patient interview 12 - 62yr F. Multiple

The MUR was seen by these patients as an unexpected encounter but one which was a welcome chance to refresh their knowledge or gain some insight about a particular issue about their medicines. Although patients were comfortable accepting the offer for an MUR at this pharmacy, several reported that they would be less comfortable or would decline the offer if they went elsewhere to a pharmacy they were less familiar with. The relationship with the staff therefore appeared to be an important factor for patients to accept the invitation for an MUR:

Comfort:...I would have felt more at home here than going into a strange one [pharmacy] and discussing all my um things you know...I not saying I wouldn't do it, but I'd be more thinking what should I say, what shall I do, not being in with someone that knows me as well as I know them...

Patient interview 15 - 72yr F. Multiple

Ashley:...If I walked into [name of another pharmacy] for example, took my prescription in and he asked me to do a prescription review, if I'd got no problems I'd say "no I'm not bothered thanks" and come out cause' I wouldn't know who I was talking to...

Patient interview 14 - 67yr M. Multiple

Only one patient (Nicola) was observed to ask the pharmacy staff for an MUR. When asked why she did this, she mentioned specific concerns about her medicines that she felt the pharmacist could answer:

Researcher: Why did you ask for a review?

Nicola: Because they're offering it...that's the only reason...and just want to make sure...if I could take them in one go in the morning, in one go at dinner and one go at

night rather than individually...so I thought I'd just check...I just recently started taking paracetamols... I did ask the doctor if I could take up to six and she said eight, so I just wanted to make sure with the other tablets. I thought there's nothing wrong with having it confirmed, a second opinion if you like [laughs] I wouldn't want my doctor to know that [laughter].

Patient interview 16 - 68yr F. Multiple

Nicola saw the MUR as an opportunity to address her concerns about her medicines and this was a means to provide reassurance. Significantly, she revealed that she did not want the doctor to know this for fear that her doctor may become “*upset*”. Some patients recognised that there was potential for the MUR to cause tension between the GP and pharmacist which could impact on professional boundaries and responsibilities and this is discussed further in section 6.4.5. As they were not widely aware of the service and given their existing preconceptions and experience of pharmacy services, patients’ reasons for accepting the invitation for an MUR was rarely based upon an understanding or awareness that the overall aim of the service was to improve their knowledge and use of medicines.

6.4.2.2 Patients’ reasons for declining the invitation for an MUR

Having explored patients’ reasons for accepting the invitation for an MUR, further insights about patients’ perceptions of the MUR service were gained through considering why some declined the offer. Eight patients were observed to decline the offer of an MUR: one patient from the independent and seven from the multiple. In the pharmacy, two stated that they did so due to a lack of time and three refused outright without reason. However, interviews with the remaining three revealed a more complex picture. Despite previously having had an MUR, one patient was observed declining the offer from the pharmacist because he perceived this would result in more medication. In his interview he revealed that he could not remember many details of his previous MUR other than being asked whether he was taking the medication, how he felt about them and if he was happy with the service from the pharmacy. He reported being “*very impressed*” with pharmacy services and the advice that he received from the pharmacy. Nevertheless, he revealed that his main reason for declining the invitation was because he had recently been diagnosed with throat cancer and was overwhelmed by his personal circumstances. He therefore just wanted his prescription filled:

Zach: ...I said 'I've got one or two things on my mind at the moment' and I wanted to basically get in, get my prescription and get out...believe me, she's a charming young lady and I like her company so there was no problem. It was just the fact that I've been recently told I've got cancer of the throat...so, I've had my mind full of other things.

Patient decliner 1 - 70yr M. Independent

Zach mentioned in his interview that he would be happy to take part in an MUR when things had settled and "*if it helps the system run smoothly*". The other two patients declined the MUR reporting to the pharmacy staff they had previously completed a "*review with the doctor*". During the interview, it transpired that one of these patients said that the two medications that she was taking (Hormone Replacement Therapy (HRT) tablets and ranitidine) were not "*important*" enough to warrant a review:

Researcher: ...How did you feel being asked about having one [MUR]?

Xena: Well I didn't think there was a need because I'm not on any sort of important medications if you like...I'm not on anything sort of for blood pressure. If I had something like that I would have a review.

Researcher: Is that why you declined the offer?

Xena: Yes.

Patient decliner 1 - 66yr F. Multiple

Xena felt the MUR was a good idea in principle and appropriate that pharmacists should be involved in MUR activity. However, she felt that these would be more useful for patients on more "*important medications*". When asked whether she had any concerns about her medicines, she revealed that some supplies of her ranitidine did not seem as efficacious as others:

Xena: The only thing that concerns me is I've been to different pharmacies and the tablets seem not as good in one as another...

Researcher: Do you think that this would have been an issue that you would have discussed with the pharmacist?

Xena: Yeah, actually probably would. Yes.

Patient decliner 1 - 66yr F. Multiple

The extract illustrates that Xena had not realised until the interview what the MUR could offer her. The approach taken by the pharmacy staff had therefore not conveyed this effectively enough. The third patient who was interviewed described the review as “*bureaucratic*”. Observations in the pharmacy revealed that the invitation made by the pharmacy staff was typical of how other patients were approached. However, this patient revealed in her interview that she did not want an “*extra layer*” of involvement.

Zara: ... I'm not particularly impressed with anybody who I feel is putting pressure on me...I don't want another level where I have to see the pharmacist as well...there seemed to be that slight pressure, you know, “this is what we do now” you know, “this is NHS regulations”, you know “so we really ought to be doing this now”, that's how I felt about it.

Patient decliner 2 - 53yrs F. Multiple

Zara expressed noticeable resentment about the pressure she felt over the way she was offered the MUR. Another important factor was that she did not live near the pharmacy and it was not made clear whether she would have the MUR immediately or later via an appointment. When asked whether she thought that she was the type of person who would benefit from having an MUR she clarified:

Zara: No, for one thing I'm not interested and another thing I know I'm only on blood pressure and cholesterol [tablets]...it's better for me to take my blood pressure in the morning and my cholesterol in the evening. I know that already and if I get any side effects...I will go and see somebody...through my own choice, to me it's a bit like hard selling through the telephone.

Patient decliner 2 - 53yrs F. Multiple

Zara agreed in principle that the MUR was a good idea but felt the additional involvement from the pharmacist, for her personally, was unnecessary. She mentioned that a pharmacist should be available if a patient wanted to discuss “*something medical*”. She did recognise that the MUR could be beneficial for some, such as young mothers or for older people who find it difficult to see the doctor. However, she was not one who passively accepted the ‘status quo’:

Zara: As I said, it's probably a good idea for some people and perhaps it's a route around if you can't get in to see the doctor or whatever. But I tend to be anti-establishment anyway so the least I get involved with them the better [laughs].

Patient decliner 2 - 53yrs F. Multiple

Zara acknowledged the MUR could be useful for some patients but held strong personal views not to be 'cajoled' into accepting the offer from pharmacy staff. These three patients gave pragmatic reasons for declining the invitation for an MUR when approached in the pharmacy. However, more complex reasons for declining the offer were only revealed in the interview. Their initial response hid what might have been construed as less acceptable or more complex motives for declining an MUR. In the following section I return to focus on patients perceptions of the MUR consultation.

6.4.3 Patient perceptions of MURs

6.4.3.1 The consultation room

There were a range of views reported about the consultation room. Most patients considered that the consultation room, in both pharmacies, was adequate for undertaking an MUR. No patients felt that privacy was a problem:

Researcher: ...What did you think of the consultation area?

Wilson: I think it's very good, all pharmacies should have them...if there's a shop floor, you don't want your views in public and sometimes you want that bit of confidential information...It might only be trivial, but at least you're getting satisfaction and you get a proper answer. There is nobody [saying] "oh what's he taking that for".

Patient interview 4 - 75yr M. Independent

Researcher: What did you think of the little room?

Beth: Quite nice, yes nice and private. And you know nobody can see you and what's going on in there, it's quite nice, puts you at ease...

Patient interview 3 - 76yr F. Multiple

Most patients welcomed discussions being in the consultation room rather than on the shop floor, where it was felt that conversations could be overheard. However, several patients reported being dissatisfied with the room and voiced strong opinions that it needed to be improved. Within the multiple, the lack of a window and the bare walls made a few patients feel that the room was “*intimidating*” and “*claustrophobic*”. The size of the room was also an issue for some:

Megan: The room was appalling, I mean even this is untidy [managers office], but it's better than that room. It's sort of like a portacabin really isn't it.

Patient interview 5 - 73yr F. Multiple

The pokey, bare, cupboard like room promoted a poor image for the place where MURs were undertaken. Patients who were dissatisfied suggested that the room could be more welcoming by having a window and soft furnishings. A sitting or coffee room environment was suggested by one patient which would create a more relaxed atmosphere. Within the independent, one patient commented that the room was like a storage area, another mentioned that the area was cramped:

Researcher: What did you think of the consultation area?

Renata: [Laughs] Bit cramped...well I mean, if that was out of the way [refers to empty water containers] it wouldn't be so bad.

Patient interview 8 - 81yr F. Independent

In Renata’s case above, two people were invited for an MUR (mother with daughter) and this made the seating arrangement restrictive. Poorly accommodating patients may have affected how patients perceived the value of MURs and the status of service.

6.4.3.2 Describing the MUR

Patients were asked to recall their experience of what happened during their MUR. Respondent accounts supported the fieldwork observations made during their MUR. Patients provided ambivalent or somewhat confusing accounts of their MUR. Most patients generally described how the pharmacist “*went through*” their medicines and had asked them questions to see how and why they took them:

Moya: Well all the medication was discussed and how I took it and why I didn't take it and whether I was taking it right and the workings of it you see. So I thought, you know, it was quite good.

Patient interview 10 - 79yr F. Independent

Researcher:...What do you remember of the review?

Molly: I remember the young lady...and she asked me the questions, and you sat in, on a stool against the door...

Researcher: Is there anything in the consultation that stood out? Or made you think?

Molly: Not really no. Not that I can think of, everything was just plain sailing.

Patient interview 6 - 76 yr F. Multiple

Jacques: Um we were discussing the actual uh medicine, medication that I was taking, if there'd been any changes ...I was involved in whether or not it was accurate.

Patient interview 9 - 78 yr M. Multiple

Many patients framed the MUR as having an important monitoring or checking function that ensured that they took the medicine correctly and to ensure they had not “misunderstood” any directions on their medication. Patients were asked what they thought the purpose of the MUR was. Most acknowledged that the MUR benefited them in some way. One reason was to ensure that the medication they took was appropriate and necessary:

Primrose: I thought it was to um, to make sure I have a better understanding of what I'm taking and because there are certain things I have to take at certain times and in a certain way. Um I thought perhaps it was an opportunity to go over that, to make sure that I've not got confused about anything.

Patient interview 17 - 56yr F. Independent

Researcher...How would you describe the review to someone who hasn't had it before?

Comfort: Well I think it's very helpful to the customer uh if they do want to discuss things in private...it made me feel a bit more confident; thinking well, am I doing the

right thing, am I taking the right thing, am I taking it in the right way. Yeah it's helped me, it really has.

Patient interview 15 - 72yr F. Multiple

Nearly all patients described the MUR in positive terms. Most accounts suggested that the pharmacist provided reassurance for them about their medicines. The process of asking about each medicine in turn provided patients with confidence that they were "*doing the right thing*":

Nick: ... I found it very helpful that first of all it was quite relaxed and secondly...it was useful to go through each and every piece of medication. I suppose really 90% of the time confirming what I already knew, but it doesn't do any harm to refresh your memory. Because occasionally they do change medication...

Patient interview 13 - 80yr M. Multiple

Fiona:...I did find that very helpful, you know although I was probably doing the right thing all along, but it's still nice to have somebody, an expert to tell you are doing the right thing. And um you never know when there might be something that will crop up that I might want to ask you about...when you come to see the pharmacist, she had it all there...it was nice for me to think well she can see everything that I'm taking.

Patient interview 2 - 70yr F. Multiple

When patients were asked if the MUR improved their knowledge of their medicines there was little evidence from their responses that it did so. Rather, as the extracts illustrate, the consultation provided reassurance that they were taking the medicines in the right way. These responses are further investigated in section 6.5.5.

Patients were asked whether they felt comfortable or apprehensive during the MUR. All of the patients reported feeling comfortable speaking to the pharmacist. Several patients appeared to value being invited for an MUR and showed some appreciation to the pharmacy for the service that was offered to them. As well as providing reassurance about their medicines, patients also expressed gratitude to the pharmacist and commented that they felt special because the pharmacist had spent time with them:

Renata: ...You feel they know more about you and what your needs are and they get to know you. In fact, in here they do, very friendly um and I think you feel they're more interested in you, than actually some doctors are [laughs].

Researcher: ...Do you feel it's necessary [MUR]?

Renata: ...it's so new to me; I don't, yeah in a way, yes I do. If it's worth their time, it's worth mine.

Patient interview 8 - 81yr F. Independent

Mia: ...in fact I'm glad that they remembered me as an individual, 'cause nowadays, hospitals and things like that, you're like a conveyor belt and nobody seems to have time to talk to you.

Patient interview 17 - 66yr F. Multiple

Despite a lack of perceived personal usefulness to improve their knowledge of their medicines, most patients valued the pharmacists' advice and opinions during an MUR. Others made wider comments that the MUR was useful particularly in reducing the workload of the GP:

Researcher:...Do you think that your pharmacist should be involved in services like this?

Robert: Oh yes. I think they can be quite useful really and take a lot of strain from the GP's at times, you know, with minor things...rather than seeing the doctor at every end and turn.

Patient interview 1 - 79yr M. Multiple

Annabel:...It seems to me that the Government is trying to pull loads of things away from the doctors, aren't they? Onto other people; nurse practitioners are prescribing drugs um and all that kind of thing. I mean you get doctors now that cannot take blood because they're just not used to doing it.

Patient interview 14 - 61yr F. Independent

Patient responses were shaped by their previous understanding of what the pharmacist did. Participants viewed MURs as a means to manage minor concerns that could be resolved by speaking to the pharmacist. MURs were therefore perceived to have a role to play in saving GPs' time and reducing their workload. In contrast to these views, a couple of patients

recognised the time constraints the pharmacist was already under. One respondent considered the potentially adverse impact MUR might have on the pharmacists' workload.

Beth:...I don't think they should be pulled from there to do that sort of work, in that room, reviews, and then have to go back again. Because that's their job isn't it, tablets pharmacists...sometimes that's how mistakes are made, they're rushed...Pharmacist's job is tablets, medicines and that's their job, and a review should be with a another person or with another pharmacist that knows what they're doing. Not doing two jobs at once.

Patient interview 3 - 76yr F. Multiple

As the extract illustrates Beth had concerns over the perceived additional task the pharmacist was required to undertake. The following section explores misunderstandings surrounding the MUR service.

6.4.3.3 Misunderstanding the purpose of MUR

It emerged from the interviews that not all patients had been fully informed about what the purpose of the MUR service were. There were a range of misunderstandings. Some patients perceived that by agreeing to the invitation by the pharmacy staff that they were helping the pharmacy or pharmacist in some way:

Researcher: So on Saturday you came in, presumably you weren't expecting a review at all?

Terrie: No absolutely not [laughs], I was in a hurry actually...I didn't mention it, because I thought if I can be helpful with this...it's obviously more important than what I've got planned...

Patient interview 3 - 54yr F. Independent

Researcher:...Do you feel that the review is therefore necessary for people like yourself...?

Primrose: Well I didn't think that the review was uh specifically to help me anyway. I felt that the review was to also have the pharmacist put in the picture and kind of involved with my on-going treatment. So to me although I'm up to speed and informed

with what's happening with myself, I felt that I was happy to do the interview for the benefit of the pharmacist.

Patient interview 17 - 56yr F. Independent

The deference felt for the pharmacist and the sense that they had been asked to undertake an MUR was a strong motivator for patients to take part in the review. Some patients perceived that undertaking the MUR would enable the pharmacist to be better informed about their medicines. This in turn would be useful if a subsequent problem about their medicines arose in the future. Pharmacists' lack of tailored explanation as to the purpose of MURs meant that patients who were less able to understand remained confused after the consultation. Despite having had now two MURs, one patient enquired during the interview what the purpose of the MUR was and why it was being done. He also queried if it was an "*annual thing*":

Morris: I'm just wondering what's the purpose of it, why it's being done? Because I suppose the GP knows all about it, it's done with their support...

Patient interview 11 - 79yr M. Independent

A further patient described his MUR as an "*interview on a research programme*" suggesting that the recruitment process used for this study appeared to have shaped to how he perceived the purpose of his MUR. The following section will further explore how patients contextualised their MUR in relation to other health services they received.

6.4.4 Contextualising the MUR within the patient's wider health care

Patient interviews aimed to better understand how patients contextualised the MUR within their existing framework of care. The following three sections will explore this in more depth. Patients were asked about other health professionals that were involved in their health care. As mentioned, all patients perceived their GP to be the main authority over their medications and considered that problems with their medications would be best resolved by talking to them rather than with the pharmacist during an MUR:

Researcher: ...[what] if you had a side effect with your medication?

Adam: I'd go and see the doctor...I wouldn't ask these...only because in ranking...that's what he's [doctor] there for...

Patient interview 6 - 79yr M. Independent

Jill: ... If it is a real concern then I would go back to the GP. I mean I do go back to the GP every so often for a review of my tablets, I do do that, I've got another one next week...

Patient interview 8 - 76 yr F. Multiple

Patients viewed the pharmacist as subordinate to the GP. This meant that when a patient considered a problem to be more than a minor practical issue, it was reserved for discussion with their GP who had originally prescribed the medicine. Most patients saw their GP periodically and revealed they took the opportunity to resolve any medication issues then. Patients were asked to discuss other medication review activity they had elsewhere. The doctor review was most commonly cited. In contrast to the MUR that focused solely on medicines, the review with the doctor included measuring the patient's blood pressure, blood tests and weight. Most patients' accounts were not specific about how the doctor actually reviewed their medicines. Doctors were reported to enquire about how they were getting on with medications, if they had any problems and informed patients about whether medications were still needed or whether they could be "*dropped off*". The doctor was therefore seen as someone who understood which medicines were needed and which were not. In comparison, MURs were seen by patients to be specific only to medicines:

Researcher: ...how's the review that you had on Thursday different from the one that you have from your doctor?

Annabel: Well I mean he [GP] doesn't usually go through each medication individually...it tends to be if I say 'what do you think about such and such' then he'll look at it. But otherwise I think on the whole doctors probably are a bit busy and tend to not rock the boat do they...if it's not broken you don't mend it kind of thing...having said that I've got a good doctor who will discuss anything with me...

Patient interview 14 - 61yr F. Independent

Iris: ...they'll [GP] look at it and if ... I don't use it any more or don't need it anymore they'll take it off. So they'll look at your repeat prescription and look if you do actually need the things that you're taking...

Researcher: ... the review that you had with the pharmacist it was slightly different?

Iris: Yes, in as much as how you were taking it and when you were taking it. Any questions and she would...refer you back to your GP or something if she thought necessary.

Patient interview 7- 65yr F. Multiple

With GP medication reviews the onus was usually on patients to report any problems. This was not seen as an issue as most felt that they were adequately informed about the medication which had been prescribed long-term. Patients were accustomed to seeking help with prescribed medicines from their GP. When asked if the MUR had been useful, patients tended to use the terms “*satisfying*” or “*interesting*”. Some patients described how talking to the pharmacist allowed them to articulate their medicine issues. They therefore felt better prepared to discuss matters with their GP:

Researcher: ...How useful did you feel the review was?

Nick: Well, a review like that is always useful you might think initially 'well that was a waste of time'. But I don't think it is, because it just refreshes your mind...Because they're [GPs] always busy watching the clock...so I don't like taking much time up there. I ask what I believe are vital questions. I mean the cholesterol, dry mouth, tired legs, the things that really hit me hard and beyond that I try not to take any time up. So coming down here, sitting down as I'm doing with you now is useful, very useful.

Patient interview 13 - 80yr M. Multiple

Researcher: ...I'm not entirely sure whether it is possible within the short period of time [MUR]...to resolve the complex issues.

Polly: Probably not but it's going to make you think about it. So when you to see the GP you're not starting again really from scratch. You've been made to sort of think about it in the first place. So you know it's probably a good idea.

Patient interview 15 - 58yr F. Independent

As was discussed in section 6.3.3 the pharmacist was seen as a knowledgeable expert on medicines and able to provide patients with support and reassurance about their minor medication or health related problems. However, a few patients did not consider the MUR had been useful:

Researcher: ...Did you find any part of it, you know, quite useful or not?

Robert: Well, I think it was interesting rather than useful and having said I didn't find it useful for myself um I'm quite sure that it would be useful for other patients. You know, without the same sort of background [retired nurse].

Patient interview 1 - 79yr M. Multiple

Summer: I think the questions are very elementary and sort of might be geared towards someone older than me...I felt like saying 'of course I can swallow things', you know, hello!

Patient interview 12- 62yr F. Multiple

As these extracts illustrate, some patients felt that the MUR was not necessary for them personally as they believed they could effectively manage their medicines and felt that they could access help should they need it. However, they recognised that the MUR could be useful for others. Older patients, those who were confused and those who would not ask for advice were seen to be those who would benefit from the service. Nearly all patients said that they would wait to be asked for their next MUR rather than ask for an MUR themselves as the pharmacist would know when they needed the next review. A few patients did comment that they would ask should they feel the need:

Researcher: Would you ask for an MUR or would you wait until you were asked?

Molly: No, I would wait until I was approached,

Researcher: Why is that?

Molly: Well unless there is any other specific reason, you know why I should want one sooner and at the moment, I couldn't see that. So yeah, I would wait to be approached, I would willingly come, yeah.

Patient interview 6 - 76 yr F. Multiple

Eve: Well, I would wait to be asked because they'll know when it's suitable won't they, but I would ask if I needed to, yes.

Patient interview 5 - 75yr F. Independent

Patients contextualised the MUR as a pharmacist-initiated activity that was interesting and provided reassurance that they were doing the right thing. Although this consultation was more focused on the medicines than the reviews received from the GP, they were only seen to potentially resolve minor practical issues of medicine taking. Only the GP prescriber was seen as having the mandate to add, delete or make necessary changes to prescribed medicines. In the following section I further explore patient views on professional boundaries.

6.4.5 Professional boundaries

Several patients expressed concerns that the MUR could potentially cause tension between the pharmacist and the GP and were wary of the potential conflict that could arise between them:

Adam: Well I always think there's a certain amount of competition isn't there? Because whether you like it or not you're a pharmacist and he's the doctor so everybody's looking after their own little uh domain...you're a bit of a threat to a doctor aren't you? ...

Patient interview 6 - 79yr M. Independent

Ashley: I don't think they [GPs] like it, outside interference...being from a novice, a pharmacist or anybody else...

Researcher: They actually communicate with the GP, if there were any actions.

Ashley: So he will know that I went in last Wednesday and talked to Jane [pharmacist]...?

Researcher:...I don't know if Jane is going to send it off [MUR form]...but otherwise yes they usually send it off if there are actions.

Ashley: Right [laughs] I'll get a fuckin' bollockin' off him next time then!

Patient interview 14 - 67yr M. Multiple

Ashley was sceptical about how influential any pharmacist suggestions to his GP may have been. When probed further, he was also surprised to hear that the GP may have been informed about the MUR, having not been told that this may occur. Ashley's response was one of concern that he would get 'told off' by his GP. Although Ashley was the most explicit, several patients indicated that they had concerns over professional boundaries and wanted to ensure that the relationship between their GP was not jeopardised by the MUR. In the following section, I explore whether patient views of the pharmacist changed as a result of having had an MUR.

6.4.6 Opinions of the pharmacist

Most patients felt the MUR did not significantly affect their opinion of what the pharmacist did or encourage them to use the pharmacist more. They were already aware that they could access the pharmacist if they had any concerns about their medicines. Furthermore, fieldwork observations revealed that the patients who were invited for an MUR already tended to have good relationships with the pharmacy staff. A couple of patients commented that the MUR allowed the pharmacist, themselves, to learn more about the patients' medicines and their medical conditions. Their preconceived notions of the pharmacist being accessible, knowledgeable and available to treat minor ailments were unchanged:

Researcher: ... Has it [MURs] affected your opinion of what the pharmacist does?

Alison: Not really. Because I always thought they're really well trained and knew what they were doing.

Patient interview 7 - 46yr F. Independent

Researcher: ...When you had the review did it encourage you to use the pharmacist more or did it make you more aware of the things that you can ask them?

Primrose: I knew that anyway. Like with my sons, if they've got something wrong and I didn't think it was a doctor thing, then I'd say 'we'll go to the pharmacist and chat with them and see what they think'.

Patient interview 17 - 56yr F. Independent

However, one patient felt that the MUR was a routine and basic activity that could be performed by less well qualified staff:

Researcher: ...How suited are they [pharmacists] at performing the service...?

Colin: ...It's actually a waste of the pharmacist's time. Any member of staff could have done that [MUR]...It's basically questions and answers. If there was anything technical required the person doing the review could always go back and ask the pharmacist...the pharmacists go to uni, for how many years is it? They learn something and then basically it's a paper pusher's job...yeah so it's quite a waste and I think it's quite an insult to them [laugh].

Patient interview 12 - 50yr M. Independent

Colin's account of the MUR was quite a telling indication of the very functional and perfunctory nature of the MUR activity.

The previous sections have described the MUR from the patient's perspective. It emerged from the early patient interviews that in describing their MUR, there appeared to be a mismatch between what was being reportedly being achieved and the policy aims of the service. In the following section, I report on the findings concerning the extent to which patient accounts of their MUR match the intended policy aims of the service.

6.5 The MUR and its aims

Below, I compare what patients reported in their interviews with the four underlying policy aims for the service and then with the overall aim of the MUR to improve patients' knowledge and use of medicines. The common features between the stated aims do mean that in this analysis there is some overlap of the illustrative examples given. The following sections are examples from patient reports and are not an assessment of their behaviour. It is also important to note that this was a cross sectional study and patients were not followed-up to see if the pharmacists' recommendations had been accepted or rejected in the long-term or if patients' medicine use had changed. Similarly, it is not known what actions the patient's GP had made as a result of receiving notification that the patient had an MUR or if the MUR form had influenced their care in any way.

6.5.1 Establishing the patient's actual use, understanding and experience of taking their medicines

Most patients, when asked, reported that they felt the pharmacist did manage to establish how they took their medicines:

Researcher: Did you feel that the pharmacist really got down to how you actually use your medicines?

Esther: Yes, I mean she was making sure I used them properly; she wanted to know why I needed to use them and how I used them. Yes, I thought she was very thorough.

Patient interview 13 - 61yr F. Independent

However, while discussing their experiences of the MUR, several patients mentioned medicines that they were using which had not been discussed during the MUR. The pharmacist therefore had not been able to establish a full list of all of the patient's current medicines. The reasons patients reported for this was either because they had not been given the opportunity to reveal all the medicines they were taking or they had forgotten to mention to the pharmacist at the time of the MUR:

Comfort: ...The ibuprofen gel and the ibuprofen tablets, I'm I not supposed use them together?...

Researcher: Because I don't think you mentioned them to Jane last week ?

Comfort: I didn't...I didn't mention that at all...it just slipped my mind actually... I was concentrating on sort of the other ones [questions] rather than that...

Patient interview 15 - 72yr F. Multiple

Summer: Well I saw her two weeks ago and she gave me a [homeopathic] remedy at the time and well I'm always on a remedy really.

Researcher: Fine, because you didn't mention it to the pharmacist?

Summer: She didn't ask.

Patient interview 12- 62yr F. Multiple

The MUR should involve a discussion of both prescribed and OTC medicines. As the above extract from Comfort's interview illustrates, the failure of the pharmacist to determine a full list of prescribed and OTC medicines meant that the opportunity to resolve confusion over a medicine issue, in this case over taking two forms of the medicine ibuprofen, was lost. When patients were questioned further, a few revealed that the pharmacist had not, in fact, fully established their actual use of medicines. Annabel's interview revealed that she was, at the time, taking one of her medications differently to that mentioned to the pharmacist during the MUR. Her reluctance to mention this in the MUR stemmed from her concern that she may not provide the 'correct answer' to the pharmacist.

Researcher: ... I can't remember whether you did say you reduced the dose [of the Colazide capsules].

Annabel: I probably didn't say anything because I'm not sure what it says on the prescription [laughs]. This is why people should come isn't it? [Laughs]. Get it sorted...

Researcher: ...Was there any reason for that?

Annabel: ... to be honest, I honestly didn't know what dose I'd got on the prescription.

Patient interview 14 - 61yr F. Independent

Other patients reported confusion or uncertainty when questioned about medicines that had been discussed during the MUR. These instances indicated that the MUR did not serve its purpose to establish and then address issues about the patients understanding of their medicines:

Researcher: The ramipril was for your...

Polly: It's something to do with my kidneys...I don't know quite what it is...I suppose I ought to sort of find out a bit more what it's about...I mean it might have been nice last week when I sort of said, I don't quite know... and she had been able to say 'this is why'. At the end of the day... they don't have as much training as the doctors do they...I can't really realistically expect them to know every single medicine that's dispensed...

Patient interview 15 - 58yr F. Independent

Researcher:...Can you remember what was discussed at all?

Iris: Well um, I suppose she asked me, well I don't really know. We went through each medicine and I sort of told her when I was taking these tablets and um she said that was right for the thyroxine. Because otherwise if you took them after food, did she said it would block calcium or something?

Patient interview 7- 65yr F. Multiple

The above extracts show that there remained significant confusion with some patients about certain medicines after the MUR. The pharmacist therefore did not identify and resolved these particular concerns that patients had with their medicines during the MUR. This is further explored in the following section.

6.5.2 Identifying, discussing and resolving poor or ineffective use of their medicines

There was little evidence to suggest that MURs had improved patients' adherence to their medicines. This was because there were few examples where the pharmacist identified a problem concerning patients' ineffective use of medicines. In a few instances not all of the patients' concerns about their medicines had been identified during the MUR:

Morris: ... I am a little bit concerned if I don't get my sulphasalazine... I don't know what the range is...whilst I was on holiday; we were on funny dietary changes. It's alright in the morning after breakfast, go back up to your room and take your tablets but...in the evening I might go out and have a meal... and the time you get back it's bedtime, it's too late.

Researcher: ...Do you think that would be the sort of things that you'd like to have discussed with the pharmacist at all or would you mention it to the doctor?

Morris: Well I haven't really um thought about it because my wife usually says "oh you'd be alright" so I say "OK" [laughter].

Patient interview 11 - 79yr M. Independent

With the pharmacist focusing solely on current use of medicines, wider patient concerns as described by Morris above, were not identified and so were not resolved. As indicated in

Chapter Five, the format and structured manner in which the MUR was performed restricted the scope to identify and address wider patient medication issues. When patients did reveal instances where they were non-adherent to their medicine, the pharmacist typically handled this by referring the patient back to the GP or other health professional:

Moya: ... You see my frusemide ...I thought well I don't get any swelling of my ankles so do I need it every day? So, I get a bit naughty and I don't take them every day. And so of course the pharmacist got on to me and so I've got to tell the doctor...whether it is something I should be taking every day...

Researcher: Ok, would you have discussed it with the doctor if the pharmacist hadn't mentioned it?

Moya: No, no I'd probably wouldn't ...I might have thought about it and thought well better not say anything else because I might not be doing the right thing [laughs]... but I will mention it. I'll have to because that forms gone to him [laughter].

Patient interview 10 - 79yr F. Independent

Having revealed to the pharmacist that she was taking her furosemide tablets infrequently, Moya described a conventional response from the pharmacist; the pharmacist had “*got onto me and so I've got to tell the doctor*”. MURs have been described as a concordance-based review (Clyne et al 2008; PSNC 2009). However, as Moya’s extract illustrates, the approach taken by pharmacists when patients deviated from their prescribed regimens was one motivated by professional desires to ensure patients adhered to the prescribers’ instructions. The following section explores how well the MUR identified and resolved side effects and interactions with medicines.

6.5.3 Identifying side effects and drug interactions that may affect patient compliance

Patients were asked about side effects from the medication during the MUR. Most patients indicated that they had no side effects from their medicines. A couple of patients did report in their interview that their concerns about side effects had not been addressed. One patient described a significant side effect from a previously prescribed medicine which was not discussed during the MUR:

Alison: ...if I had prior warning [of the MUR]...I might have spoken to her about the prednisolone and the side effects of that and if she had any ideas about what I could do...I just get a buzz in my head really and I become as if I'm hyperactive. I cannot sleep much at night...

Researcher: ...We didn't touch on that?

Alison: No we didn't, because I'm not on it at the moment you see, so I didn't.

Patient interview 7 - 46yr F. Independent

Sometimes pharmacists were not able to provide effective reassurance to patients even when side effects had been identified:

Researcher: ...I don't know if you wanted to speak to the pharmacist about that [reported side effect from citalopram]?

Konnie:...I probably wouldn't have brought that up if I didn't want some kind of reassurance...I know things have side effects and it's only when I get really tired... but with this one if I get really tired I can't even hold a cup of coffee...I was just looking for a bit of reassurance, you know after a couple weeks that will go, um which I didn't get. I mean through no fault of her own she might not have known that's what I wanted to know. But yeah I think it's a good opportunity to discuss your medication.

Patient interview 11 - 40yr F. Multiple

Konnie had reported a side effect from taking her antidepressant tablet. The pharmacist (Jane) responded during the MUR by saying: "*It usually takes a couple of weeks to settle, that's quite interesting for me to hear that. Do you have any other problems?*" Konnie responded by saying that she wanted to give up smoking. As the extract above illustrates, Jane's swift response during the MUR failed to fully explore and provide Konnie with a resolution on this concern.

In another MUR, one of the patients' medicines was causing her to experience a dry mouth. This problem had been communicated to the patient's GP through the MUR paperwork on a previous MUR. The patient subsequently reported receiving an oral spray to alleviate her dry mouth:

Researcher:...Did you bring up the situation with the dry mouth or did they [GP] have the report [MUR form]?

Jill: No, they had the report...then I got the spray yeah...If you get it in the right place you're alright, and if you don't it doesn't work.

Patient interview 8 - 76 yr F. Multiple

The issue with the dry mouth was raised again during her most recent MUR. The pharmacist accepted the patient's response that this was not troublesome and did not probe further or suggest a course of action. The pharmacist failed to enquire about the spray that had been prescribed as a result of the previous MUR as this was not on the patient's current list of medications. The opportunity to review or provide additional advice on the sprays use was therefore lost. During the interview the patient had said the issue of the dry mouth was not a problem for her but when questioned further, it emerged that she was managing this by drinking water. The lack of referral to the previous MUR records and the pharmacist's intention to move on meant that the discussion was not extended or the point followed up.

6.5.4 Improving the clinical and cost effectiveness of prescribed medicines and reducing medicine wastage

There were several instances where the pharmacist advised the patient to change the way they used a medicine. Patients' acceptance of such advice depended on their understanding of the direct advantage of such advice or as a route to avoid future harm:

Beth: ...Jane said not to keep it too long [Trimovate cream] because...it can cause a fungus or something didn't she?...

Researcher: ... if it occurred again, would you have used the cream?...

Beth: I would have done...I think she said the cream can cause uh did she say a fungus of some kind...I might be thinking that's the same thing and perhaps could be something else...it could cause more harm than good.

Patient interview 3 - 76yr F. Multiple

Konnie: Because they take such a long time to dissolve [aspirin]...they did say to me at the hospital that if I started getting any indigestion or problems with my stomach I had to go back because that was a symptom...

Researcher: ...you found that useful?...[Pharmacist informed patient to take aspirin with water].

Konnie: Yeah, I mean at the end of the day you know that you should be doing that, but I think sometimes you just need someone to say you should be really taking it that way and yes that was helpful.

Patient interview 11 - 40yr F. Multiple

However, the pharmacists' advice was ignored when the pharmacist had not successfully communicated the advice or when the perceived benefits of using the medicine outweighed the risk:

Esther: ...if I can't get to sleep, I'll take three paracetamols and that knocks me out and it keeps the pain under control...

Researcher:...Rebecca advised you that you should be taking two...will you continue to be taking three, if you need it?

Esther: Oh I don't find it does any harm...I find if I take two sometimes it doesn't sort of kill the pain, ok whereas if I take three, it sort of keeps it under control.

Patient interview 13 - 61yr F. Independent

Researcher: ... After the review, did it affect the way that you take your medicines at all?

Nick: No, not one iota.

Researcher: ...Jane mentioned about the nicorandil⁴ tablets...you mentioned that you had a blister open in the morning and one in the evening?

Nick: For the simple reason that she said that once you opened a packet you've got to finish it off...I know full well because I take one, I'm well within the uh comfort zone...

Patient interview 13 - 80yr M. Multiple

⁴ Nicoradil tablets are available in blister strips of 10 tablets. Each blister is manufactured with its own desiccant. Strips have a 30 day shelf life once opened. Patients are advised to start and complete one blister at a time.

From their accounts, patients presented logical arguments to justify why they had rejected the pharmacist's suggestions. There was no explicit agreement or indication during the MUR that the patient would accept the recommendations the pharmacist made. In these cases, pharmacists chose to adhere to pharmacological knowledge and provided information that did not resonate with the patients' circumstances. Pharmacists rarely explored how the patient intended to respond to the suggestions made and so opportunities to discover how accepting and receptive patients were to this advice was lost. With little to no follow-up by the pharmacist after the MUR, there was no means of checking whether their recommendations had been successfully adopted. When patients were asked about medicine waste, there was very little evidence in their accounts that this was perceived to be an issue. In this population, patients' accounts suggested that the MUR had little impact on waste from unused medicines.

6.5.5 MURs as a means to improve patient knowledge and use of medicines

Most patients reported that the MUR did not improve knowledge of their medicines. The most common reasons cited were that their doctor had already explained the necessary information to them or they already felt they had adequate knowledge about their medicines most of which were prescribed for long-term conditions:

Researcher: ...As a result of the review how much more knowledgeable were you about your medicines?

Jill: [Sighs] Well I don't think I've got no more knowledge, I think it's just that I've been on these for so long, and once you've been on them for so long, the doctor does makes sure that you're alright with them.

Patient interview 8 - 76 yr F. Multiple

Researcher: ...Did it [MUR] make you any more knowledgeable about your medicines at all?

Alison: I don't actually think it did because I do ask a lot of questions at the doctors and I have a space in my diary where I write it down [in the diary] or they tell me.

Patient interview 7 - 46yr F. Independent

Two patients were retired nurses and felt they had sufficient knowledge about their medicines. A few patients expressed no desire to improve upon their knowledge of their medicines. One patient commented that she did not want to become any more informed as that could potentially increase her anxiety about her medicines:

Researcher:...Did the review make you any more knowledgeable about your medicines at all?

Queenie: Not really, no 'cos I didn't go into detail. As far as I'm concerned they're to do with blood pressure, that's all I worry about, well I don't even worry about that [laughs].

Researcher:...Would you have liked more information?

Queenie: No not really, what you don't know, you don't worry about...the more knowledge you've got, the more you probably worry. So the less you know the better, that's the old saying.

Patient interview 10 - 81yr F. Multiple

Despite most patients reporting that the MUR did not improve their knowledge of their medicines a few patients reported that their knowledge had improved and remembered specific advice that had been given by the pharmacist. Often this resulted from an issue that the patient raised during the MUR or was something that interested the patient:

Eve: The only thing I was more knowledgeable about was when she told me it was alright to take them like that [to take tablets together]...it put my mind at rest...I kept thinking everyday really...he [husband] said you shouldn't be doing that...

Researcher:...Was there any reason why you didn't ask that question beforehand?

Eve: Yes, I kept meaning to ask but I thought they're gonna tell me off if I do [laugh]

Researcher: [Laugh] What you mean the pharmacy?

Eve: [Laugh] No, that was just in my silly mind.

Patient interview 5 - 75yr F. Independent

Ashley: ...she was saying red foods are good for you, you know. I thought oh I love tin tomatoes...so we brought tinned tomatoes back into our diet...the other thing she mentioned was the fact that although it says on the box that uh my cholesterol tablets should be taken at night, it's not strictly necessary. So if it doesn't fit in my day, I can take it when it will fit in with my day, because it doesn't have to be just at night.

Patient interview 14 - 67yr M. Multiple

Researcher: ... Did you pick up anything that you didn't already know?

Mia: ...Only that uh I needed to go back, 'cause the Ventolin. I just thought it was me getting worse... I thought I was on the most I could go on, you know and I'd have to tolerate it but with her saying that, she said that they can help you more.

Patient interview 17 - 66yr F. Multiple

When patients were asked whether the MUR had improved or affected the way they used their medicines most reported that it had not. Patients continued to use their medicines as they previously had done because they perceived that there was no need to change. Several patients remarked that the MUR confirmed what they were doing was correct:

Researcher: ...You talked about your Spectraban [sun lotion] and that you were more comfortable using it. But was there anything else that you changed as a result of talking to the pharmacist?

Fiona: No no, 'cause she sort of confirmed that what I was doing was OK so I've carried on doing that really.

Patient interview 2 - 70yr F. Multiple

Researcher: ...Did it affect or change the way that you use your medicines?

Esther: No.

Researcher: OK that's fine, because you're continuing as you were?

Esther: Yes.

Patient interview 13 - 61yr F. Independent

The preceding five sections have explored what patients accounts reveal about whether the aims of the MUR service are being realised in practice. Most participants did not report having

concerns with their medicines. Patients who did reveal concerns typically had issues with a specific medicine or health matter. The pharmacists' formulaic approach, as illustrated in the preceding chapter, failed to identify or enable patients to easily express these concerns. Pharmacists' lack of curiosity, the limited remit and scope provided through the MUR meant that they closed off or failed to fully identify and address issues that did arise during the MUR. They imparted responsibility to the patient, advising them to follow up issues directly with the GP rather than contacting the GP themselves. In the last section of this chapter, I report suggestions made by patients on how, if any, improvements to the MUR service could be made.

6.6 Improvements

Earlier sections described patients' suggestions for improving the consultation room and to provide prior notice of the MUR to allow reflection of issues they may want to discuss. When asked whether the MUR could be better tailored to their particular needs, many commented that they were satisfied and that the format of the MUR was acceptable:

Researcher: ... Could it be improved?

Fiona: Well obviously she's got a list of what medication I'm on hadn't she?...I don't know how that could be improved really. Just going through the list of what you're on and how you take it...I don't think you could do much more than that really.

Patient interview 2 - 70yr F. Multiple

Esther: ...I mean to me I think we went over everything and we discussed things what was important, I don't think there is anything I felt that was left out.

Patient interview 13 - 61yr F. Independent

A few patients suggested that the pharmacist should use a more open 'counselling' method to allow patients to 'open up'. One patient suggested that the pharmacist asked at the beginning of the MUR whether the patient had any concerns so that these could be focused upon and addressed. Another patient commented that there should be a follow-up to allow the patient to feel that care was on-going:

Researcher:...How could it be better tailored to what you needed?

Megan: ... perhaps listen a bit more, I don't think I got 100% of her listening...you have to dig that little bit deeper, get to know that person sitting in front of you, press the right buttons to get the person to open up to you.

Patient interview 5 - 73yr F. Multiple

Terrie: ...if it was, like, an on-going thing for patients. When you came in the pharmacist would actually know what stage you were at...I don't think they could tailor it after the first interview...it would show you were interested in them and has their medication changed and refer back to what they'd already said...

Patient interview 3 - 54yr F. Independent

A few respondents commented that the MUR had lasted longer than they had expected. The estimated time provided by the pharmacy staff did not always match to how long the MUR took.

6.7 Summary

In this chapter, I have explored patients' views of the MUR service. I have built upon the findings presented in the previous two observation chapters to provide a deeper and contextual understanding of how MURs had been received by the participants. Patients' expectation of pharmacy services included the filling of prescriptions and seeking advice on managing minor ailments. No patients reported that they saw the pharmacist's role as providing an extended consultation about their medicines. The lack of clear promotion of the service meant participants constructed their experience of the MUR through what had happened and their existing perceptions of the pharmacist. With one exception, patients were not observed asking for an MUR. Several respondents questioned the necessity of the MUR or its personal relevance. An investigation into why patients declined the invitation for an MUR uncovered more complex motives than the reasons reported in the pharmacies.

Most patients reported that they did not expect an MUR when they visited the pharmacy and reacted to their invitation with indifference or surprise. Their response did not seem to be strongly motivated by self interest or the prospect of personal benefit. This was reflected in

most of the respondents' accounts in which they reported feeling obliged to take part or that they were helping the pharmacist in some way by agreeing to an MUR. The few patients who viewed the MUR as a chance to improve their knowledge of medicines did not perceive this activity to be part of the routine care provided from the pharmacy. Likewise, all those who had previously completed an MUR did not anticipate clear, personal benefits from having another. With MURs being performed infrequently and patients' awareness of accessing the pharmacist's skills when they feel the need, the MUR service did not resonate as a service that patients felt was necessary.

Patients gave ambivalent accounts of the purpose and what happened during the MUR. Most did not mind the ad hoc invitation but this left some feeling unprepared and guarded during the consultation. This reduced patients' opportunity to think about what they may want to ask or recall existing concerns about their medicines. Participants generally framed the MUR as a monitoring activity where the pharmacist was ensuring that the patient did not have problems with their medicines. Many patients believed that purpose of the MUR was to 'check' on their medicines rather than to provide an opportunity for them to discuss their understanding, use, beliefs and concerns about their medicines. This impression was reinforced by the discourse used by the pharmacists and what they were seen doing during the consultation. Nevertheless, most patients valued the time the pharmacist spent with them and appreciated the opportunity to speak to them privately. Most patients were receptive to the idea of greater pharmacist involvement in services like the MUR. They regarded the pharmacist as a knowledgeable expert on medicines, felt comfortable speaking to them and valued the reassurance they could provide about their medicines. The MUR itself did not notably change this view.

Nearly all the patients interviewed recognised that responsibility for prescribed medicines rested with whoever prescribed the medicine, which was their GP or a specialist prescriber. These views had important implications for what they perceived could be achieved from the MUR. Other than providing simple practical advice, the pharmacist was not considered able to resolve more 'serious' problems that arose during the MUR. Patients' perception of the subordinate status of the pharmacist compared with the GP meant that some patients were aware of the potentially negative impact MURs could have on professional boundaries, relationships and responsibilities. The disconnectedness of MURs from other services and

professional contacts added to these concerns and reinforced awareness of professional hierarchy rather than enhancing pharmacists' professional status.

When patients' accounts were scrutinised for evidence that MURs achieved the aims and intentions of formal policy, there were few clear examples where these had been met. Most patients reported that their MUR did not improve their knowledge and rarely affected the use of their medicines. There was little evidence to suggest that, in this population, adherence to medicine taking had improved or wastage from unused medicines had reduced. Likewise, from patients' accounts there was little indication that the MUR improved the clinical or cost-effectiveness of the patients' medicines. With MURs not being effectively targeted at the most needy patients, policy intentions to improve medicine use were not being realised in practice. Moreover, patients' medicine taking habits were shown to be complex and the structured, routinised strategy deployed by pharmacists to fill in the MUR form left little scope to tackle more indeterminate or wider matters of the patients' medicine use. Added to this, respondents' accounts indicated that they tended to accept the pharmacist's suggestions when the advice was in line with their own beliefs and preferences. Conversely, they were less likely to be receptive to suggestions which conflicted with their personal opinions or were difficult or inconvenient to implement.

This chapter has explored patients' perspectives of the MUR service. The final results chapter will report on pharmacy staff views of the service.

CHAPTER SEVEN

The views of pharmacy staff

7.1 Introduction

In this last results chapter, I present the findings from the pharmacist and support staff interviews. This chapter builds upon the three previous results chapters and aims to substantiate and extend the observations that were made during the fieldwork. As was reported in Chapter Four, pharmacies faced difficulties when implementing the MUR service in practice and so I begin by considering the MUR training that pharmacists and their support staff had received. I then report the views about how they manage the MUR service and their opinions on its integration into the workload of the pharmacy. One primary aim of this study was to better understand the MUR consultation. As a result, few observations were made of pharmacy activities when the pharmacist was absent during an MUR. Interviews with support staff therefore provided valuable insights how they cope when the pharmacist was not present during this period.

7.2 Participants

Interviews were carried out with a total of 17 pharmacy staff (Table 3). These included five of the regular pharmacists working at the study pharmacies and 12 of the 14 regular support staff. Interviews with pharmacists typically lasted one hour; pharmacy support staff interviews lasted between 15 to 90 minutes. All were audio recorded.

Table 3: Job roles of staff interviewed (n = 17)

Member of staff	Independent (n = 9)	Multiple (n = 8)
Pharmacists:		
Proprietor	1	0
Manager	1	0
Employee	0	2
Locum	1	0
Non-pharmacist manager ¹	0	1
Dispenser	3	2
Medicines counter assistant (MCA)	1	2
Pre-registration (Trainee) pharmacist ²	0	1
Saturday staff ³	2	0

¹The manager of the multiple was not a pharmacist but was responsible for meeting the pharmacy's targets, including those for MURs.

²A pre-registration pharmacist is required to complete a year of supervised training in employment before general registration as a pharmacist.

³Two undergraduate pharmacy students were employed by the independent who tended to work on alternate Saturdays in the dispensary.

7.3 The pharmacy staff perspective of MURs

7.3.1 MUR training

Pharmacists are required to pass an assessment set by a Higher Education Institute (HEI) in order to be accredited to carry out MURs. Pharmacists were asked about their experience of the MUR accreditation process. Two pharmacists (Rebecca and Linda) had completed an online assessment (provided by the Centre for Pharmacy Postgraduate Education (CPPE)). Three pharmacists (Jane, Kate, and Rose) had been accredited from another university. Rebecca and Rose had been on a face-to-face MUR training course. Pharmacists were asked how the training and accreditation process had prepared them to undertake MURs. Their opinions were mixed. One pharmacist could not remember many details of their accreditation as this had

been several years ago and the others reported that the accreditation process had, to some extent, equipped them to offer the service:

Researcher: ...Do you reckon that [MUR accreditation] prepared you for your role?

Jane: Mm. Not really. It's not practical. And, to be honest, I can't think of anything that I got from it that I benefited from...So, I think you're better off getting more practical experience.

Employee pharmacist, Multiple

Rebecca...we sat down with the old style forms, we sort of did MURs on each other. So that was quite good... I was trained, prepared quite well...

Employee pharmacist, Independent

Undertaking practice sessions were seen by pharmacists as the most practical way to prepare them for conducting MURs. Support staff were also asked about how they had been informed of the MUR service and about any training they might have received. None reported having had any formal training other than the pharmacist informing them that the MUR was a brief discussion about the patient's medicines, in which they were asked about "*what they were taking*" and "*how they were taking it*". A dispenser and the non-pharmacist manager reported uncertainty about the purpose of the MUR, whether the pharmacy was legally required to engage with the service and reservations over why pharmacists were involved with reviewing prescribed medicines and not the patient's GP:

Researcher: ...were you informed by the pharmacist about what the purpose of the review is? Are you clear on this?

Lucy: Not really [laughs] no. Only that's it's a financial thing isn't it? But, at the end of the day, I don't know whether, have they got to do it? Is it the law now that this is what they have to do to protect people? Because I don't know really, honestly I don't.

Dispenser, Independent

Margaret: ...Initially, I was kind of thinking, Why is the doctor not doing that? Why is that something that falls on to a pharmacist? ...I still kind of don't understand why we do them as opposed to a doctor...

Manager, Multiple

Furthermore, during their interviews a couple of dispensary support staff appeared to misunderstand or expressed confusion about which patients were entitled to an MUR:

Sophie: ...there was one locum...[he] said that, "oh, I won't do an MUR for that patient, they're just on one medication". But Jane told that locum...you can do it...but I don't really know the answer as well. Are we able to do the MUR for a patient who's just on one medication?

Pre-registration pharmacist, Multiple

Helen: I don't think it should be just for older people either. It should be for any age that's on a lot of medication...

Dispenser, Independent

An experienced MCA also expressed confusion. She explained that her initial training had stated that more potent pharmacy medicines were required to be sold under the supervision of a pharmacist. Being unaware of the new guidance issued on this matter⁵, she reported concerns over selling OTC medicines when the pharmacist was performing the MUR:

Leah: ...when I first did my training, they always said that a pharmacist had to be in view of selling a medicine. Is that right still?...Because if they're out of view then we shouldn't really be selling anything anyway...I don't really know the legalities of that.

Counter assistant, Multiple

⁵ The Medicines Act requires that pharmacy and prescription only medicines be sold or supplied by a pharmacist, or someone acting under the supervision of a pharmacist. Guidance was issued by the RPS (then RPSGB) in 2005 following queries asking if dispensed prescriptions can be supplied and pharmacy-only medicines sold whilst the pharmacist is undertaking a private consultation with a patient such as an MUR. It asserted that pharmacy medicines can be sold and dispensed prescriptions that have been 'clinically checked' can be supplied provided that robust standard operating procedures are in place.

The extracts illustrate some of the confusion over aspects of the MUR activity or support staff's personal responsibility when the pharmacist was performing an MUR. Consequently, as was reported in Chapter Four (section 4.6), when support staff were involved in inviting patients for an MUR their approach did not always effectively convey to patients the anticipated benefits. In the following section, patient selection and the invitation process will be explored.

7.3.2 Selection and invitation

Pharmacy staff were asked about how they identified and approached patients for an MUR. All pharmacists were aware of the minimum selection criteria detailed under the service specifications (patients on multiple medicines, using the pharmacy for their dispensed medicines for the previous three months and who had not undertaken an MUR in the previous 12 months). Pharmacists were aware of local guidance issued by the PCT about 'target' groups including those over the age of 60, those taking four or more medicines and asthma patients. Support staff who were involved in inviting patients for an MUR were less aware of target groups. However, most were aware of the minimum selection criteria. All participants involved in inviting patients for an MUR were asked about what influenced their decision to identify or select a patient. Their responses revealed that they tended to perform MURs regardless of the target groups, so long as patients were willing to accept the invitation:

Rebecca:we tend to go for the elderly but really, it's all about just anybody who really wants an MUR, I think, if you offer it to them.

Employee pharmacist, Independent

Jane: ...I don't necessarily pick people out, like, right, I want to know more about this particular situation. I just tend to pick...opportunities for work, you know, when it's quiet-ish and we've noticed they've not had one done or they're due for one, and then we mention it. I don't target any particular group.

Employee pharmacist, Multiple

Despite pharmacists being aware of PCT guidance about 'target' groups, MURs were performed for patients with any condition so long as they were willing to accept the invitation.

Even the minimum selection criteria of patients taking at least two medicines was not always reported to be observed by one pharmacist:

Researcher: ...How would you go about selecting a patient...?

Rose: Random. I look at a patient to see if they're on polypharmacy, even two items, and I'll talk to them. There are some people who are on one item and they want to discuss it. I've got no issues...

Pharmacist and proprietor, Independent

Patients were therefore not being selected according to pharmacist identified perceived need for further support but rather according to whether they were amenable to the invitation and when the pharmacy was less busy. Support staff attitudes similarly did not typically portray an intention to identify those patients who would most benefit from an MUR:

Dorothy: What we do mostly, when we get the PCSs [Prescription Collection Service prescriptions] back, we look, check to see if they've had an MUR within the last twelve months. If it's longer than twelve months we'll stamp it to say they're a candidate...and then when they come in just mention it to them.

Dispenser, Multiple

Kirsty: ...it just comes up on the system...if the dose has changed or something you just ask them if they're interested in an MUR...if they're free then yes. If not, then... make an appointment...Most of them come on a regular basis anyway. Like our regular clients...Not all of them, though, I have to say, just, you know, randomly...

Saturday assistant, Independent

Support staff made their decisions based upon the minimum selection criteria. The lack of targeting reported by pharmacy staff supported the fieldwork observations. Consequently, this may explain patients reports suggesting the MUR was not personally necessary for them (Chapter Six section 6.4.4).

7.3.3 Recruitment anomalies

Despite participants reporting that they used the minimum selection criteria for identifying patients for an MUR, some expressed in their interviews that they had an aversion to selecting particular groups of patients. Older patients, who could potentially become confused with the request, were avoided by one MCA:

Cath:...Don't normally target, I mean it's probably a bit biased, but the really elderly because like I said they get confused. So sometimes if you can see someone's a bit, not say completely there, I don't think it's fair to approach because I think they get a bit confused but then again they'll probably benefit more...

Counter assistant, Independent

Cath reported avoiding asking the “*really elderly*” patients for an MUR. However, she did recognise that these patients may potentially benefit most. Likewise, those with many prescribed items were also reported to be avoided because there was a perception that these MURs would take the pharmacist longer to complete. This was despite the recognition that these patients would also probably benefit the most:

Dawn:...this is when it doesn't work because you try to avoid the ones that have got like, fifteen items. Because unless you've got two pharmacists, in which case it's no problem whatsoever, but if you've only got one pharmacist and they're on about fifteen, twenty items, you just really can't warrant that time for pharmacists not to be checking walk-in prescriptions.

Dispenser, Multiple

Jane: ... you see a massive script, you think I don't want to do an MUR on that. But though, probably they would be the best people who would get the most out of it. You see a prescription that's got maybe two items on it, dead easy...the emphasis is on targets so it's quantity and not necessarily quality...So I think people are trying to get, do the easiest ones possible to get the numbers rather than concentrating on getting those that perhaps would benefit from it.

Employee pharmacist, Multiple

Jane, (pharmacist) had the most overt view and explained that she purposefully chose patients on fewer medications being driven by the need to achieve organisational MUR targets. Pharmacists' views on this organisational pressure are discussed further in section 7.3.7. Another group of patients that were reportedly avoided were patients prescribed medication for mental illness. Four out of the five pharmacists interviewed reported this aversion:

Linda: I suppose, if you'd got psychiatric pati- [pause] well, I don't know whether you'd pick them out. You know, people that are on a lot of medication, you know, psych- you know, they are perhaps a bit mmm...it's a field that I'm not really too confident about...most of them they're under a psychiatrist, they're under specialist treatment...and I'd have thought, by then, they'd know how to take their medication...

Locum pharmacist, Independent

Kate: ...I tend to find the cardiovascular ones are the most easiest because I've got more of an in-depth knowledge over it. Whereas I tend to brush over those who are anti-psychotics or depression, because, just being a really sensitive topic, and I wouldn't know how to approach it.

Employee pharmacist, Multiple

Pharmacists reported feeling less confident speaking to people who took either antidepressants or antipsychotics medicines because they were anxious about prying into their personal circumstances. They questioned the value of MURs for these patients and were averse to discussing what were described as "sensitive" issues. Patients taking medicines for psychiatric problems were assumed to be under the "specialist" and so were perceived by two pharmacists to be less in need of an MUR. One pharmacist reported that these patients probably required more support but thought that it would be too time consuming and they "*may not understand it*". Although pharmacists reported an aversion to performing MURs with patients with mental illness, the observations revealed little evidence that these patients were avoided in practice. Indeed 9 of the 54 MUR performed were with patients taking an antidepressant or an antipsychotic medication.

7.3.4 The invitation

All pharmacists described difficulty in recruiting patients for an MUR because of a lack of patient awareness of the service. Pharmacists described in their interviews patients' resistance to their request when they invited them for an MUR:

Rose: ...sometimes you get people who feel why is this pharmacist talking to me? Like, one guy, he begrudgingly did an interview. And some tablets he was on he didn't even know why he was having them...

Pharmacist and proprietor, Independent

Kate: ...there's just not enough awareness of it. So they would automatically assume it's just a [names Company] thing. And they think that we're just hassling them.

Employee pharmacist, Multiple

Pharmacists reported trying to convince patients of an activity that the patient did not perceive as necessary. Pharmacists mandate to undertake an MUR with a patient was not perceived to be fully accepted or acknowledged by patients. This is explored further in the next section. When pharmacists were asked about external support for promoting the service, such as from the GP or PCT, they reported receiving little assistance. The owner of the independent pharmacy was particularly scathing and annoyed that the service had been slowly adopted by the pharmacy because of poor promotion of the service to patients:

Researcher: ... what support have you had from the PCT?

Rose: None...We've had criticism that we're not achieving the MUR targets...they haven't marketed the service properly, they've been pathetic.

Pharmacist and proprietor, Independent

When support staff were asked about their experiences of how they invited patients for an MUR their lack of training became evident. In their accounts, it became evident that there was a lack of tailoring of the potential benefits of MURs to individual patients' circumstance and preference. Their response was akin to that observed in the pharmacy:

Researcher: And how do you approach the patient? What do you say? Do you think they know what the purpose is when you do ask them?

Dorothy: Probably not, no. I mean, you just say, you know, "oh it's to check that you understand how you take your medicines and see if you've got any problems" and once you get them in there, then, yeah, they're all right.

Dispenser, Multiple

Lucy: So just a question of saying "we're offering a free service, I don't know whether you know about it. I think you'd find it quite useful to yourself, we can make you an appointment. Come in and speak to the pharmacist at a time that is convenient to yourself. Come and have a cup of tea with us, you know we'll make you feel sort of at home" and that sort of thing.

Dispenser, Independent

The lack of clarity of what the MUR involved and could offer the patient was shown to be a reason why patients reported declining the invitation for the MUR (Chapter Six, section 6.4.2.2). The problem of recruiting patients was so problematic that a couple of the dispensers had adopted strategies to convince patients to undertake an MUR, rather than relying on conveying the benefits of the MUR to patients:

Dawn...what I tend to do is, when they hand the prescription in I'll just say "I'll just check we've got them in stock". I'm not actually because I'm looking on the records to see if they can have an MUR...And then, I can say to them "Oh, yeah, everything's in stock, while you're waiting, it's going to be five minutes, do you mind having a chat with the pharmacist?"...

Dispenser, Multiple

Lucy: ...I think it's just saying things like "oh Mr Smith it looks like you might have slipped through our nets, we've not asked you for an MUR". You know "we really need to be speaking to you, 'I'm really sorry that we have not asked you before but we've got this free service and you know we'd like to invite you to come in'"...so it's a little bit of spiel isn't it.

Dispenser, Independent

The lack a lack of interest from patients resulted in some support staff having to use creative ways to persuade patients to undertake an MUR. The following section will describe staff views on patients' response to their invitation to have an MUR.

7.3.4.1 Views on patients' response to the invitation

Pharmacy staff described a range of responses when they invited patients for an MUR. A few indicated that some patients were keen to accept the invitation. However, as described in Chapter Six section 6.4.2, a lack of time appeared to be the main reason given by patients for declining the invitation:

Cath...I mean a lot of people are really up for it, I mean touch wood the majority of customers that we have approached have been "oh yeah that's fine"...

Counter assistant, Independent

Rebecca: ...It's a shame that patients don't feel that their appointments are important enough to come to, you know, very few of them do...

Employee pharmacist, Independent

Some respondents described how some patients were simply indifferent towards the invitation for an MUR. The reasons they mentioned for patients not turning up to appointments included the lack of awareness of the service and the low importance attached to MUR activity. One dispenser explained that in her experience these attitudes were not exclusive to MURs but also to reviews at the doctor's surgery:

Dorothy: ...and we try and tell them the point of it but you can see them thinking, "No, no, I'm all right"... you'll tell them they're due for a review at the doctors; "oh no, not bothered going there, what have I got to go there for? I know what I'm doing"...

Dispenser, Multiple

Patients were seen to decline the invitation for an MUR because they reported to pharmacy staff that they already had a medication review at their doctor's surgery. Pharmacists reported

that patients misunderstood or could not distinguish between the request to undertake an MUR in the pharmacy and the medication reviews offered at their GP practice:

Kate: ...they say “oh, I’ve already had it with the doctor” and it’s just like a tug of war. You’re battling with them, you know, in order for them to say yes, and then you get the vibe off them, that we don’t want to...and then you just back off...

Employee pharmacist, Multiple

Jane:...Some people misunderstand, they think that you get the review done at the doctors. They don’t see the point of this, but once you get them in there, I think most of the time they quite enjoy it...

Employee pharmacist, Multiple

Support staff also described how they struggled to explain the difference between MURs and GP medication reviews. A few suggested that the service name should be changed as patients frequently confused MURs with medication reviews conducted at the GP surgery. It became apparent from support staff interviews that there was a lack of insight into how an MUR differed from a medication review:

Researcher: Why do they decline?

Dorothy: ...they nearly always say, “oh, I’ve just had one with the doctor” and we explain to them that this is, you know, it’s not instead of that; it’s sort of, by the side of that. But, some of them are OK but the others “oh no, no, I can’t be bothered”...

Dispenser, Multiple

Cath: ...most people when you ask them they seem to think that they have them done at the doctors, they’re like “well I’ve had my review at the doctors”. So it’s like trying, even though it’s the same sort of thing, it’s not the same thing, it’s similar...

Counter assistant, Independent

A lack of training for support staff may have been responsible for their poor ability to effectively communicate to the patient the difference between an MUR and medication review. When staff were asked about how they felt when patients declined the invitation, most did not

seem to mind. However, one MCA appeared to be adversely affected. She described how the refusal for an MUR had impacted negatively on her confidence to approach subsequent patients:

Cath: ...it's like being a salesperson...like a door to door sales person, how many knock backs can you take? And you just think ohh ...and if they say no, it sort of puts me off a bit asking the next person because you lose your confidence a bit...it does knock me if someone turns you down. I don't like people saying no.

Counter assistant, Independent

MURs were offered less frequently within the independent pharmacy and in a less busy environment compared with the multiple. Being a MCA and therefore in full view of the public, as well as being unable to withdraw out of sight into the relative comfort of the dispensary, may have impacted upon Cath more than the dispensing staff. Despite reporting difficulties in recruitment, all staff broadly welcomed the MUR service. The following section will explore this further starting with pharmacists' perceptions of MURs.

7.3.5 Pharmacists' views and perceived value of MURs

All the pharmacists' accounts conveyed that they enjoyed carrying out MUR consultations and that they thought most patients did benefit from these. A couple of pharmacists indicated the extent to which patients found the MUR useful varied according to their prior knowledge of their medicines:

Researcher: ... at the end, you reckon it does increase the patient's knowledge, use of their medicine?

Jane: ...I think so. Not, not a hundred percent of the time but I would say a decent percentage, probably seventy percent.

Employee pharmacist, Multiple

Researcher: Do you think it actually improves the knowledge of the patient's medication and their use?

Rebecca: I think so, because the amount of times people will say to you, 'simvastatin, that's for my blood pressure' or something like that. No, actually, that's to lower your cholesterol, der der der...

Researcher: ...a lot of people are on regular medicines...In these circumstances, do you think it increases their knowledge or their use at all...?

Rebecca: I don't think it increases their knowledge or use but at least again, you can reiterate that look, it's to be taken at night time...that's things doctors don't normally discuss, timings and stuff...

Employee pharmacist, Independent

Pharmacists recognised that not all the MURs they performed improve patients' knowledge or use of their medicines. The MUR provided pharmacists with an opportunity to impart information to patients about their medicines and to resolve, what they perceived to be, minor issues such as patient queries about when medication could be taken. As well as benefitting patients, MUR activity was seen to provide personal benefits to pharmacists. MURs were viewed as a means to vary the work activities of the day and seen as a break from the pressures of routine dispensing work:

Linda: ...if I went and did a locum and went into work and they said, "Right, we got five MURs in this morning", but there's some other pharmacist...I'd be quite happy to do that. Because sometimes, it does get tedious, the dispensing side of it does... I think it just gives you a break from that, and I do prefer that actually.

Locum pharmacist, Independent

Kate: ...I think there's more patient interaction and I like that. I do enjoy it because that was my whole purpose in wanting to become a pharmacist...

Employee pharmacist, Multiple

Pharmacists reported welcoming the greater patient contact that MURs offered. The process of undertaking and preparing for the MUR was also an impetus for them to keep up to date

with clinical knowledge. MURs also were seen as an opportunity to learn about the patient condition(s):

Rose: ...I won't say it's all one way. Some people, you know, you pick up a lot from them, particularly people who've had all sorts of cardiovascular episodes...

Pharmacist and proprietor, Independent

Rebecca: ... I think, as a community pharmacist in a dispensing role, you don't use that much of your knowledge. I will admit that it goes a little bit as well...And I think this would keep it up to date, as long as you were allowed to do them rather than just 'off the top MURs', they would need to be, "OK, what's your medical history", go through it, do a bit of research...

Employee pharmacist, Independent

Pharmacists reported welcoming greater patient involvement and recognised the patient as a source of information. However, their responses also revealed reservations about becoming 'overly' involved in more complex medicine-related issues that patients sometimes presented. These issues are further explored in section 7.6. Although pharmacists indicated aversion to greater involvement with issues relating to medicines, MURs were potentially valued as a way to enhance their professional status with the public. However, the impact of this was seen to be limited:

Rebecca: ...they [patients] know that it's not a necessity, because like, the doctor, you have to go so that you can get your meds. I guess maybe, if it was like the same in a pharmacy, where you know, you can't use the pharmacy till you've had your MUR, [laughter] then maybe it would make a difference.

Employee pharmacist, Independent

Jane: I think rather than becoming a glorified dispenser, you become more involved in what the patient's understanding of their medication, how they're getting on with it and get to know them more as a person.

Employee pharmacist, Multiple

Pharmacists commented that the MUR service was not being perceived by patients to be an essential part of their care. Integrating MURs into their routine workload was also seen to be problematic and these issues are discussed in the next section.

7.3.6 Integration of MURs into the existing workload

All pharmacists reported struggling in some way to perform MURs alongside the existing service provision. The unpredictable nature of the workload of the pharmacy meant that pharmacists perceived that they had no spare time to perform MURs. When they did occur, pharmacists reported that MURs were performed quickly and efficiently in order to return to other responsibilities:

Rose: ...I don't think people understand the logistics of pharmacy and the pressure. Maybe that's why, you know, these sorts of things should be documented about all the other things that we do, and how relevant are all of those. Is it important to manage walk-ins [prescriptions]? Is it important to manage everything else?

Pharmacist and proprietor, Independent

Kate:...if it was like a ten item one [prescription] you know you're going to spend some time with them. And I hate to be out of the dispensary for about half an hour, especially if I was only by myself... you have to consider other things, basically.

Employee pharmacist, Multiple

Pharmacists were conscious of spending too much time away from the dispensary because they feared that when they returned they would be greeted with a backlog of prescriptions to be checked that had subsequently built up. This affected the way they approached the MUR consultation:

Jane:...when you know that you're exceptionally busy, it puts you under a pressure and you really just want to get through that, those questions as quickly as possible. Because, you know you're going to go back to bedlam...You can't switch off from that because that's part of your responsibility as well.

Employee pharmacist, Multiple

Linda: ... you do listen to them [patients] but you think, oh, I've got to get back, I've got to get back, you know, I can't be talking to you too long here.

Locum pharmacist, Independent

There was agreement among pharmacists that the whole process, from conducting an MUR with a patient through to completing the associated paperwork, was lengthy and its integration into the services provided by the pharmacy was ill thought out:

Jane: The ideal thing would be to cut back on the paperwork side of things...we have to note down on the board that you've done it; you have to ring it in the till; you need to note it down at the end of the day that you've done it; you have to file it away at the end of the month; you have to notify the doctor that you've done it; so there's all these added things...

Employee pharmacist, Multiple

Rebecca: ...I just don't think they've been implemented into pharmacy well enough. It just generally hasn't been done with the correct thinking ...

Employee pharmacist, Independent

Support manuals to help with implementing the MUR service were available in the multiple, although they were not reportedly used by the pharmacists. One pharmacist referred to them as being akin to a “computer manual” and went on to explain that having one does not necessarily mean that you necessarily use it. A few of the pharmacists reported that they did not like being interrupted by support staff during an MUR consultation but allowed this to happen. Pharmacists felt that being interrupted to check a prescription during an MUR was intrusive and there were some expressions of concern that accuracy checking a prescription during an MUR could contribute to a dispensing error:

Rebecca:...I think generally... MURs should be uninterrupted anyway...I have said, "look, if I am doing an MUR, I don't want to be interrupted". Because, as you say, you're in that MUR mode...so you're thinking oh God, I'm being interrupted; it makes you not check very thoroughly...

Employee pharmacist, Independent

Jane:...I've never really thought about it but yes, I think there is a genuine risk that in the rush to get the prescription out you may not concentrate properly on the prescription.

Employee pharmacist, Multiple

Employee pharmacists were conscious of the added pressure their absence placed on support staff. Support staff's views on the pharmacists' absence will be discussed in the following section. The expectations of support staff as well as the patients / customers were therefore at the back of the pharmacist's mind when performing an MUR:

Rebecca: ...I think they [support staff] feel under pressure because we're so used to having such a very good system and people don't have to wait long...so for that period of time they do feel under pressure, that oh my God, like, people have got a waiting time and things are piling up...

Employee pharmacist, Independent

Jane: ...I try and be sympathetic to the staff and say "look, I'm really sorry, but I've really got to do this one". Because you've got the target, you've got to achieve your target and I daren't say no to an MUR...I hope it's not obvious to the person in the MUR room that you're trying to rush through because you're conscious of the impact it's having on the rest of the business.

Employee pharmacist, Multiple

Jane was conscious of the effects of her absence on the running of the pharmacy and felt that she had to explain to staff the consequences of not attaining organisational targets. Employee pharmacists indicated that an additional pharmacist was required in busier pharmacies in order for MURs to be delivered effectively. However, they recognised that a pharmacy would

only warrant as many pharmacists as were needed to maintain the dispensing function. The following section describes the organisational pressure that pharmacists faced to achieve a targeted number of MURs.

7.3.7 Organisational pressure

Pharmacy staff were asked about any organisational pressure they felt surrounding the MUR service. Employee pharmacists in the independent did not report the same views as those pharmacists in the multiple. Rebecca, from the independent, mentioned that there was a target set by the owner to perform one MUR a day. However, she did not feel there were any consequences if this was not achieved. She explained that the owner acknowledged the barriers that sole pharmacists working in the pharmacy faced when performing MURs:

Rebecca: ...I give Rose [owner] credit and I must admit I'm the one who's not pulled through but she has said that I quite understand you can't do MURs when you're the only pharmacist...

Employee pharmacist, Independent

The owner of the independent was shown to be understanding when MURs were not being undertaken and this view was supported through observing the interactions between the owner and employee during fieldwork. Likewise, Linda, (the regular locum pharmacist) also reported not experiencing any pressure from the owner in the independent pharmacy. These views contrasted markedly with the employee pharmacists working in the multiple. Pharmacists' interview accounts confirmed fieldwork observations and conversations which suggested that staff did feel pressurised to achieve MUR targets. When asked where the pressure was coming from, two pharmacists commented that it was from the area managers and from the Company:

Researcher: ...you've spoken about...pressure but where do you think most of it comes from? What's the main source?

*Kate: ...From the area managers...I mean, when you have your conference call which I really don't, really do so much, mind you. How many have you done this week then?
Blah blah blah...*

Employee pharmacist, Multiple

Jane: Most pressure, I think, comes from the Company. Because they're saying, if you don't do so many targets, then you don't get a pay rise...So it's not like dangling a carrot in front of you and saying, well, if you manage to achieve it then we'll give you an extra bonus, it's more like if you don't achieve it, you'll get a whack up the backside...

Employee pharmacist, Multiple

Pharmacists were predominantly motivated to perform MURs to avoid negative consequences such as the withholding of staff pay rises. The pressure to achieve MUR targets adversely affected service provision; in particular, the way Jane reported selecting patients:

Jane: Well, it's not ideal because you're looking at figures rather than the actual quality of the service that you're giving...I think the pressure's got so much that it's just like, here's a quick one. You know, we can get one out of the way...So you're not picking the best people for it.

Employee pharmacist, Multiple

Jane described in her interview that she sometimes felt that she was “bullying” patients to undertake an MUR. Being the more senior pharmacist, Jane felt the pressure more strongly. She personally felt more responsible and was acutely aware that the consequences for not achieving the target would not only affect her but also other members of the dispensing team:

Jane: ...The only incentive they give us is the stick that we won't get a pay rise...The staff won't get a bonus. All staff will not get a bonus. So you've got peer pressure then to do it [MURs].

Employee pharmacist, Multiple

Jane expressed strong views over the perceived pressure to undertake MURs. Despite the organisational pressure to achieve the targeted number of MURs, pharmacists reported there was little to no additional staffing. When asked to describe any support they had received she replied:

Jane: ...I mean, I've had the ACT for two months, but she's gone...they've taken away my pharmacist, the idea being that they've given me an ACT but then the ACT's gone. So I have no one to cover the dispensary whilst I'm doing it [MURs] at the moment...

Employee pharmacist, Multiple

Kate:...they just pretty much throw you in at the deep end...they just don't want to know. They just want to know if your meeting target...

Employee pharmacist, Multiple

Pharmacists used the lack of staffing as a reason to justify to their superiors why the weekly MUR target was not being met:

Jane: ...It's set into my contract that I need to achieve so many MURs...I can counter by saying "well you're supposed to provide me with the staff and I cannot achieve these without the staff". So I feel like a bit of the pressure's been lifted because I've got an argument as to why I've not achieved it.

Employee pharmacist, Multiple

Despite the pressure described by Jane she still recognised that MURs were a useful activity for patients:

Jane: ...as much as I would like to say, you know, they're a waste of time, shouldn't be doing them, let's get rid of them and it takes the pressure off us, I think it's a good thing to have MURs...I've seen people go out and they seem happy, or happier, relieved, more relaxed about their medication...

Employee pharmacist, Multiple

Support staff in the multiple were asked to discuss any pressure they felt. The dispensers did not feel personally pressurised or burdened to recruit patients for MURs. However, they were very conscious of the effect of such pressure upon the pharmacist:

Dawn:...I don't agree we should have targets for it. It should be as and when a customer needs a medication review. It shouldn't be about, you've got to do ten today.

Because if you do ten and you don't give them the quality of service, what's the point in it?...Patient care's involved, that should be what it's about, it shouldn't be about targets.

Dispenser, Multiple

Dorothy: I am aware of what the targets are...I mean, Jane says she's sort of almost gone into relaxation mode. Because she says "I know I'm going to fail all my targets and it's not my fault...it's not achievable, they don't give me the bodies to do it with, so, what are you supposed to do?"

Dispenser, Multiple

Some support staff had concerns about what effect the pressure to achieve a targeted number of MURs had upon the “*quality*” of the consultation. The manager of the multiple reported that she preferred that the MURs did add “*value*” to patients:

Margaret...I don't see the value in hitting your four hundred target and everyone going well done, but those four hundred, a minimal amount of them have had any value....I would deliver them because we have to deliver them, and that's fine, I don't have a problem with it. I would much rather they be four hundred that added value than four hundred that don't.

Manager, Multiple

As a manager, Margaret also felt the pressure to achieve the targeted number of MURs. It was apparent that the manager was conscious of meeting her targets but also expressed concerns that the pressure to undertake MURs may be affecting the quality of care the patient received. Despite acknowledging the pressure that the pharmacists were under, the manager believed that it was her job to deliver the targeted number of MURs. Margaret described how she managed to achieve the target of 400 MURs in the previous financial year:

Margaret: Just talking about it all the time. Just, every day, how many have we done? How many have we done? How many have we done? And then that did become, Oh my God! But this year they're more focussed on it...

Manager, Multiple

There were several unintended consequences of pursuing MUR targets. Not only did pharmacists report it influenced selection but the pressure appeared to lead to some perverse effects. For example, during fieldwork observations it was found that MURs were offered to members of the support staff. Two of the staff members from the multiple pharmacy disclosed that they had an MUR in the same pharmacy where they worked. Although they were eligible for an MUR, it was apparent that their MURs were not anticipated to benefit them directly but rather, were performed in order to meet the quota:

Leah: Oh, I had one [MUR] last year. Jane did one on me.

Researcher: OK. How did you feel about that?

Leah: Well, it was all right, I sort of, I only did it because to get the figures up.

Researcher: ...Did you get anything from it or was it literally...?

Leah: No...It was just "you taking it all right?" "Yeah". That's it. I said "Is that it?"

[Laughs] [Jane] Said "Yeah".

Researcher: ...You didn't think it was necessary?

Leah: Not really. Not for me, no.

Counter assistant, Multiple

Although no rules were broken, the circumstances surrounding these MURs did not appear to be in the spirit of the service. Pharmacists in the multiple expressed how the target was affecting them and their professional decisions. The pressure exerted on employee pharmacists appeared to be their prime motivation for engaging with the service. The real world pressures of performing MURs have been highlighted in this section. Although support staff were not involved in performing MURs, they were, as already discussed, involved with the invitation process and also in coping when the pharmacist was absent during an MUR. Consideration will be given in the following section to support staff perceptions of the MUR service.

7.4 The absent pharmacist

Due to the researcher observing MURs in the consultation room, few observations were made of how support staff coped in the absence of the pharmacist during this time. These issues were explored in the support staff interviews. To begin with, support staff were asked how they felt about the MUR service. Most support staff framed the MUR service in a positive light and mentioned it benefited the patient in some way:

Helen: Yeah it's good for the patients 'cause they're elderly, they probably do get really confused about what they're on, what they're for and everything...the doctors don't always have time to do that. Whereas here they can come in, have a cup of tea if you want and they can really ask questions...

Dispenser, Independent

Dawn: ...the ones that seem reluctant, actually, in the end, come out of it thinking "oh yeah, it was beneficial". You get that...

Dispenser, Multiple

There were broadly positive views expressed by all support staff regarding the pharmacist spending time to talk with patients about their medicines. However, one dispenser expressed some concern that the time spent during the MURs could potentially be demanding for some patients:

Lucy: ...people seem to go away quite happy but I think people probably find it quite a tiring experience as well to be sort of cross-examined...that's how I see it sometimes, although it's good to be in a room here, I think that can be quite ostracising.

Dispenser, Independent

When they were asked about how they managed to continue providing services while the pharmacist was absent performing an MUR, dispensers and MCAs expressed several concerns. As was discussed in the literature review (section 2.3), the pharmacist is legally required to perform a 'clinical check' on each prescription received in the pharmacy. Most support staff recognised that the pharmacist was crucial to the provision of existing services and their

absence was seen to create tensions with patients waiting for their prescriptions or wishing to speak with the pharmacist. It was left to support staff to explain to patients why the pharmacist was not available:

Leah:...you see, on the television, they often run 'Ask your pharmacist' campaigns, so people will come in to speak specifically to the pharmacist and of course, they're not available.

Counter assistant, Multiple

Helen: Everything stops, everything stops [laughs] you know. I mean obviously it is a literary stop because we can do all the prescription and everything but you're having to say to people "oh it will be 15 minutes or 20 minutes".

Dispenser, Independent

As noted above by one MCA, there was a contradiction as television and magazine campaigns were promoting greater accessibility to the pharmacist, but when engaged with a patient during an MUR, the pharmacist was inaccessible. Dispensing staff described how asking patients simply to wait would lead some to go elsewhere to fill their prescription. The uncertainty faced over the length of time the pharmacist would perform the review was also a concern raised by support staff:

Sophie: ...if you tell them to wait for ten to fifteen minutes, they would just say "why do I need to wait for fifteen minutes?"...so, some of them will go to another pharmacy. That's like the worst objection.

Pre-registration pharmacist, Multiple

Helen: ...you can't even say "well yeah it will be 20 minutes" or "it will be 15 minutes" 'cause somebody might come in [for an MUR] and it will be so difficult that you've got to sit with them maybe for an hour.

Dispenser, Independent

A few support staff expressed annoyance due to the combination of the pharmacist being absent when performing an MUR and having to explain this to patients and customers:

Dorothy: I mean, when [names locum pharmacist] was here, that just got ridiculous. Because he went in with an MUR middle of a Friday morning and it was literally me left there on my own, and he was gone for ages. And that was just beyond a joke...

Dispenser, Multiple

Lucy: I think it's frustrating. Frustrating from the fact that you know people are waiting for prescriptions and you're having to say the pharmacist has got a patient in with her at the moment. People just want to go don't they? They want their prescription, and they're not bothered about why she's interviewing another patient...

Dispenser, Independent

One dispenser provided further insights. She explained that similar tensions also arose in situations other than when the pharmacist was absent during the MUR consultation. For example, when there were several prescriptions to be checked and patients were asked to wait. However, she perceived that patients became frustrated to a greater extent because the pharmacist was not visible to them when they were performing an MUR. All the dispensers saw the absence of the pharmacist as problematic except one who mentioned that because MURs were “scattered throughout during the week”, this was not disruptive for her. One reason why she may have reported feeling less concerned was because she was largely responsible for assembling prescriptions for nursing and residential homes that did not require an immediate clinical and accuracy check by the pharmacist.

In contrast to dispensing staff, MCAs by and large did not perceive the absence of the pharmacist to pose a problem. Customers on the whole were seen to be tolerant. The pharmacist’s absence was not usually felt to be an issue as they were usually available again after a short while:

Stef:...Most of the customers are patient and they will wait or they'll sort of go away and come back later. I've never had anybody that's been, you know, annoyed that there's no pharmacist available. No.

Counter assistant, Multiple

The contrasting attitude of MCAs compared with dispensers was because the work of dispensers was directly dependent upon the pharmacist being present for the final accuracy check. MCA could continue their activities as they were less reliant on the pharmacist when selling OTC medicines. However, some staff, particularly those who worked in the independent, described how sometimes they felt uncomfortable whilst waiting for the pharmacist when they were busy performing an MUR. They expressed feelings of being helpless and awkward when the pharmacist was unavailable to either talk to a customer about an OTC medicine or was waiting for a prescription that needed to be checked:

Cath...I do feel like sometimes, I don't know, like a duck at a fairground you know, like the hook a duck sort of thing or rifle range. 'Cause people are sitting there waiting to see the pharmacist or are waiting for the prescription and I'm on the shop floor and they're looking at me as if to say "why can't you do it"...I walk up and down, I feel they're following me everywhere. Well I can't do anything! It's not me! It's the pharmacist! You know, I do feel that like I get daggers pointed at me, ohh.

Counter assistant, Independent

Lucy:...if you do need to have a word you just have to say to the patient "I'm really sorry it's outside my sort of capabilities or jurisdiction. I can't sell you this at the moment; I need to speak to the pharmacist".

Researcher: Is that frustrating for the staff?

Lucy: I think it's umm a bit irksome...

Dispenser, Independent

Support staff on the front-line reported feeling anxious in situations when customers and patient were waiting for the pharmacist while they were performing an MUR. To avoid these situations they developed coping strategies and these will be reported in the next section.

7.4.1 Support staff strategies during the pharmacist's absence

It was generally left to support staff to explain to patients why the pharmacist was absent when they were performing an MUR. To avoid situations where tensions with customers or patients could arise, they deployed a range of coping strategies. Dispensing staff would initially

tell those who were waiting for their prescription that the pharmacist was busy with another patient. They would then assess how tolerant the patient looked whilst waiting. Dispensers were aware that they could interrupt the pharmacist should they need to:

Dawn:...what I generally do is I gauge if they're looking irritable...if it's a classic my bus will be here in five minutes, and she still hasn't done it, then what I tend to do is I'll nip in...

Dispenser, Multiple

Lydia:...if the patient's waiting, I do sometimes have to go in and knock and say "Rose [owner] can you just check?" and she'll sign it really quick, she doesn't mind if I do that...

Saturday assistant, Independent

The MUR was seen by all support staff as a private consultation between the patient and pharmacist. Support staff were aware that they could interrupt the pharmacist in these circumstances and made personal judgements about the need to interrupt a private consultation and appeasing waiting patients:

Helen: ...you don't like doing that because that's private, you don't like interrupting them but you feel you will because its dragged on so long ...you can't say "well they're not out yet" and then expect them to wait another 10 minutes so you feel obliged to interrupt...I mean if you're in the doctor's surgery you wouldn't want the receptionist knocking on the door would you while you were having a consultation.

Dispenser, Independent

Although pharmacists were aware of the potential problems the dispensing staff faced, there was not a clear 'protocol' for dispensing staff to use in managing these situations. Some dispensing staff would pre-empt this problem by telling patients their prescriptions will take longer:

Sophie: ...I know like the pattern of the pharmacist doing an MUR. For Kate I will try to give more time [laughter].

Pre-registration pharmacist, Multiple

Dawn:...[I would] first say, "now the pharmacist is with a patient so it could be about ten minutes", because, to me, if you say it'll be five and then it takes ten, they're not happy. You might as well say ten and then if they do it quicker, fine.

Dispenser, Multiple

There was a balance between how support staff dealt with patients waiting for prescriptions and the pharmacists wanting time to spend with patients. MURs were seen as an additional task that needed to be accommodated. When asked how the service could be improved, there was agreement from most support staff that it would be better to have an additional pharmacist or an ACT to free up the pharmacist to allow them to perform the MUR. However, it was acknowledged by some that it would not be financially viable to have two pharmacists:

Kay: ...I do think that if you're having the pharmacist whose doing MURs you should have somebody there to back up...because it is infuriating waiting for things.

Dispenser, Independent

Stef:...Because they won't give us two pharmacists every day will they...so long as one is available.

Researcher:...have you got any advice for me about how things would be easier for you?...

Stef: Oh. It's always the extra staff, isn't it? But, that's not going to happen. It's just not going to happen...another pharmacist or somebody to, well, like we had the ACT, but it didn't last long, did it? [Laughter].

Counter assistant, Multiple

This section described the difficulties and frustrations support staff faced when the pharmacist was absent during an MUR and the coping strategies used to overcome this. In the following section the use of the information collected during the MUR is discussed.

7.5 MUR information and patients' wider care

During fieldwork, information gathered during the MUR was not observed being referred to during the dispensing process or provision of other services from the pharmacy. The issue of accessing MUR information was further explored with pharmacists in their interviews. When asked, pharmacists reported that any information that was perceived to be important to the care of the patient or that was needed during the dispensing process was recorded on the PMR. This meant that the information was available when the patients' prescription was being labelled to be dispensed:

Researcher: How accessible is that [MUR] to your normal routine dispensing day?

Rebecca: Well, I guess it's at the click of a button but I guess it doesn't really sort of bring it up every single time...for example, I think one patient... was allergic to all orange colouring so we then flashed it up on the records [PMR] 'check none of the tablets have any orange or red colouring, if possible give her white tablets'

Researcher: But the information, you have to put that on to the PMR record...

Rebecca: We have to put that on the PMR...

Employee pharmacist, Independent

Jane: You don't necessarily remember it [MUR]...I mean, I have put the odd thing on [the PMR] but it's got to be really important for me to stick it on.

Employee pharmacist, Multiple

Pharmacists reported that the information recorded onto the MUR form was not accessed during routine dispensing of patients' prescriptions or other services relating to the patients' care. This supported fieldwork observations that MUR records in the multiple were filed alphabetically in folders on the dispensary shelf. The availability of the electronic MUR form in the independent was only accessible through a different window and so was not looked at during routine provision of services. Better integration of MUR information so that it could be accessed was not seen as a priority for pharmacists; indeed one pharmacist responded that there was barely enough time to complete the form itself:

Kate: ... it would be nice if [names Company] were to give us half an hour in the day just to write up our MURs...soon as I'm back in the dispensary, oh this has to be checked and stuff like that...if we've got the time, I'm happy to do so, put it on the computer...

Employee pharmacist, Multiple

Interviews with pharmacists supported fieldwork observation that the information derived from the MUR discussion was poorly integrated with other patient services.

7.6 Indeterminate issues and relationship with GPs

Pharmacists' accounts revealed that they all had their individual personal approaches to performing MURs. A couple of pharmacists described these, revealing that the process was underpinned by their reliance on filling in the MUR form rather than engaging in a process that was patient-centred:

Rebecca: ...I don't know if you notice...it is ticking boxes. But you kind of address a lot of the issues straightaway...when the first screen comes up, it's like "OK, this is the meds you're on"...all they [patients] need to be saying is 'Yes' or 'No'... [but they say] "I take that in the morning", so they're already giving all the details and then you move on to the next page with the 'tick-box' and you can literally tick it...

Employee pharmacist, Independent

Jane: ...I go through the form, you know, "do you understand it? How are you taking it? Are you having any problems with it?" But at the end, I say "have you got any questions about your medication?"...That is when they tend to pipe up about something that's going on...When you're going through the form, unless you really get involved in a query, you don't tend to discuss things, it's like tick, tick, yes, yes, fine, fine, fine, fine, bang. Everything fine, done...

Employee pharmacist, Multiple

As the extract illustrates pharmacists focused on filling out the MUR form and did not appear to show a desire to understand patients' concerns or other issues about their medicines. Furthermore, when pharmacists were questioned about what they wanted to achieve from the

MUR they did not express any wish to be involved with complex or indeterminate issues about the patient's medicines:

Researcher: ...what do hope to achieve out of Medicines Use Review?

Jane: I don't really tend to have any goals apart from let's get this done and get out as quick as possible [laughter].

Employee pharmacist, Multiple

Linda... a lot of people think it's a clinical review. But it's not, it's a usage review. And you're not there to question the appropriateness of the medication, you're there to make sure that they're taking it properly and they understand what it's for.

Locum pharmacist, Independent

Rose: I don't go looking for problems. I just see that the person knows why they're taking their tablets, they're taking the tablets and...they're achieving the objective of taking them. Because I feel that that's all I'm really wanting to find out.

Pharmacist and proprietor, Independent

When asked how often they contacted the patient's GP following an MUR, pharmacists reported that they rarely did so, instead they relied principally upon the patient to contact their GP if they felt this was needed:

Jane...I've always advised the patient if there's an issue that I think they need to sort out, advise them to get in contact with the practice nurse or the doctor...I've never come across anything that I felt that I needed to get on the blower. Personally, I think it's better not to have a third party involved because that can complicate matters...I think it's better that the patient and the doctor deal with each other directly.

Employee pharmacist, Multiple

Kate: ...I say [to the patient] speak to your doctor about it because of course, they're the only ones who can take things further and then they'll mention it to the doctor and review it...

Employee pharmacist, Multiple

Pharmacists generally felt that it was best for the patient to discuss an issue directly with their GP should the need arise. Pharmacists' reluctance to become involved with the patients care to a greater degree may stem from their existing relationship with GPs and the very limited involvement they had with the patient's prescribed medicines. These views were further explored when pharmacists were asked if they received any feedback from GPs about the MURs. All pharmacists reported they had little to no feedback from GPs or any other health professional as a result of their MURs. With little additional communication resulting from the MUR service, pharmacists had seen little difference in their relationship with GPs. There were some concerns raised over whether GPs welcomed the pharmacist's intervention. One pharmacist expressed that she did not want to collaborate to any greater degree with GPs:

Rose: I don't really care to talk too much to GPs unless I really have to...If there is any recommendation, I'll put it on their form, and it's their [GPs] responsibility...we're not going to go round chasing GPs...if you put a value on your time and you see how much each minute of yours is worth, then I want to use it for the benefit of my business, not chasing GPs.

Pharmacist and proprietor, Independent

Kate: ...I don't think they're [GPs] keen on us doing it, to be honest, to be truthful.

Employee pharmacist, Multiple

Pharmacists were largely passive when describing their involvement with the patient's medicines during MURs. They were content with managing minor issues but were conscious of professional boundaries and relied on the patient to discuss more complex or indeterminate issues with the GP.

7.7 Summary

In this chapter, I have reported pharmacist and support staff views of the MUR service and confirmed and extended the findings from the previous three chapters. The pharmacists in this study reported welcoming MUR activity and perceived that most MUR consultations were beneficial to their patients. Pharmacists held professional conceptions of what was to be

achieved during an MUR relating to notions of checking patients' compliance with medicines and providing information if they felt this was necessary. Personal benefits were also reported by pharmacists. These included the MUR as a break from routine activities and as a spur to keep up to date with their clinical knowledge. MURs were seen as an opportunity to talk to a greater extent with patients and learn about their medical conditions. Despite their positive views, pharmacists did not believe all their MURs were of benefit to patients and did not perceive their remit to extend to more complicated situations of patients medicine taking. The reported lack of feedback from GPs made MURs isolated events. Pharmacists revealed that they did not contact the GP directly, but rather, relied upon the patient to follow up any issues resulting from the review. Nevertheless, pharmacists did give accounts of where they felt an MUR had made a difference and also felt heartened to resolve minor problems that the patient had not been mentioned to the GP. In this sense MURs were seen as a professionalising and valued activity.

Pharmacists in the study reported they simply had insufficient time to dedicate to MURs. They expressed that the MUR policy and its implementation in pharmacies showed little evidence of thinking through the implications for the existing workload of the pharmacy. Support staff interviews further highlighted this view. During an MUR, dispensers and MCAs reported feeling frustrated as they had to manage patients' expectations when the pharmacist was absent from view in the consultation room. Dispensers knew they could interrupt pharmacists during an MUR; the symbolic significance of this supported the notion that the pharmacist was effectively still 'on call' despite being in a private consultation with a patient.

Pharmacists and support staff reported other barriers to the service which reduced their motivation to perform MURs. On a practical level recruiting patients was a tedious challenge. As was illustrated in the previous chapter, when patients were asked about the reasons why they used the pharmacy their response did not include reviews of their medications. It is not therefore surprising that pharmacy staff reported low awareness among patients of MURs. In their accounts, pharmacy staff showed little sign of identifying or targeting patients who potentially may benefit most from an MUR. Support staff interviews confirmed a limited understanding of what occurs during an MUR and their difficulties in communicating the anticipated benefits to patients. The low value attached to MURs compared with other pressing activities coupled with vague ideas of their potential benefits resulted in an unfocused

approach to patient recruitment. Pharmacists were not concerned about who they recruited as long as they met the minimum eligibility criteria. The information that was gathered during the MUR was perceived to be poorly integrated or utilised in other pharmacy services such as during the provision of dispensing services.

On an organisational level, pharmacists and support staff in the multiple were acutely aware of the corporate strategy to achieve a targeted number of MURs. Pharmacists reported feeling pressurised to undertake MUR activity to achieve the maximum quota as this was linked to pay rises and bonus payments for themselves and the rest of the team. Pharmacists conceded that under these circumstances, patients that were potentially in most need of an MUR were at times being excluded. Particularly in the multiple, rather than viewing the MUR as an activity to benefit the patient, pharmacists fixated on short-term targets and the avoidance of negative consequences of not achieving these. Interview accounts suggested that the pressure to achieve targets could lead to perverse behaviours. The targeting of patients on fewer medicines which could be undertaken quickly and MURs being reportedly undertaken on pharmacy staff were two such examples.

This chapter has presented the views of pharmacy staff and is the fourth and final results chapter. The following chapter is a discussion of the findings from this study.

CHAPTER EIGHT

Discussion

8.1 Introduction

National health policies in the UK are increasingly promoting community pharmacy's involvement in medication management services (Clifford et al 2010; DH 2001; DH 2003b; DH 2005b; DH 2008; NICE 2009). Since 2005, community pharmacies in England and Wales have had the opportunity to offer the MUR service to their patients. The Government White Paper, '*Pharmacy in England: building on strengths - delivering the future*' (DH 2008) cited MURs as a key opportunity for community pharmacists to intervene in supporting patients with the safe and effective use of their medicines (DH 2008). However, the effectiveness and value to patients of community pharmacists' involvement in the delivery of such services remains unclear (Holland et al 2005; Lenaghan et al 2007; McDonald et al 2010; Salter et al 2007; The Community Pharmacy Medicines Management Project Evaluation Team 2007). Moreover, patient outcomes from MURs have not been well researched and studies in this area have been small and not representative of how MURs typically occur in practice (Bagole et al 2007; Colquhoun 2010a; Colquhoun 2010b; Desborough et al 2008; Greenhill et al 2011; Portlock et al 2009; Wilcock and Harding 2008; Youssef et al 2010). Furthermore, there have been studies suggesting wide variation in how pharmacists are documenting and completing MUR forms (John et al 2009; MacAdam and Sherwood 2011; NPA 2010; Ruda and Wood 2007).

This study was an in-depth investigation of the MUR service and aimed to fill current gaps in the literature. The study was designed to investigate the 'real world' practice of MURs including reporting on the MUR consultation and the patients' perspective of this. In the previous four chapters I have presented the findings from this study. In this chapter, these findings are discussed in relation to other studies of MURs and the relevant wider literature. I consider the findings from this study in the context of two broad themes. Firstly, I consider the MUR as a modern developing service and an extended role for community pharmacists. However, I argue that the MUR is an unestablished service and role for community

pharmacists and one which is not fully recognised by patients or GPs. Secondly, I consider the findings from this study in relation to the MUR policy, professional aims and intentions and consider whether these are being translated in to practice. The strengths and limitations of the study are discussed as are the implications and avenues for future research. Before discussing their significance, a short summary of the key findings is presented below.

8.2 Summary of findings

Observations in the two community pharmacies revealed pharmacists' heavy commitment to the dispensing process and to other services that required them to be accessible on the shop floor. MUR activity was therefore undertaken by pharmacists opportunistically and pragmatically accommodated into their daily workload without additional resource. There was little evidence that suggested that pharmacists targeted MUR activity to patients who may have benefited most. Rather this was dependent on whether the patient filled the minimum selection criteria for eligibility or if they had a good relationship with the patient. Undertaking MURs to achieve targets or for financial reasons was a noticeable driver for MUR activity within the pharmacies.

Observations of MUR consultations revealed that all the pharmacists adhered to a format for conducting MURs which was largely determined by the structure of the MUR form. Typically the pharmacist dominated the consultation through their professional discourse. The pharmacist framed the activity as a quick consultation in order to "check" the patients medicines. Their formulaic approach and closed questions meant opportunities to discuss more complex issues about medicines and wider health issues were lost. Nevertheless, compared with patient-pharmacist interactions when handing out dispensed medicines, the MUR offered a more private and comprehensive consultation about the patients use of medicines.

Patients provided ambivalent descriptions of their experience of MURs and what they perceived the purpose to be. This was perceived as a monitoring activity rather than an opportunity for them to discuss their use, beliefs and concerns about their medicines. Patients reported that the MUR did little to improve their knowledge of their medicines and rarely affected their use. Some patients were aware of the potentially negative impact of MURs on inter-professional boundaries, relationships and responsibilities. Patients' accounts did not provide strong evidence that the MUR service is achieving its formal policy aims and objectives.

Pharmacists' professional conception of MURs rested on improving patient adherence to medicine taking. Pharmacists, particularly in the multiple pharmacy, reported feeling pressurised to achieve a targeted number of MURs. This contributed to unintended

consequences including a reluctance to offer MURs to patients with complex medicine regimens or health problems. This was despite pharmacists acknowledging that these patients could potentially benefit most from the service. Implementing the MUR service was challenging with staff reporting a lack of time and resource as well as difficulties with recruiting patients. Support staff reported their frustration of having to manage patient expectations when the pharmacist was absent from the shop floor and unable to respond to queries. This study revealed the strategies they used to cope when the pharmacist was absent during an MUR.

8.3 MURs: a modern and developing service

Within this theme, I initially discuss and contextualise the patients' perspective of MURs. I then discuss the implementation of the MUR service and how this was challenging for pharmacists alongside the existing services provided by the pharmacy. I also discuss how the lack of collaboration between pharmacists and GPs impacted on service delivery. I then turn to consider how the MUR was communicated to patients and how this affected the perceived purpose of the MUR. As a modern yet developing service, I argue that there is a supplier-induced demand for MURs rather than being driven by patients. I conclude by considering MURs as a means of promoting the community pharmacist's role and its impact on the professional status of pharmacists.

8.3.1 Contextualising the patient perspective

There have been no studies that have sought to observe the MUR as they typically occur in a 'real world' practice of a community pharmacy and to explore patient perspectives of the service. This study therefore adds to our understanding of what happens during an MUR and what the immediate perception and outcomes for the patient were. Observation of pharmacists performing MURs showed that they adhered to a format for conducting MURs which was largely determined by the structure of the MUR form. This led to patients being passive recipients of the service. Pharmacists tended to use a 'unilateral' approach to patient counselling (Pilnick 2003) and often provided information without establishing whether the patient was already knowledgeable about an issue. There were resemblances with patient-pharmacist interactions when handing out dispensed medicines. There was a noticeable

absence of curiosity or intent to enable patients to reveal their perspectives on their medicines. These findings support previous studies of patient-pharmacist communication indicating that the pharmacists' conversational turn aims to promote their own agenda rather than altering in response to what patients say (Ramalho de Oliveira and Shoemaker 2006; Salter et al 2007; Salter 2010). Like in other studies of patient-pharmacist interactions, in most instances the pharmacist remained focused on the medicine rather than responding to the patient and discussing the issue in relation to the patient's illness (Dyck et al 2005; Deschamps et al 2003; Greenhill et al 2011).

Most patients described the MUR in positive terms. This view was concurrent with other studies suggesting that MURs are generally well received by patients (Bagole et al 2007; Kumwenda and James 2008; NPA 2010; Patel and Lefteri 2009; Portlock et al 2009; RPSGB 2010; Youssef 2009; Youssef et al 2010). Patients' positive views of MURs may be indicative of a wider satisfaction trend of community pharmacy services in general (Anderson et al 2004; Bissell et al 2008; Eades 2011). However, the manner in which MURs were performed by pharmacists led to patients framing the MUR as a monitoring or a 'big-brother' activity. In their accounts, patients did not construct their experience of MURs as an opportunity for them to discuss their medicine use, beliefs and concerns. Indeed, several patients reported that the consultation left them with the impression that this was an activity that the pharmacist was required to do rather than being for their benefit. Despite these views, most patients reported feeling comfortable during the consultation and were appreciative of the time spent with the pharmacist. Pharmacists were perceived as knowledgeable experts on medicines and most patients found that the pharmacist was more approachable and had more time than their GP. Some patients had the chance to discuss what they considered to be 'minor' issues, such as which medicines could be co-administered. These issues were not perceived important enough to discuss with their GP but were still considered a concern for the patient. Patient information needs have been shown to vary over time (Barber 2001; Britten 2008) and patients may use the pharmacist's opinion as a sanction to access the GP (Hassell et al 1997). This may account for the MUR process helping reassure patients about their medicines and that they were "*doing the right thing*".

When the MUR was contextualised within the patient's existing framework of care, it was found that most of them took prescribed medicines long-term and were comfortable with

their existing level of information about medicines. Patients perceived that the pharmacist could resolve few problems as part of an MUR as they perceived, as others have highlighted, pharmacists as a 'drug experts' rather than experts on health and illness (Anderson et al 2004). Moreover, despite the notion that the pharmacist could potentially be a 'bridge' or 'translator' between lay and professional care (Blaxter and Britten 1996), most patients had regular contact with their GP and perceived them to be the main authority over their medicines. They considered that 'significant' problems with their medicines would be best resolved by talking to the GP rather than with the pharmacist during the MUR. This supports previous studies that have found that patients believe their GP to be the only health professional with the legitimate expertise to diagnose and treat disease (Britten 2008; Makoul 1995; Livingstone et al 1993; Livingstone 1995). Research into patient perceptions of prescribed medicines suggests that they perceive the GP to be best placed to provide information about their medicines and that they feel the routine giving of information on repeat medication is unnecessary (Britten 2008; Hirsch et al 2009; Makoul 1995; Puspitasari et al 2010). Indeed the distinction between doctors as 'autonomous' prescribers and pharmacists as 'mere' dispensers (Britten, 2001) was one which was seen to hold true in the present study.

Patients perceived pharmacists to hold a subordinate position to GPs and to have little authority to advise or change their prescribed medicines. MURs were seen by some to challenge this authority. Some of the respondents, as in Bissell et al's study (Bissell et al 2008), also expressed anxieties about the pharmacist's role in making recommendations about their treatment, stemming from expectations about 'who did what' within the health care division of labour. Such findings are congruent with another UK based study which showed that patients, who received medication reviews by pharmacists, rebutted their attempts to give advice about treatment by calling on the higher authority of the doctor (Salter et al 2007). A recent study exploring patients' views of Australian HMRs has also found similar concerns and that the pharmacists may be compromising patient trust in the doctor (Lee et al 2011). The significance of a lack of collaboration between pharmacists and GPs is discussed further in section 8.3.3.1.

8.3.2 Communicating the purpose of MURs

Previous studies have questioned whether the difficulty in recruiting patients for an MUR was due to a lack of patient interest or the pharmacists' inability to communicate the MUR as a

useful and relevant service to patients (Bassi and Wood 2009; Hall and Smith 2006). The findings from this study indicated that both were the case. When inviting a patient for an MUR, pharmacy staff struggled to effectively explain how the MUR might be beneficial to them or how this differed from a medication review provided by the GP. Support staff in particular received little training about how MURs could be useful to patients and what the service entailed. Vague phrases were typically used to convey the MUR purpose to patients such as "*to go through your medicines*".

The difficulties in communicating the purpose of an MUR could be viewed as part of a wider problem of the public not being aware of the pharmacists' engagement in newer roles or their existing skills and attributes (Hassell et al 1999; Hassell et al 2000; Roberts et al 2006; Rutter et al 2000). Tensions may exist between the well established traditional, technically-oriented paradigm that patients are familiar and the less well developed role of the pharmacist as patient advocate (Morgall and Almarsdóttir 1999). Fieldwork observations and interviews with participants supported the widespread consumer notion that pharmacies are used mostly for prescription supplies and the purchase of OTC medicines (Anderson et al 2004; Eades et al 2011; Hassell et al 1999). Patients recognised the pharmacy as a retail environment and prioritised a quick and efficient dispensing service above other services. Nevertheless, the pharmacist was seen as an accessible adviser, views which were similar to those shown in other studies (Guirguis and Chewning 2005; Hassell et al 1997; Ried et al 1999).

Most patients in this study were invited for an MUR in an ad hoc way, a method of recruitment commonly used by pharmacy staff (Hall and Smith 2006; Latif and Boardman 2008; Moss 2007; Urban et al 2007; Wang 2007). This method of recruiting surprised some patients and made others feel guarded which further detracted from opportunities to explore the patient's agenda within the MUR. Analysis of patient information leaflets about MURs found that these largely communicated a formal assessment message to patients (Donyai and Van den Berg 2006; Van den Berg and Donyai 2010). Although patient empowerment was implied in these leaflets, this was within the boundaries of the biomedical model with the pharmacist as the educator for medicines information. The issue of mixed messages being communicated to patients via patient information leaflets more generally, has been highlighted by others. Dixon-Woods (2001) suggested that two discourses could be distinguished. The prominent discourse was one that served the professional agenda to ensure medicines were taken 'properly'.

Patients here are characterised as passive and open to manipulation. The second, more recent discourse, contrasted with the first to draw on the political agenda of patient empowerment and choice for the patient. This study suggests that clarity of what MURs should aim to achieve for patients is needed to develop a rigorous, theoretically grounded approach to MUR patient information leaflets and other promotional campaigns.

8.3.3 Challenges of implementing a new service

One research objective of this study was to observe and report how the MUR service is being managed alongside the existing service provision. Research into community pharmacists' involvement in patient-oriented services has identified several facilitators to their implementation. These include more training and support for pharmacists, reduction of administrative work, increase in patient awareness and demand for such services, improvements in pharmacist-GP relationships and clearer messages from the pharmacy profession about the future of professional practice (Gastelurrutia et al 2009; Roberts et al 2006). However, findings from this study supported those from several other studies suggesting MUR implementation is problematic for pharmacists due to a perceived lack of time, increased workload and poor resourcing (Blenkinsopp et al 2007a; Bradley et al 2008a; Foulsham et al 2006; Gidman 2011; Hall and Smith 2006; Latif and Boardman 2008; Rosenbloom and Graham 2008; Urban et al 2008; Wang 2007; Wilcock and Harding 2008).

Pharmacists pragmatically accommodated MURs when convenient to them and to the workload of the pharmacy and felt pressure to return to their 'traditional' shop floor duties. Pharmacists were acutely aware of the negative consequences of their absence on the pharmacy support staff while they were occupied in completing an MUR. They indicated that this influenced how they conducted the MUR. Perceptions of being busy have been shown to reduce the extent to which pharmacists provide information to patients and ability to assess their understanding (Svarstad et al 2004). In response to their commitment to their shop floor duties, pharmacists allowed MURs to be interrupted to maintain work flow. This study provides insights into the range of strategies that were employed by support staff to cope while the pharmacist was absent during an MUR. This finding highlights the importance for policy makers and professional bodies to consider pharmacists existing responsibilities and how new roles affect existing service provision. The implementation of MURs appeared to

suffer from the well documented problems of managing extended roles alongside existing ones (Amsler et al 2001; Bradley et al 2008b; Eades et al 2011; Krska and Veitch 2001; Lee et al 2008; Lounsbury et al 2009; Niquille et al 2010; Rutter et al 2000). The MUR service has been implemented without due consideration for the practicalities of the modern day pharmacy akin to the analysis by Dingwall and Watson (2002). Commenting on the social and economic position of the solo practitioner, they stated that there was a clear cultural gap between the thinking of NHS policy makers and the pharmacist as an entrepreneurial professional.

The MUR remuneration structure led to a target driven culture and as a result this was the main facilitator for MUR activity. Corporate pressure applied to pharmacists was most evident in the multiple pharmacy and this has been well reported in the literature (Bassi and Wood 2009; Blenkinsopp et al 2007a; Bradley et al 2008a; Murphy 2007; McDonald et al 2010a; McDonald et al 2010b; Wilcock and Harding 2008; Harding and Wilcock 2010; Urban et al 2008). Consequently, particularly in the multiple, the motivation for undertaking MURs was not strongly driven by personal, professional or altruistic reasons but rather to avoid the negative consequences from not achieving a targeted number of MURs. This contributed to several unintended consequences which are discussed further in section 8.4.2.

Reasons reported by pharmacists for becoming involved in extended role activities include enhanced job satisfaction, a break from the routine task of dispensing and the potential to improve their public image to patients and GPs (Edmund and Calnan 2001; Grindrod et al 2010; Mottram 1995; Roberts et al 2006; Tully et al 2000). Although in principle pharmacists did view MURs to be beneficial to patients, when undertaking MURs in practice they proved burdensome. The challenges of recruiting patients and a lack of perceived support from GPs contribute to this. However, further insights were made by the way the pharmacies incentivised their employees to perform MURs. Pharmacists felt pressurised and, particularly in the multiple, somewhat coerced to achieve a weekly target number of MURs. This reduced their intrinsic motivation to engage in MUR activity (Pink 2009). Being constrained by the ‘technology’ of the MUR form, pharmacists lacked a sense of autonomy in deciding how best to help the patient. This resulted in a formulaic approach to MURs which is discussed in section 8.4.2.2. Implementation of MURs was problematic for pharmacists and due consideration to the logistics of the pharmacists existing workload failed to encourage them to take the

opportunities to effectively engage with the service. Furthermore, a lack of collaboration with the GP was seen to limit the potential of what could be achieved by the service.

8.3.3.1 Lack of collaboration with GPs

The literature reports positive results on patient health outcomes arising from effective pharmacist-GP collaboration (Chen and De Neto Almeido 2007; Krska et al 2001; Nathan et al 1999; Sorensen et al 2004; Sturgess et al 2003; Zermansky et al 2001). Although MURs involve pharmacists undertaking a consultation with a patient, GPs can become involved by referring patients to the pharmacist and considering pharmacist recommendations made as a result of an MUR. The findings from this study suggest that the MUR service is not fostering collaborative work between pharmacists and GPs. Pharmacists did not report that the GP had referred patients to them for an MUR and they also reported receiving no feedback from them about the MURs conducted. Pharmacists have reported similar views in other studies indicating that they did not perceive MURs to be welcomed or valued by GPs (Blenkinsopp et al 2007a; Bradley et al 2008a; Celino et al 2007; McDonald et al 2010; Urban et al 2008; Wilcock and Harding 2007).

There was little evidence from pharmacists' accounts that MURs contributed to increasing collaboration with GPs. Pharmacists chose to shift responsibility of communicating any outcomes from MURs to patients. This finding supported other research indicating that MURs have not significantly contributed to improving pharmacist-GP relationships (Blenkinsopp et al 2007a; Bradley et al 2008a; Elvey et al 2006; James et al 2007; Harding and Wilcock 2010; Urban et al 2008; Wilcock and Harding 2008). Cultural barriers, a lack of clear shared expectations and routine face-to-face interactions between GPs and community pharmacists have been cited as obstacles to community pharmacists' medication review activity (Chen and De Neto Almeido 2007). Resistance from the medical profession to the extension of the pharmacists' role has also been highlighted (Edmunds and Calnan 2001; Hughes and McCann 2003). Other inhibiting factors include the geographical separateness or isolation of community pharmacy from general practice, the image of the community pharmacy as a commercial outlet rather than a health care provider (Hughes and McCann 2003; Jesson and Wilson 2003) and pharmacists not being considered as a "*permanent member of the primary health care team*" (Royal College of General Practitioners 2007:9). Britten (2008) has suggested that health professionals, other than prescribers, could be used to support patients who adjust

their medicine regimen to their own preference. However, pharmacists did not take the opportunity to adopt this role. The lack of perceived mandate over prescribed medicines and the wider issue of pharmacists' lack of collaboration and access to GPs (Hughes and McCann 2003) may have been reasons for this.

Poor collaboration between pharmacists and GPs draws attention to the wider issue of specialisation in professions. Waddock and Spangler (2000), in their analogy, described a 'Humpty Dumpty problem', where all of the kings horses and men resembled the various specialisations in today's professions, all trying to resolve the problem of Humpty's broken body. Each profession, only having some of the knowledge to resolve the problem, is expected to help by putting their part of Humpty's broken body, and only their part, back together again. They accomplish this without knowledge of what the other professions are doing or indeed what Humpty looked like in the first place. The authors argue that professionals that do not have a common, shared care plan for the patient cannot be successful and that professions must be able to integrate multiple perspectives for the overall benefit of the patient. This study found that collaboration between pharmacists and GPs was typically episodic and any problems were resolved via telephone conversations. Only specific problems with the patient's prescription were discussed when identified during the dispensing process. There was minimal continuum of care involving the patient. Others have suggested that for collaborative programmes to be successful, the expectations and practice of collaboration must be pre-existing (Chen et al 1999a; Chen et al 1999b; Chen et al 2001). Expectations that effective pharmacist-GP collaboration would occur as a result of MURs, without understanding the limitations of their pre-existing relationship, is idealistic. Nevertheless, better working relationships between pharmacists and GPs have been suggested to involve a piecemeal process; one that is slowly built over time and with reliance on the essence of goodwill relationships (Bradley et al 2008b). MUR activity could facilitate this process. However, in order for deep and sustained change to occur, reforms to the MUR policy are needed to encourage GPs to become more involved along with a concerted effort to build relationships so that pharmacists and GPs are in regular contact for the benefit of the patient.

8.3.4 Supplier-induced demand

The community pharmacist's social position and role has been argued as being indistinct and overshadowed by perceptions of being oriented towards business (Edmund and Calnan 2001;

Hibbert et al 2002; Hughes and McCann 2003; Mays 1994). Others have suggested that the public infrequently seeks pharmacy care as an alternative to the GP (Hassell et al 1999; Hassell et al 2000; Hamilton 1998). The lack of self or GP referral in this study indicated that patients did not feel that the community pharmacist had a role in reviewing their prescribed medicines as a means to improve their knowledge and use of medicines. Nor did they perceive MURs to be an activity that would resolve any serious issues that they had with their prescribed medicines. This was reflected in how patients described the MUR as being “*satisfying*” or “*interesting*” rather than “*necessary*” or “*personally useful*”. Pharmacists reported patient apathy and failure to turn up for booked appointments, a finding supported by other studies (Blenkinsopp et al 2007a; Moss 2007; McDonald et al 2010; Urban et al 2008). As other researchers have suggested, patients may be resistant to change and prefer to stick with their current level of care from the pharmacist (Tinelli et al 2009). Some may even prefer to be in a state of ‘blissful ignorance’ regarding their own treatment (Lupton et al 1991).

Community pharmacy has faced a long standing problem about who needs advice and when and how it should be given (Tully et al 1997). The lack of recognition of the community pharmacist’s role in medication management services is not confined to the UK. Home Medication Reviews (HMRs) represent a key component of Australia’s national medicines policy for achieving ‘quality use’ of medicines (Commonwealth Department of Health and Aged Care 2001). However, a recent study of HMRs also found that patient awareness of the service was poor despite its availability since 2001 (Lee et al 2011). In the US, low participation rates in medication therapy management services are common and numerous challenges to providing such services including reimbursement and stakeholder acceptance of the services have been identified (Pellegrino et al 2009). For programmes to be successful, patients must perceive value for their time spent engaging with the service (Pellegrino et al 2009). With pharmacists being constrained by the ‘top down’ MUR policy, the MUR did not resonate with patients as a useful service.

Patients’ use of the pharmacy has been suggested to be affected by their subjective evaluation of their need for a service and their actions in managing their illness (Eades et al 2011; Hassell et al 2000). Despite the MUR service being available for several years, pharmacy staff reported that awareness amongst patients of what the MUR could offer them was poor. With the exception of one, all MURs were initiated by the pharmacy staff and so this was largely a

service driven by a supplier-induced demand mechanism (Folland et al 2009). In contrast, other pharmacy services such as the supply of dispensed medicines and OTC sales of medicines are patient or consumer initiated. The infrequency of MUR activity meant that, when viewed from the patients' perspective, the consultation was an unexpected and somewhat sporadic event and not considered a routine part of the care offered from the pharmacy. Patients who had an MUR for the first time reported they had never been offered such a service in the past and did not expect this to be offered again in the future. As the demand for MURs is supplier-induced, this study raises questions as to whether the service is required by patients or whether there could be alternate ways of achieving the same goals. Furthermore, as with other supplier-induced demand health services, commissioners typically have little way of knowing the appropriate quantity of service to be provided resulting in the rationing of service payments (Folland et al 2009). Simply placing a cap on the maximum number of MURs that each pharmacy can claim has led to a perverse incentive (McDonald et al 2010a; McDonald et al 2010b) and the consequences for patients of this are further explored in section 8.4.2.

8.3.5 MURs and professional role extension

MURs remain largely unrecognised by patients and GPs and have proved to be challenging for pharmacists to deliver. It therefore raises questions as to what extent MURs contribute to the professional status of community pharmacists. As discussed in Chapter Two, developments in technology, automation and organisation of health care has led to growing professional attention to reappraise community pharmacists' activities away from the technical aspects of dispensing toward clinically-oriented and patient-centred roles (Birembaum 1982; Edmund and Calnan 2001; Gilbert 1998; Laine and Davidoff 1996; Nuffield Committee of Inquiry into Pharmacy 1986; RPSGB 1997a; RPSGB 1997b). However, far from providing an opportunity to develop skills and raise their professional status, pharmacists' subordination to the 'technology' of the MUR form reduced the pharmacists' scope and opportunity for exercising professional judgement and autonomy during the consultation. Furthermore, evidence suggesting ineffective targeting of MURs (Blenkinsopp et al 2007a; Bradley et al 2008a), has threatened the extent to which this activity raises the pharmacists' professional profile (DH 2008).

Pharmacists hold a licence to undertake MUR activity and in theory, engaging with MURs has the potential to raise the community pharmacist's status. However, the continued lack of control that the pharmacists were seen to have over pharmacy's social object, the medicine, (Denzin and Metlin 1968) undermined the potential to enhance their professional status. Moreover, corporate pressure applied to employee pharmacists, as others have also suggested, led to pharmacists focusing on commercial, as opposed to patient interests (McDonald et al 2010b). A lack of recognition from patients, GPs and organisational constraints signified that pharmacists' struggle to establish a mandate over this activity. Furthermore, it has been argued that one facet of professional status involves perceptions of professional time as being more valuable than that of the patient (Harding and Taylor 1997). However, where patients initiate consultations to see their GP, the MUR was one where the pharmacist was relying on the patient to agree to an MUR.

Harding and Taylor (1997) have noted that extended pharmacy roles may ironically have a de-professionalising effect because many do not have medicines as their focal point and thus has traditionally been the pharmacist's expertise and claim to professional status (Hepler and Strand 1990; Edmund and Calnan 2001) Pharmacists engagement with MURs exposed them to a greater degree of indeterminacy in their work than their 'traditional' shop floor interactions (Jamous and Peloille 1970). Much of the pharmacist's shop floor work was routinised and when opportunities were presented to intervene on prescribed medicines, this was, as indicated by others, largely taken up with bureaucratic or legal issues (Braund 2010). In contrast, during the MUR, each medicine was referred to and was asked about and this would not have otherwise occurred. The MUR presented pharmacists with more opportunities to help patients with their medicines or to respond to a specific query that had been raised by the patient. Consequently, pharmacists were exposed to some of the complexity of how patients manage their medicines and were challenged to sometimes talk about a sensitive issue that would not have been raised by patients on the shop floor. In this way, MURs incrementally added to the level of indeterminacy in pharmacists' work. This study shows that pharmacists have the opportunity to further their professional status through MUR activity. However, they are, by and large, not taking full advantage of this at present.

In this section, I have discussed the patient's perspective of MURs and their implementation in light of a modern but still unestablished service. With a supplier-induced demand for MURs,

questions are raised as to their value to improve patient's use of medicines. I have also discussed the topic of MURs as a means for enhancing professional status. In the following section, I turn to discuss whether the MUR service is in practice, managing to realise its intended policy and professional aims and intentions.

8.4 From policy to practice

One objective of this study was to investigate whether the aims of the MUR service to improve patients' knowledge about their medicines and their use are being realised in practice and in this section I discuss this objective. Initially consideration is given to the process of rationalisation on MUR service provision and the unintended consequences that result from this. I then discuss how the MUR policy was being interpreted by pharmacists and its manifestation in practice. I conclude by discussing whether the policy and professional agendas that have been set out for the service were being met in the 'real world' practice of the pharmacy.

8.4.1 MURs and rationalisation

NHS services have seen an increased focus on operational outcomes which have been brought about through a 'top-down' managerial approach and commitment to rational decision making (Hogwood and Gunn 1984; North 1997). The MUR policy is no exception and this study demonstrated the effect of such rationalisation in practice. As outlined in Chapter Two, one way of understanding this process is through Ritzer's conceptual model which is based on four intertwined dimensions: efficiency, calculability, predictability and control (Ritzer 2008). These dimensions were evident and could be applied to the MUR service. For example, the MUR consultation centred on the completion of the national standard MUR form. This 'tick-box' form enabled the efficient questioning of patients about issues that were thought to improve patients' medicines knowledge and use. This 'one size fits all' approach encouraged the pharmacist to treat patients who had a diverse range of individual circumstances and issues the same. There was evidence suggesting that pharmacists focused on the quantity of MURs undertaken over any quality outcome measure. The control element of his model could be seen in the way organisations applied pressure on pharmacists to undertake MURs. Ritzer, in

his model, warned that systems designed around rationality can lead to irrational and unintended consequences and these are discussed next.

8.4.2 Unintended consequences

In this section, I focus on two areas that contributed to the irrationality that was associated with the MUR service. Firstly, the MUR remuneration structure and secondly, the national MUR form that is required to be completed as part of the MUR.

8.4.2.1 Irrationality of MUR targets

The MUR policy remunerates for the volume of MURs undertaken and this has led to organisations setting targets for pharmacists. This issue has been well documented in the literature (Bassi and Wood 2009; Blenkinsopp et al 2007a; Bradley et al 2008a; Murphy 2007; McDonald et al 2010a; McDonald et al 2010b; Wilcock and Harding 2008; Harding and Wilcock 2010; Urban et al 2008). Within the multiple pharmacy, the threat of withholding staff bonuses or pay rises was reflected in the choices that pharmacists made. One pharmacist reported that as a consequence of this pressure she felt she was "*bullying*" patients to undertake an MUR in order to achieve the weekly quota. Others have indicated that pharmacies are being remunerated for MURs that are not being effectively targeted at those who may benefit the most and that the professional status offered through MUR activity is being undermined (Bradley et al 2008a; DH 2008; McDonald 2010a; McDonald 2010b). This irrationality was most evident when two support staff reported that they themselves had been offered and had undertaken an MUR in order to contribute to realising the MUR target.

The lack of optimally selected patients or formal needs assessment prior to the MUR may explain the limited improvements in adherence to medicines or reduction of wastage from unused medicines reported by patients. Patients on fewer medicines, or those perceived to have less complex medical conditions, were targeted for MURs as they could be 'processed' more quickly. This led to some patient groups reportedly being avoided such as patients with many medicines, complex conditions such as mental illness and older patients who could become confused by the request and participation of an MUR. However, these are precisely the patient groups who may have benefited the most from an MUR. Moyo (2010) commenting on the perverse effects of quantitative measures as a means to remunerate for MURs, pointed

to 'Darley's Law' to provide further insights. This law predicts that the more a quantitative measure is used to determine an individual's performance, people will find ingenious ways in order to maximise their figures but in the process, lose sight of what the numbers actually represent.

The introduction of different types of incentives to better manage public health services has been shown to impact on the professional behaviour of pharmacists and other health care professionals in primary care (McDonald et al 2010b). McDonald et al (2010b) showed that centrally driven reforms and initiatives do not always change behaviour as intended. For example, the use of computerised chronic disease templates, which facilitate GPs achievement of Quality and Outcomes Framework (QOF) targets, have led to patient consultations to be directed by the GPs agenda to ensure that these target measures are met. The focus on recording information that may not be of direct relevance has threatened the balance away from the patient's immediate agenda (Campbell et al 2008; Mangin and Toop 2007; McDonald et al 2010b). In another example, reforms to the Dental Contract in 2006 led to reports of immediate behaviour changes in dental practice. A shift away from complex treatments towards less resource intensive procedures was reported by dentists because of the new funding structure. This led to dentists switching to treatments which pay more, relative to effort expended as opposed to selecting treatments on the basis of clinical factors alone (McDonald et al 2010b).

UK studies investigating the effect of pay-for-performance schemes in general practice have shown limited effects on processes of care or on clinical outcomes and that providing generous financial incentives may not be sufficient to improve the quality of care and outcomes for patients (Campbell et al 2009; Serumaga et al 2011). Nevertheless, pay-for-performance incentives have been argued to have positive impacts when the policy is designed according to the context to which the programme is introduced (Van Herck et al 2010). Van Herck et al (2010) suggested, following a systematic review of pay-for-performance programmes in health care, that incentives should include targets on the basis of baseline room for improvement. Also, they suggested that there should be thorough and direct communication about the programs to stakeholders, a focus on quality improvement and a distribution of incentives to the individual and / or team level. However few of these suggestions were evident during my investigation of the MUR service.

Recent national changes to the MUR service have been agreed. These include the introduction of national target patient groups including patients taking high risk medicines (e.g. anticoagulants, diuretics), patients recently discharged from hospital and those with respiratory disease (Livingstone 2010; PSNC 2011e). As part of these reforms, policy makers have agreed that 50% of all MURs undertaken by each pharmacy should be with patients within the national target groups. It is intended that these measures will improve outcomes from MURs and also provide assurance to commissioners that MURs are being effectively targeted (PSNC 2011e). Furthermore, outcome measures for each target group have also been suggested but details of these outcome measures are yet to be released (PSNC 2011e). However, in light of the study findings, simple measures may not be sufficient to address the problems associated with the way organisations are motivating pharmacists to achieve their allowance of MUR payments. Such measures will also not address the limitations and constraints associated with the rational format of the MUR form and how this was being deployed by the pharmacist during the MUR consultation and this is discussed next.

8.4.2.2 The MUR format

One key principle that has been suggested in the current UK national guidelines on medication adherence is that health care professionals should adapt their consultation style to the needs of individual patients so that they have the opportunity to be involved in decisions about their medicines at a level with which they feel comfortable (NICE 2009). Current guidance also indicates that central to the MUR process, there should be respect for the patient's beliefs about medicines and patients should also be able to engage in an open discussion of these with the pharmacist (Clyne et al 2008; NICE 2009). However, MUR consultations observed in this study, were dominated by the pharmacist's agenda to complete the national standardised 'tick-box' MUR form. Closed questions were asked in order for the pharmacist to complete the review quickly and efficiently. This pre-empted patient questions or wider discussion of their health and medicines. This was akin to the selective attention strategies that have been identified where GPs maintain focus on the patient's symptoms and bypass other patient cues and responses (Barry et al 2001; Mishler 1984). Barry et al (2001) suggested that doctors who ignored or blocked patient life-world experiences and concerns led to poorer outcomes for patients. This may be one of the reasons why several patients reported they did not find the MUR personally useful. Furthermore, studies of doctor and pharmacist-patient consultations have shown that the computer screen had detracted attention away from the patient (Booth

et al 2004; Greenhill et al 2011). In this study the pharmacist was subordinate to the ‘technology’ of the MUR form and it was this which detracted attention from exploring the patient’s agenda or exploring issues that they would find useful and relevant.

Studies have indicated that patients who participate more during their consultations through asking questions, expressing opinions and raising topics of concern are more likely to understand their treatment and follow recommendations than patients who display a passive demeanour (Harrington et al 2004; Deschamps et al 2003; Ramalho de Oliveira and Shoemaker 2006). Reforms to the MUR policy to simplify the MUR form resulted in the question ‘*What would the patient like to get out of the review?*’ being removed. During their interviews, some patients, when asked, revealed outstanding concerns or still remained confused about an aspect of their treatment. Patients were reluctant to raise health concerns unless they perceived these to be directly relevant to the consultation. They reported feeling they did not want to interrupt the pharmacist’s flow of questions or perceived that the matter could only be dealt with by the GP. Barry et al’s (2000, 2001) investigation of patients attending GP appointments found that often patients had several diverse agendas including concerns about their symptoms, illness fears, and emotional and social issues that they wanted to air in the consultation. However, patients were found not to raise these ‘unvoiced agendas’ which led to poor outcomes including unwanted prescriptions and non-adherence to treatment. The lack of a clear invitation for patients to ask questions about their medicines or health concerns at the beginning of the MUR consultation may have contributed to them still having unresolved concerns. The ad hoc approach to recruitment left some patients feeling surprised and this further created a barrier for patients to prepare for or remember to ask questions during the MUR.

Pharmacists chose to communicate with the GP via the MUR form or relied on the patient to follow up recommendations rather than speaking to the GP directly. Despite the changes made to the MUR form to make it more “*user friendly*” for pharmacists, GPs and patients (PSNC 2007), the patient was still left with the responsibility to follow up any suggestions made by the pharmacist resulting from an MUR. Harding and Taylor (1997) described that many extended roles for community pharmacy involved simply “*asking structured, formulaic questions*”. The structured MUR format and limited scope of the service is at odds with policy commitments to develop pharmacy services which are responsive, individually tailored and

patient-centred (DH 2000b; DH 2003a; DH 2003b; DH 2005b). The procedural way MURs were conducted was not an effective method of improving patient knowledge about their medicines or adherence to them. This is further discussed in section 8.4.4.

8.4.3 Pharmacists as street-level bureaucrats

Previous research that has reported benefit from MURs has primarily focused upon certain groups of patients (Bagole et al 2007; Desborough et al 2008; Portlock et al 2009; Wilcock and Harding 2008). Some studies have shown benefits from MURs that have been tailored to a specific medical condition through the addition of supporting material, such as questions to assess asthma control (Bagole et al 2007; Colquhoun 2010a; Colquhoun 2010b). Other studies have provided additional training before the pharmacist undertook MURs (Portlock et al 2009; Cree 2010). However, these studies are limited as they do not reflect how MURs are typically being performed in practice. As was introduced in Chapter Two (section 2.10), Lipsky (2010) argues that in practice it is the street-level bureaucrats (front-line workers) who determine how policies are implemented. They often do so with limited resources and under pressure to meet targets. Lipsky's arguments resonate with the findings from this study, in particular, how pharmacists understood and were implementing the MUR service in practice. The difficulties pharmacy staff experienced when recruiting patients meant that target patient groups, who may have potentially benefited most, were effectively sidelined. Pharmacists, in response to organisational pressures to meet targets, exercised discretion to whom the service was offered and how quickly the MUR was performed. In this way the MUR policy was interpreted and at times its intentions even subverted to accommodate for the demands of work.

The successful implementation of policy to improve patients' knowledge and use of medicines through the MUR was not evident from fieldwork observations or patient accounts. The MUR was viewed by pharmacists as a means to check that patients were adhering to their medicines and to provide further information if they felt that this was necessary. Pharmacists simplified or circumvented complex patient issues that inevitably arose when discussing patients' medicines use in order to record the issue on the MUR form and allow the MUR to proceed. They made professional judgements about the patients' medicine taking and deemed what was acceptable and what was not, according to their own criteria rather than exploring how important an issue was for the patient. In instances where the patient reported taking a medicine differently or expressed an aversion to their medicine, an inflexible view was taken by the pharmacist in order to 'correct' the patients' deviance. Pharmacists in these instances could be considered as 'street-level bureaucrats' (Lipsky 2010) as their approach to the MUR

and the decisions they made in practice effectively became the MUR policy and determined what the service actually achieved.

Previous studies of pharmacist-patient communication suggest that pharmacists tend to use a protocol-driven discourse when advising about prescription medicines as well as medicines sold OTC (Greenhill et al 2011; Norris and Rowsell 2003; Rutter et al 2004; Skoglund et al 2003). Pharmacists may therefore be ill equipped with the skills to undertake extended and more complex consultations such as the MUR. MUR consultations showed similarities to the unilateral approach to counseling identified by Pilnick (Pilnick 2003). The message communicated in many MUR sequences was that there is only one correct way to take medication (as opposed to a choice to be made). Pilnick describes unilateral counselling activity as bearing resemblance to conversational sequences of instruction in relation to factual or procedural matters. During the MUR, patient's utterances indicated to pharmacists that they had adequate knowledge of their own medicines. However, by merely acknowledging this utterance, pharmacists simply confirmed the patient response rather than actively seeking to ensure understanding. This may be one reason why patients reported the MUR did little to improve their knowledge of their medicines and that they were left feeling that the MUR was a 'check' on their medicines.

8.4.4 Translation of MURs policy aims and intentions in practice

8.4.4.1 The adherence agenda

There is a long standing public and professional concern about NHS medicines wastage (Clifford et al 2010; Horne et al 2005; RPSGB 1997; Trueman et al 2010; WHO 2003) and the MUR is part of a strategy to address this (DH 2005a). The underlying and implicit assumption of the MUR service rests on an information deficit model (Dunbar et al 1979; Heath 2003). Patients in this scenario are viewed as empty vessels into which information can be poured, and once enough of the 'right information' has been given this will result in the 'correct' use of the medicine. Consequently, this will lead to a reduction in cost from unused medicines and the possible prevention of treatment failure. Using the empty vessel metaphor, patients during the MUR were checked to see if they were devoid of such knowledge and experience. However, simply providing information does not necessarily lead to a change in a patient's health behaviour (Lorig 2001). This study showed that in practice patients reported that MURs

did little to affect their use of medicines as they felt no need to change their medicine taking habits. This was similarly reported by others and what has been attributed to a 'ceiling effect' where the patients' treatment is already in line with the agreed guidelines (The Community Pharmacy Medicines Management Project Evaluation Team 2007).

There was little evidence from this study that the MUR service in practice was an effective means to tackle non-adherence issues. As outlined in Chapter Two, patient non-adherence can be classed as intentional or unintentional or both (Horne and Weinman 1999; Horne et al 2005; NICE 2009). Pharmacists lacked interest to seek out patients who might be in more need of an MUR. This meant that the potential for the pharmacist to address cases where the patient unintentionally did not adhere to medicines was limited. Moreover, MURs had limited scope to be able to affect patients' intentional non-adherence to medicines. As others have suggested change in the patient's health behaviour is facilitated by an understanding of the patient's underlying belief system (Elliott et al 2005; George et al 2008; Haynes et al 2002; Kripalani et al 2007; Pellegrino et al 2009). Pharmacists' "*natural attitude*" to convey pharmacological knowledge (Ramalho de Oliveira and Shoemaker 2006) and their lack of intent and curiosity about the patient, resulted in the MUR not being an effective mechanism to identify patient problems with their medicines. Advice was accepted by patients when the pharmacists' suggestions were in line with their beliefs and preferences. Suggestions that conflicted with their opinions or were difficult or inconvenient to implement were less likely to be accepted.

8.4.4.2 MURs as a patient-centred and concordant service

Developing concordant practice has been a challenging concept to implement in health care settings (Heath 2003) and pharmacists may be adapting this practice according to the constraints of work and their personal style (Leontowitsch et al 2005). This study suggests that the delivery of the MUR service is at odds with policy commitments and strategies to develop a responsive service which is individually tailored and patient-centred (Clyne et al 2008; DH 2000b; DH 2003a; DH 2003b; DH 2005b; Laine and Davidoff 1996; NICE 2009). The consequence of pharmacists' formulaic style of conducting MURs meant that they inevitably sidelined patients' complex beliefs and concerns including aversion to medicines which was expressed by several patients (Britten et al 2004; Donovan and Blake 1992; Conrad 1985; Pound et al 2005; Townsend et al 2003). Like others studies have suggested, patients reported using medicines in ways that accord with their individual beliefs and preferences and this

sometimes deviated from the prescribed recommendations (Adams et al 1997; Conrad, 1985; Donovan and Blake 1992; Donovan 1995; Nichter and Vuckovic 1994; Pollock 2001; Pollock 2005). Constrained by the MUR format, the pharmacist did little to uncover these complex views. Furthermore, patients had to wait for a convenient time to ask a question or express their views.

The findings from this study share similarities to recent findings exploring pharmacist domiciliary medication review encounters (Salter 2010). Salter's findings suggested that a "*dominant compliance paradigm*" encourages pharmacist-led encounters with patients failing to engage in the medication review process. This led to the author finding little evidence of two-way reciprocated discussion or concordant practice (Salter 2010). MURs have been criticised for promoting a professional agenda focusing on patient adherence, rather than capitalising on an opportunity to explore their beliefs and expectations of medicine and approaching the MUR concordantly (Donyai and Van den Berg 2006; Wilcock and Harding 2008; Van den Berg and Donyai 2009). Consultation skills such as responding to patient cues, using open questions and eliciting the patient's perspective have been identified by others as areas where pharmacists need to improve (Greenhill et al 2010).

In contrast to their handling of the MURs, this study indicates that pharmacists can provide customised information in responding to patient requests for advice about minor ailments. In these circumstances, patients appeared both familiar with and accepted the role of the pharmacist as an accessible adviser. The autonomy and willingness of the pharmacists to accommodate patient preferences during OTC discussions was in contrast to their constrained approach when discussing prescribed medicines during the MUR. A systematic review of two-way communication between patients and health care professionals, found that patient perspectives about their medicines were not discussed in most health care consultations (Stevenson et al 2004).

In this discussion, I have argued that although well intentioned, the MUR service in practice is not achieving what it should be and substantial changes to the policy, organisational arrangement, GP and pharmacy staff perceptions are needed. Professional agendas to promote the pharmacist's extended role also, in practice, fell short of these objectives and

stronger professional leadership and changes to cultural practice is required. The implications arising from this study are discussed in section 8.6.

8.5 Strengths and limitations

8.5.1 Strengths

To my knowledge, this is the only observational study that has explored MUR consultations as they occur in a ‘real life’ community pharmacy setting. In this sense, these findings go beyond what is already known and so make a significant contribution to our understanding of current pharmacy practice. The fieldwork observations enabled a personal firsthand account of how MURs were being performed and managed alongside the provision of other pharmacy services. Adopting this research approach also enabled the identification of patients who declined an invitation for an MUR. Whilst this was only a small number of interviewees, this is a hard to reach group and this study allowed for the inclusion of their views.

Another important strength was that this study used a combination of two powerful qualitative research methodological approaches to enhance the credibility of the findings. The fieldwork observations provided access to the same places and events as the participants. The interviews with participants allowed them to share their experiences of the MUR in their own words which permitted their views to be studied in more depth. The triangulation of direct observation (researcher’s accounts) with accounts provided by respondents in interviews provided a powerful means of understanding the complexity of respondents’ views, how these may shift contextually, the situational pressures which underlie them and the resulting difference in what people ‘say’ and what they ‘do’. By speaking to the participants, I was able to tailor my questions to clarify, confirm and extend the observational data.

The research design was also found to be a significant strength of this study. Fieldwork observations were alternated between pharmacies and spread over a year. Data analysis started during the early stages of data collection. This provided an opportunity for the data to be collected and analysed iteratively. The longitudinal nature of the study was intended to reduce the extent to which participants modify behaviour as a result of a heightened awareness of the observer. Therefore the time spent in the pharmacy allowed me to identify

recurring patterns of behaviour and also reflect on the observations and interviews with patients and to make adjustments in the research focus in light of new findings. The focus of the observations and the interview topic guide were revised during the data collection period. This inductive approach is considered to be good qualitative practice (Charmaz 2006; Ziebland and McPherson 2006).

8.5.2 Limitations

All research studies, including the present study, have limitations and these should be taken into account when interpreting the findings. This study was designed to be undertaken in two community pharmacies: a multiple and an independent and involved only 4 different pharmacists. There were significant differences between the two pharmacies. Most evident was the perceived organisational pressure that was found in the multiple to pursue a targeted number of MURs. However, both pharmacies did share some similar characteristics such as levels of affluence in the patient catchment area and the volume of prescriptions dispensed. Other pharmacy settings, including ones that may have had more supporting staff, different patient populations or different relationships with local GP surgeries could have resulted in pharmacists implementing and performing MURs in a different way and consequently patients perceiving the service differently. The findings of this study therefore need to be viewed in this context. Undertaking this study in a wider sample of pharmacies could have been a different way of undertaking this study and this may have uncovered different implementation strategies and conduct of MURs by pharmacists. As a result, patient reports of the MUR may have been different. Nevertheless, the very detailed account in the two contrasting pharmacies enabled the incorporation of the perspectives of both patients and pharmacy staff and an understanding of complexity and interrelations between participants and how micro-factors impinge on the delivery of policy in real world settings. Such a detailed study would have been less feasible if the number of pharmacies had increased.

Unpacking exactly how transferable the findings are to other settings is challenging. Transferability has been described as representing the “*extent to which the findings of a particular study may be applied to similar contexts*” (Murphy et al 1998:195). This study was undertaken in two pharmacies. The independent pharmacy recruited for this study was the only one that was approached that met the minimum selection criteria of undertaking at least

3 MURs per week. The chosen independent pharmacy therefore may have been a more atypical setting. Although pharmacies in England and Wales are subject to the same MUR policy guidelines and pharmacists are required to fill in the same national standard MUR form with patients, the findings of this study cannot be considered typical of all pharmacies and so further research is needed and this is further discussed in section 8.7.

Another well known limitation to fieldwork observations is the unknown effect of the researcher's presence on the pharmacy staff's behaviour and on the pharmacist and patient during the MUR consultation. Pharmacists were occasionally apologetic on days when no MURs took place suggesting that they felt obliged to undertake MURs when the researcher was present. This was despite reassurances that the study aimed to explore MURs as they occurred in 'real life' and that they should carry on and make decisions as they normally would. Pharmacists may have also felt pressure to 'perform' to a higher standard as they were aware of being observed by a fellow pharmacist. The longitudinal nature of the study was intended to reduce the extent to which pharmacy staff may modify behaviour as they would become accustomed to the presence of the researcher.

There were also some limitations to the data collection and analysis phases of this study. It was anticipated at the beginning of the fieldwork observations that an A5 handbook would be used to write in the observations. However, this was substituted for a pocket handbook as I felt this made participants feel less self-conscious of my presence and being observed. Personal tension did arise, particularly at the beginning of the fieldwork, that I would not be able to capture all that was happening. Producing a full account of the activities from memory would therefore have been subject to what could be remembered and subject to decisions to record some things and not others (Murphy and Dingwall 2003b). Audio or video recording the MUR consultation would have provided verbatim data. Nevertheless, it was decided, upon considering the ethical issues of inviting patients to the study when they were being recruited for an MUR in an ad hoc way, that hand written notes would be used by the researcher to record the MUR consultation (Latif et al 2010). This would produce a less detailed account of the MUR but it was felt that this was a necessary compromise.

My professional background as a pharmacist would have influenced what I perceived as important or relevant in the field and consequently what was recorded. My similar training

and socialisation compared with the study pharmacists may have affected what I construed as being ‘normal’ practice. In this way, my own professional prejudices may have also affected my interpretation of the phenomena under study. To address this, attempts were made to remain neutral during data collection and analysis. Regular discussions with supervisors helped consider various viewpoints. Moreover, I have provided a detailed description of my data collection and analysis methods. I have also presented adequate fieldwork data to enable the reader to make their own judgements of the findings of this research. In the following section, the practice implications from this study are discussed.

8.6 Practice Implications

The results of this study have provided valuable insights that further our understanding of the complexities of undertaking MURs in practice and how they are being received by patients. The following section draws on the findings of this study and presents the implications for patients, health care professionals, organisations and for policy makers.

8.6.1 Practice implications for patients

This study raises several issues that are of importance to patients. The core purpose of what the MUR could potentially offer remained elusive to many patients. This was in part due to the confusing and sometimes conflicting messages that were being presented to them. Patients should seek to decide for themselves what additional support with their medicines they want or may need. During the MUR, patients should be encouraged to take the opportunity to ask questions about their medicines and to address any concerns they may have about them. They should be aware that the MUR service is funded by the NHS and is available for them to use. There should also be a means to elicit and incorporate patient views about the form and function of the MUR service. Patient support groups, such as Age Concern, could become involved in this process and so provide local feedback to the pharmacy about how patients perceive the service.

Many patients felt MURs were largely unnecessary. However, if patients choose to have an MUR, the pharmacists’ involvement should be tailored to their agenda. Pharmacists have been reported to be more approachable than GPs (Bissell and Traulsen 2005; Turner 1995). They

may therefore have an important role in the successful management of the patient's medicines. Nevertheless, patients need to feel reassured that pharmacists and GP are working collaboratively for their benefit. For MURs to be successful reforms are needed to the MUR policy to make MURs more relevant to patients in order to progressively help turn the MUR into a consumer-induced demand activity rather than one which is professional-induced. Many of the potential benefits of MURs to patients are not currently fully being realised and clearer guidance and messaging from policy makers, administrators and those directly involved with patient care is required to enable this to happen

8.6.2 Implications for health care professionals

There are several implications for pharmacists and their staff. One key finding from this study is that pharmacists and their support staff did not actively seek to engage the patients who potentially could benefit most from an MUR. A cultural shift is required so that the MUR is seen as a genuinely patient-centred service. For this to occur, pharmacists need to be clear about what they want to achieve for patients during an MUR. They should resist being driven by financial incentives or pressures when these are not conducive to delivering effective patient care. Additionally, with the service coming under increased scrutiny there is a need for increased transparency to demonstrate clear outcomes for patients. A focus on performing more Prescription Intervention MURs, which requires the pharmacist to identify a problem with the patient's medicine, may better demonstrate the usefulness of the service to improving patient care.

Training for all pharmacy staff is needed to better communicate with patients the core message of what MURs involve and the potential benefits of the service to patients. Although most patients reported that the ad hoc approach used in the pharmacies was acceptable, not all patients were comfortable with this method. Pharmacists should therefore routinely assess beforehand whether the patient is receptive, willing to take part and be aware of the likely benefits of the MUR before commencing the consultation. This would mean reviewing how patients are offered an MUR and providing them with information and, if needed, time to consider these issues. This may mean that pharmacy staff should uncover initially whether the patient would benefit from having prior notice of their MUR in order to avoid patients feeling guarded and unable to contribute comfortably during their review. Patients need to be clear

that the MUR is for their benefit and be encouraged to think beforehand about any issues they would find useful to discuss. This may mean that pharmacists need to implement more effective appointment systems or find ways to perform MURs at the patient's home. Likewise, pharmacists need to explain clearly to patients their purpose for undertaking MURs and that this is not a surreptitious activity that should be concealed from their GP.

The findings of this study indicate that there may be a need to introduce specific consultation and communication skills training to pharmacists if they are to engage more effectively with patients. Pharmacist peer review sessions or shadowing may be useful to facilitate improvements in this process. However, one must be mindful not to undermine pharmacists' professional status (Harding and Wilcock 2008). One aspect that this training should cover is how the pharmacist can better elicit the patient's agenda before the start of the consultation and effectively explore patients' views, beliefs and concerns about their medicines. Pharmacists should also assume greater responsibility for resolving or following up indeterminate medicine problems that have been identified as part of the MUR. One way to do this is to encourage patients to record their actual use of medicines to determine their own optimal drug dose and acceptable balance of symptom control and side effects. Pharmacists can then engage and work with the GP to find out ways in which complex issues that have been identified can be addressed. The lack of integration of the information obtained from the MUR also needs to be reviewed. Pharmacists should be routinely reviewing previous MUR records before both dispensing prescriptions and when conducting another MUR. These records should be more easily accessible during the provision of other services in order to provide patients with a more comprehensive service.

With the DH set to continue to pay for the MUR service for the foreseeable future, GPs should, if they choose, refer patients who they think may benefit from extra support from the pharmacist. In this study, MURs were shown to provide reassurance to most patients and a referral from the GP could legitimise the pharmacist's role to provide MURs and so consequently remove tensions that some patients reported. The MUR provides an opportunity to foster a culture of collaboration between pharmacist and GP. However the pharmacists in this study reported receiving no feedback from GPs on the MURs they undertook. The relative isolation in which the pharmacist chose to undertake the MUR limited their potential and reduced the capacity to resolve issues that did arise. Pharmacists need to take the initiative

and proactively speak to GP Practice Managers to develop or improve GP referral systems and agree with GPs suitable patients that are most in need of an MUR. This will help improve the chances of identifying and resolving problems where the patient is genuinely ineffectively using their medicines.

8.6.3 Implications for organisations

The results of this study highlighted some of the barriers pharmacists faced when conducting MURs. One of these was their heavy involvement with the dispensing process. A key observation was the variety of tasks the pharmacist was expected to accomplish resulting in them feeling they had no spare time to perform MURs. Organisations need to consider providing additional staffing to allow pharmacists the requisite time to perform MURs without feeling the need to return quickly to their dispensing responsibilities. This may be challenging if it is decided that the pharmacist will continue to provide MURs in an ad hoc way. Allocating additional pharmacist resource at certain times along with developing an effective appointment system may help manage MUR activity better. Furthermore, organisations should review the impact of the pharmacist's absence on support staff activities. This may mean training for staff on how to better manage the work flow when the pharmacist is absent during an MUR.

Pharmacist pursuit of a targeted number of MURs, in response to organisational pressure, had serious consequences for how the service was delivered in practice. Organisations need to reconsider the way they incentivise or motivate pharmacy staff to offer and undertake MURs. The threat of sanctions for not achieving the arbitrary target number of MURs, contributed towards some of the irrational and unintended consequences found in this study. Organisations may consider encouraging pharmacists to undertaking more Prescription Intervention MURs. These arise when the pharmacist identifies an issue or problem with the patient's medicines and this could develop pharmacists' motivation and curiosity to engage more earnestly with the service.

The findings from this study revealed some logistical matters that organisations should consider to ensure patients attain maximum benefits from the service. One such matter is to develop effective systems that allow information collected from the patient during an MUR to

be better integrated and available when the patient uses other services from the pharmacy. Another matter is that of the suitability of the consultation room to perform MURs. Although both pharmacies had consultation rooms that met the minimum required standards, a poor image was promoted to several patients. At a time when it is challenging to convince both patients and other health professionals of the value MURs could potentially bring, organisations should seek to invest in a better consultation room to promote a more professional image of the service.

8.6.4 Implications for policy makers and administrators

The broad MUR policy aims and objectives made assessment of whether these were being achieved in practice difficult. Nevertheless, an important finding arising from this study was that the MUR policy intentions were not being effectively interpreted or realised in the two study pharmacies. Effective policies depend on purpose. However, the different discourses that are being communicated about the service have created confusion over what should be achieved for patients who undertake an MUR. Policy makers and professional bodies need to consider whether the MUR service should be abandoned, reformed or if there are other more effective ways of achieving better use of medicines. Policy makers should acknowledge and review how their proposed policies are being interpreted by front-line staff and how their intentions are understood and put into practice by those delivering the service. Pharmacists' concerns over a lack of time, resource and the issue of perverse incentives need addressing.

A review of the existing MUR policy is needed. For the foreseeable future pharmacies will continue to be remunerated for the number of MURs undertaken. The arbitrary cap placed on MURs is being interpreted as a target and this has been well reported (Blenkinsopp et al 2007a; Bradley et al 2008a; Urban et al 2008; Wilcock and Harding 2008). Better selection of patients who potentially could benefit from an MUR is needed or a GP referral based system could be used. Furthermore, if policy makers are intending to support patients' use of medicine, pharmacists should be provided with greater autonomy over the frequency at which MURs should be undertaken. MURs should occur at times according to when patients feel this is necessary and pharmacist could use their discretion to follow patient's progress to provide continuing support to those who may need it the most. In Australia, HMRs allow the pharmacist to work more closely with the GP, and with full access to the patient's medical

records, they have been shown to improve the quality use of medicines (Castelino et al 2011). Lessons from more successful programmes should be learnt.

If policy makers choose to focus on reducing cost associated with avoidable medicine waste, then better targeting of MUR activity is needed. One study found that targeting patients with more expensive medicines for a community pharmacy-based medication review program could be an effective way to reduce costs (Krahenbuhl et al 2008). Current proposals to define target patient groups and monitor specific outcome measures for each target group (Livingstone 2010; PSNC 2011e) may prove fruitless without a deeper understanding of the challenges that community pharmacists face when providing the service. The consequence of implementing a rationalised policy to improve patient adherence to medicines led to a service that was unresponsive to the patient's individual circumstance. One example where this was evident was through the development of the 'Version 2' MUR form (PSNC 2007). The streamlining of the form and its 'tick-box' format reduced opportunities for patients to express their concerns as the question about what the patient wanted from the MUR has been deleted.

PCTs or the newly proposed commissioning groups (Mannion 2011) may also consider how to support pharmacies to deliver MURs. One way may be to improve patient awareness of the potential benefits of MURs through promotional campaigns. Another way to improve patients' understanding and encourage recognition of the service may be through fostering greater collaborative involvement from GPs. In Australia, the HMR service is supported by a facilitator program to provide support and resources to GPs, practice staff, pharmacists and others. Pharmacists have expressed positive satisfaction with this additional help in explaining the review process to patients and in providing opportunities to discuss HMR issues and concerns (Scwartzkoff 2005). A similar support mechanism has been shown to be welcomed for MURs (Portlock et al 2009) and this needs to be considered to be offered more widely.

8.7 Future research

This study has highlighted future research that would benefit from both qualitative and quantitative investigation but also research that could help guide or reform the MUR policy. Qualitative studies often open up a field of enquiry for subsequent quantitative study. Undertaking a detailed investigation in two pharmacies allowed an opportunity to learn about

how pharmacists manage MUR consultations, the patient's perspective of MURs and how the implementation of the service influenced the delivering the MUR policy in practice. These findings could now form the basis for further research within a wider and more diverse range of community pharmacy settings. Patient views of the MUR service have been under researched. Previous attempts to establish patient views have relied simply on asking simple questions such as whether the MUR improved patients' knowledge of their medicines or if they found the MUR 'useful' (Bagole et al 2007; Kumwenda and James 2008; NPA 2010; Patel and Lefteri 2009; Portlock et al 2009; Youssef 2008; Youssef 2009; Youssef et al 2010). Using the findings from this study, a more comprehensive and searching questionnaire could be developed from the findings arising from this study. Questions such as those below could be used to develop an instrument for use in pharmacies to achieve a clearer picture of how the MUR policy is being realised in practice:

- Who are the patients being targeted for MURs?
- Was the MUR initiated by the patient or was this done by the pharmacy staff?
- What are patient expectations of the MUR service and did they expect an MUR when they visited the pharmacy?
- Why did patients accept the invitation for an MUR?
- What is the level of patient awareness and current knowledge of the MUR service?
- What is the number and type of medication concern that patients had before the MUR and to what extent were these addressed by the pharmacist?
- To what extent did the MUR provide reassurance to the patient and did this avoid the patient having to see the GP or another health professional?
- To what extent did the MUR affect patients' subsequent medicines use?

This study also raised questions that would benefit from more qualitative research. Further exploratory studies are needed to explore more widely the way pharmacists address indeterminate issues arising from an MUR. Pharmacists in this study were found to deal with indeterminate issues in a superficial way. The underlying reasons for this should be investigated further to ensure that pharmacists can effectively address and are fully prepared to deal with matters arising from an MUR. In-depth interviews with a sample of pharmacists from different pharmacy settings could be used to investigate their perceived remit for

managing more complicated medicine-related issues arising from an MUR. A better understanding of the impact of conventional relationships between pharmacists and GPs and pharmacists' reluctance to engage more actively with GPs about patients' medicines is a prerequisite for instigating changes in professional roles and interaction which could help to increase the value and efficacy of the MUR service. Additionally, an investigation into the pharmacists' educational training and professional socialisation could be a way to help clarify how these problems arise. A future study could explore how the training of pharmacy students prepares them for extended consultations such as the MUR. Observations and comparisons could be made between undergraduate medical and pharmacy teaching strategies to reveal how managing complexity in the patient care is communicated and taught within the two professions. With the profession of pharmacy aiming to adopt further extended roles for pharmacists, an understanding of how pharmacists could be better prepared for more professionally-oriented and less technically defined roles is essential.

This study also uncovered several complex processes which could help inform a study about the MUR policy and its implementation. The value of this qualitative study is that issues were raised, such as the underlying reasons why patients decline the invitation for MURs, which had not previously been documented in the literature. This study has made these processes more explicit which can enable a better assessment of how we monitor the efficiency of MURs or how this can be translated to a better informed economic evaluation of the service. Drummond et al (1987) defines economic evaluation as "*the comparative analysis of alternative courses of action in terms of both their costs and consequences*". Health care resources are increasingly becoming limited by the total funds available and health care and Government agencies could use an economic evaluation as an adjunct to existing findings to implement changes to ensure MURs become more efficient, equitable and, most importantly, useful to patients. A future research study could aim to answer both whether MURs are worth doing compared with medication reviews performed by pharmacists in GP surgeries or a comparison of MUR outcomes with routine prescription counselling by the pharmacy staff. This study was a cross-sectional study. To facilitate an effective economic evaluation, future research should seek to collect longitudinal data from the MUR intervention to explore whether or not the service improves outcomes for patients and the NHS. The design of such a study should incorporate the quantification of the practical impact of MURs in terms of

reduced costs of medicines, other health care resources and investigating whether MURs have any impact on hospital admissions.

Further policy research is similarly needed into newer advanced pharmacy services. The ‘New Medicine Service’ (NMS) is the fourth Advanced service and was implemented on 1st October 2011 (PSNC 2011b). This aims to provide support to people newly prescribed a medicine to manage a long term condition. The service involves an initial consultation and a follow-up intervention by the pharmacist in order to support medication adherence with new medicines. This service has been informed by the findings of a study investigating the cost effectiveness of a telephone-based pharmacy advisory service (Elliott et al 2008). However, it is yet to be seen how pharmacists will adopt this service in practice, how the service will be managed alongside existing service provision and whether, in practice, it will be useful for patients. Under the new guidelines, an MUR cannot be performed within 6 months of a patient receiving an NMS intervention. This clearly will affect how MURs are conducted and it would be important to assess what effect this has on MUR activity. As highlighted with MURs, there may well be some unintended consequences associated with implementing the NMS service and these will need to be explored in order to ensure that the services is beneficial to patients.

CHAPTER NINE

Concluding remarks

There is an increasing global trend for countries to invest in medication review programmes. Since 2005, reforms to the pharmacy contract have given community pharmacists in the UK the opportunity to undertake MURs. The cornerstone of this service is to improve patient adherence to medicines, reduce avoidable waste and therefore reduce cost as a result from the better use of medicines (DH 2005a). MURs also offers the potential for community pharmacists to become more involved in patient advisory services and therefore extend their professional role by moving away from their involvement in the technical, routine task of dispensing. However, with the exception of one study, Greenhill et al (2011), there has been a lack of transparency into what actually happens during an MUR, the value they bring to patients and the patients' perspective of the service. Policy development is a dynamic process and for the MUR service to improve, this must be responsive to research in order to develop a sustainable model of practice. However, the lack of understanding of what occurs during an MUR consultation and patient expectations and experience of these has meant that reforms to the MUR service are likely to reflect professional, rather than patient objectives.

In this thesis, I have presented an in-depth investigation of patient and pharmacy staff perspectives of the MUR service and its implementation in the 'real world' practice of two community pharmacies. This study used qualitative methods in order to provide an in-depth investigation of the service. In order to answer the aims and objectives of this study, two complementary research methods were used: ethnographically-oriented unstructured observations and face-to-face interviews with participants. These methods provided a detailed description or 'firsthand' account of MUR consultations as they happen in everyday practice and how patients contextualised this service. To my knowledge, this is the only study that has sought to investigate 'live practice' of MURs consultations as they occur 'naturally' in a community pharmacy setting. This may reflect the challenges of researching services that are performed ad hoc (Latif et al 2010). The strength of this study over others lies in its capacity to compare what pharmacists actually do during an MUR as opposed to what they say they do.

This study adds to our knowledge of the MUR consultation. The reasons why patients accepted or declined the invitation for an MUR has provided novel insights into patients' expectations and their perspective of the service. The pharmacist-led approach and structured format of the MUR consultation served professional rather than patient objectives. Pharmacists lacked curiosity to search for patient problems and concerns. Overall, the core message that the MUR was for the patients' benefit was not effectively communicated before or during the MUR. This study highlights the need for pharmacists to undertake consultation and communication skills training to better manage the MUR interaction. During OTC consultations, pharmacists involved patients to a greater extent indicating they already have many skills to effectively engage patients in decisions about their health care. Policy makers need to better adapt their policies to encourage patients to be full participants in the care they receive. More effective promotional campaigns are needed to communicate the message that the MUR service is available for patients to access and is there to assist them with their medicines. The lack of connection between MURs and other professional contacts raised concerns among some patients over boundary encroachment. Patients need to be reassured that the pharmacist is working collaboratively with the GP for their benefit.

The MUR is a modern and developing service but one which remains unestablished. The idea of pharmacists undertaking medication reviews and assuming greater responsibility for the patient's medicines management is not novel. However, the reality of undertaking such roles in a community pharmacy setting has challenged the traditional identity of community pharmacists and requires patients to participate in a new interaction with the pharmacist. This study showed that MURs have yet to be fully recognised and accepted by patients. Patients were unaccustomed to the pharmacist offering a service which they had not asked for or felt that they needed. The lack of awareness of what MURs could potentially offer and the existing limited mandate of pharmacists over the patients' prescribed medicines reduced the potential for the MUR to become a useful service for patients. GPs have not taken the opportunity to refer patients indicating that they have yet to be convinced of their value.

The findings of this study provide valuable insights into whether the policy and professional intentions for the MUR service are being realised in practice. I argue that although the MUR service is well intentioned, there is little indication from this study that MURs, as they are being practiced, are meeting their intended stated policy and professional aims. There remains

a lack of clarity over the purpose of the MUR service and what it should aim to achieve for patients. From their accounts, patients suggested that MURs were not an effective means for improving their knowledge, understanding and use of medicines. Neither were they reported to reduce waste from unused medicines. Policy and professionalising agendas were limited by 'real world' pressures of limited resource, perceived lack of time and pressure to achieve MUR targets. MURs have been implemented without due consideration of the pharmacists' heavy commitment to the dispensing process which means there was poor integration of the MUR service into their routine workload. The way organisations implement and incentivise staff to perform MURs had a substantial bearing on how pharmacists viewed the service and what was subsequently achieved. As a result, pharmacists often failed to take full advantage of the opportunities offered by MURs.

Pharmacists, by undertaking MURs, have now a licence that greatly increases their responsibility to patients. If pharmacists are to become patient advocates they need to be proactive and take the initiative to make the service work for their patients. Pharmacists were constrained by situational pressures and the need to accommodate MURs pragmatically between other services provided and under the influence of commercial pressures to generate income. However, they should resist compromising their professional integrity to ensure that MURs are only performed when they and the patient deem it necessary. Strong professional leadership and organisational support is needed to support pharmacists in achieving this. Furthermore, the New Medicines Service which commences from October 2011, presents community pharmacists with an opportunity to further their involvement with patient care. Pharmacists need to learn from the challenges of implementing MURs in their pharmacies to ensure that this service is effectively managed.

This study investigated how the MUR policy had been translated into practice. It highlighted how the rational implementation of MURs led to unintended consequences which subverted the potential benefits of MURs to patients. The decision taken to streamline the MUR form has been for the professional benefit of pharmacists and GPs rather than improving the service for patients. This thesis takes forward the argument of the need to re-evaluate pharmacy services that rely on the traditional information deficit model. Each MUR should aim to be purposive when viewed from both the patient and pharmacist perspective. Agreed changes to the MUR policy to target patient groups may prove unsuccessful in improving outcomes for patients if

the format for undertaking MURs and the manner MURs are being conducted in practice are not also reviewed. Research will be necessary to investigate these developments and to what extent they improve care for patients. Pharmacists should seek to perform a needs assessment before considering undertaking an MUR with a patient. This may prove a more effective means of identifying patients who could potentially benefit most from an MUR rather than simply dictating which group of patients pharmacists should target. This assessment could be performed during the routine encounter with the patient when the pharmacist hands out their prescribed medicines.

Despite the difficulties faced in implementing MURs in practice and the questionable value to improving the patients' use of medicines or pharmaceutical care, most patients in this study reported valuing the time the pharmacist spent with them and the reassurance they received about their medicines. Patients did recognise the pharmacist as an approachable and knowledgeable health professional who they perceived could resolve issues they considered too 'minor' for a GP consultation. Pharmacists are already well recognised by the public for their ability to treat minor ailments. There is therefore potential for pharmacists' greater involvement in patients' prescribed medicines and wider health care if they can demonstrate how the service is beneficial to patients. Pharmacists need to therefore capitalise on the opportunities that MURs present for it to become a successful patient-centred service. To do this, however, they need access to information about which patients are the neediest who could potentially benefit most from an MUR. This requires a bold rethink to develop a platform for pharmacists and GPs to exchanging reliable, accurate, and consistent patient information.

This study raises questions about the future of the MUR service. Is the service one that is valuable and benefiting patients? In times of austerity measures, pharmacists need to clearly demonstrate that MURs are value for money. Policy makers and pharmacy's professional bodies should be forthright and seek to objectively review the evidence of whether MURs are achieving their intended aims or whether they should consider more effective ways of achieving the same goals. Strong professional leadership is required to decide what the role of the community pharmacist, in supporting patients with their medicines, should be and how this can be best translated into practice.

The findings from this study provide a clearer understanding of how MURs are being implemented in practice, what happens during an MUR and the views of patients who have taken part in the service. In my opinion, the MUR service in practice, is largely failing to achieve its intended policy aims and objectives. Consideration of whether the MUR service should continue, at least in its current form, should therefore be reviewed. Policy makers, professionals and organisations need to refocus on how community pharmacists can best help patients with their medicines. A successful community pharmacy medication review service should be one that seeks out the neediest patients who require help with their medicines, fully involves them from the onset, and is flexible to the individual's circumstance and preference. In order for the MUR policy to be effective, a culture shift is required to allow community pharmacists to have dedicated time to be fully involved with patient-centred services and also enables them to become more active participants in the wider health care team. Rationalising service by dictating their scope and format will largely fail to identify and address real concerns that patients have with medicines. Furthermore, this may deskill pharmacists and prevent them from effectively using their unique knowledge and skill set to best help patients with their medicines.

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APPENDIX ONE

Literature review search strategy

This literature review aimed to draw on the works from previous research, to identify gaps within the existing literature and so preventing duplication of earlier works. Additionally, a review of the literature has helped identify key issues, the research design and data collection techniques. Many of the principles outlined by Hart (2002) were employed in the initial preparation for the literature search. This included defining a research topic, developing a working title and creating key words. A broad criteria for the research was therefore established which incorporated the limits of the topic i.e. what would be included / excluded.

An initial search of the literature was performed in 2007 and repeated at regular intervals, it included the following major search terms: Medicines Use Reviews (MUR), community pharmacy Advanced service, medication reviews / management services, compliance, adherence, concordance, patient perspectives. The data bases and information sources used included EMBASE, International Pharmaceutical Abstracts, MEDLINE 1966-present, Web of Science, Google Scholar™, conference proceedings, official publications and 'gray literature' (list of items not published). The Zetoc alert system was also used with these terms to inform of any new publications. Data was assessed for importance using the selection criteria detailed by Hart (2002). This involved consideration of the materials 'authority' specifically materials produced by a reputable publisher, seminal works and works that were within the parameters of the aims and objectives of the study.

APPENDIX TWO

Original MUR form and 'Version 2' MUR form

Original MUR form (4 pages):



Community Pharmacy Medicines Use Review & Prescription Intervention Service

Patient Details			
Date of review:	Title:	Name:	NHS Patient Code:
			Pharmacy (PMR) ID:
Address:			DOB:
			Tel:
GP:	GP address:		
Recording of patient's informed consent (must be completed before the review can proceed)			
Patient has received information on and consented to the review process. <input type="checkbox"/>			
Patient has agreed that information may be shared with their GP. <input type="checkbox"/>			
Patient has agreed that information may be shared with others such as carers. <input type="checkbox"/> Specify others by name:			
Reason for review: Annual Review (MUR) <input type="checkbox"/> Prescription Intervention <input type="checkbox"/>		Pharmacist identified <input type="checkbox"/> or Referral from <input type="checkbox"/>	
What would the patient like to get out of the review? (including the need for information)			
Basic health data			
Significant previous ADRs:		Known allergies/sensitivities:	
Medical history as described by patient and from information recorded in PMR		Monitoring as described by patient and from information recorded in PMR	
Name of Pharmacist conducting the review:			
Pharmacy name & address:			
Location of review: Pharmacy <input type="checkbox"/> Other location <input type="checkbox"/> <small>(state location used)</small> Telephone <input type="checkbox"/> <small>(record reason why face to face was not possible)</small>		Outcome of Review: Copy of care plan given to patient <input type="checkbox"/> Referral made to GP <input type="checkbox"/> Pharmacist actions completed and recorded in care plan <input type="checkbox"/>	

(Final version)

Explanatory notes:

Patient's knowledge of the medicine's use – record what the patient thinks the medicine is for and highlight where response would indicate need for further information.

Compliance -Use open, non-judgemental questions to establish how the medicine is being taken, and tick the box which best indicates the patient's level of compliance, i.e. always takes the medicines as prescribed through to never takes the medicine as prescribed. Leave blank for 'PRN' medicines.

This review is based on information available to the pharmacist held on the pharmacy medication records and from information provided by the patient.

'Version 2' MUR form (2 pages):

Community Pharmacy Medicines Use Review & Prescription Intervention Service		Sheet of CONFIDENTIAL								
Patient: <p><input type="checkbox"/> For information only – no action required <input type="checkbox"/> Follow your actions agreed below <input type="checkbox"/> Please note the recommendations made to your GP</p> <p>This is your copy of the form. You may wish to show it to other health care professionals.</p>										
Patient details <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">Title: <input type="text" value="First Name:"/></td> <td style="width: 50%;">Surname: <input type="text"/></td> </tr> <tr> <td><input type="text" value="NHS Number:"/></td> <td><input type="text" value="Tel:"/></td> </tr> <tr> <td></td> <td><input type="text" value="Date of Birth:"/></td> </tr> <tr> <td colspan="2"><input type="text" value="Address:"/></td> </tr> </table>			Title: <input type="text" value="First Name:"/>	Surname: <input type="text"/>	<input type="text" value="NHS Number:"/>	<input type="text" value="Tel:"/>		<input type="text" value="Date of Birth:"/>	<input type="text" value="Address:"/>	
Title: <input type="text" value="First Name:"/>	Surname: <input type="text"/>									
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	<input type="text" value="Date of Birth:"/>									
<input type="text" value="Address:"/>										
GP: <p><input type="checkbox"/> For information only – no action required <input type="checkbox"/> Please consider the recommendations proposed below</p> <p>A copy of the consultation record sheet can be obtained from the pharmacy if required. Clinical codes: Medicines Use Review done by community pharmacist: 4byte:88MF Version 2:BBMF Clinical Terms Version 3:Xakuo SNOMED CT:198391000000102</p>										
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Pharmacist <input type="checkbox"/>	ECO permission granted for off-site MUR: Yes <input type="checkbox"/>									
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Overview page This review is based on information available to the Pharmacist held on the Pharmacy Patient Medication Record system and from information provided by the patient

NHS Community Pharmacy Medicines Use Review & Prescription Intervention Service

						Sheet of	CONFIDENTIAL
Title:		First name:	Surname:	NHS Number:	Date of birth:	Date of review:	
Current Medicines (including over the counter & complementary therapies)		Does the patient use the medicine as prescribed?	Does the patient know why they are using the medicine?	More info provided on use of medicine	Is the formulation appropriate?	Are side effects reported by the patient?	
1	Name/Dosage form/Strength: Dose:	<input type="checkbox"/> Yes If no, specify: -	Yes <input type="checkbox"/> No <input type="checkbox"/>				
2	Name/Dosage form/Strength: Dose:	<input type="checkbox"/> Yes If no, specify: -	Yes <input type="checkbox"/> No <input type="checkbox"/>				
3	Name/Dosage form/Strength: Dose:	<input type="checkbox"/> Yes If no, specify: -	Yes <input type="checkbox"/> No <input type="checkbox"/>				
4	Name/Dosage form/Strength: Dose:	<input type="checkbox"/> Yes If no, specify: -	Yes <input type="checkbox"/> No <input type="checkbox"/>				
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6	Name/Dosage form/Strength: Dose:	<input type="checkbox"/> Yes If no, specify: -	Yes <input type="checkbox"/> No <input type="checkbox"/>				

Consultation record This review is based on information available to the pharmacist held on the pharmacy Patient Medication Record system and from information provided by the patient

APPENDIX THREE

Approval letters for the study

Ethical approval letter:



Nottingham Research Ethics Committee 2

1 Standard Court
Park Row
Nottingham
NG1 6GN

Telephone: 0115 9123344
Facsimile: 0115 9123300

09 July 2008

Mr Asam Latif
Doctoral student
University of Nottingham
School of Pharmacy
University Park
Nottingham
NG7 2RD

Dear Mr Latif

Full title of study: An exploration of patient and professional perceptions of community pharmacy based Medicines Use Review (MUR) services - a qualitative investigation.

REC reference number: 08/H0408/92

The Research Ethics Committee reviewed the above application at the meeting held on 30 June 2008. Thank you for attending to discuss the study.

Ethical opinion

Discussion: Mr Asam Latif confirmed the following:

- There will be multiple pharmacy's involved in the study, Boots Pharmacy have already been approached

The members of the Committee present gave a favourable ethical opinion of the above research on the basis described in the application form, protocol and supporting documentation, subject to the conditions specified below.

Ethical review of research sites

The Committee agreed that all sites in this study should be exempt from site-specific assessment (SSA). There is no need to submit the Site-Specific Information Form to any Research Ethics Committee. The favourable opinion for the study applies to all sites involved in the research.

Conditions of the favourable opinion

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

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

Management permission at NHS sites ("R&D approval") should be obtained from the relevant care organisation(s) in accordance with NHS research governance arrangements.

This Research Ethics Committee is an advisory committee to East Midlands Strategic Health Authority.
The National Research Ethics Service (NRES) represents the NRES Directorate within the National Patient Safety Agency and Research Ethics Committees in England.

Guidance on applying for NHS permission is available in the Integrated Research Application System or at <http://www.rdforum.nhs.uk>.

1. The reply slip included in the Patient Information Sheet (version 1) MUR observation & interview 01/05/2008 and Patient Information Sheet (Version 1) MUR decline interview 01/05/2008 should be a separate document, should not have the provision to tear and return as this would leave the information sheets intact

Approved documents

The documents reviewed and approved at the meeting were:

Document	Version	Date
Application	1781/2216/1/ 618	15 April 2008
Investigator CV		01 May 2008
Protocol	1	01 May 2008
Letter from Sponsor		02 June 2008
Advertisement	1	01 May 2008
GP/Consultant Information Sheets	1	01 May 2008
Participant Information Sheet: Patient MUR decline interview	1	01 May 2008
Participant Information Sheet: Patient MUR observation & interview	1	01 May 2008
Participant Information Sheet: Pharmacist & pharmacy staff	1	01 May 2008
Participant Consent Form: Patient MUR decline interview	1	01 May 2008
Participant Consent Form: Patient MUR interviews	1	01 May 2008
Participant Consent Form: Patient MUR observations	1	01 May 2008
Participant Consent Form: Pharmacy staff (interview)	1	01 May 2008
Participant Consent Form: Pharmacy staff (observation)	1	01 May 2008
Participant Consent Form: GP/Practice staff interview/focus group	1	01 May 2008
Details of research grant		25 September 2007
CV - Helen Boardman		
CV - Kristian Pollock		

Membership of the Committee

The members of the Ethics Committee who were present at the meeting are listed on the attached sheet.

Statement of compliance

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

After ethical review

Now that you have completed the application process please visit the National Research Ethics Website > After Review

You are invited to give your view of the service that you have received from the National Research Ethics Service and the application procedure. If you wish to make your views known please use the feedback form available on the website.

The attached document "After ethical review – guidance for researchers" gives detailed guidance on reporting requirements for studies with a favourable opinion, including:

- Notifying substantial amendments
- Progress and safety reports
- Notifying the end of the study

The NRES website also provides guidance on these topics, which is updated in the light of changes in reporting requirements or procedures.

We would also like to inform you that we consult regularly with stakeholders to improve our service. If you would like to join our Reference Group please email referencegroup@nres.npsa.nhs.uk.

08/H0408/92	Please quote this number on all correspondence
-------------	--

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

Yours sincerely

Dr Martin Hewitt/Ms Linda Ellis
Chair/Co-ordinator

Email: linda.ellis@notspct.nhs.uk

Enclosures: *List of names and professions of members who were present at the meeting and those who submitted written comments
"After ethical review – guidance for researchers" SL-AR2*

Copy to: *Mr Paul Cartledge, University of Nottingham
R&D office for NHS care organisation at lead site - NCT-PCT*

Nottingham Research Ethics Committee 2**Attendance at Committee meeting on 30 June 2008****Committee Members:**

Name	Profession	Present	Notes
Dr Deborah Annesley-Williams	Consultant Neuroradiologist	No	
Ms Karen Asher	Secretary	Yes	
Dr Frances Game	Consultant Physician	Yes	
Dr Diane Gilmore	Medical Sociologist	No	
Mr Richard Greenhow	Medical Student	Yes	
Dr Martin Hewitt	Consultant Paediatrician Oncologist	Yes	
Mrs Sheila Hodgson	Clinical Trials Pharmacist	Yes	
Mrs Anita Hughes	Research Midwife	No	
Dr David Lott	Pharmaceutical Physician	Yes	
Mr Jonathan Mitchell	Barrister	Yes	
Mrs Ruth Musson	Pathology Specialist Nurse	Yes	
Mrs Linda Reynolds	Occupational Therapist	Yes	
Dr Simon Roe	Consultant Nephrologist	Yes	
Mr Glen Swanwick	P.P.I Forum Member	Yes	
Ms Margret Vince	Translator	Yes	
Reverend Paul Weeding	Chaplain	Yes	
Miss Emma Wilkinson	Staff Nurse	Yes	
Mrs Janice Wilson	Nurse Practitioner	No	

Written comments received from:

Name	Position
Mrs Anita Hughes	Research Midwife

Also in attendance:

Name	Position
Ms Linda Ellis	Research Ethics Manager

Research and development approval letter:



Nottinghamshire County Teaching PCT

Research and Evaluation

Birch House
Ransom Wood Business Park
Southwell Road West
Rainworth
Nottinghamshire
NG21 0HJ

Tel: 01623 673338
Fax: 01623 673340

www.rdnottspct.nhs.uk

06 October 2008

Mr Asam Latif
Doctoral Student
University of Nottingham
School of Pharmacy
University Park
Nottingham
NG7 2RD

Dear Mr Latif

Ethics Reference Number: 08/H0408/92

Project Title: An exploration of patient and professional perceptions of community pharmacy based Medicines Use Review (MUR) services – a qualitative investigation.

Thank you for submitting the above project to the NHS Nottinghamshire County Research and Evaluation Department. The project has now been given Organisational Approval by:

Dr Amanda Sullivan, R & E Lead, on behalf of NHS Nottinghamshire County
Dr Chris Packham, R & D Lead, on behalf of Nottinghamshire City tPCT

Although Organisational approval has been given for this study it does not guarantee that independent contractors such as GPs, dentists, optometrists and community pharmacists will be able to take part in your study.



Conditions of approval

Please note that approval for this study is dependent on full compliance with the following. To that end, please complete and return the form attached to this letter confirming your acceptance of these terms and conditions:

- You are required to ensure that all information regarding patients or staff remains secure and **strictly confidential** at all times. You must ensure that you understand and comply with the requirements of the NHS Confidentiality Code of Practice (<http://www.dh.gov.uk/assetRoot/04/06/92/54/04069254.pdf>) and the Data Protection Act (1998). Furthermore, you should be aware that under the Act, unauthorised disclosure of information is an offence and such disclosures may lead to prosecution.
- You must not hold person identifiable data on portable media unless it is encrypted. Protecting data files with passwords does not constitute encryption
- To complete yearly/final reports as requested, and to feedback study findings to the Research and Development Department and participants (as appropriate)
- To endeavour to publish and/or disseminate research findings on completion of the project
- To inform the Research and Development Department of any changes that occur, e.g. amendments to approved documentation, project not started for any reason, change in personnel etc
- That you inform the Research and Development Department which GP Practices you have recruited to your study from the Nottinghamshire PCTs (where applicable)
- That you inform the Research and Development Department of all serious adverse incidents¹ in accordance with Trust Policy and/or Legal requirements (e.g. Sponsor, MHRA). This is in addition to the reporting of serious or unexpected adverse events and adverse drug reactions (which may affect the conduct and continuation of the study) to the approving research ethics committee
- That you are aware of and comply with the PCT Research and Development Policies and Best Practice Guidance²
- That you agree to cooperate with a Research Governance Audit of the project if requested by the Research and Development Department
- That you have read and agree to abide by the Research Governance Framework (RGF) for Health and Social Care (second edition 2005)

The *Research Governance Framework for Health & Social Care* sets out the responsibilities of all those involved in research in order to enhance the ethical and scientific quality of health research and to safeguard patients and the public. The lead investigator and all involved in the research have a responsibility to comply with Research Governance.

¹ Refer to Nottinghamshire PCTs Adverse Event Reporting Policy in Research for definitions - www.rdnottspct.nhs.uk

² Policy for Adverse Event Reporting in Research
Research Fraud and Misconduct Policy
Policy for the Management of Trust Generated Intellectual Property
Best Practice Guidance: Data Management in Research
www.rdnottspct.nhs.uk



Full details can be found in the RGF document available at www.dh.gov.uk or via the Research and Evaluation Department.

Yours sincerely,

A handwritten signature in black ink that reads "R. Illingworth".

Rachel Illingworth
Head of Research and Evaluation

Copy to:
Relevant PCT Lead
Research Ethics Committee

Indemnity support letter:

Our reference:

RIS 32987

Your reference:

08/H0408/92

0115 846 8232

Paul.cartledge@nottingham.ac.uk

Research Innovation Services

University of Nottingham

King's Meadow Campus

Lenton Lane Nottingham

NG7 2NR

Nottingham REC 2

1 Standard Court

Park Row

Nottingham

NG1 6GN

Mr Asam Latif, Chief Investigator

University of Nottingham

School of Pharmacy

University Park

Nottingham

NG7 2RD

2nd June 2008

Dear sir or madam,

Sponsorship Statement

Re: An exploration of patient and professional perceptions of community pharmacy based Medicines Use Review (MUR) services: a qualitative investigation.

I can confirm that this research proposal has been discussed with the Chief Investigator and agreement to sponsor the research is in place.

An appropriate process of scientific critique has demonstrated that this research proposal is worthwhile and of high scientific quality.*

Any necessary indemnity or insurance arrangements will be in place before this research starts. Arrangements will be in place before the study starts for the research team to access resources and support to deliver the research as proposed.

Arrangements to allocate responsibilities for the management, monitoring and reporting of the research will be in place before the research starts.

The duties of sponsors set out in the NHS Research Governance Framework for Health and Social Care will be undertaken in relation to this research.**

* Not applicable to student research (except doctoral research).

** Not applicable to research outside the scope of the Research Governance Framework.

Yours faithfully

Paul Cartledge

Head of Research Grants and Contracts
University of Nottingham



Confidentiality agreement letter:



Nottinghamshire County Teaching PCT
Research & Evaluation Department
Birch House
Ransom Wood Business Park
Southwell Road West
Rainworth
Nottinghamshire
NG21 0HJ

Tel: 01623 673338
Fax: 01623 673340
Web: www.nottinghamshirecountylearningpct.nhs.uk

8 October 2008

Mr Asam Latif
Doctoral Student
University of Nottingham
School of Pharmacy
University Park
Nottingham
NH7 2RD

Dear Mr Latif

Study Title: An exploration of patient and professional perceptions of community pharmacy based Medicines Use Review (MUR) services – a qualitative investigation.

Confidentiality Letter

The information supplied about your role in the above research project has been reviewed and you do not require an honorary research contract. The Trust is satisfied that such checks as it considers necessary have been carried out. This letter outlines your responsibilities while you are conducting research within the PCT/s named in the study approval letter.

Your activities will be overseen by myself, Rachel Illingworth, Head of R&E at NHS Nottinghamshire County.

You are considered to be a legal visitor to Trust premises. You are not entitled to any form of payment or access to other benefits provided by the Trust to employees and this letter does not give rise to any other relationship between you and the Trust, in particular that of a contract of employment.

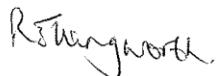
You must act in accordance with Trust policies and procedures, which are available to you upon request, including the *Research Governance Framework for Health & Social Care* (2005). You must observe the same standards of care and propriety in dealing with patients, staff, visitors, equipment and the premises as is expected of any other contract holder and you must act appropriately, responsibly and professionally at all times.

You are required to ensure that all information regarding patients or staff remains secure and **strictly confidential** at all times. You must ensure that you understand and comply with the requirements of the NHS Confidentiality Code of Practice (<http://www.dh.gov.uk/assetRoot/04/06/92/54/04069254.pdf>) and the Data Protection Act (1998). Furthermore you should be aware that under the Act, unauthorised disclosure of information is an offence and such disclosures may lead to prosecution.

You should ensure that where you are issued an identity or security card, a bleep number, email or library account, keys or protective clothing, that these are returned upon termination of this arrangement. Please also ensure that while on the premises you wear your ID badge at all times, or are able to prove your identity if challenged. Please note that the Trust accepts no responsibility for damage to or loss of personal property.

Any breach of these requirements will result in withdrawal of the access conferred in this letter and will be notified to your employer. Your substantive employer is responsible for your conduct during this research project and any breach may therefore result in disciplinary action against you. Any breach of the Data Protection Act 1998 may result in legal action against you and/or your substantive employer.

Yours faithfully



Rachel Illingworth
Head of Research and Evaluation
NHS Nottinghamshire County

Copy to Chief Investigator

Protocol amendment letter:**Nottingham Research Ethics Committee 2**

1 Standard Court
Park Row
Nottingham
NG1 6GN

Tel: 0115 8839461
Fax: 0115 9123300

16 December 2008

Mr Asam Latif
Doctoral Student
University of Nottingham
Division of Social Research in Medicines and Health
School of Pharmacy
University Park
Nottingham, NG7 2RD

Dear Mr Latif,

Study title:	An exploration of patient and professional perceptions of community pharmacy based Medicines Use Review (MUR) services - a qualitative investigation.
REC reference:	08/H0408/92
Protocol number:	1
Amendment number:	1
Amendment date:	09 December 2008

Thank you for your letter of 11 December 2008, notifying the Committee of the above amendment.

The amendment has been considered by the Chair; the Committee does not consider this to be a "substantial amendment" as defined in the Standard Operating Procedures for Research Ethics Committees. The amendment does not therefore require an ethical opinion from the Committee and may be implemented immediately, provided that it does not affect the approval for the research given by the R&D office for the relevant NHS care organisation.

Documents received

The documents received were as follows:

Document	Version	Date
Amendments to protocol		
Notification of a Minor Amendment - option for telephone interview	1	09 December 2008
Protocol	2.0	09 December 2008

Statement of compliance

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

08/H0408/92:	Please quote this number on all correspondence
--------------	--

Yours sincerely,



**Ms Linda Ellis
Committee Co-ordinator**

E-mail: linda.ellis@nottspct.nhs.uk

Copy to: *Mr Paul Cartledge - University of Nottingham
R&D office for NHS care organisation at lead site - NCT-PCT*



Research & Evaluation Department
Birch House
Ransom Wood Business Park
Southwell Road West
Rainworth
Nottinghamshire
NG21 0HJ

Tel: 01623 673338
Fax: 01623 673340
Web: www.nottinghamshirecountyteachingPCT.nhs.uk

12 January 2009

Mr Asam Latif
Doctoral Student
University of Nottingham
Division of Social Research in Medicines and Health
School of Pharmacy
University Park
Nottingham
NG7 2RD

Dear Mr Latif

Ethics Reference: 08/H0408/92

Project Title: An exploration of patient and professional perceptions of community pharmacy based Medicines Use Review (MUR) services - a qualitative investigation

We are writing to acknowledge receipt of the following project amendments:

Amendment No: 1

Amendments to protocol

**Notification of a Minor Amendment - option for telephone interview V1 - 09 December 2008
Protocol - V 2 - 09 December 2008**

The changes have been reviewed and approved on behalf of:

Dr Amanda Sullivan, R&D Lead, on behalf of Nottinghamshire County tPCT
Dr Chris Packham, R&D Lead, on behalf of Nottingham City PCT

Please ensure all future proposed changes are forwarded to both the R&D department and the relevant Ethics Committee for review and approval.

Yours sincerely

A handwritten signature in black ink, appearing to read 'A. Steel'.

Alison Steel
Research and Development Manager



National Research Ethics Service

Nottingham Research Ethics Committee 2

1 Standard Court
Park Row
Nottingham
NG1 6GN

Tel: 0115 8839368
Fax: 0115 9123300

29 October 2009

Mr Asam Latif
Doctoral Student
University of Nottingham
School of Pharmacy
University Park
Nottingham
NG7 2RD

Dear Mr Latif,

Study title: An exploration of patient and professional perceptions of community pharmacy based Medicines Use Review (MUR) services - a qualitative investigation.
REC reference: 08/H0408/92
Protocol number: 1
Amendment number: 2 - use of a transcriber
Amendment date: 28 October 2009

Thank you for your email of 28 October 2009, notifying the Committee of the above amendment.

The amendment has been considered by the Chair and is not considered to be a "substantial amendment" as defined in the Standard Operating Procedures for Research Ethics Committees. The amendment does not therefore require an ethical opinion from the Committee and may be implemented immediately, provided that it does not affect the approval for the research given by the R&D office for the relevant NHS care organisation.

Documents received

The documents received were as follows:

Document	Version	Date
Confidentiality Acceptance for Transcribers		
Protocol	2.0	09 December 2008
Notification of a Minor Amendment - use of a transcriber	2	28 October 2009

This Research Ethics Committee is an advisory committee to East Midlands Strategic Health Authority.
The National Research Ethics Service (NRES) represents the NRES Directorate within the National Patient Safety Agency and Research Ethics Committees in England.

Statement of compliance

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

08/H0408/92:

Please quote this number on all correspondence

Yours sincerely,



Miss Susie Cornick-Willis
Committee Co-ordinator

E-mail: susie.cornick-willis@nottspct.nhs.uk

Copy to:

*Mr Paul Cartledge - University of Nottingham
R&D office for NHS care organisation at lead site - NCT-PCT*



Research & Evaluation Department
Birch House
Ransom Wood Business Park
Southwell Road West
Rainworth
Nottinghamshire
NG21 0HJ

Tel: 01623 673338
Fax: 01623 673340
Web: www.nottinghamshirecountyteachingPCT.nhs.uk

21st October 2009

Mr Asam Latif
Doctoral Student
University of Nottingham
School of Pharmacy
University Park
Nottingham
NG7 2RD

Dear Mr Latif

Ethics Reference: 08/H0408/92
Project Title: An exploration of patient and professional perceptions of community pharmacy based Medicines Use Review (MUR) services - a qualitative investigation

We are writing to acknowledge receipt of the following project amendments:

Amendment No: 2 – minor amendment

Addition of transcriber

The changes have been reviewed and approved on behalf of:

Dr Amanda Sullivan, R&D Lead, on behalf of Nottinghamshire County tPCT
Dr Chris Packham, R&D Lead, on behalf of Nottingham City PCT

Please ensure all future proposed changes are forwarded to both the R&D department and the relevant Ethics Committee for review and approval.

Yours sincerely

A handwritten signature in black ink, appearing to read 'A. Steel'. A small red checkmark is placed to the right of the signature.

Alison Steel
Research and Development Manager



APPENDIX FOUR

Independent pharmacy recruitment letter

Dear Sir or Madam,

I am a PhD student at the University of Nottingham and I am currently conducting research into patient perceptions of MURs. As you know, MURs are an integral part of the community pharmacy contract; however there has been little research into what patients' think of the service.

My research involves recruiting two pharmacies (one independent and one multiple) in order to undertake observational work in each. I am contacting you as to ask if you would be willing to participate in the study - I have selected your pharmacy from a list of pharmacies in the Nottingham area. The study would involve you and your staff being observed in their daily practice and investigating how MURs are incorporated into your routines. The study will also involve observing MUR consultations, with permission of the patient. Patients whose MUR consultations are observed will be invited to an interview at a later date to talk about their experiences of the MUR.

The primary purpose of the study is to look at patient perceptions of the service. This will not be an evaluation of the service that is provided in the pharmacy. Your pharmacy, staff and patients details will be kept confidential in the reports and publications arising from this study. All information will be anonymised to ensure pharmacies and individuals who participate are not identifiable.

I have received NHS ethical approval for this study and I am awaiting Research Governance approval so that I can conduct this research in the Nottingham PCT area. I have attached a summary of the planned research for your information as well as a pharmacist and pharmacy staff information sheet. In order to be eligible for this study and allow a suitable number of patients to be recruited for interviews, the pharmacy will need to be performing on average at least 3 to 4 MURs each week. I intend to start this study during October / November 2008.

I will contact you in a few days time, to ask if you would be willing to participate and, if so, to arrange a meeting to discuss the project and what participating would mean for you, your staff and patients. In the meantime please do not hesitate to contact me if you have any queries, my contact details are below.

Yours faithfully,

Asam Latif MA MRPharmS

PhD Research Student

Division of Social Research in Medicines and Health School of Pharmacy University of Nottingham

NG7 2RD

Mobile xxxxxxxxxxx; E-mail: xxxxx@nottingham.ac.uk

APPENDIX FIVE

Pharmacist and support staff information sheets and consent forms

Pharmacy staff information sheet:



Project title: Exploring patient and professional views of pharmacy Medicine Use Review (MUR) services

Information for pharmacists and pharmacy staff about the research

We would like to invite you to take part in a research study. Before you decide you need to understand why the research is being done and what it would involve for you. Please take time to read the following information carefully. Talk to others about the study if you wish. This information sheet tells you the purpose of this study and what will happen to you if you take part. Please ask us if there is anything that is not clear or if you would like more information and take time to decide whether or not you wish to take part.

What is the purpose of the study?

A Medicine Use Review (MUR) is a NHS service that involves a pharmacist periodically talking to a patient about their medicines and aims to improve the patient's knowledge and use of their drugs. This is normally carried out face to face with the patient in a private consultation room located within the community pharmacy. This study aims to understand peoples' views of the Medicines Use Review (MUR) service that is provided by this community pharmacy. As a provider of the MUR service this pharmacy has been selected to partake in this study. We will be investigating what patients think about MURs and how MURs are incorporated into your daily practices.

Why have I been asked to participate in the study?

We have chosen two contrasting pharmacies to take part in this study. As a provider of the MUR service you and other pharmacy staff involved with MURs are eligible to take part. We are interested in observing the pharmacist and the staff that are involved with MURs and speaking to them about the experience of providing this new service.

Do I have to take part?

It is up to you to decide. You do not have to take part in this study. We will describe the study and go through this information sheet, which is yours to keep. We will then ask you to sign a consent form to show you have agreed to take part (you will be given a copy to keep). You are free to withdraw at any time, without giving a reason.

What will happen to me if I take part?

If you agree to take part in this study, the researcher will spend some time observing you (pharmacist and pharmacy staff) during your normal work and may ask you questions about how you feel about the MUR service. The researcher will ask the pharmacist if he can (with the patient's permission) 'sit in' on MUR consultations. After the MUR consultation, the researcher will approach the

patient and ask if he or she would be willing to take part in an interview to discuss their experiences of the MUR. The researcher may also approach patients who have declined an offer for an MUR to get a more comprehensive view of the service and patients perspectives of its usefulness.

The observations within pharmacies will typically take place at a week at a time. There will be approximately four to five weeks of observations which will be spread over a period of about eight to nine months. At the end of the observations, you may be invited to take part in an interview to talk about your experience of providing MURs to your patients.

If you decide that you would like to talk about your experience of MURs, you will have the opportunity to choose the venue, time and date that you want the interview to take place. You will be sent a letter confirming the details of your interview. If you are unable to make your interview appointment for whatever reason, don't worry. Please let us know and we will arrange a more suitable time. Interviews are expected to last approximately one hour, and with your permission, will be audio-recorded. Also with your permission we may use direct quotes from the interview material in any publication of the results but you will not be identified.

Can I change my mind once I have signed the consent form?

If you have agreed to take part in the study, and for whatever reason you are unable to or change your mind and want to withdraw, that is absolutely fine. If you initially decided not to take part, and would now like to be involved that is OK too. All you need to do is contact us and let us know.

Will I be paid for taking part in the study?

No, you will not receive any money for taking part in this study. If you incur any expenses as a result of this study (i.e. for any travel associated with the study), you will be fully reimbursed.

What are the possible benefits of taking part?

We cannot promise the study will benefit you directly, but the information we get from this study may help improve the service that is provided by pharmacies in the future.

What are the risks of taking part in this study?

This study involves a researcher observing you at work, asking you how you put the MUR service into practice and what you think patients feel about the service. If you decide to, you may be invited for an interview to talk to a researcher further about the MUR service. We believe that the risks of taking part in this project are minimal.

What happens if something goes wrong?

If you have any concerns or complaints concerning any aspect of this study please speak to the researcher who will do his best to answer your questions (contact Asam Latif on xxxx xxxx or email [xxxx xxxx](#)).

If you would prefer to share your complaint with someone else or remain unhappy about a decision you may contact the academic supervisors of this project Dr Helen Boardman on xxxx xxxx or email [xxxx xxxx](#) or Dr Kristian Pollock on xxxx xxxx or email [xxxx xxxx](#).

Will the information provided be kept confidential?

All information which is collected about you during the course of this research will be kept confidential, and any information about you will have the name, address and any other identifying features removed so that you cannot be recognised.

Will you be contacting GPs?

Individual MURs that are performed within this pharmacy will not be discussed with GPs. After the observations within this pharmacy are over, local GPs and practice staff will be invited to partake in an interview or focus group discussion to discuss their general views of the MUR service.

Will the information be handled and stored safely?

The overall responsibility for handling any information you provide during the course of this study lies with Asam Latif. The information you provide us with will be held on secure password protected computers and / or in a locked and secure drawer / filling cabinet.

Who will have access to the data collected during the study?

Only the research team involved will have access to the collected data. The data collected will be stored at the University of Nottingham for 7 years following completion of the study.

What will happen to the results of the study?

We will send you a short communication of the findings of this study. We will also present results at conferences and write journal articles so that other people can learn from our study. No findings will have any of your personal information.

Who is organising and funding this research?

This research is being organised by the University of Nottingham for completion of an educational qualification (PhD) for Asam Latif. This study is conducted under the supervision of Dr Helen Boardman and Dr Kristian Pollock and is funded jointly by the Economic and Social Research Council and the Medical Research Council.

Who has reviewed this study?

All research in the NHS is looked at by an independent group of people called a Research Ethics Committee to protect your safety, rights, wellbeing and dignity. This study has been reviewed and given favorable opinion by (insert name) Research Ethics Committee. This project is supported by (insert name of clinical services manager of organisation or pharmacy owner) who has given us permission to do this study in this pharmacy.

Who should I contact for further information?

If you need further information about this study please feel free to contact us on the details provided below:

Name of researcher: Asam Latif Tel: xxxx xxxx or email [xxxx xxxx](#)

Academic supervisors: Dr Helen Boardman tel: xxxx xxxx or email [xxxx xxxx](#)

Dr Kristian Pollock on xxxx xxxx or email [xxxx xxxx](#)

Thank you for reading this information sheet.

Please don't hesitate to ask me any questions if you need to.

Pharmacy staff consent form (observations):**STAFF CONSENT FORM**

Protocol number: 1

Staff identification number for this study:

Title of the Study: Exploring patient and professional views of pharmacy Medicine Use Review services

Name of the researcher: Asam Latif

Please initial Box

1. I confirm that I have read and understand the information sheet dated 01/05/2008 (Version 1) for the above study. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily.

2. I understand that my participation is voluntary and that I am free to withdraw at any time, without giving any reason.

3. I understand that relevant data collected during the study, may be looked at by individuals from regulatory authorities (i.e. for University auditing purposes) where it is relevant to my taking part in this research. I give permission for these individuals to have access to this data.

4. I give my consent for the researcher to observe my normal daily work as described in the information sheet.

5. I agree to take part in the above study

 Name of staff

 Date

 Signature

 Name of Person taking consent (if different
from researcher)

 Date

 Signature

 Researcher
Asam Latif

 Date

 Signature

When completed, 1 for staff member; 1 for researcher

Pharmacy staff consent form (interview):**STAFF CONSENT FORM**

Protocol number: 1

Staff identification number for this study:

Title of the Study: Exploring patient and professional views of pharmacy Medicine Use Review services

Name of the researcher: Asam Latif

Please initial Box

1. I confirm that I have read and understand the information sheet dated 01/05/2008 (Version 1) for the above study. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily.

2. I understand that my participation is voluntary and that I am free to withdraw at any time, without giving any reason.

3. I understand that relevant data collected during the study, may be looked at by individuals from regulatory authorities (i.e. for University auditing purposes) where it is relevant to my taking part in this research. I give permission for these individuals to have access to this data.

4. I give my consent for the researcher to audio-record the interview as described in the information sheet.

5. I give my consent for anonymised direct quotes to be used in reports and publications.

6. I agree to take part in the above study

Name of staff	Date	Signature
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Name of Person taking consent (if different from researcher)	Date	Signature
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Researcher Asam Latif	Date	Signature
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When completed, 1 for staff member; 1 researcher

APPENDIX SIX

Pharmacy study poster



What do you think about the Medicines Use Review (MUR) service that is provided in this pharmacy?

We are currently conducting some research at the University of Nottingham into what patients' think of the MUR service.

You may be asked to have a Medicines Use Review (MUR) with your pharmacist. Whether you agree or decline, you may be invited to take part in this study – it's entirely optional.

For further details please contact:

Asam Latif on xxxx xxxxxx; mobile xxxxxxxxx

Email: xxxx@nottingham.ac.uk

Asam Latif

School of Pharmacy

University of Nottingham

University Park

Nottingham

NG7 2RD

APPENDIX SEVEN

Patient information sheet and consent forms

Patient information sheet:



Project title: Exploring patient and professional views of pharmacy Medicine Use Review (MUR) services

Information about the research

We would like to invite you to take part in a research study. Before you decide you need to understand why the research is being done and what it would involve for you. Please take time to read the following information carefully. Talk to others about the study if you wish. This information sheet tells you the purpose of this study and what will happen to you if you take part. Please ask us if there is anything that is not clear or if you would like more information and take time to decide whether or not you wish to take part.

What is the purpose of the study?

A Medicine Use Review (MUR) is a NHS service that involves a pharmacist periodically talking to a patient about their medicines and aims to improve the patient's knowledge and use of their drugs. This is normally carried out face to face with the patient in a private consultation room located within the community pharmacy. This study aims to understand peoples' views of the Medicines Use Review (MUR) service that is provided by your local community pharmacy. We are interested in what happens in the consultation and how you felt about the service.

Why have I been asked to participate in the study?

As a user of this community pharmacy you are eligible for a review of your medication. You will have been invited for a Medicines Use Review with your pharmacist. We are interested in speaking to approximately 30-40 people who have either had an MUR or chose not to do so.

Do I have to take part?

It is up to you to decide. You do not have to take part in this study, it is entirely voluntary. We will describe the study and go through this information sheet, which we will then give to you. We will then ask you to sign a consent form to show you have agreed to take part (you will be given a copy to keep). You are free to withdraw at any time, without giving a reason.

Will my decision affect the care I receive?

You may decide not to take part, please be assured that this would not affect the standard of care you receive. This is whether you take part in this study or not.

What will happen to me if I take part?

If you agree to take part in this study the MUR consultation will be observed by the researcher. This will mean that the researcher will 'sit in' on the consultation. After the MUR consultation, the researcher will approach you and invite you to take part in an

interview to talk about your experience of having the MUR. You do not have to decide at this stage whether you would like to take part in an interview.

If you decide to participate in an interview, you will be contacted by the researcher at a later date to arrange an interview. If you do not want to be interviewed simply let me know or return the slip below to me in the pre-paid envelope. If you decide that you would like to talk about your experience of having an MUR, you will have the opportunity to choose the venue, time and date that you want the interview to take place.

You will be sent a letter confirming the details of your interview. We will also ask you about how you felt about being chosen for a review by your pharmacist and more generally about your experiences of your community pharmacy. You will not have to answer any questions about issues you do not want to discuss. If you are unable to make your interview appointment for whatever reason, don't worry. Please let us know and we will arrange a more suitable time.

Interviews will last approximately one hour. With your permission we may use direct quotes from the MUR observations or from the interview material in any publication of the results but you will not be identified. Also with your permission we would like to audio record the interview.

Will my decision affect the care I receive?

Please be assured that the standard of care you receive will not be affected in any way. This is whether you take part in this study or not.

Can I change my mind once I have signed the consent form?

If you have agreed to take part in the study, and for whatever reason you are unable to or change your mind and want to withdraw that is absolutely fine; please let us know if you would like us to erase the data collected from the MUR consultation. If you initially decided not to take part, and would now like to be involved that is OK too. All you need to do is contact us and let us know.

Will I be paid for taking part in the study?

No, you will not receive any money for taking part in this study. If you incur any expenses as a result of this study (i.e. travel / parking costs) please retain your receipt and we will fully reimburse you.

What are the possible benefits of taking part?

It is unlikely that the study will benefit you directly, but the information we collect may help improve the service that is provided by pharmacies in the future.

What are the risks of taking part in this study?

This study involves a researcher observing your MUR consultation with the pharmacist, and if you decide to, talking to a researcher about the Medicines Use Review service. We believe that the risks of taking part in this project are minimal.

What happens if something goes wrong?

If you have any concerns or complaints concerning any aspect of this study please speak to the researcher who will do his best to answer your questions (contact Asam Latif on xxxx xxxx, mobile xxx xxxxxxxx or email [xxxx xxxx](#)).

If you would prefer to share your complaint with someone else or remain unhappy about a decision you may contact the academic supervisors of this study, Dr Helen Boardman on xxxx xxxx or email [xxxx xxxx](#) or Dr Kristian Pollock on xxxx xxxx or email [xxxx xxxx](#).

If you remain unhappy you may complain formally to Patient Advice and Liaison Service (PALS) who provide confidential advice and support to patients, families and carers. They can be contacted on 0115 912 3320.

Will the information provided be kept confidential?

All information which is collected about you during the course of this research will remain confidential. All identifying information about you will be removed from reports and publications resulting from this study so that you will not be recognised as a participant.

Will you be contacting my GP?

We will not disclose any information to your GP. If any issues arise about your medication that may warrant further attention during the interview, we will refer you either back to the pharmacist or to your GP. What you tell us is confidential and will not be reported back to your GP or the pharmacist. If you want, please feel free to speak to your GP or pharmacist about any aspect of this study.

Will the information be handled and stored safely?

The overall responsibility for handling any information you provide during the course of this study lies with Asam Latif. The information you provide us with will be held on secure password protected computers and / or in a locked and secure drawer / filing cabinet.

Who will have access to the data collected during the study?

Only the research team involved will have access to the collected data. The data collected will be stored at the University of Nottingham for 7 years following completion of the study.

What will happen to the results of the study?

We will send you a short communication of the findings of this study. We will also present results at conferences and write journal articles so that other people can learn from our study. No findings will include any of your personal information.

Who is organising and funding this research?

This research is being organised by the University of Nottingham for completion of an educational qualification (PhD) for Asam Latif. This study is conducted under the supervision of Dr Helen Boardman and Dr Kristian Pollock and is funded jointly by the Economic and Social Research Council and the Medical Research Council.

Who has reviewed this study?

All research in the NHS is looked at by an independent group of people called a Research Ethics Committee to protect your safety, rights, wellbeing and dignity. This study has been reviewed and given favorable opinion by Nottingham Research Ethics Committee. [Insert name of pharmacy] has provided permission and supports this study.

Who should I contact for further information?

If you need further information about this study please feel free to contact us on the details provided below:

Name of researcher: Asam Latif Tel: xxxx xxxx, mobile xxx xxxxxxxx or email [xxxx xxxx](#)

Academic supervisors: Dr Helen Boardman tel: xxxx xxxx or email [xxxx xxxx](#)

Dr Kristian Pollock on xxxx xxxx or email [xxxx xxxx](#)

Thank you for reading this information sheet.

Please don't hesitate to ask me any questions if you need to.

Following on from our discussion in the pharmacy, I will as agreed, contact you in the next few days, however, should you wish not to be contacted, please indicate this by completing the reply slip below.

Please tear along this line and return in the self addressed envelope whether or not you would be willing to participate in an interview as described in this information sheet:

.....

Please tick one option –

I do not wish to further take part in this study.

Yes, I would be interested in continuing in this study by talking to you about my experiences of my MUR.

Name.....

Contact details.....

Patient consent form (observation of MUR):**PATIENT CONSENT FORM**

Protocol number: 1

Patient identification number for this study:

Title of the Study: Exploring patient and professional views of pharmacy Medicine Use Review services

Name of the researcher: Asam Latif

Please initial Box

1. I confirm that I have read and understand the information sheet dated 01/05/2008 (Version 1) for the above study. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily.

2. I understand that my participation is voluntary and that I am free to withdraw at any time, without giving any reason, without my care or legal rights being affected.

3. I understand that relevant data collected during the study, may be looked at by individuals from regulatory authorities (i.e. for University auditing purposes) where it is relevant to my taking part in this research. I give permission for these individuals to have access to this data.

4. I give my consent for the researcher to observe my MUR with the pharmacist as described in the information sheet.

5. I give my consent for any notes taken during the consultation to be used in reports and publications.

6. I agree to take part in the above study

Name of Patient	Date	Signature
Name of Person taking consent (if different from researcher)	Date	Signature
Researcher Asam Latif	Date	Signature

When completed, 1 for patient; 1 for researcher

Patient consent form (interview):**PATIENT CONSENT FORM**

Protocol number: 1

Patient identification number for this study:

Title of the Study: Exploring patient and professional views of pharmacy Medicine Use Review services

Name of the researcher: Asam Latif

Please initial Box

1. I confirm that I have read and understand the information sheet dated 01/05/2008 (Version 1) for the above study. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily.

2. I understand that my participation is voluntary and that I am free to withdraw from the interview at any time, without giving any reason, without my care or legal rights being affected.

3. I understand that relevant data collected during the study, may be looked at by individuals from regulatory authorities (i.e. for University auditing purposes) where it is relevant to my taking part in this research. I give permission for these individuals to have access to this data.

4. I give my consent for the interview to be audio-recorded as described in the information sheet.

5. I give my consent for anonymised direct quotes to be used in reports and publications.

6. I agree to take part in the above study

Name of Patient

Date

Signature

Name of Person taking consent (if different
from researcher)

Date

Signature

Researcher

Date

Signature

Asam Latif

When completed, 1 for patient; 1 for researcher

Patient information sheet (declined MUR):

Project title: Exploring patient and professional views of pharmacy Medicine Use Review (MUR) services

Information about the research

We would like to invite you to take part in a research study. Before you decide you need to understand why the research is being done and what it would involve for you. Please take time to read the following information carefully. Talk to others about the study if you wish. This information sheet tells you the purpose of this study and what will happen to you if you take part. Please ask us if there is anything that is not clear or if you would like more information and take time to decide whether or not you wish to take part.

What is the purpose of the study?

A Medicine Use Review (MUR) is a NHS service that involves a pharmacist periodically talking to a patient about their medicines and aims to improve the patient's knowledge and use of their drugs. This is normally carried out face to face with the patient in a private consultation room located within the community pharmacy. This study aims to understand peoples' views of the Medicines Use Review (MUR) service that is provided by your local community pharmacy. This research aims to explore peoples' attitudes towards the MUR service.

Why have I been asked to participate in the study?

As a user of this community pharmacy you are eligible for a review of your medication. You will have been invited for a Medicines Use Review with your pharmacist. As part of our research we are interested in the reasons why people decline the offer to have an MUR. We are interested in speaking to approximately 30-40 people who have either had an MUR or chose not to do so.

Do I have to take part?

It is up to you to decide. You do not have to take part in this study. We will describe the study and go through this information sheet, which we will then give to you. If you agree to take part, we will ask you to sign a consent form to show you have agreed to take part (you will be given a copy to keep). You are free to withdraw at any time, without giving a reason.

Will my decision affect the care I receive?

Please be assured that this will not affect the standard of care you receive.

What will happen to me if I take part?

If you agree to take part in this study, you will be contacted by the researcher at a later date to arrange an interview. If you do not want to be interviewed simply return the slip below to me in the pre-paid envelope. If you decide that you would like to talk about your experiences, you will have the opportunity to choose the venue, time and date that you want the interview to take place. You will be sent a letter confirming the details of your interview. We will ask you about how you felt about being chosen for a review by your pharmacist or pharmacy staff, the reasons why you chose to decline the offer on this occasion and more generally about your experiences of your community pharmacy. You will not have to answer any questions about issues you do not want to discuss.

If you are unable to make your interview appointment for whatever reason, don't worry. Please let us know and we will arrange a more suitable time. Interviews will last approximately half an hour. If you decide that you do not want a face-to-face interview,

you may choose to have a telephone interview instead. If you choose this option you will be contacted by us to arrange a convenient date and time for the interview to take place. With your permission we would like to audio record the interview and also with your permission we may use direct quotes from the interview material in any publication of the results but you will not be identified and all identifiable information will be removed.

Can I change my mind once I have signed the consent form?

If you have agreed to take part in the study, and for whatever reason you are unable to or change your mind and want to withdraw, that is absolutely fine. If you initially decided not to take part, and would now like to be involved that is OK too. All you need to do is contact us and let us know.

Will I be paid for taking part in the study?

No, you will not receive any money for taking part in this study. If you incur any expenses as a result of this study (i.e. travel / parking costs) please retain your receipt and we will fully reimburse you.

What are the possible benefits of taking part?

It is unlikely that the study will benefit you directly, but the information we collect may help improve the service that is provided by pharmacies in the future.

What are the risks of taking part in this study?

This study involves you talking to us about your reasons for declining an MUR. We believe that the risks of taking part in this project are minimal.

What happens if something goes wrong?

If you have any concerns or complaints concerning any aspect of this study please speak to the researcher who will do his best to answer your questions (contact Asam Latif on xxxx xxxx, mobile xxx xxxxxxxx or email [xxxx xxxx](#)).

If you would prefer to share your complaint with someone else or remain unhappy about a decision you may contact the academic supervisors of this project Dr Helen Boardman on xxxx xxxx or email [xxxx xxxx](#) or Dr Kristian Pollock on xxxx xxxx or email [xxxx xxxx](#).

If you remain unhappy you may complain formally to Patient Advice and Liaison Service (PALS) who provide confidential advice and support to patients, families and carers. They can be contacted on 0115 912 3320.

Will the information provided be kept confidential?

All information which is collected about you during the course of this research will remain confidential. All identifying information about you will be removed from reports and publications resulting from this study so that you will not be recognised as a participant.

Will you be contacting my GP?

We will not disclose any information to your GP. If any issues arise about your medication that may warrant further attention during the interview, we will refer you either back to the pharmacist or to your GP. What you tell us is confidential and will not be repeated back to your GP or the pharmacist. If you want, please feel free to speak to your GP about any aspect of this study.

Will the information be handled and stored safely?

The overall responsibility for handling any information you provide during the course of this study lies with Asam Latif. The information you provide us with will be held on secure password protected computers and / or in a locked and secure drawer / filing cabinet.

Who will have access to the data collected during the study?

Only the research team involved will have access to the collected data. The data collected will be stored at the University of Nottingham for 7 years following completion of the study.

What will happen to the results of the study?

We will send you a short communication of the findings of this study. We will also present results at conferences and write journal articles so that other people can learn from our study. No findings will include any of your personal information.

Who is organising and funding this research?

This research is being organised by the University of Nottingham for completion of an educational qualification (PhD) for Asam Latif. This study is conducted under the supervision of Dr Helen Boardman and Dr Kristian Pollock and is funded jointly by the Economic and Social Research Council and the Medical Research Council.

Who has reviewed this study?

All research in the NHS is looked at by an independent group of people called a Research Ethics Committee to protect your safety, rights, wellbeing and dignity. This study has been reviewed and given favorable opinion by Nottingham Research Ethics Committee. [insert name] has provided permission and supports this study.

Who should I contact for further information?

If you need further information about this study please feel free to contact us on the details provided below:

Name of researcher: Asam Latif Tel: xxxx xxxx, mobile xxx xxxxxxxx or email [xxxx xxxx](#)

Academic supervisors: Dr Helen Boardman tel: xxxx xxxx or email [xxxx xxxx](#)

Dr Kristian Pollock on xxxx xxxx or email [xxxx xxxx](#)

Thank you for reading this information sheet.

Please don't hesitate to ask me any questions if you need to.

Following on from our discussion in the pharmacy, I will as agreed, contact you in the next few days, however, should you wish not to be contacted, please indicate this by completing the reply slip below:

Please tear along this line and return in the self addressed envelope whether or not you would be willing to participate in an interview as described in this information sheet:

.....

Please tick one option –

I do not wish to take part in this study

Yes, I would be interested in talking to you about my experiences of pharmacy services:

□

Name.....

Contact details

Patient consent form (declined MUR):**PATIENT CONSENT FORM**

Protocol number: 1

Patient identification number for this study:

Title of the Study: Exploring patient and professional views of pharmacy Medicine Use Review services

Name of the researcher: Asam Latif

Please initial Box

1. I confirm that I have read and understand the information sheet dated 01/05/2008 (Version 1) for the above study. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily.

2. I understand that my participation is voluntary and that I am free to withdraw from this interview at any time, without giving any reason, without my care or legal rights being affected.

3. I understand that relevant data collected during the study, may be looked at by individuals from regulatory authorities (i.e. for University auditing purposes) where it is relevant to my taking part in this research. I give permission for these individuals to have access to this data.

4. I give my consent for the researcher to audio-record the interview.

5. I give my consent for anonymised direct quotes to be used in reports and publications.

6. I agree to take part in the above study

Name of Patient _____

Date _____

Signature _____

Name of Person taking consent (if different
from researcher) _____

Date _____

Signature _____

Researcher _____

Date _____

Signature _____

Asam Latif

When completed, 1 for patient; 1 for researcher

APPENDIX EIGHT

Topic guides

Patient interview topic guide:

Demographic details.

Opening question: could you tell me from beginning to the end your experience of the MUR in as much detail as possible?

Respondent's awareness of MUR service and views of being approached.

Respondent's expectations and views of purpose of the MUR.

Exploration of what happened during the MUR (using observation notes).

Views on necessity/usefulness/would respondent like to have discussed anything?

Affect knowledge or use of medicines?

Likes and dislikes about review?

Who in your opinion would most benefit from MUR?

Improving the service/another MUR in future?

Pharmacy use and perceptions around role of the pharmacist.

Respondent's medicines and medical care.

Beliefs, necessity and concerns over medicines.

Perceived authority over medicines.

GP and other health professional role in respondent's care.

Pharmacist interview topic guide:

Demographic data and accreditation process.

Pharmacist's experience of MURs:

Patient selection.

Views and use of MUR forms.

Necessity of MURs.

Most common concerns patients have about their medicines?

Organisational pressure and targets.

Professional boundaries.

Objectives of MUR:

What do you hope to achieve? Good outcome/bad outcome.

View on improving knowledge and use of patients' medicines.

Resolving patient's ineffective use of medicines and examples.

How often do you make suggestions/are these accepted?

Views on value for money for NHS.

Support:

Do you welcome MURs/has this added anything to your role?

What support have you had to help you develop the service? (employers, local surgery, Primary Care Trust)

How can MURs be improved?

Pharmacy support staff interview topic guide:

Demographic data.

Training received.

Patient selection.

Identifying patients.

Explore patient responses.

Organisational issues:

View on pharmacist performing MURs.

Managing work without pharmacist.

Examples where the pharmacist was needed but was unavailable and patient response.

Organisational pressures and MUR targets.

APPENDIX NINE

List of patient medications

(Recorded during MUR and patient interviews)

List of patient medicines - Multiple Pharmacy:

Alias name	Medications that have been discussed during MUR or at Interview ¹	Number of medications
Anthony	Metformin tablets, Ramipril, Simvastatin tablets, Atenolol tablets, Aspirin tablets, Xalatan eye drops, Timolol eye drops.	7
Ashley	Atorvastain tablets, Amlodipine tablets, Lisinopril tablets.	3
Autumn	Amlodipine tablets, Aspirin tablets, Co-codamol tablets, Furosemide tablets, Ramipril tablets.	5
Beth	Paracetamol (soluble) tablets, Tolterodine tablets, Levothyroxine tablets, Trimovate cream, Lansoprazole, Imodium (OTC).	6
Betty	Metformin tablets, Simvastatin tablets, Losartan tablets, Amlodipine tablets, Aspirin tablets.	5
Cady	Adcal tablets, Alendronic acid tablets, Amantadine tablets, Aspirin (OTC) tablets, Atenolol tablets, Doxazocin tablets, Glucosamine and Chondroitin, Primrose oil (OTC), Ramipril, Simvastatin tablets.	10
Charlie	Ramipril, Levothyroxine tablets.	2
Comfort	Alendronic acid tablets, Calcichew tablets, <i>Multivitamins</i> (OTC), <i>Ibuprofen tablets</i> (OTC), <i>Ibuprofen gel</i> (OTC).	5
Dotty	Allopurinol tablets, Atorvastatin tablets, Bezefibrate tablets, Co-tenidone tablets, Diltiazem, Dosulepin tablets, Doxazocin tablets, Ibuprofen tablets, Paracetamol tablets.	9
Faith	Amitriptyline tablets, Felodipine tablets, Lactulose liquid Levothyroxine tablets, Prazocin tablets.	5
Fiona	Methotrexate tablets, Folic acid tablets, Spectroban liquid, Ventolin inhaler, Support stockings.	5
Iris	Cetirizine tablets, Beconase nasal spray, Feldene gel, Aspirin tablets, <i>Rennie</i> (OTC), Levothyroxine 50mg and 25mg tablets.	7
Jacques	Aspirin tablets, Simvastatin tablets, Metformin tablets, Lansoprazole.	4
Jessica	Benylin (OTC) liquid, Seretide inhaler, Spacer device, Ventolin inhaler.	4
Jill	Aspirin (OTC) tablets, Eprosartan, Phisiotens tablets (One further "blood pressure" medication not reported in MUR).	6
Jimmy	Aspirin tablets, Atenolol tablets, Bendroflumethiazide tablets, Ramipril.	4
Konnie	Aspirin (OTC) tablets, Citalopram tablets (two strengths), Dovonex cream, Flecainide tablets.	5
Megan	Prednisolone tablets, Alendronic acid tablets, Paracetamol tablets, Ibuprofen tablets, Calcichew tablets, Codeine tablets.	6

Mia	Amlodipine tablets, Atrovent inhaler, Dosulepin tablets, Paracetamol tablets, Symbicort inhaler, Uniphylline tablets, Ventolin inhaler.	7
Michael	Alfuzocin tablets, Atorvastatin tablets, Felodipine tablets, Meptid tablets, Ramipril capsules, Symbicort inhaler, Ventolin inhaler.	7
Molly	Bendroflumethiazide, Clexane injection, Support stockings.	3
Murial	Citalopram tablets, Co-amilorfruse tablets, Lansoprazole.	3
Nick	Bezefibrate tablets, Diclofenac tablets, Diprobase cream, Ezetamide tablets, Felodipine tablets, Lansoprazole capsules, Metformin tablets, Nicorandil tablets.	8
Nicola	Calcichew D3 forte tablets, Fortipine tablets, Paracetamol tablets, Simvastatin tablets, Slow K tablets, Valsartan capsules.	6
Noble	Atrovent, Iron tablets, Isosorbide Mononitrate, Nitrolingual spray, Salbutamol inhaler, Seretide inhaler.	6
Noleen	Aspirin tablets, Bendroflumethiazide tablets, Dipyridamole tablets, Felodipine tablets (two strengths), Simvastatin tablets.	6
Oprah	Bendroflumethiazide tablets, Co-codamol tablets, Codeine tablets, Hypromellose eye drops, E45 cream, Losartan tablets.	6
Queenie	Lisinopril tablets, Nizoral shampoo.	2
Robert	Amlodipine tablets Atenolol tablets, Co-codamol tablets, Paracetamol tablets, Ranitidine tablets, Arthrotec tablets, Quinine tablets, Aspirin tablets.	8
Sue	Antibiotics (Short course), Amlodipine tablets, Lansoprazole, Alendronic Acid tablets, Paracetamol tablets, Glucosamine and Chondroitin.	6
Summer	Aspirin tablets, Celluvisc eye drops, Crestor tablets, Lansoprazole Levothyroxine tablets, Steriod eye drops.	6
Tally	Allopurinol tablets, Ventolin inhaler, Glyceryl Trinitrate tablets, Co-amilorfruse tablets, Aspirin tablets, Pulmicort inhaler, Simvastatin tablets, Omeprazole, Cinnarizine tablets, Buccastem tablets, Betahistadine tablets.	11
Timotha	Atenolol tablets, Bendroflumethiazide tablets, Erythromycin tablets, Loratadine tablets, Simvastatin tablets.	5

¹Medications that have been italicised are those which were revealed during the study interview with the researcher but not during the MUR with the pharmacist.

List of patient medicines - Independent Pharmacy:

Alias	Medications that have been discussed during MUR or at interview ¹	Number of medications
Adam	Bendroflumethiazide tablets, Ramipril.	2
Alison	Alphaderm cream, Antihistamine eye drops, Diprobase cream, Flixonase spray, Loratadine tablets, Peak flow metre, Seretide, Ventolin, Volumatic spacer.	9
Annabel	Alendronic acid tablets, Calcichew tablets, Cetirizine tablets, Co-enzyme Q10 tablets (OTC), Colazide tablets, Felodipine tablets, Gaviscon liquid, Losartan tablets, Omeprazole capsules, Paracetamol tablets.	10
Cilla	Co-codamol tablets, Diclofenac tablets, Ibuprofen (OTC) tablets, Paracetamol (OTC) tablets, Sertraline tablets.	5
Colin	Arthrotec tablets, Cetirizine tablets, Doxazocin tablets, Felodipine tablets, Lisinopril tablets, Omeprazole capsules, Salbutamol inhaler, Symbicort inhaler.	8
Connie	Amitriptyline tablets, Arimidex tablets, Brufen tablets, Co-amoxiclav tablets, Co-danthramer capsules, Cyclizine tablets, Emla cream, Fentanyl patches, Flucloxacillin capsules, Gabapentin capsules, Lansoprazole capsules, Oynorm capsules, Paracetamol tablets, Tegaderm dressing, Zoladex injection, Zometa infusion, Zopiclone tablets.	17
Daisy	Beconase, Aqueous cream, Sudocrem, Eurax, Co-codamol, Movicol, Fybogel, Senna, Dihydrocodeine, Bendroflumethiazide, Cetirizine tablets, Gaviscon liquid.	12
Esther	Bendroflumethiazide tablets, Cetirizine tablets, Co-codamol tablets, Dacktacort ointment, Dermovate ointment, Epaderm emollient, Feldene gel, Feldene melts, Fluconazole capsules, Fluoxetine capsules, Omeprazole capsules, Paracetamol tablets, Pregabalin capsules, Quinine tablets, Trimovate cream.	15
Eve	Bendroflumethiazide tablets, Ramipril, Diprobase cream, Ibuprofen tablets, Felodipine tablets, Atenolol tablets.	6
Geri	Alendronic acid tablets, Calcichew tablets, Co-amilofruse tablets, Co-codamol tablets, Felodipine tablets, Simvastatin tablets.	6
Harry	Amlodipine tablets, Cetirizine tablets, Gaviscon liquid, Simvastatin tablets.	4
Howard	Amitriptyline tablets, Co-dydranol tablets, Diclofenac tablets, Etanacept injection, "Lubricant eye drops", Folic acid, Methotrexate tablets.	7
Morris	Clopidogrel tablets, Dutasteride tablets, Lansoprazole capsules, Salbutamol inhaler, Simvastatin tablets, Sulphasalazine tablets.	6
Moya	Aspirin tablets, Bisoprolol tablets, Calcium tablets, Furosemide tablets, Lansoprazole, Lisinopril tablets, Lotriderm Cream, Simvastatin tablets, Solpadeine (OTC).	9
Polly	Alphosyl liquid, Amitriptyline tablets, Chlorpromazine tablets, Dovonex cream, Exorex Lotion, Polytar liquid, Ramipril tablets, Temazepam tablets.	8
Primrose	Alendronic acid tablets, Annadin tablets (OTC), Docusate	12

	capsules, Exemestane tablets, Fybogel sachets, Lansoprazole capsules, Lorazepam tablets, Morphine Liquid, Priadel tablets 400mg and 200mg, Senna tablets, Venlafaxine tablets.	
Renata	"Antihistamines" (OTC), Celluvisc eye drops, Co-proxamol tablets, Glucosamine tablets, Thyroxine tablets.	5
Renita	Aloe Vera (OTC), Citalopram, Cod Liver oil (OTC), Co-proxamol tablets, Domperidone, Garlic tablets (OTC), Gaviscon tablets, Lansoprazole, Levothyroxine, Multivitamins (OTC), Pregabalin.	11
Syd	Aspirin tablets, Cetirizine tablets, Cod liver oil capsules (OTC), Glucosamine tablets (OTC), Lansoprazole capsules, Lisinopril tablets, Metformin tablets, Multivitamins, Naproxen tablets, Simvastatin tablets, Xenical capsules.	11
Terrie	Gaviscon, Preservative free eye drops, Lacrilube eye drops, Indigestion capsules.	4
Wilson	GTN spray, Imdur tablets, Lansoprazole, Simple Linctus (OTC), Simvastatin tablets, Symbicort inhaler, Tildiem tablets, Ventolin inhaler, Warfarin tablets.	9

¹ Medications that have been italicised are those which were revealed during the study interview with the researcher but not during the MUR with the pharmacist.

APPENDIX TEN

Paper arising from the study

Latif A, Pollock K, Boardman H. (2011) The contribution of the Medicines Use Review (MUR) consultation to counseling practice in community pharmacies. *Patient Education and Counseling*, 83, 336-44.

