



**Skill mix in community pharmacy:
exploring and defining the roles of
dispensary support staff**

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COMMUNITY PHARMACY
PRACTICE RESEARCH FELLOWSHIP, 2002**

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FOREWORD

Current policy indicates the need to make greater use of pharmacy support staff and develop their roles in order to enable pharmacists to take on extended activities in supporting patients with their medicines. A number of key drivers, such as the RPSGB's intention to register and regulate all pharmacy technicians and the Department of Health's position on extending the roles of pharmacy support staff are adding to the need to know more about views and expectations of pharmacy support staff.

Within community pharmacy trained pharmacists, technicians, dispensing assistants and medicines counter assistants provide different levels of skill mix. To date, skill mix has not been explored in great detail in community pharmacy practice, though it has been successfully implemented in hospital pharmacy. Community pharmacies employ different levels of support staff with varying levels of competence undertaking different roles. However, accurate data about the pharmacy support workforce, who they are, their level of training, and precise numbers, are difficult to ascertain. Furthermore, there is little empirical evidence on the role of support staff or the tasks and activities they perform.

This qualitative and quantitative report describes and clarifies the range and diversity of tasks undertaken by dispensary support staff and identifies the factors that affect the skill mix in the community pharmacy setting. It demonstrates the complexity and diversity in community pharmacy and provides examples of innovative models of skill mix, often developed at a local level.

This research was funded by the Leverhulme Trade Charities Trust through the Sir Hugh Linstead Fellowship, which is administered by the Pharmacy Practice Research Trust. The role of the Trust is to support and promote the development of high quality practice research in pharmacy and its contribution to informing health policy and practice.

I would like to thank Dr Rachel Mullen of the University of Manchester for all her work in collecting, analysing and interpreting these findings. This report contributes to our knowledge and understanding of service delivery in the community pharmacy setting and I hope this will inform community pharmacists as they develop their roles, as outlined in the new pharmacy contract, through making greater use of pharmacy support staff.

Sir Graham Hart
Chair
Pharmacy Practice Research Trust

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Executive Summary

Introduction

Along with pharmacists, there are a further three groups of staff who work in community pharmacy. They include: Medicines Counter Assistants, Dispensing/Pharmacy Assistants and Pharmacy Technicians. Together, these different staff groups comprise the skill mix within community pharmacy. Skill mix has yet to be explored in any detail in community pharmacy practice, although it has been successfully implemented in hospital pharmacy. In the hospital sector, pharmacy technicians' roles have been extended to release pharmacists to develop more clinically orientated services. Recent RPSGB and Government policy on support staff has re-focussed the skill mix debate, particularly within community pharmacy.

However, skill mix in community pharmacy remains largely unexplored. While we know that pharmacists employ different levels of support staff with varying levels of competence, accurate data about the pharmacy support workforce, who they are, their level of training, and precise numbers, are difficult to ascertain. Furthermore, there is little empirical evidence on the role of support staff or the tasks and activities they perform.

Aims and objectives

Therefore, the aims of this research are to clarify and describe the range and diversity of tasks undertaken by dispensary support staff in the community pharmacy setting and to identify the factors that are likely to affect the existing skill mix profiles. The research objectives are as follows:

- Establish the nature and range of activities performed by dispensary support staff.
- Identify factors affecting the type of work undertaken by support staff (e.g. workload, type of pharmacy, employment status of pharmacist, levels of delegation, qualifications and capabilities of staff).
- Explore the views of support staff on current roles and responsibilities and also their career aspirations.
- Measure the extent to which activities identified are taken up by different dispensing support staff, including their views on such tasks, within community pharmacies on a regional/city-wide scale.
- Make recommendations about how skill mix developments could be implemented in practice (including identifying barriers to implementation).

Methodology

This research comprised two stages involving both qualitative and quantitative methodologies. A 'case study' approach was adopted in Stage 1 of the work, followed by a survey design in Stage 2 in which the generalisability of findings from Stage 1 were assessed and the methodology tested.

Stage 1: Case studies

The six 'cases' were purposively sampled and included dispensary support staff (staff involved in any aspect of the dispensing process) in a number of different community pharmacy settings. This variation reflected the range of tasks, personnel, locations and environments likely to impact on skill mix issues. One week was spent in each 'case', allowing time to overcome the Hawthorne Effect, while also avoiding the researcher 'going native'. Information was collected using a range of techniques, including, direct observations, interviews with support staff, contextual data about the pharmacy and its staff and, where possible, documentary analysis, for example, job descriptions.

Stage 2: Support Staff Survey

Stage 2 of the study involved a cross-sectional web- and paper-based survey of community pharmacy support staff. The main aim of this stage was to measure the extent to which the findings from Stage 1 were applicable on a wider scale.

Key findings

The following six community pharmacy cases were sampled in the study:

- Pharmacy A - '*Distinct Roles!*' Support staff worked within three main areas of pharmacy: dispensing prescriptions, providing services to drug mis-users, as well as nursing and residential homes.
- Pharmacy B - '*Owner-run!*' The Pharmacy Owner worked in Pharmacy B permanently and was closely involved with the day-to-day activities.
- Pharmacy C - '*Explicitly Technician-led!*' A Dispensary Manager was responsible for the overall running of the dispensary. While highly efficient, her reluctance to delegate tasks and decision-making often dis-empowered other support staff.
- Pharmacy D - '*Implicitly Technician-led!*' A Pharmacy Technician ensured that Pharmacy D provided a highly focused dispensing service.
- Pharmacy E - '*United Front!*' A team of support staff had, until now, run the pharmacy in the absence of a permanent pharmacy manager.
- Pharmacy F - '*Team-spirit!*' The support staff worked in an integrated fashion to ensure that all tasks were undertaken.

The pharmacies visited in this research were complex and diverse. However, common to all six cases was the presence of the 'dispensary manager' role, assumed implicitly or explicitly by the dispensary support staff, as well as the pharmacist. The 'dispensary manager' provided the continuity and consistency to the pharmacy by organising and overseeing the day-to-day work. Often, within each community pharmacy case, members of dispensary support staff were responsible for managing a particular service, for example, supplying compliance packs to nursing homes. A range of dispensary support staff, both qualified and unqualified were involved with the operational aspects

of these services. However, activities undertaken were not always linked to the qualifications. In some cases, dispensary support staff were undertaking extended role activities, for example, accuracy checking, without formal accreditation. Findings from the survey that dispensary support staff were keen to undertake further training, but were unsure of the forthcoming regulatory requirements, supported the evidence from the observations and interviews.

Conclusion

The complexity and diversity demonstrated in this research means that no one model of skill mix would fit all community pharmacies. Also, recognising the valuable role of the 'dispensary manager' performed by some dispensary support staff should not be overlooked when considering implementing additional services in community pharmacies, particularly those that are regularly staffed with locums. Finally, in the process of implementing regulatory reforms RPSGB should take care to avoid quashing good examples of skill mix innovations often developed at a local level and without formal accreditation. RPSGB should also recognise that key messages about regulation need to reach their target audience effectively, if they are to be fully understood and their implications realised.

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Firstly, my thanks go to RPSGB for funding this research through the 2002 Sir Hugh Linstead Community Pharmacy Practice Research Fellowship. Thank you also to the six community pharmacies for allowing me to conduct the research, and to the pharmacy support staff for their time and help with the project. I also thank CPPE and APTUK for their help with the web-based survey and the community pharmacy support staff who participated.

Finally, I thank Karen Hassell for supervising the project, in particular, her ongoing help, support and advice. Also, Peter Noyce for his support at the design stage of the study.

Introduction

This is the final report submitted to the Royal Pharmaceutical Society of Great Britain (RPSGB) for a project entitled, 'Skill mix in community pharmacy: exploring and defining the role of dispensary support staff', which was funded by the Sir Hugh Linstead Community Pharmacy Practice Research Fellowship, 2002.

This report begins with a description of the background and aims of the project (Sections 1 and 2), followed by an account of the methods employed (Section 3). The results are presented in Section 5, and the summary and discussion in Section 6, while conclusions to the study are drawn, and recommendations suggested in Section 7.

1 Background

1.1 The policy framework

Along with pharmacists, there are a further three groups of staff working in community pharmacy, including, Medicines Counter Assistants (MCAs), Dispensing/Pharmacy Assistants and Pharmacy Technicians. RPSGB's current definitions of these roles¹ are provided in Figure 1. These three groups of staff are referred to, collectively, throughout the report hereon as support staff.

Figure 1. Pharmacy Support Staff Definitions

Medicines Counter Assistant (MCA):

A person who has satisfactorily completed or is undertaking an accredited programme of training for work in support of the sale of non-prescription medicines, the receipt of prescriptions, the handing out of completed dispensed items and the provision of advice on health matters.

Dispensing Assistant / Dispenser / Pharmacy Assistant / Assistant Technical Officer:

A person involved in a range of pharmacy support activities covered by RPSGB's 2005 minimum competence requirements.

Pharmacy Technician:

A person who holds a Pharmacy Services Scottish/National Vocational Qualification (S/NVQ) level 3 qualification or a qualification that has previously been recognised by employers as a valid qualification for pharmacy technicians.

Within community pharmacy, pharmacists and the three pharmacy staff groups described in Figure 1 collectively comprise the profession's skill mix. Skill mix is a complex concept and has been described variously, but Hassell

*et al*² have used the following frequently used definition of skill mix³ to distinguish between its different levels within community pharmacy:

- The mix of skills across different health disciplines involved in the delivery of a service (Interprofessional skill mix);
- The mix of skills held within a particular discipline (Intraprofessional skill mix); and
- The mix of skills held by an individual (Individual skill mix).

Hassell *et al*² contend that changes in skill mix, at whichever level i.e. interprofessional, intraprofessional or individual, are effected through delegation, substitution or diversification.

Within the community pharmacy sector, skill mix and work configuration is an increasingly important but under-researched area to address, especially in the light of recent Government and RPSGB policies. The Government, in its NHS pharmacy programme, 'Pharmacy in The Future'⁴, expressed the importance of ensuring appropriate levels of skill mix across all sectors of the profession and that:

'... The time is right for a more focused debate on the respective roles and responsibilities of pharmacists and their staff. So that the talent and skills of pharmacy technicians and other support workers are fully utilised in all pharmacy services, not just hospitals'

The Government⁵ and RPSGB⁶ believes that effective use of pharmacy support staff and role expansion will enable pharmacists themselves to take on extended role activities to support patients with their medicines, for example, through medicines management schemes, supplementary prescribing, repeat dispensing schemes and Local Pharmaceutical Service (LPS) pilots. The Government has discussed the introduction of 'protocol medicines supply schemes' as a means of relaxing supervisory constraints and release the pharmacist to take on extended role activities⁵. It is envisaged that qualified and accredited technicians will work within standard protocols, to dispense and supply medicines without the personal supervision of a pharmacist. Indeed, one community pharmacy multiple has already introduced a similar Accredited Checking Technician role within the company⁷.

In parallel to these policy changes, wider Governmental policies are affecting pharmacy support staff. In response to the Kennedy report on children's heart surgery at Bristol Royal Infirmary and the Shipman case, the Government is undertaking a programme of regulatory reform of all healthcare workers⁸. Rather than falling within the remit of the Health Professions Council, as the majority of healthcare workers do, the RPSGB decided that they would be the regulatory body for all pharmacy staff⁹ and in doing so, would comply with clinical governance requirements¹⁰. Consequently, in consultation with members of the profession, the Council of the RPSGB has made a series of policy decisions that impact upon all pharmacy support staff¹¹. In 2002, the Council agreed to regulate pharmacy technicians, which includes voluntary registration with the RPSGB between January 2005 – December 2007 and

mandatory registration thereafter, if support staff wish to use the protected title of 'Pharmacy Technician'. To register with RPSGB as a pharmacy technician during the voluntary period, support staff must possess Pharmacy Services S/NVQ Level 3 or an equivalent qualification under the transitional grandparent clause arrangements⁹. The pre-requisite qualification from 2007 will be Pharmacy Services S/NVQ Level 3, which includes an accredited underpinning knowledge programme. Once registered, pharmacy technicians will have to undertake mandatory Continuing Professional Development (CPD) and comply with a code of ethics, which is currently undergoing consultation¹². RPSGB will also gain powers to determine whether registrants are competent and fit to practise, and if not, sanction their removal from the register¹¹.

Medicines Counter Assistants (MCAs) have been regulated by the RPSGB since 1996¹³. Pharmacists have a professional obligation to ensure that any assistant selling medicines under protocol should have, or is currently undertaking an accredited course, as described in Figure 1. In a similar fashion, the Dispensing/Pharmacy Assistants in Figure 1 will be regulated from January 2005 by the introduction of a minimum competence standard¹⁴. This will be equivalent to the new Pharmacy Services S/NVQ level 2 qualification¹. Pharmacists are professionally obligated to ensure that all staff involved with assembling prescriptions, including generating labels, are competent to a minimum of S/NVQ level 2, or are undertaking their training towards this standard¹⁵. Also, experienced staff may be declared competent by a supervising pharmacist without the need to undertake further training under a 'level 2 grandparent clause'¹⁶. Finally, pharmacists are required to implement Standard Operating Procedures* (SOPs - written procedures specifying in writing what should be done, when, where and by whom) in all dispensaries¹⁵.

1.2 Skill mix in UK community pharmacy: empirical evidence

The Nuffield Inquiry, published in 1986 first recommended that pharmacists should delegate activities to suitably trained staff¹⁷. Skill mix issues in UK hospital pharmacy were investigated over a decade ago by Bevan and colleagues¹⁸. Changing the way hospital pharmacy staff were configured was considered a solution to long-standing staffing shortages experienced in this sector and enabled pharmacists to expand their role. Consequently, hospital pharmacy technicians have successfully extended their role and released the pharmacists to develop more clinically orientated services. Undertaking tasks, including, providing medicines information, reviewing in-patient medication charts and accuracy checking, is now the norm for many hospital pharmacy technicians. However, the same cannot be said for community pharmacy support staff, where a review of the literature by researchers at the University of Manchester¹⁹ has shown that there is little empirical evidence of role expansion. This is largely because community pharmacy support staff are not expanding their role, constrained by factors such as 'personal control' and 'supervision' by the pharmacist-in-charge⁵. The dearth of evidence is also an indication of the fact that skill mix in community pharmacy is an under-

researched area. Indeed, research into skill mix and changes to the skill mix of health care workers, more generally, has focused on doctors and nurses with research on other health care workers scarce²⁰.

With the exception of work conducted in our own group on the advice-giving role of MCAs^{21;22}, little is actually known about support staff in community pharmacy, in terms of who and how many there are or their roles and responsibilities. Although, the Department of Health cited data gathered in 1998 by the Department for Education and Employment⁵, which estimated the number of pharmacy support staff employed in community pharmacies in the UK. There were approximately 8,000 technicians with a recognised qualification, 16,000 dispensing assistants who had either none or only basic qualifications, and a further 40,000 MCAs. Instead, the tasks and activities performed by pharmacists have been the focus of previous research. Researchers have endeavoured to identify and quantify the time pharmacists spend on a particular task using various work sampling techniques²³. Savage²⁴ estimated the time 18 pharmacists spent advising on patients that received prescription medicines, bought over-the-counter (OTC) medicines and responded to their symptoms. The findings revealed that no pharmacist in the study gave out more than two-thirds of prescription medicines and spent at least one minute advising each patient about their OTC medicine or on their symptoms. Rutter *et al*²⁵ used and validated²⁶ the method of subjective evaluation, while Bell *et al*²⁷ employed a self-reporting technique to investigate how community pharmacists spend their time. Rutter *et al*²⁵ identified that dispensing, prescription monitoring and counselling patients accounted for the largest proportion of their time. Bell *et al*²⁷ showed that community pharmacists spent almost half of their time performing professional activities, for example, checking prescription appropriateness and checking the accuracy of the final product. They also spent nearly one-third of their time undertaking semi-professional activities, for example, assembling and labelling prescription products.

A further three studies have included pharmacy support staff along with the pharmacist. Savage²⁸ explored the effect of skilled dispensary help on pharmacist work activities, by comparing two similar pharmacies (with respect to prescription volume) with and without a pharmacy technician. The study showed that the pharmacy technician released one hour of the pharmacist's time each day. However, this time was not continuous or predictable and prevented the pharmacist from dedicating it to patients. A study by Rutter²⁹ demonstrated that staffing levels and prescription numbers had no effect on the work patterns of pharmacists. Instead, the pharmacists performed traditional tasks of dispensing and checking prescriptions, as well as communication and rest, and were less likely to engage with pharmaceutical care activities. Finally, preliminary findings of a study conducted by Jones and Rutter³⁰ suggest that the introduction of checking technicians reduces the time pharmacists spent dispensing. This, in turn, allows them to spend more time in direct contact with patients.

A study commissioned by the Department of Health and undertaken in 2002 by researchers in the School of Pharmacy, University of Manchester

described and assessed the available evidence on skill mix in community pharmacy practice¹⁹. As mentioned, a review of the literature revealed that there was a paucity of empirical investigation into the tasks and activities performed by community pharmacy support staff. As part of this research, a scoping exercise was undertaken, involving interviews with key community pharmacy figures within and outside of the UK, as well as a focus group with community pharmacy support staff. This study showed the complexity and diversity that is characteristic of community pharmacy². Based on the evidence, the authors hypothesised that different models of skill mix were likely to operate and these were directly influenced by three core, interrelated factors, including, financial viability, organisational size and staff mobility and dynamics.

The size of the organisation refers to the number of community pharmacies within the organisation, regardless of whether they are high or low dispensing volume. The authors suggest that implementing different models of skill mix is more feasible in the larger organisations where some business activities, for example, purchasing, operate as separate departments, and are performed by specialists. In contrast, it is more difficult to implement different models of skill mix in the smaller organisations where pharmacy staff have to undertake a broader range of tasks. Linked to organisational size, the authors assert, is financial viability, where it is likely that the larger organisations are better resourced, in both financial and human terms, to implement skill mix models. It is unlikely that a small organisation has the financial capacity to employ, for example, a 'checking technician'. Linked to this is staff mobility and dynamics, which also affects the implementation of skill mix models. Community pharmacies with a small staff complement, or that are small in organisational size are more likely to feel the impact of the absence or change in a member of the pharmacy staff and hence disrupt the dynamic. Others, including, tasks over skills, recruitment and retention, pharmacists' aspirational drive (and whether pharmacists are willing to delegate tasks), sharing of vision and perceptions of skill required were considered factors that indirectly affected the implementation of models of skill mix.

The interviews with key community pharmacy players outside of the UK suggested that pharmacy support staff in other European countries were trained and utilised differently, compared with their UK counterparts. Further research undertaken by the same research team has helped to shed light on how the role of primarily pharmacy technicians in Denmark, Holland and Sweden has extended against a backdrop of pharmacy staff workforce shortages. This is briefly described in Section 1.3, next.

1.3 Skill mix in Denmark, Holland and Sweden

Building on the findings from the review of the evidence on skill mix in community pharmacy¹⁹, a comparative study on the use of pharmacy technicians in Denmark, Holland and Sweden was commissioned by the Department of Health, in 2004 and undertaken by researchers at the School of Pharmacy, University of Manchester³¹. This research was a scoping

exercise and its comprehensiveness and rigour was limited by the methodology employed. Visits to these European countries were brief but intense, involving a team of three researchers (including two pharmacists) meeting with numerous key stakeholders and pharmacy personnel.

There were clearly differences in the overall size, structure, organisation, ownership and regulation of community pharmacy in the three comparator countries. Despite these differences, the scoping exercise revealed that equivalent pharmacy technician staff groups ('pharmaconomists' in Denmark, 'pharmacist's assistants' in Holland and 'prescriptionists' in Sweden) were, on the whole, better trained, undertook a number of additional tasks and had greater levels of responsibility than the UK pharmacy technicians. Changes to the role appeared to be a response to the more general pharmacy workforce shortages. These equivalent pharmacy technician staff groups undertook longer periods of training, often comprising theoretical, college components and practice-based work placements. Indeed, the 'prescriptionists' in Sweden are currently trained to Bachelor degree level and are akin to the UK BPharm pharmacists. Notably, one pharmacy multiple, Apoteket AB, owns all community pharmacies in Sweden.

In terms of the tasks and responsibilities undertaken, the equivalent pharmacy technician staff groups in the three comparator countries assumed higher levels than those in the UK. The 'pharmaconomists' in Denmark dispensed prescriptions without the direct supervision of the pharmacist. They had extended their role by developing clinical specialisms, for example, asthma management, and business skills, for example, in quality control. Some pharmaconomists were also responsible for managing a sub branch of pharmacy without the presence of a pharmacist. The 'pharmacist's assistants' in Holland undertook a wide range of tasks, including dispensing prescriptions without the direct supervision of pharmacist, counselling patients and undertaking medication reviews. They had also developed their business role by gaining managerial responsibilities. The 'prescriptionists' in Sweden performed a similar range of tasks to the pharmacist within the community pharmacy setting. They were responsible for the daily management of the pharmacy and were often employed as the 'Chief pharmacist'.

A culture of developing safe systems of working within the community pharmacy sector across the three other European countries enabled these equivalent pharmacy technician staff groups to extend their role. A commitment to quality control was a feature underlying these safe systems of working. Prescriptions were more detailed and often included the clinical indication for the prescribed drug. The electronic transfer of the majority of prescriptions in Denmark and Holland allowed for the incorporation of a series of internal checks on the computer system. Also, original pack dispensing and barcode matching in all three comparator countries guarded against dispensing errors by the equivalent pharmacy technician groups. Similarly, the tasks undertaken by these staff groups were defined, clear and protocol-driven. All of these factors allowed for these equivalent pharmacy technician staff groups to operate 'unsupervised'. Indeed, the notion of supervision did not receive the same, if any, attention by pharmacists in the three comparator

countries. This contrasts sharply with the ongoing and often heated debates on supervision in the UK pharmacy press.

Importantly, in terms of developments in the pharmacists' role, Holland was the only country to witness a role expansion parallel to that of their equivalent pharmacy technician group. Pharmacists in Holland acted in a consultancy capacity to staff and patients within the community pharmacy setting and provided advice and expertise to physicians through participation in therapeutic committees and by undertaking drug utilisation reviews. Tight data protection legislation constrained the ability of pharmacists in Sweden to extend their role and so they had developed an advisory role within the company, and outside the community pharmacy setting to other institutions, which had a strong quality control focus. However, community pharmacists in Denmark, comprising less than 300 in total, had not expanded their professional or clinical role in line with that of the equivalent pharmacy technician groups, but had retained their ownership and regulatory roles.

1.4 Summary

This background to the study has shown that community pharmacy support staff have recently become the focus of Governmental and RPSGB policy changes. These and other factors, including, the desire of pharmacists to extend their role and the well-documented workforce shortages³², are driving developments in skill mix. However, the review of the literature has revealed that little is actually known about the current skill mix of community pharmacy support staff. Whilst we know that pharmacists employ different levels of support staff, precise numbers are difficult to ascertain, and their distribution across pharmacies remain unknown.

Similarly, little is known about the tasks and activities community pharmacy support staff perform, or their views and experiences of their role, qualifications gained or training experiences. Furthermore, little is known or understood about the views of community pharmacy support staff on the regulatory changes that are taking place from 2005, with the introduction of minimum standards of competence, SOPs and registration of technicians.

Scoping exercises helped to highlight the situation in three other European countries with respect to developments around the role of equivalent pharmacy technician staff groups. Factors, including, advanced Information Technology (IT) and a safe systems approach appeared to enable these role developments.

2 Aims and Objectives

In the light of some of these gaps identified in the previous section, the research undertaken for the present study set out to examine more closely

what support staff do, and to collect new data on their views on policy issues, such as, mandatory regulation. This in turn, will help pharmacists to determine their skill mix more appropriately, whilst also considering staff expectations, and training and education needs.

The main purpose of this study was to explore the role of dispensary staff within community pharmacy and by so doing add greater clarity to, and inform the debate about, skill mix issues within this sector.

The research question for this study was:

What tasks do dispensary support staff perform and how are these related to the variety of cultural/personal and structural factors encountered within the community pharmacy environment?

The aims of the research were to clarify and describe the tasks undertaken by dispensary support staff in the community pharmacy setting and to identify the factors likely to affect the existing skill mix profile.

The objectives of this study were:

- Establish the nature and range of activities performed by dispensary support staff.
- Identify factors affecting the type of work undertaken by support staff (e.g. workload, type of pharmacy, employment status of pharmacist, levels of delegation, qualifications and capabilities of staff).
- Explore the views of support staff on current roles and responsibilities and also their career aspirations.
- Measure the extent to which activities identified are taken up by different dispensing support staff, including their views on such tasks, within community pharmacies, on a regional/city-wide scale.
- Make recommendations about how skill mix developments could be implemented in practice (including identifying barriers to implementation).

3 Methodology

The research employed qualitative methodology in the first instance and employed a number of techniques, including, observations and interviews within a case study design. The followed quantitative component employed a survey design utilising a web- and paper-based questionnaire.

3.1 Study Design

The study comprised two stages: Stage 1 was exploratory and qualitative in nature and employed a case study approach; Stage 2 was quantitative and involved a survey design.

3.2 Stage 1: Case studies

A case study design was selected as it is an appropriate strategy for researching 'contemporary phenomenon in its real life context using multiple sources of evidence'³³. This allowed the researcher to develop a detailed knowledge of the skill mix issues within the context and setting of the community pharmacy cases. This design also enabled the researcher to overcome any assumptions and preconceptions regarding dispensary support staff roles, by shedding light on actual practice, rather than idealised versions of what should (or could) have happened. A qualitative approach suited the exploratory nature of this research. Therefore, quantitative work measurement techniques employed in previous studies²³ to establish what and how pharmacists perform various duties were discounted.

3.2.1 Sample selection

It was anticipated that the inherent nature of the research design for Stage 1 of the project and the methods employed to collect data would act as an impediment to community pharmacies agreeing to participate in the study. This was because of the intense nature of the data collection and intrusion in the community pharmacies. Therefore, existing research networks and other community pharmacy contacts established by the research group within the School of Pharmacy, at the University of Manchester were drawn upon to recruit community pharmacies to the study. Selection of these community pharmacy cases was informed by work undertaken by the research group within the School of Pharmacy. While one study³⁴ showed that environment and organisation of pharmacies affect service provision, another¹⁹ identified the complexity and diversity of community pharmacies. Therefore, community pharmacies that reflected the range of tasks, personnel, locations and environments likely to impact on skill mix issues were purposively sampled. A total of six community pharmacies were successively selected, allowing the researcher to select cases as informed by the findings from preceding cases. A maximum of six cases were sampled to avoid researcher fatigue, given that she was the sole researcher.

3.2.2 Inclusion/exclusion criteria

Within each case, the following dispensary support staff i.e. staff members involved in any aspect of the dispensing process were included: Dispensing/Pharmacy Assistants and Pharmacy Technicians, as well as other

unqualified staff who undertook dispensary-related tasks. Where pertinent, MCAs involved in dispensary-related activities, which extended beyond the remit of their role (i.e. the receipt of prescriptions and handing out of completed dispensed items) were also included.

3.2.3 Data collection methods

Data were collected using a range of methods, including direct observations and semi-structured interviews. Contextual information about the pharmacy and dispensary support staff was gathered using short questionnaires and, where possible, documentary evidence was collected. These methods are described in more detail in the following sections.

3.2.3.1 Observations

The nature and range of activities performed by dispensary support staff were explored using direct observations. The main advantage of observation research is that it ensures information on what people actually do rather than what they say they do is elicited³⁵. The role taken by the researcher was 'participant-as-observer'³⁶. Time spent in each case did not exceed five days (Monday-Friday). This allowed the researcher sufficient time to collect and reflect on the data gathered, while also allowing for the Hawthorne Effect³⁷ to diminish. However, just one day (Monday) was spent in Pharmacy E as negotiating access was difficult and limited. The researcher was discouraged from visiting this pharmacy by the Pharmacy Manager on the grounds that it was too busy.

Detailed information was recorded through hand-written field notes and included factual accounts of the tasks and activities dispensary support staff performed. The researcher's interpretive ideas and personal impressions of their behaviour and interactions and talk with colleagues and patients were recorded, for example, on issues such as supervision, responsibility, decision-making and training. 'Member Checking'³⁶ was used to ensure the internal validity of the findings. Here the researcher asked questions about situations observed to ensure that data accurately reflected the actions of the dispensary support staff. A technique called 'Peer Debriefing'³⁶ was also employed to ensure the reliability of the findings. This involved the researcher submitting preliminary findings to the supervisors of the study so that alternative explanations were assessed and suggestions for additional data collection made. By doing so, 'peer debriefing' prevented researcher bias and allowed the researcher to retain neutrality in the situation given that she is herself a community pharmacist.

3.2.3.2 Contextual and documentary material

Two short questionnaires (See Appendix) were designed to collect contextual data about the pharmacy and the dispensary support staff. Information about

the pharmacy included: the pharmacy type e.g. independent, small/large-chain multiple, its location, the number of prescription items dispensed per month, as well as any additional services provided e.g., methadone dispensing, diagnostics and monitoring services and LPS. Socio-demographic data were collected from the pharmacist or support staff and recorded by the researcher. Information on the qualifications and experience gained by dispensary support staff were also gathered via self-administered questionnaires.

Where possible documentary evidence in the form of Standard Operating Procedures (SOPs), job descriptions and risk management strategies were gathered.

3.2.3.3 Semi-structured interviews

At a convenient point during each observation period, a semi-structured (taped) interview was conducted with available dispensary support staff. A total of 13 interviews were conducted, ranging from 10 to 45 minutes in duration and each was transcribed verbatim. The interviews explored issues around recruitment, views on tasks and activities, future work, as well as training and understanding of regulatory issues. These also helped to inform the design of the survey questionnaire in Stage 2 of the study.

3.2.4 Data analysis

The hand-recorded observational data were subjected to a thematic analysis and constant comparison using Framework³⁸, which is a matrix-based approach to qualitative data analysis. Framework involved developing a thematic framework through a process of familiarisation with the data, identifying recurring and important themes. The thematic framework was then systematically and comprehensively applied to the whole dataset. The data were then summarised and synthesised using a series of A3 charts, which were organised around the thematic framework. The data were in an accessible and retrievable form that enabled further investigation and interpretation. Along with the main themes identified, the following specific areas were explored:

- Descriptions about the diurnal pattern of demand and organisation of work activity and how patterns changed over the days
- Whether there appeared to be any relationship between the level of responsibility of the support staff and their training
- The basis for deciding on the role and responsibilities of the dispensary support staff
- Dispensary support staff role changes with changes to the pharmacist in charge
- Tasks and activities confined to dispensary support staff, those confined to the pharmacist, and those performed interchangeably

3.3 Stage 2: Community Pharmacy Support staff Survey

Stage 2 of the study consisted of a quantitative survey design, which built on, and was informed by, the findings from Stage 1. This final stage of the study involved a survey of a sample of community pharmacy support staff. This included MCAs, Dispensing/Pharmacy Assistants and Pharmacy Technicians, as well as those who did not possess any formal dispensing qualifications. The main aims of this stage were to measure the extent to which the findings from Stage 1 were applicable on a wider scale and to assess the feasibility of the methodology.

3.3.1 The sampling strategy

It was decided not to employ the sampling strategy described in the original proposal because a low response rate has been reported in a study where self-completion postal questionnaires were mailed out to registered community pharmacy premises³⁹. Instead, this study used the opportunity to test out the feasibility of using the electronic method of data collection described below.

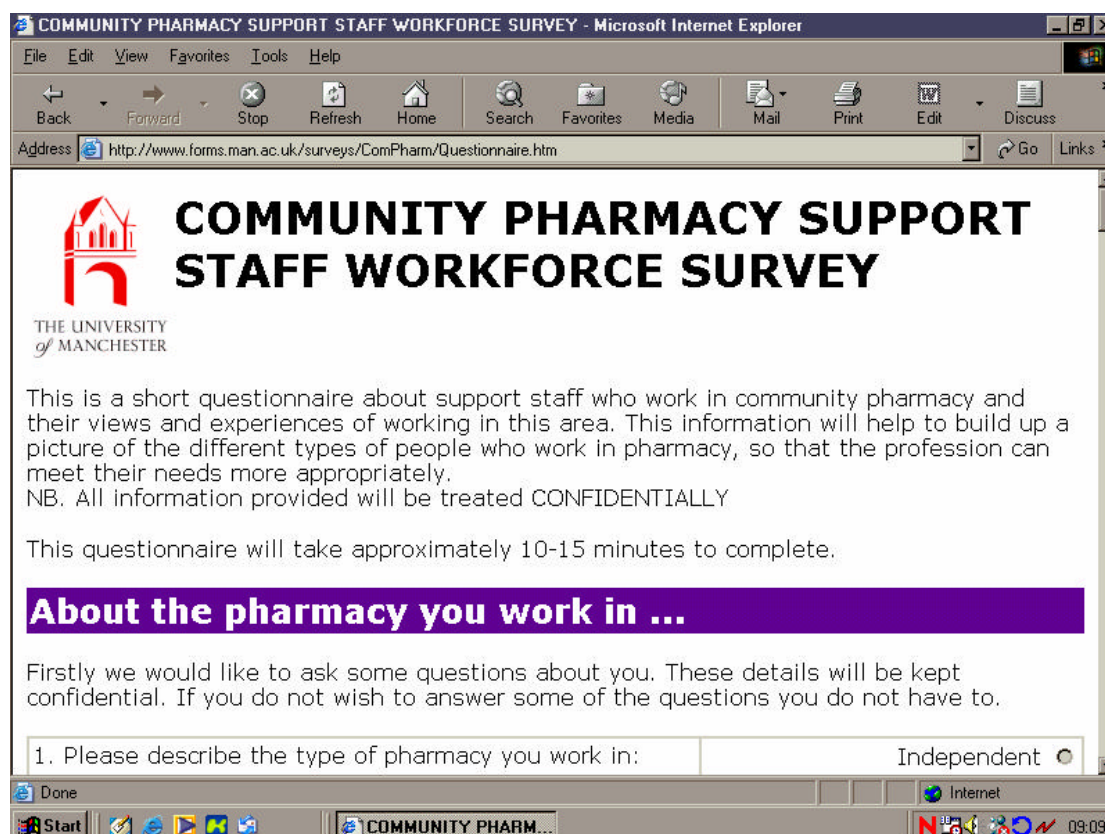
Since there was no readily accessible sampling frame available for community pharmacy support staff, participants were identified via two sources. The first involved using an open, web-based survey, where participants completed and submitted an online questionnaire. Links to the web-based survey were contained on the Centre for Pharmacy Postgraduate Education's (CPPE) and the Association of Pharmacy Technician's UK (APTUK) website. An email was sent to contacts in eight leading multiple and supermarket pharmacies. This email contained information about the research and the URL for the questionnaire to disseminate to the staff. Two agreed to assist with the research, two are still considering assisting and the remaining four did not respond to the email.

The second source for sampling community pharmacy support staff was via the National Pharmaceutical Association (NPA). Students undertaking their training for the MCA, Dispensing/Pharmacy Assistant, Pharmacy Technician and Accuracy Checking course who use the NPA's Helpline were asked to participate in the study. The names and addresses of 31 willing volunteers were then given to the researcher and stored in a database. Each received a paper-based postal questionnaire.

3.3.2 The questionnaire: design, pilot and data collection

There was a paper-based (See Appendix) and online version of the questionnaire (see Figure 2).

Figure 2. Web-based survey



The questionnaire contained 22 questions and was divided into four sections, including, one about the pharmacy the respondent worked in, about their job (See Figure 3 for an example), about their intentions for the future and finally a section containing socio-demographic questions. In particular, the two sections comprising questions about aspects of the respondent's job and their future intentions contained attitudinal questions and statements. The attitudinal statements relating to work satisfaction were derived from a scale utilised in a study involving GPs⁴⁰. The statements contained in question 14 were derived from the observations and interviews conducted for the qualitative, first stage of the study, as well as from key governmental policy⁵.

The original proposal stated that one output from Stage 1 would be the development of an activity checklist, which would then be included in the questionnaire for Stage 2 of the study. However, based on analysis of the data gathered for Stage 1 of the study, it was decided not to include an activity checklist in the questionnaire. This was because inclusion of an activity

checklist would have yielded quantitative data on the tasks performed by the respondents. Given the range of tasks dispensary support staff were observed performing in the first stage of the study, it was likely that they would indicate performing the majority of tasks. Therefore, the attitudinal statements described above were the preferred option for exploring the issues underlying the tasks and activities performed.

A paper-based questionnaire was piloted in accordance with good practice guidelines and minor amendments were made. Paper-based questionnaires were mailed to participants recruited through the NPA at the beginning of July 2004, and reminder letters sent after two and then four weeks. Further copies of the questionnaire were enclosed with both reminder letters. The web-based survey questionnaire was available online from early July 2004. Links to the URL from CPPE and UKATP were in place from early to mid July 2004.

Respondents also had the option of printing the questionnaire, completing and returning a paper-based copy. The advantages and disadvantages of the growing use of the Internet as a research tool have been documented⁴¹⁻⁴³. Web-based surveys allow for rapid data collection that is directly stored in a database and therefore accessible to the researcher, and the respondent retains complete anonymity. However, disadvantages to using open web-based surveys include the inability to identify who and how many people read the questionnaire, selection bias due to the non-representativeness of the Internet population, which threatens the external validity as the results are not generalisable. There is also no guarantee that a member of the target population completes the questionnaire.

Figure 3. Web-based survey: About your job ...

The screenshot shows a web browser window with the title "COMMUNITY PHARMACY SUPPORT STAFF WORKFORCE SURVEY - Microsoft Internet Explorer". The address bar shows the URL "http://www.forms.man.ac.uk/surveys/ComPharm/Questionnaire.htm". The main content area has a purple header "About your job ...". Below the header are several questions with input fields:

- 6. What is your job title?
- 7. In total, how long have you worked in pharmacy? (exclude time off for having children etc)
 Years Months
- 8. How long have you worked in THIS pharmacy
 Years Months
- 9. On average, how far do you travel to work each day? Miles
- 10. On average, how many hours do you work each week? Hours
- 11. What is your hourly rate?
Less than £3.99 an hour
Between £4.00 and £4.99
Between £5.00 and £5.99
Between £6.00 and £6.99
Between £7.00 and £7.99
Between £8.00 and £8.99
Between £9.00 and £9.99
£10.00 or more

3.3.3 Data analysis

Data from the web-based survey was stored directly in a database and then imported into SPSS version 11. Completed and returned paper-based copies were entered onto the same SPSS database.

At present, 26 community pharmacy support staff have completed and submitted questionnaires online. This is despite an endorsement of the study from CPPE and the ATPUK, which contained links to the questionnaire. Of the 31 community pharmacy support staff recruited through the NPA, 25 have responded. This gives a pooled achieved sample of just 51 respondents. Clearly, a sample of this size is insufficient to conduct any meaningful statistical analysis. However, descriptive analysis of the data has been conducted where the data are ordered and summarised in order to build up a picture of the key characteristics. Owing to the small size of the achieved sample, analytical data analysis, whereby relationships between subgroups of respondents identified from the initial analysis are explored, has not been conducted.

3.4 Limitations

With respect to the community pharmacy case studies selected, the sample was skewed towards the small organisations i.e. those organisations containing only a small number of units. Four community pharmacies were either independents or part of small chain (maximum three), while the other two were part of a regional and national chain. The community pharmacies in the sample also had high dispensing volumes (minimum 6,000 and maximum 16,000 prescription items per month). However, it is not uncommon for community pharmacies, particularly those that are part of the essential small pharmacy scheme to dispense from several hundred to just a few thousand prescription items each month.

In terms of conducting the case studies, it was not possible for the researcher to capture every possible iteration within each community pharmacy setting. It was more difficult to observe all dispensary support staff working in the community pharmacies that employed several members. The researcher, in these situations, adopted a work shadowing technique. Observations were not undertaken during the community pharmacies' full opening hours owing to researcher fatigue, but were confined to week days.

The interviews conducted with the dispensary support staff were a limitation of the study. Busy work schedules and time constraints limited the researcher's ability to conduct depth interviews and explore issues in fuller detail. Also, the interviews were often conducted in environments that were not conducive to a full and private interview. The interviews were held on the shop floor, in stockrooms and kitchens/staff rooms. Finally, it was not possible to conduct interviews with all of the dispensary support staff observed owing to their lack of availability.

The survey of community pharmacy support staff is the biggest limitation of the study. Mailed self-completion postal questionnaires to registered community pharmacy premises is a strategy that has been used to overcome the absence of a sampling frame for this division of staff³⁹. However, there is no guarantee that this strategy reaches the desired population of interest, as they are not mailed directly. Consequently, individual response rates cannot be ascertained, only the number of community pharmacies. Therefore, a web-based survey was tested alongside utilising a traditional, postal questionnaire method of gathering data. However, this strategy proved unsuccessful stimulating only a modest response. One explanation is that the majority of community pharmacy support staff are not part of the Internet population. This is because they probably do not have access to e-mail or the Internet at work, although their access to these facilities at home is unknown. The Internet population is more likely to be male, come from a professional social class, have a higher income and comprise younger members than the general population⁴³. Assuming they have access to the Internet and the time to surf, the survey relied on community pharmacy support staff visiting the CPPE and the APTUK websites and following the link to the online questionnaire. While community pharmacy support staff may, by and large, not be part of the

Internet population, the lack of responses to this web-based survey is nonetheless disappointing. This suggests that hospital, rather than community pharmacy support staff more commonly use the web-based mode of communication employed by CPPE and the APTUK.

4 Results

Drawing on the observation and contextual data gathered in Stage 1 of the study, the findings are presented for each community pharmacy case in the early sections. A summary of the different models of skill mix employed in each case will then follow. Key themes, including experiences and views of the tasks and activities performed, training undertaken and regulatory issues that emerged from the interviews with dispensary support staff are described in Section 4.3, followed by a discussion of the case study and interview findings, overall (Section 5).

4.1 Stage 1: community pharmacy case studies

Each of the six community pharmacy cases are characterised according to their skill mix. Table 1 summarises the key features of each community pharmacy visited. A detailed description of each case is then provided, beginning with the structural and cultural aspects of each community pharmacy, followed by information on the range of support staff employed. A wealth of information was collected during this first stage of the study and so key and recurring themes have been selected for the purposes of the report. These include, how work is organised within the context of each community pharmacy case and how dispensary support staff are involved in the process of dispensing prescriptions. Finally, the level of participation of support staff in other services, including, those provided to drug mis-users, as well as nursing and residential homes is described, along with a brief summary of their involvement in other dispensary related activities, for example, stock management.

Table 1. Key characteristics of community pharmacy cases

	Pharmacy type	P Wte	(trainee) PT (n=)	(trainee) DA / PA (n=)	(trainee) MCA (n=)	Other staff (n=)	Prescription volume (items / month)	Hours open / days
Pharmacy A	Independent	4.8	8	2	9	9	16,000	91 / 7
Pharmacy B	Small-chain	1	4	-	1	2	6,000	44 / 5
Pharmacy C	Small-chain	2	2	-	3	2	8,500	42 / 5
Pharmacy D	Small-chain	1	2	-	3	1	6,000	44 / 6
Pharmacy E	Multiple-chain (National)	1.5	3	-	3	7	10,000	58 / 7
Pharmacy F	Multiple-chain (Regional)	1	1	1	4	3	9,000	47 / 6

P: Pharmacist; PT: Pharmacy Technician; DA / PA: Dispensing / Pharmacy Assistant; MCA: Medicines Counter Assistant

As shown in Table 1, the six community pharmacy case studies varied according to the type of pharmacy, the number and range of support staff employed, as well as the prescription volume and opening hours. These, and other factors are discussed in more detail in the following sections, beginning next with the first community pharmacy visited.

4.1.1 Pharmacy A: 'Distinct Roles'

Pharmacy A is located on the periphery of a city-centre in Yorkshire, this well-established, independent pharmacy was open each week for 91 hours over seven days (8:30am-10pm Monday-Saturday; 10am-10pm Sunday). It dispensed an average of 16,000 prescription items per month.

The broad range of services provided by Pharmacy A included: dispensing prescriptions; a free prescription collection and delivery service; supply of oxygen; services to nursing and residential homes, and drug mis-users. The pattern of demand varied over the course of the day and week. On a weekday, Pharmacy A tended to be busy with methadone and needle exchange patients, but with fewer walk-in prescriptions. The support staff considered the presence of patients who use these services a factor that deterred other people from using the pharmacy. Weekday evenings and weekends were occupied mainly with dispensing private prescriptions; prescriptions issued to patients out-of-hours and dispensing emergency supplies. However, a bus strike during the first three days of the observation period reduced service-demand, particularly during the evening. Dispensing for the nursing and residential homes took place during the day from Monday to Saturday.

Pharmacy A was an open-plan design, comprising a large shop floor area accessed by two entrance doors. The first entrance door led customers to the medicines counter across the shop floor, which stocked mainly health-related products, as well as housing a touch-screen health information point. There was a consultation area separated from the shop floor by a chest-height partition wall. The second entrance door was dedicated to the high number of drug mis-users who utilised the pharmacy's needle exchange service and who had their methadone or other prescriptions dispensed there. This area of the shop floor held only health promotion leaflets. Directly opposite this area faced the dispensary, where the pharmacist and dispensary support staff were highly visible to patients waiting for their prescriptions. Although an old building, the pharmacy was modern, clean and tidy, portraying a very professional image. The dispensary was large with adequate work and storage space. A number of rooms led out from the back of the dispensary. These were mainly used for storage, although the largest was used for dispensing compliance packs to nursing and residential homes, and patients in the community (the Monitored Dosage System - MDS - room).

4.1.1.1 Staff profile

A profile of the staff employed in Pharmacy A is provided in Table 2 overleaf.

As shown in Table 2, Pharmacy A employed a total of 28 members of support staff, with a further 4.8 whole time equivalent (wte) pharmacists. Of these 28 support staff, 15 were support staff working almost exclusively in the dispensary or MDS room. The dispensary support staff in Table 2 were an average age of 39 years, having worked within pharmacy for an average of 10 years. Of the 15 dispensary support staff overall (eight not observed), six were Pharmacy Technicians; two were undertaking their Pharmacy Technician training and a further two were Dispensing/Pharmacy Assistants. However, the remaining five dispensary support staff were either unqualified or their qualifications were not ascertained.

4.1.1.2 Organisation of work

The comprehensive range of services provided by the large staff complement during the extended hours of opening meant that Pharmacy A was run very efficiently. On a strategic level the Managing Director ensured that SOPs, covering all aspects of services provided were in place, that all grades of staff had job descriptions and that staff rotas were produced for the pharmacists, dispensary support staff and MCAs. A Supervisor who was also a Pharmacy Technician, worked at an operational level, overseeing the day-to-day running of the dispensary and implementing the staff rotas to ensure adequate cover for the three main areas of activity within the pharmacy.

Table 2. Staff profile of Pharmacy A: Distinct Roles

ID	Gender	Age	Highest qualification	Experience in pharmacy	Time in this pharmacy	Av hours worked per week
1	Female	47	Trainee Dispensing/ Pharmacy Assistant	12 years	15 months	31
2	Female	22	Pharmacy Technician	5 years	5 years	39
3	Female	39	Pharmacy Technician	15 years	28 months	15
4	Female	58	Pharmacy Technician	16 years	24 months	40
5	Male	27	Trainee Pharmacy Technician	8 years	21 months	36
6	Male	24	Unqualified	18 months	18 months	24.5
7	Female	56	Dispensing/ Pharmacy Assistant	18 years	12 months	26
Additional staff: 8 dispensary support staff not observed: on maternity leave; annual leave; sick or outside data collection period (data not collected) 9 MCAs 2 Drivers 2 Needle Exchange staff						

These main areas of activity included dispensing prescriptions, providing services to drug mis-users, as well as services to nursing and residential homes. These services and how the dispensary support staff were utilised within them are described in more detail in the following sections. However, it is worth noting at this point that the dispensary support staff tended to work almost exclusively in the dispensary, dispensing prescriptions and supporting services to the drug mis-users, or in the MDS room, where compliance packs for the nursing and residential homes were dispensed. Only during periods of staff shortages, for example lunch breaks, days off and holidays, did the dispensary support staff work across the dispensary and the MDS room. Furthermore, the MCAs operated completely separately from all of the dispensary support staff, with no evidence of integration. Within each area, the dispensary support staff were keen to impress that they all 'mucked in' and just 'got on with it'. Although, at the beginning of their shift, the dispensary support staff working in the dispensary checked with the Supervisor where they were needed to work.

The distinct separation between the medicines counter, dispensary and MDS Room meant that support staff had distinct roles within the pharmacy, hence Pharmacy A is so-called the 'Distinct Roles' pharmacy. Pharmacy A operated as a large organisation and this appeared to undermine the team spirit that was evident in the other pharmacy case studies, described later. Consequently, the staff appeared to have naturally formed into smaller cliques and a degree of 'work politics' was apparent.

4.1.1.3 Dispensing prescriptions

Dispensary support staff working within the main dispensary were busy with prescriptions that were faxed, telephoned, collected from the numerous GP surgeries or posted by the patients, but less so with walk-in prescriptions. The majority of these prescriptions were delivered directly to the patients.

For walk-in prescriptions, the MCAs took in the prescription at the medicines counter and issued the patient with a docket, while retaining the other portion of the docket with the prescription. They rang a bell signalling to the dispensary support staff, if they were not already in the vicinity, that a prescription required dispensing. Whether a walk-in prescription, or one received by any other mode, the dispensing process followed the path shown in Figure 4, to that described by Savage²⁸ in a previous study:

Figure 4. The dispensing process

1. Prescription is selected and read
2. Patient and prescription details are entered into the computer
3. Label(s) generated
4. Drug product(s) selected
5. Drug product(s):
 - Dispensed in their original pack and/or
 - Tablets/capsules cut or counted and/or
 - Liquids diluted or reconstituted and/or
 - Extemporaneously dispensed
6. Label(s) peeled and attached to the drug product(s)
7. Prescription(s) checked by the pharmacist
8. Prescription(s) bagged
9. Prescription(s) handed to the patient or stored on a shelf
10. Written records made in the controlled drugs register/private prescription book/Owings
11. Prescription(s) endorsed and stamped (either manually, or electronically after generating the labels – Stage 3)

Thus, the dispensing process itself followed a sequential step-wise pattern. However, of note, observations revealed that the dispensary support staff performed tasks, involved at each stage of the process, interchangeably. For example, one member of the dispensary support staff undertook all tasks involved in labelling and assembling a prescription (Stages 1-6). Alternatively, these tasks were divided such that one member of the dispensary support staff labelled the prescription (Stages 1-3) while another assembled it (Stages 4-6). In this pharmacy, a distinct and separate part of the dispensing process was Stage 7, 'prescription checked by the pharmacist'. This task was performed by the pharmacist on the dispensary bench that was designated a 'checking area' and only after the prescription was dispensed. The pharmacist

was also more likely to bag and hand out prescriptions (Stages 8 and 9). It was less common to observe the pharmacist undertaking the tasks involved with labelling and assembling prescriptions (Stages 1-6).

Along with other tasks, described in 4.1.1.6, a specific person was employed to enter CD supplies into the register (Stage 10). One of the Pharmacy Technicians was also charged with the responsibility of endorsing the prescriptions (Stage 11) having attended a course on the subject.

4.1.1.4 Services to drug mis-users

There were just over 200 patients who were on a methadone, or other e.g. subutex, maintenance programme, many of whom were daily pick-ups. The system for supplying the methadone preparations, in particular, was sophisticated and efficient. The Managing Director had recently decided to change the system from one where patients' methadone preparations were prepared one day in advance to the current system of one week in advance. Three of the Pharmacy Technicians, one of whom was also the Supervisor, were charged with the task of setting up and running the new system. It was envisaged that by reducing the number of dispensary support staff involved, then the number of errors would also reduce. However, involving just three Pharmacy Technicians proved impractical since the extended opening hours meant that more staff needed to be involved in the process of dispensing the methadone preparations. There was an initial degree of resistance from the pharmacists to this change as they felt that the three original Pharmacy Technicians involved were less likely to be available to dispense the walk-in and faxed etc. prescriptions.

Although efficient, the revised system for dispensing methadone preparations was onerous, and operated within a tight timeline owing to the sheer volume of patients requiring the service. Consequently, the staff involved, which had now extended beyond the original three Pharmacy Technicians, worked extremely hard to meet the deadlines. Indeed, dispensing the methadone preparations was observed as being a core activity that the dispensary support staff were involved with. The Supervisor ensured that the staff were running to schedule and directed them accordingly.

The system for dispensing the methadone preparations was cyclical and ran from Monday to Friday of each week. The first job was to ensure that all of the methadone mixture pre-packs were dispensed and brown medicine bottles filled. Methadone preparations were dispensed once the labels had been generated and placed in a tray in the Green Room (the small room dedicated to dispensing methadone preparations). This was a time-consuming and repetitive task and dispensary support staff were in the Green Room for up to two or three hours continuously working. However, one member of the dispensary support staff commented that she liked working in the Green Room because:

'You can keep out of the way and it feels good to see them all [the dispensed methadone preparations] finished.' #07

Once dispensed, the methadone preparations were stored in the large CD cabinet.

The prescriptions for the methadone preparations arrived either by post from the drug clinic or by the patients themselves. Whichever member of the dispensary support staff received a methadone prescription was then responsible for inputting the patients' details into the computer, generating the labels for that week and completing the collection dates on the prescription. The labels were then colour-coded to the days of the week and transferred to the Green Room. The patients' prescriptions were then photocopied and transferred to the patients' file. However, not all of the dispensary support staff actioned the methadone prescriptions on their receipt, but transferred them directly into the patient's file. This proved to be a grievance for some of the dispensary support staff.

All of the dispensary support staff were observed undertaking one or all aspects of the different tasks involved with dispensing the methadone preparations. Under the direction of the Supervisor, this work was balanced with dispensing other types of prescriptions, as well as other tasks, for example, unpacking an order. Interestingly, one of the Pharmacy Technicians spent the 15 hours that she worked each week doing nothing else except dispensing the methadone prescriptions. This Pharmacy Technician commented that:

'It suits me because I'm only in for these hours, I just want to come in, know what I'm doing and just get on with it.' #09

This Pharmacy Technician also commented that she thinks that some pharmacists believe that she should not be pouring methadone and that less qualified staff should be performing this task, instead. However, she thinks that she should because of what it is [a controlled drug].

Finally, one member of the dispensary support staff was employed on a full-time basis to operate the needle exchange service, as well as write up entries of the methadone preparations supplied, in the CD register and answer the telephone. This member of dispensary support staff did not possess any dispensing qualifications.

4.1.1.5 Supply of compliance packs

The MDS room had its own complement of staff, including, one pharmacist, one Pharmacy Technician and a further two that were undertaking their Pharmacy Technician training. The pharmacist considered it important to have the same people working in the MDS room to provide consistency and continuity. However, the Pharmacy Technician was on maternity leave and so an unqualified member of the dispensary support staff helped out in the

meantime. They supplied compliance packs to eight nursing/residential homes and 182 community patients. This equated to about 4,000 prescription items each month. The system for dispensing different types of compliance packs was complicated and it was difficult for the researcher to grasp the finer level of detail. However, it was seemingly extremely efficient with all members of staff clear about what tasks they needed to perform. Charts on the wall listed the tasks that needed doing each day. Also, the Pharmacy Technician had compiled SOPs in a lever-arch folder, known as 'The Bible', which documented how to perform every activity in the MDS room. The dispensary support staff in the MDS room informed the researcher that owing to this guidance, they are not told what to do *per se*, but instead 'just get on with it' #11.

The pharmacist checked all of the dispensed compliance packs, but felt that the MDS room lent itself well to having a 'Checking Technician' and felt that:

'The pharmacist should do jobs that only they can do and the technicians should do the rest' MDS Room Pharmacist

The pharmacist had discussed with the Pharmacy Technician the possibility of becoming a 'Checking Technician' as this enabled her to conduct domiciliary visits more regularly than she was currently able to do. The pharmacist would conduct a clinical check and sort out any problems when the prescriptions first arrived, but would not have to check the accuracy of the dispensed compliance packs thereafter.

4.1.1.6 Other dispensary-related activities

All members of the dispensary support staff performed tasks, including, checking and unpacking the dispensary order and balancing Owing prescriptions. There did not appear to be a set pattern as to who undertook which particular task.

4.1.2 Pharmacy B: 'Owner-run'

Pharmacy B was located in the middle of a parade of shops in a suburb of a town in the North West of England. This pharmacy opened just 18 months earlier, under a new contract, the premises having formerly been occupied by a newsagent. The Primary Care Trust (PCT) had identified a pharmaceutical need within the area, but pharmacists, until now, were reluctant to open a community pharmacy as the nearest GP surgery, located one mile away, was considered too far away to guarantee a sufficient prescription volume. Since opening this pharmacy, the owner has opened a second and third pharmacy within the surrounding areas. The Pharmacy Owner had employed three other dispensary support staff within the last four months to release him from dispensing activities and concentrate on opening the two other pharmacies.

In terms of the services provided, Pharmacy B dispensed walk-in prescriptions, offered a free prescription collection and delivery service, supplied oxygen, supplied compliance packs to patients in the community, nursing and residential homes, dispensed methadone preparations and similar medicines to drug mis-users. There was no obvious diurnal or weekly pattern of prescription activity since there was not a local GP surgery, although Thursday afternoons tended to be quieter than the rest of the week. A driver was employed to collect prescriptions from GP surgeries all over the town and deliver dispensed prescriptions to the patients. However, the data collection period was atypical as the third pharmacy opened and two key members of the dispensary support staff, who were also sisters, had just arrived back from their annual summer holiday. Consequently, the pharmacy was fairly chaotic as the dispensary support staff transferred stock to the new pharmacy.

Pharmacy B opened for 44 hours (9am-6pm Monday-Friday; closed between 1-2pm; 9am-1pm Saturday) and dispensed an average of 6,000 prescription items per month. Pharmacy B was a small, modern, open-plan pharmacy. The shop floor held both health and non-health related goods. There was a small, semi-private consultation area located in one corner of the pharmacy. The dispensary was directly opposite the entrance door and although on the same level, was separated by a chest-height partition wall. Consequently, the pharmacist and the dispensary support staff were highly visible when working in the dispensary. The dispensary was fairly small and had limited workspace, which was further reduced by the amount of stock and paperwork held within this area. There was a small room leading out from the back of the dispensary, which housed a sink, and workbenches used for assembling compliance packs. Leading from this room was a larger stockroom, containing stock for the shop and a computer for managing the patient medication records (PMRs) for the patients receiving compliance packs.

4.1.2.1 Staff profile

Pharmacy B employed seven members of staff (See Table 3 overleaf).

As can be seen from Table 3, the dispensary support staff in Pharmacy B were mainly female, spanned a wide age-range (average 32 years) and had yet to qualify as Pharmacy Technicians. With the exception of the two newer recruits, these dispensary support staff had gained many years of experience working in the pharmacy profession. Finally, all of the dispensary support staff in the second case study worked less than 32 hours each week. Only the Pharmacy Owner was present at all times and, as such, provided the continuity. For example, the Pharmacy Owner was much more likely to deal with telephone queries from patients and GP surgeries. Hence Pharmacy B is characterised as the 'Owner-run' pharmacy.

The Pharmacy Owner was approximately 30 years of age and together with the younger members of staff, injected a lot of youthful enthusiasm into the pharmacy. There was a lot of banter between all members of staff with

frequent periods of laughter, punctuated by periods where the Pharmacy Manager asserted his authority, although in a fashion that often upset the older ladies in the pharmacy.

Table 3. Staff profile of Pharmacy B: Owner-run

ID	Gender	Age	Highest qualification	Experience in pharmacy	Time in this pharmacy	Av hours worked per week
08	Female	36	Trainee Pharmacy Technician	19 years	18 month	32
09	Female	38	Trainee Pharmacy Technician	14 years	18 months	32
10	Female	50	MCA	12 years	4 months	24
11	Female	19	Trainee Pharmacy Technician	2 months	2 months	32
12	Male	17	Trainee Pharmacy Technician	Less than 1 week	Less than 1 week	32
Additional staff: 1 Driver 1 Saturday person						

4.1.2.2 Organisation of work

The pharmacy originally opened with just the Pharmacy Owner and dispensary support staff members #08 and #09. These dispensary support staff had previously worked for an independent pharmacy, which was taken over by a multiple. There, #08 was responsible for the shop-side of the business, while #09 was responsible for the service provided to the nursing and residential homes. Consequently, both #08 and #09 retained responsibility for their respective areas when they transferred to Pharmacy B. As the Pharmacy Owner had extended his ownership to three pharmacies, he envisaged #08 and #09 extending their responsibilities for the shop, and nursing and residential homes, respectively, across the three pharmacies. The Pharmacy Owner had increased their hours and given them a modest salary rise in line with these increased levels of responsibility. The Pharmacy Owner considered himself, #08 and #09 as the 'senior management team'.

Three more dispensary support staff had subsequently been recruited since opening the pharmacy. Of the three new recruits, only one (#10) had worked in a pharmacy before, while the other two (#11 and #12) were new to the profession. The newest recruit, #12, worked mainly on the medicines counter and #11 was busy helping #08 organise stock to take to the new pharmacy that was opened during the week of data collection. In contrast to Pharmacy A, the staff in this pharmacy functioned more as a team working fluidly in the dispensary, on the medicines counter and in the shop.

4.1.2.3 Dispensing prescriptions

As described in Figure 4, the prescriptions in Pharmacy B were dispensed in a sequential fashion. All of the dispensary support staff, regardless of their experience or level of qualification were observed labelling and assembling prescriptions (Stages 1-6), as well as completing the tasks involved in Stages 8-11, after the prescription was checked by the Pharmacy Owner (Stage 7). Although the dispensary support staff performed specific tasks interchangeably, for example, they labelled, picked and bagged prescriptions; a more general pattern emerged from observing the dispensing process.

Prescriptions arrived into the pharmacy via different modes, including, walk-in, collected, faxed and telephoned. Walk-in and, in particular, collected prescriptions accounted for a substantial part of the monthly prescription turnover (an average of 4,000 items). The driver delivered prescriptions that were collected from the GP surgeries in the town before the pharmacy closed for lunch and again before it closed for the day. Dispensary support staff member #09 tended to sort these prescriptions into those that required dispensing in a compliance pack, and those that did not. For the latter, #09 was more likely to block label (Stages 1-3) the prescriptions. The remaining dispensary support staff and the Pharmacy Owner were more likely to assemble and bag the prescriptions (Stages 4-9) with the Pharmacy Owner checking at some point in the dispensing process. The Pharmacy Owner and all members of staff, including the Saturday person, were observed performing the tasks involved at Stage 10 of the dispensing process, including, making entries in the CD register and balancing the Owings.

In contrast to the pharmacists in Pharmacy A, the Pharmacy Owner in Pharmacy B was much more likely to label, assemble and handout the prescriptions (Stages 1-9), either on his own (i.e. self-checking) or in conjunction with another member of the dispensary support staff. Also, it was often difficult for the researcher to discern Stage 7 of the process, when the pharmacist checked the prescriptions. The Pharmacy Owner checked the prescriptions inconsistently, at different points in the dispensing process, such that he did not have an obvious checking technique.

Staff member #10 was the only experienced member of the dispensary support staff who worked solely in the dispensary. When the opportunity arose, the two newer dispensary support staff members, #11 and #12 dispensed prescriptions, although closely supervised by the Pharmacy Owner. This was possible because they worked in close proximity to one another, allowing the Pharmacy Owner to intervene at any point.

4.1.2.4 Services to drug mis-users

Pharmacy B had 25 patients who received methadone preparations and other similar medicines, the majority of whom collected their medicine on a daily basis. Dispensing the daily methadone preparations was the first task of the day and was undertaken by, 'whoever was in first'. Consequently, there was no set pattern as to which member of the dispensary support staff undertook this task.

The Pharmacy Owner showed #12, the new recruit, on a one-to-one basis how to dispense the methadone preparations. All of the dispensary support staff were observed entering the methadone preparations supplied into the CD register, in an ad hoc fashion. Interestingly, the Saturday person, who was working extra hours in Pharmacy B, undertook this task regularly and of his own accord. He also trained #12 how to perform this particular task.

4.1.2.5 Supply of compliance packs

Pharmacy B dispensed prescriptions in compliance packs for a total of 200 patients in two nursing/residential homes and an unquantified number in the community. As mentioned, #09 was responsible for this service, which meant that she strategically managed the organisational and administrative aspects. This member of the dispensary support staff knew, for example, when each patient's prescription was due, what medication they were on and where they resided. She was also responsible for maintaining these patients' PMRs and processing the paperwork. Queries relating to this service from either the GP surgeries, the staff working at the nursing and residential homes or from the patients were transferred directly to #09. The Pharmacy Owner made it quite clear to the researcher that he had delegated responsibility for this service to #09 and he did not expect to have to deal with any problems. This issue emerged from problems that had arisen while #09 was taking her annual leave. The Pharmacy Owner felt that the system in place should run efficiently and be comprehensible to all of the other members of the dispensary support staff.

With the exception of #12, the rest of the dispensary support staff inputted into the operational aspects of the service i.e. dispensing patients' medicines in compliance packs. They did not have any involvement in the organisational aspects of the service. Although, the Pharmacy Owner aimed for #12 to take over the management of this service within Pharmacy B, allowing #09 to run the services across all three pharmacies.

One final point relates to the issue of accuracy checking. Although #08 and #09 had not undertaken an accredited accuracy checking course, both were observed checking the accuracy of the external medicines, for example, creams and liquids, that were dispensed for patients also receiving

compliance packs. However, the Pharmacy Owner checked the accuracy of the dispensed compliance packs.

4.1.2.6 Other dispensary-related activities

Since #10 spent most of her time dispensing prescriptions, she was also more likely to ensure that Owings on prescriptions were balanced and that prescriptions were counted and filed. The Pharmacy Owner had also charged her with the task of processing the paperwork for prescriptions that were sent to a Specials laboratory for dispensing. The Pharmacy Owner and the other dispensary support staff carried out these tasks when #10 was on her days off.

In terms of stock management, all of the dispensary support staff were observed unpacking and checking dispensary orders against invoices and, along with the Pharmacy Owner, transferring the goods to the shelves. The system for ordering goods was more complicated. Some products were ordered electronically from a main supplier and all the dispensary support staff inputted into this. However, other dispensary goods were ordered from a wide variety of other suppliers. The Pharmacy Owner undertook this task as it involved negotiating with the suppliers for the cheapest price. However, the Pharmacy Owner had informed #09 that she would be responsible for this in the future. She was not enthusiastic about the prospect:

'I'm dreading it cos it's really complicated!'#09

4.1.3 Pharmacy C: 'Explicitly Technician-led'

Pharmacy C was a well-established pharmacy that was part of a small chain. The owner of the chain worked mainly in Pharmacy C having managed it for 27 years and owned it for 18 of these. The pharmacy was located in the suburb of a city in the North West, on a parade of shops with a GP surgery nearby. It was open for 42 hours over five days (Monday-Tuesday, Thursday-Friday: 9am-6:30pm, closed between 1-2pm; Wednesday and Saturday: 9am-1pm). Pharmacy C dispensed between 8,000 and 9,000 prescription items per month.

In addition to the services provided by Pharmacy C, including: dispensing prescriptions, a free prescription collection and delivery service, supply of oxygen, services to nursing and residential homes, and drug mis-users, the pharmacy was a Local Pharmaceutical Services (LPS) pilot site. Also, the Pharmacy Owner hoped to implement a minor ailments scheme in the near future.

Pharmacy C was fairly long and narrow with the dispensary located to the rear behind the medicines counter and shop floor. The dispensary was only partially visible from the shop floor to patients and customer. Access to the dispensary was via an enclosed consultation room to one side of the medicine

counter, or through the medicines counter via an open doorway. The dispensary itself was spacious, extremely tidy and ordered. Three smaller rooms led off from the dispensary, one housed lockers and a toilet, another was utilised as an MDS room and the third led to a stock room comprising a very small office area.

Patients from the GP surgery nearby accounted for approximately 80-85% of the walk-in prescriptions, and the remainder were from two other GP surgeries in the locality. Consequently, the local GP surgeries had a marked impact on the workload within Pharmacy C. Therefore, the pharmacy was busier during and after surgery hours, which were mid to late morning and mid to late afternoon. The pharmacy also tended to be very busy on a Wednesday morning, since it was closed in the afternoon.

4.1.3.1 Staff profile

Of the two pharmacists who worked in Pharmacy C, one was the Pharmacy Owner and the second worked there on a part-time basis. In addition, Pharmacy C employed a total of eight members of staff, as shown in Table 4.

Table 4. Staff profile of Pharmacy C: Explicitly Technician-led

ID	Gender	Age	Highest qualification	Experience in pharmacy	Time in this pharmacy	Av hours worked per week
13	Female	46	Trainee Pharmacy Technician	29 years	19 months	38
14	Female	49	Pharmacy Technician / Dispensary Manager	32 years	21 years	42.
15	Female	31	MCA	14 years	5 months	29
Additional staff: 3 MCAs 1 Driver 1 pre-reg						

As can be seen from Table 4, just three of the eight staff were categorised as being dispensary support staff. Of these dispensary support staff, all were female and aged between 31 and 49. Only #13 had attained their Pharmacy Technician qualification, while #14 was undertaking her Pharmacy Technician training and #15 had no formal dispensing qualifications. Although Table 4 shows that these three dispensary support staff members had gained many years experience of working in the pharmacy profession, for #14 and #15, this had mainly been on the medicines counter and in the shop area. All three dispensary support staff worked between 29 and 42 hours per week.

4.1.3.2 Organisation of work

The only Pharmacy Technician in Pharmacy C also had the responsibility and job title of Dispensary Manager. The Pharmacy Owner created this position to relieve the pressure from the pharmacists. This Dispensary Manager played a pivotal role within the pharmacy. In terms of organising the workload, the Dispensary Manager allocated tasks to the staff each morning and had overall responsibility for running the services provided, including, dispensing compliance packs to patients in the community, nursing and residential homes, the supply of methadone to drug mis-users, the prescription collection and delivery service, as well as dispensing walk-in, faxed or telephoned prescriptions. The Dispensary Manager was extremely knowledgeable about all aspects of these services and having worked in Pharmacy C for many years, knew the patients and their idiosyncrasies very well. Hence, Pharmacy C was characterised as being 'Explicitly Technician-led'.

The atmosphere in Pharmacy C was very calm since the staff in general and the Dispensary Manager, in particular, were very industrious, quietly spoken and general 'chit-chat' was uncommon. The Dispensary Manager was closely involved with each dispensary support staff member's routine tasks and activities. She was patient, supportive and acutely aware of *all* staff's capabilities. She achieved this by actively listening, watching and questioning the activities undertaken. They themselves continually kept the Dispensary Manager informed about what they were doing or planned to do. The dispensary support staff often sought her guidance, advice and reassurance, for example, when and how to undertake tasks and handle queries from patients and GP surgeries. However, a consequence of this relationship was that the dispensary support staff were rarely observed making a decision without first seeking advice from the Dispensary Manager. While on the one hand the Dispensary Manager sought involvement in the activities of others, their inability to take ownership for their actions was sometimes a source of frustration for the Dispensary Manager.

It appeared that the dispensary support staff were allocated broad areas of responsibility. For example, #14 was responsible for organising and processing the paperwork for the patients requiring their medicines to be dispensed in compliance packs, while #15 was responsible for assembling them. Under the strong direction of the Dispensary Manager, all of the dispensary support staff worked fluidly between the dispensary and the delivery benches. Indeed, the dispensary manager commented that:

'Everyone can do each other's job' #14

It was necessary for the dispensary support staff to change their role within the dispensary in the presence or absence of others. For example, #15 was absent through sickness and so #14 stepped into the role of assembling the

compliance packs and the Dispensary Manager worked on delivery bench more than was usual.

It was unusual for the dispensary support staff to work on the medicines counter, largely because they were so busy performing dispensing-related tasks. However, two of the MCAs were observed undertaking tasks involved with stock management, as described in 4.1.3.6. Therefore, the MCAs and dispensary support staff appeared partially integrated.

4.1.3.3 Dispensing prescriptions

As mentioned, the dispensary had two workbenches, the delivery bench and the dispensary bench, separated by a pillar. Walk-in prescriptions were dispensed on the dispensary bench and prescriptions collected from the GP surgeries that required delivering to patients were dispensed on the delivery bench.

For prescriptions that were dispensed on the dispensary bench, they followed the same process as described in Figure 4. However, the process of dispensing prescriptions was more systematic than as described for Pharmacy B. An SOP outlined the process for dispensing prescriptions on the dispensary bench in Pharmacy C and was adhered to in practice. The MCAs were more likely to take in prescriptions and place them in a basket in a designated area. More often than not the pharmacist(s) or the pre-reg labelled the prescriptions (Stages 1-3), the dispensary support staff, and less so the pharmacist(s), assembled them (Stages 4 and 5). The dispensary support staff performed the tasks involved in Stages 4 and 5 interchangeably, with no discernible pattern. Both #14 and #15 frequently asked the Dispensary Manager queries on product selection. Typically, the dispensary support staff performed Stage 5, 'Label(s) peeled and attached to the drug product(s)'. However, if they were very busy the pharmacist(s) carried out this task at the same time as checking the prescription.

Pharmacy C was similar to Pharmacy A and contrasts with Pharmacy B with respect to Stage 6, which involved the pharmacist checking the prescription. In Pharmacy C, this formed a distinct stage in the process and did not take place simultaneously with the assembly of the prescription by the dispensary support staff. Frequently, the MCAs and the pre-reg bagged and handed out the prescriptions (Stage 8 and 9).

In terms of the delivery bench it was more usual for the Dispensary Manager to organise the collection and delivery of prescriptions, and both her and #14 dispensed the prescriptions. However, only the Dispensary Manager was observed working on the delivery bench during the week during data collection i.e. she labelled (Stages 1-3), assembled (Stages 4-6) and bagged (Stage 8) the prescriptions. The pharmacist(s) checked the prescriptions in between checking prescriptions on the dispensary bench, working towards a time line of 11:30am. Pharmacy C collected prescriptions from GP surgeries and delivered dispensed prescriptions to patients residing in the city. The

Dispensary Manager supervised the driver's (an elderly man) task of collecting and delivering the prescriptions and commented that:

'I like to be around for when [Driver] gets back'#14

4.1.3.4 Services to drug mis-users

Pharmacy C supplied methadone preparations to 16 patients, of which two were observed. The pre-reg was responsible for dispensing the methadone preparations every morning for the daily pick-ups. When the patients came to collect their prescription, the pre-reg retrieved their methadone preparation, generated a label, fixed it to the bottle and gave it to the pharmacist to check, then handed it to the patient. The Dispensary Manager oversaw this service and resolved any problems that arose.

4.1.3.5 Supply of compliance packs

Pharmacy C operated three different systems for supplying compliance packs to patients in the community, eight nursing and residential homes and one retirement village. Analogous with Pharmacy A, these systems were complex and beyond the remit of this research to understand and describe the detail of their mechanics.

However, #15 was responsible and competent to assemble patients' medicines in the compliance packs. Interestingly, one of the MCAs was competent to perform this task having previously been part of the dispensary support staff. In addition to assembling the compliance packs, #14 was responsible for maintaining and processing the paperwork for the patients receiving these compliance packs, and ordering their prescriptions. The 'management', #13 commented, expected that her and #14 would train to the same level in order to share the dispensing and processing aspects of the service equally between them. The Dispensary Manager was competent to perform all of the tasks involved with providing this service. The Pharmacy Owner informed the researcher that the Dispensary Manager had covered #14's processing work during her annual leave and discovered some problems with the system. These problems had arisen from #14 not keeping the paperwork up-to-date. Together, they rectified the problem, although both were upset by the mistake and #14 felt that she had let the Dispensary Manager down.

For the previous three years, the Dispensary Manager had been charged with the responsibility of checking the accuracy of the dispensed compliance packs and external preparations for patients in the nursing and residential homes. Although she had not been accredited through a formal training course, the Pharmacy Owner and second pharmacist felt that the Dispensary Manager was competent to take on this extra responsibility. The Pharmacy Owner had a close working relationship with the Dispensary Manager spanning more than

20 years. A high level of trust had developed from their established relationship.

4.1.3.6 Other dispensary-related activities

The Dispensary Manager retained overall responsibility for stock management. Dispensary stock was ordered from three suppliers. Pharmacy C was linked electronically to the main supplier and communicated over the telephone with the other two suppliers. The pharmacists and any member of the dispensary support staff added items to the order from each supplier. However, the Dispensary Manager explained that she preferred to check the electronic order herself, before it was transmitted for 'general house-keeping and quantities'. She also preferred to take telephone calls from the other two suppliers. Dispensary support staff wishing to place an order with a supplier over the telephone confirmed with the Dispensary Manager first.

When the dispensary order arrived, two of the MCAs unpacked the stock, checked it against the invoice and transferred it to the shelves. While one MCA was employed specifically to undertake this task when she worked in the afternoon, the other MCA often volunteered to help. Both MCAs frequently requested help from the dispensary support staff when transferring the stock to the shelves. Queries often related to where the stock was located.

Balancing the Owings on prescriptions was a task undertaken by the pharmacist(s) or the dispensary support staff on receipt of the dispensary order.

4.1.4 Pharmacy D: 'Implicitly Technician-led'

Pharmacy D was part of a small chain located on the high street of a town, among a row of shops. The property was originally a farmhouse before it became a pharmacy approximately 150 years ago. The dispensary, as it is now, was the kitchen of the house. Since then, the pharmacy has changed hands five times with the current proprietor having owned the pharmacy for the last five or six years.

Pharmacy D was open for 44 hours over six days (9am-6pm Monday-Friday, closed 1-2pm; 9am-1pm Saturday) and dispensed an average of 6,000 prescription items per month. The dispensing of compliance packs to a local nursing home accounted for between 500-600 of the total number of monthly prescription items.

The services offered in Pharmacy D included: dispensing prescriptions, supplying oxygen, a free prescription collection and delivery service and dispensing compliance packs for one nursing home. A satellite branch of a GP surgery was located on the same row of shops. Consequently, Pharmacy D tended to be busier with walk-in prescriptions during surgery hours. Pharmacy D also provided an emergency service to the patients registered at this

satellite surgery. Surgery hours were inconsistent and sometimes cancelled through GP shortages, preventing patients collecting their prescriptions on time. Consequently, Pharmacy D often loaned medicines to patients. Prescriptions were also collected for patients from four other GP surgeries in the area and often delivered. Prescriptions were collected once-daily three days a week and twice-daily two days a week. Therefore, the workload in Pharmacy D peaked when these collected prescriptions were dispensed in time for the delivery.

The shop area was fairly large as it extended across two shop-fronts. A range of gift and beauty products was stocked alongside the more conventional health-related items. Behind the medicines counter were a couple of steps up to an open doorway that led to the dispensary. Consequently, the dispensary was only partially visible to patients or customers. The pharmacist and staff had to walk to the doorway and medicines counter in order to conduct a conversation with patients or customers. The dispensary itself was small and overcrowded with limited floor and workspace. The shelves were stocked to maximum capacity and surplus stock stored on the floor. A stockroom led out from the back of the dispensary, which held both shop and dispensary stock. The dispensary was carrying more stock than was usual as the data collection period coincided with the weeks running up to Christmas.

4.1.4.1 Staff profile

The staff employed in Pharmacy D are described in Table 5.

Table 5. Staff profile of Pharmacy D: Implicitly Technician-led

ID	Gender	Age	Highest qualification	Experience in pharmacy	Time in this pharmacy	Av hours worked per week
16	Female	47	Pharmacy Technician	27 years	27 years	40
17	Female	22	Pharmacy Technician	8 years	8 years	24
Additional staff: 3 MCAs 1 Driver						

As can be seen in Table 5, two of the six staff were classed as dispensary support staff. Both were female and qualified as Pharmacy Technicians. #16 was older, had many years of pharmacy experience and worked full-time. Although #17 was younger, she had worked in this pharmacy during and since leaving school and worked part-time. The Pharmacy Owner worked in this pharmacy an average of three days a week and spent the rest of his time working in the other pharmacy(s) in the chain. Regular locums covered the other days of the week.

The atmosphere in Pharmacy D was relaxed, extremely friendly, open and honest. Staff, including locums, went for a pub lunch twice a week and the representatives from the wholesalers clearly enjoyed their appointments with

Pharmacy D. The festive period coupled with some strong personalities in the pharmacy created a high-spirited week of data collection.

4.1.4.2 Organisation of work

One of the MCAs was responsible for running the shop-side of the business, and #16, the dispensary. These roles were more implicit, rather than being necessarily allocated. In the case of the dispensary support staff member #16, this was likely to be because she worked full-time and had worked there the longest. Tasks were not allocated to the dispensary support staff because the team was small, indeed #16 commented that:

'I just come in, in the morning and get on with it' #16

However, #16 was the only member of staff to work there on a full-time basis and so provided the continuity. Therefore, she acted as the main reference point to the other dispensary support staff member (#17) and also to the Pharmacy Owner and locums, one of whom she was particularly directive of. As she had worked there for many years, #16 had acquired a high level of knowledge about the patients and their medicines. On a day-to-day basis, she was also knowledgeable about what was happening with patients' prescriptions and other dispensary matters. The role of co-ordinator and, in effect, dispensary manager, assumed by #16 was implicit in her behaviour. Hence, Pharmacy B is characterised as being 'Implicitly Technician-led'. Although both Pharmacy Technicians, #16 appeared more senior than #17. The Pharmacy Owner and #16 had developed a very trusting relationship, which was not evident with #17. This was displayed through actions such as #16, but not #17 possessing a set of shop keys and having responsibility for opening and locking up the shop. In terms of the dispensing-related activities, both the Pharmacy Owner and #16 followed up #17, checking that she had completed tasks, for example, entering CD supplies in the register.

4.1.4.3 Dispensing prescriptions

Prescriptions dispensed in Pharmacy D followed the same pathway as described in Figure 4. Frequently, the pharmacist was observed dispensing and self-checking the walk-in prescriptions, while #16 dispensed compliance packs to be delivered to patients in the community (described in section 4.1.5.4) and undertook other dispensing activities (described in section 4.1.4.5):

'By the time I've dispensed prescriptions to be delivered, answered the phone and done the ordering, there's no time for much else ... puts pressure on the pharmacist' #16

If the pharmacist was very busy dispensing walk-in prescriptions, then #16 helped, often without being asked. In this case the pharmacist and the dispensary support staff undertook the tasks involved at all stages of the

dispensing process in Figure 4, interchangeably (occasionally one of the MCAs performed these tasks). Although the pharmacist more often labelled the prescriptions (Stages 1-3), both they and the dispensary support staff assembled (Stages 4-6), bagged (Stage 8) and handed out (Stage 9) prescriptions. It was difficult to ascertain at what point in the dispensing process the pharmacist checked the prescriptions (Stage 7) since the pharmacist and dispensary support staff performed these dispensing tasks simultaneously.

4.1.4.4 Supply of compliance packs

Different types of compliance packs were supplied to patients in the community and to patients residing in a local nursing home. #16 was responsible for dispensing the compliance packs to the patients in the community and this task formed a substantial part of her daily work activity. This involved #16 ordering patients' prescriptions, ensuring that amendments were incorporated and then dispensing the compliance packs. #16 liaised with both the GP surgery and the patients regarding queries and anomalies on these prescriptions. #17 occasionally assembled the compliance packs for these patients.

Once a month #17 dispensed the compliance packs for the nursing home's patients. The nursing home ordered their patients' prescriptions from the GP surgery themselves. Either the Pharmacy Owner or #17 processed the paperwork for the nursing home and #17 assembled the compliance packs. The Pharmacy Owner labelled, dispensed and checked the external preparations and checked the dispensed compliance packs. While the Pharmacy Owner was observed checking the dispensed compliance packs he identified and rectified errors, joking that #17's concentration must have slipped while dispensing them. Along with #17, both the Pharmacy Owner and #16 frequently dealt with queries from the nursing home and the GP surgery regarding these patients' prescriptions.

4.1.4.5 Other dispensary-related activities

In terms of the stock management, Pharmacy D ordered drug products electronically from two main suppliers and from about 20 different wholesalers over the telephone. The Pharmacy Owner, locums and the two dispensary support staff members were involved in ordering drug products. Pharmacy D received on average five or six deliveries throughout the day. The dispensary support staff and often the Pharmacy Owner and locums unpacked the stock and transferred it to the shelves. However, #16 tended to process the paperwork for the orders.

The prescriptions were not sorted, counted or filed on a regular basis and by no one particular person. Although, #17 seemed to think that it was her responsibility, since the figures from the previous month were incorrect so felt she needed to keep on top of them this month. #16 believed that the

Pharmacy Owner should undertake this task as she is used to the 'old-fashioned way'.

4.1.5 Pharmacy E: 'United Front'

Pharmacy E was located in the suburb of a town in the North West of England. Originally an independent pharmacy, Pharmacy E changed ownership twice before becoming part of a multiple approximately six years ago. It was housed in a medical centre with a 10-Doctor GP practice. A hospital and PCT office shared the same site, all of which were near to a row of shops. Pharmacy E was open for 58 hours over seven days (between 8:30am-6:30pm Monday-Friday; 9am-1pm Saturday and 10am-2pm Sunday). It was an exceptionally busy pharmacy dispensing an average of 10,000 prescription items per month, which were almost all exclusively from the patients visiting the adjoining GP surgery. Consequently, the pharmacy was at its busiest, dispensing walk-in prescriptions, during surgery hours.

The services provided in Pharmacy E were dispensing prescriptions, free prescription collection and delivery, oxygen supply, compliance packs for community patients and supplying drug products to a local hospice.

Pharmacy E had open access via two entrances from the medical centre. The receptionists' hatch belonging to the GP surgery was visible from the pharmacy. The shop area was small and stocked only health-related products. The dispensary was not necessarily small in size, but inadequate for the volume of prescriptions dispensed. Staff working in the dispensary were visible to the patients waiting in the shop area. Leading out from the dispensary was a small and overcrowded stockroom. There was a small workbench, which was utilised for dispensing compliance packs. There was also an extremely small kitchen/staff room.

4.1.5.1 Staff profile

The Pharmacy Manager had worked in this pharmacy for the previous 18 months. Prior to this, the pharmacy was run on locums. The company had problems recruiting pharmacists to this pharmacy, largely owing to the working conditions and workload for just one pharmacist. Pharmacy E is characterised as the 'United Front' pharmacy given that they ran the pharmacy in the absence, until now, of a permanent Pharmacy Manager. They recruited the current Pharmacy Manager by offering her a 40-hour, four-day working week. The other staff that work in Pharmacy E are described in Table 6.

Table 6. Staff profile of Pharmacy E: United Front

ID	Gender	Age	Highest qualification	Experience in pharmacy	Time in this pharmacy	Av hours worked per week
18	Female	35	Trainee Pharmacy Technician	1 month	1 month	27.5
19	Female	45	Pharmacy Technician	13 years	13 years	16
20	Female	40	Pharmacy Technician and ACT	26 years	10 years	40
Additional staff: 2 dispensary support staff not observed, nor data collected 3 MCAs (inc supervisor) 2 Saturday persons 3 Drivers						

As shown in Table 6, the three dispensary support staff members observed were female and aged between 35 and 45. Notably, #20 was an Accredited Checking Technician (ACT). With the exception of #18 who was new to pharmacy, the other two dispensary support staff had acquired a wealth of experience. Their hours worked each week range from 16 to 40.

4.1.5.2 Organisation of work

The data collection period was insufficient to determine the true picture of how the work was organised. However, it was the researcher's impression that the sheer volume of prescriptions to dispense meant that the dispensary support staff worked reactively. There was a sense that there was little need to direct the flow of work as the experienced dispensary support staff 'just got on with it'. However, the Pharmacy Manager was observed instructing the new recruit how, what and when to undertake dispensing tasks.

Pharmacy E was so busy that there was little opportunity for the staff to stop and chat, or share a joke. There was a constant background noise of the phone ringing, which was rarely answered.

4.1.5.3 Dispensing prescriptions

The walk-in prescriptions followed the journey described in Figure 4. The MCAs received the prescriptions on the small medicines counter (though they sell a wide range of Pharmacy-only medicines), which was the continuation of the dispensary bench. This layout meant that those competent to do so worked across the medicines counter and dispensary. However, both the dispensary support staff and the Pharmacy Manager labelled (Stages 1-3) and assembled (Stages 4-6) the prescriptions. The dispensary support staff and the Pharmacy Manager performed these tasks interchangeably, although the Pharmacy Manager was more likely to label (Stages 1-3). The Pharmacy Manager checked the prescriptions (Stage 7) at a distinct point once the

prescriptions had been dispensed (Stages 1-5). Consequently, the Pharmacy Manager was frequently observed self-checking prescriptions. The Pharmacy Manager mostly bagged and handed out prescriptions to the patients, as they were more likely to wait for their prescriptions. For patients calling back for their prescriptions, the MCAs tended to hand them out.

Although Pharmacy C employed an ACT, she estimated that she spent, on average, less than 10% of her time checking the accuracy of dispensed prescriptions. The ACT explained that for the system to work, there needed to be two Pharmacy Technicians assembling prescriptions (Stages 4-6) and a sufficient workload, while the pharmacist and the ACT alternated between labelling prescriptions (Stage 1-3) and checking the accuracy of the dispensed prescriptions (Stage 7). The pharmacist performed a clinical check of the prescription at the outset and stamped it to indicate that the ACT could check its accuracy. However, a high prescription volume, for example, during the Christmas period and sufficient staff numbers (two pharmacy technicians), were needed for the system to operate effectively. When the system was implemented, it enabled the Pharmacy Manager to take a break for lunch. It also released the Pharmacy Manager to undertake other activities, in particular, record keeping and paperwork for the local hospice to which they supply a large quantity of CDs. Pharmacy E did not have a consultation area, so the Pharmacy Manager was not able to utilise her time undertaking extended-role activities, for example, conducting medication reviews.

There also appeared to be other, underlying reasons for under-using the ACT. It was difficult to explore these issues fully with the ACT owing to the lack of privacy in the pharmacy. Although the ACT was unwilling to disclose too much information, she alluded to issues relating to other staff accepting her new role and her unmet expectations of the role. The ACT was disappointed with how her role has developed and was informed by Head Office that it would extend beyond simply accuracy-checking, into dispensary and personnel management. However, this role was poorly understood within the pharmacy and encroached onto another supervisory role in the shop area. Also, some locums were unwilling to delegate the task of checking the accuracy of dispensed and clinically checked prescriptions to her. As a consequence, the ACT considered her future outside this pharmacy and possibly the company if she was to pursue this role. Indeed, she would rather leave than 'rock the boat'.

4.1.5.4 Supply of compliance packs

Prescriptions dispensed in compliance packs were supplied to approximately 78 patients in the community. There was one system in place for this service and the two Pharmacy Technicians were responsible for the ordering and dispensing of 66 and 10 patients' prescriptions, respectively. The ACT then checked the compliance packs, which were dispensed by the Pharmacy Technicians. Often, the ACT checked the compliance packs during her tea break, as there was insufficient time to do so during her working hours. The

ACT alerted the pharmacist to any changes to the patients' medication for a clinical check. The ACT commented that:

'The pharmacist lets me do that as they don't like checking them'
#20

As mentioned, Pharmacy E supplied CDs to a local hospice requesting requisitions. Before the ACT qualified, she visited the hospice on a weekly basis and listed the CDs and other medicines required. She dispensed them on her return and the pharmacist checked the order. A second pharmacist also worked in the pharmacy on that same day to release the first pharmacist from the dispensary bench to carry out the check. Since the ACT had qualified, she continued to visit the hospice and list the medicines required. However, a Pharmacy Technician dispensed the order and the ACT checked the accuracy of it. However, they did not have the benefit of a second pharmacist anymore.

4.1.5.5 Other dispensary-related activities

Owing to the short data collection period in this pharmacy, it was difficult for the researcher to establish how the dispensary support staff were utilised for other dispensary-related activities, for example, balancing the items owing on patients' prescriptions. However, on receipt of a delivery, a mix of dispensary support staff were observed unpacking it and transferring the stock to the shelves.

4.1.6 Pharmacy F: 'Team-spirit'

Pharmacy F was part of a regional chain in the North West. It was located in the middle of a row of shops in the heart of a large village. It was an independent for many years and after a brief period with an American company, it was taken over by a regional chain approximately six years ago. Pharmacy F was traditional in the sense that it fulfilled an essential role within the community, where a large elderly population lived. Within the village there was one GP surgery, located a few yards behind the pharmacy and a satellite GP surgery, which opened fairly infrequently. There was another pharmacy in the village that was part of the same company as Pharmacy F. However, this second pharmacy dealt mainly with supplying compliance packs to nursing and residential homes in the area. Consequently, most of the residents in the village visited the one GP surgery and one pharmacy (Pharmacy F). There was a real sense of community spirit between the staff and customers.

Pharmacy F opened for 47 hours over six days (9am-6pm Monday–Friday and Saturday 9am-5pm, closed 1-2pm). Surgery hours in the local GP surgery affected the workload in Pharmacy F. Therefore, the pharmacy tended to be busier between 10am-1pm and 3-5pm. It was also busier on a Friday compared to the beginning of the week, but was quiet on a Saturday as the surgery was closed. Prescriptions were collected from the GP surgery at

about 11:30am and were dispensed for delivery that afternoon, or if not, the following day. Pharmacy F dispensed an average of 9,000 prescription items per month, 75% of which were walk-in and 25% were collected from GP surgeries (mainly the village GP surgery).

The services provided in Pharmacy F included, dispensing prescriptions, supplying oxygen, free prescription collection and delivery, and dispensing prescriptions for drug mis-users and needle exchange. They were also considering implementing the PCT's minor ailments scheme.

The pharmacy, which recently had a refit, occupied two shops that were knocked through to one. Both the shop floor and the dispensary were large areas. A perfume counter was located in the corner of the shop selling high quality beauty products and perfumery. The dispensary faced the entrance to the shop and having an open-plan design, was highly visible. Although on the same level, the dispensary was separated from the shop floor by a solid partition and Perspex screen reaching head-height. The dispensary was spacious, clean and tidy and had adequate workspace. The medicines counter was in the other 'shop' and was separated from the dispensary by the original pillar. Consequently, the Pharmacy Manager was unable to hear the dialogue between the MCAs and customers. Prescriptions were also handed to the MCAs at the medicines counter.

4.1.6.1 Staff profile

The Pharmacy Manager joined Pharmacy F during its period under American ownership and had worked there for several years. A regular locum covered his day off each week. The staff that worked in Pharmacy F are described in Table 7.

Table 7. Staff profile of Pharmacy F: Team-spirit

ID	Gender	Age	Highest qualification	Experience in pharmacy	Time in this pharmacy	Av hours worked per week
21	Female	55	Trainee Dispensing / Pharmacy Assistant / Supervisor	24 years	21 years	40
22	Female	50	Pharmacy Technician	12 years	12 years	40
Additional staff: 1 pre-reg 4 MCAs 2 Drivers						

As shown in Table 7, there were two members of the dispensary support staff, as well as a pre-reg student. With the exception of the pre-reg student, all of the staff, including the Pharmacy Owner were over 40 years of age.

4.1.6.2 Organisation of work

The trainee Dispensing/Pharmacy Assistant (#21) was also the shop Supervisor and oversaw the general running of the shop and was responsible for personnel management. Although training to be a Dispensing/Pharmacy Assistant, the Supervisor was not able to spend a lot of time in the dispensary, as she was superfluous or else busy performing other duties. Work undertaken in the dispensary was divided between the Pharmacy Technician (#22) and the pre-reg. The Pharmacy Manager decided this when the pre-reg joined the pharmacy almost 12 months earlier. Therefore, the Pharmacy Technician and the pre-reg took it in turns to unpack the dispensary orders, sort, count and file prescriptions and dispense the methadone preparations.

4.1.6.3 Dispensing prescriptions

The dispensing process in Pharmacy F followed that described in Figure 4. The Pharmacy Manager, pre-reg or the Pharmacy Technician labelled (Stages 1-3) and assembled (Stages 4-6) the prescriptions. All three of these staff performed the tasks for each stage of the dispensing process, interchangeably. Although, the pre-reg labelled (Stages 1-3) more frequently compared to the Pharmacy Manager or the Pharmacy Technician. The Pharmacy Manager was heavily involved in the assembly of prescriptions, but he performed his check (Stage 7) at a distinct point in the dispensing process. He only checked once the prescriptions had been dispensed, not simultaneously, as was the situation in Pharmacies B and D. The Pharmacy Manager bagged the prescriptions (Stage 8) and if not too busy, handed them out to the patients (Stage 9).

During the week of data collection, the Pharmacy Technician was on annual leave. This enabled the Supervisor, who was a trainee Dispensing/Pharmacy Assistant to practise in the dispensary, labelling (Stages 1-3) and assembling (Stages 4-6) the prescriptions. One of the MCAs was deployed in the dispensary to help in the Pharmacy Technician's absence, demonstrating the team spirit and integration evident in this pharmacy (hence the name). Although this MCA had no formal dispensing training, she competently and efficiently assembled prescriptions (Stages 4-6). However, like the Supervisor, she too was unsure of how to label (Stages 1-3). The Pharmacy Manager was a jolly, patient and approachable person who was extremely supportive and helpful when the MCA and Supervisor were unsure of anything in the dispensary. Notably, the MCA did not intend to undertake any dispensing qualifications, nor was she being signed off under the 'level 2 grandparent clause'¹¹, as the Pharmacy Manager had yet to address the regulatory matter of minimum standard of competence. Therefore, under the new regulations⁴⁴, this MCA will not be able to partake in any part of the dispensing process from 2005. Also, the pre-reg was not being replaced in the forthcoming intake. The Pharmacy Manager envisaged bringing the Supervisor into the dispensary and taking on a new MCA to resolve this forthcoming staffing issue.

The researcher returned to Pharmacy F once the Pharmacy Technician had returned from annual leave. However, a locum was covering the two-week period that the Pharmacy Manager was on his annual leave. The locum was brought in externally by the company and was fairly unfamiliar to the staff having only worked there once before. The presence of the locum appeared to completely change the dynamic of the pharmacy. He was unwilling to undertake any task other than checking dispensed prescriptions. This placed a lot of pressure on the existing dispensary support staff and pre-reg to perform all of the dispensing tasks and caused a lot of upset amongst them. They considered him lazy, particularly compared to the Pharmacy Manager who was extremely hands-on in the dispensary. Interestingly, the team spirit, which was already evident amongst all of the staff, strengthened as they united together in the presence of this locum. Indeed, after a long and tiring day, they stayed behind after the pharmacy had closed to discuss the day's events.

4.1.6.4 Services to drug mis-users

A total of 15 patients obtained their methadone and similar preparations, including diamorphine reefers, from Pharmacy F. Two of the methadone patients were observed and most were daily pick-ups. These patients bypassed the medicines counter and walked straight up to the dispensary. The dispensary support staff, pre-reg, Pharmacy Manager and the regular locum knew the majority of them by name. The pre-reg and the Pharmacy Technician took it in turns to dispense the methadone mixtures every morning. After the pharmacist checked the measured quantities, the dispensed methadone preparations were stored in the CD cupboard. The pharmacist checked the methadone mixtures again when the patients collected their supply. The Pharmacy Manager prepared the diamorphine reefers.

4.1.6.5 Other dispensary-related activities

Drug products were ordered electronically from the company's warehouse and a local supplier. Before transmitting, orders were checked by the Pharmacy Manager, the Pharmacy Technician, or the pre-reg. A delivery arrived from the company's warehouse at about 11:30am. The local supplier delivered at 9am and again at 4pm. The Pharmacy Technician and the pre-reg took it in turns to check the order, unpack it and transfer the stock to the shelves. However, in the absence of the Pharmacy Technician, three of the MCAs and the Supervisor were all observed at some point undertaking this task. The MCAs always offered to help, particularly during staff absence. However, the Supervisor commented that Head Office do not want MCAs involved with the dispensary order as it posed a risk to patient safety.

4.2 Summary of skill mix models

4.2.1 Dispensary manager role

Within each community pharmacy case, one or two key individuals were identified as assuming the role of a dispensary manager. Either the pharmacist or a member of the dispensary support staff or both performed this role. Two Pharmacy Technicians were explicitly designated this role in two cases (Pharmacy A: Distinct Roles and Pharmacy C: Explicitly Technician-led). However, this role was assumed by the Pharmacy Owner in Pharmacy B (Owner-run); the Pharmacy Technician in Pharmacy D (Implicitly Technician-led); the Pharmacy Manager and ACT in Pharmacy E (United Front) and the Pharmacy Manager and Pharmacy Technician in Pharmacy F (Team-spirit). A characteristic common to the individuals who assumed the role of dispensary manager was that they all worked on a full-time basis for that one pharmacy. This continuity enabled them to provide a seamless service, as they were able to keep abreast of the current and ongoing range of dispensary-related matters.

4.2.2 Organisation of work

While the role of dispensary manager was implicitly or explicitly apparent in all community pharmacy cases, some members of the dispensary support staff were allocated specific areas of responsibility, for example, the services provided to the nursing and residential homes or drug mis-users. However, the majority of dispensary support staff were involved with the operational aspects of the range of services provided by the six community pharmacy case studies.

In terms of the dispensing of prescriptions, which were either walk-in, or received by fax, telephone or post, the community pharmacies in this study tended to follow the process described in Figure 4. However, there were similarities and differences with respect to which staff (pharmacists, dispensary support staff and MCAs) undertook the specific tasks involved at each stage of the dispensing process. These patterns are summarised in Table 8, overleaf.

Table 8 shows that a range of pharmacy staff were involved in some or all aspects of the dispensing process. These include pharmacist(s), trainee and Pharmacy Technician(s), trainee and Dispensing/Pharmacy Assistant(s), unqualified staff (UQ) that were employed to work in the dispensary, who may or may not have their MCA qualification, and finally, MCAs that were employed primarily to work on the medicines counter, but who also helped out in the dispensary.

Table 8 shows that the pharmacists were involved with all stages of the dispensing process. However, in Pharmacies A (Distinct Roles) and C (Explicitly Technician-led) the pharmacists were much less likely to label or assemble prescriptions and, as such, were perhaps less hands-on. Notably, both Pharmacy A and Pharmacy C were the only two pharmacies to have dispensary support staff appointed to official dispensary manager roles. The pharmacists in the remaining community pharmacy cases were much more hands-on and were observed labelling and assembling prescriptions more frequently. In these cases, it was therefore much more likely that the pharmacist would self-check their dispensed prescriptions.

Accuracy checking of dispensed prescriptions was undertaken solely by the pharmacist in Pharmacies A (Distinct Roles), D (Implicitly Technician-led) and F (Team-spirit). The checking stage was performed by both the pharmacist and the ACT in Pharmacy E (United Front) and by the pharmacist and dispensary support staff that had not been accredited in Pharmacies C (Explicitly Technician-led) and B (Owner-run). In all cases where the dispensary support staff performed an accuracy check, the prescriptions were dispensed in compliance packs or were external preparations for patients in nursing or residential homes.

The asterisks next to the term 'Check' by the pharmacists in Table 8 denotes whether this formed a distinct or indistinct stage of the dispensing process. The pharmacists working in Pharmacies A (Distinct Roles) and C (Explicitly Technician-led) were less likely to assemble prescriptions and, as such, their task of checking prescriptions was clearly observed. The pharmacists in Pharmacies E (Accredited Checking Pharmacy) and F (Team-spirit) were hands-on and both they and the dispensary support staff were observed labelling and assembling prescriptions. However, their check of dispensed prescriptions was a discernible stage of the dispensing process. In contrast to these were Pharmacies B (Owner-run) and D (Implicitly Technician-led). In these cases, the pharmacists and the dispensary support staff were frequently observed labelling, assembling and checking the prescriptions simultaneously. Consequently, it was difficult to observe the point in the dispensing process when a check by the pharmacist was performed.

Table 8. The Dispensing process: tasks performed by all pharmacy staff

Cases/ Stages of dispensing process	Dispensary support staff and MCAs					
	P	ACT	(Trainee) PT	(Trainee) DA/PA	UQ	MCA
Pharmacy A: Distinct Roles						
Label	Y-unusual	-	Y	Y	Y	N
Assemble	Y-unusual	-	Y	Y	Y	N
Check	Y*	-	N	N	N	N
Bag	Y	-	N	N	N	N
Handout	Y	-	N	N	N	Y
Pharmacy B: Owner-run						
Label	Y	-	Y	-	Y	-
Assemble	Y	-	Y	-	Y	-
Check	Y**	-	Y	-	N	-
Bag	Y	-	Y	-	Y	-
Handout	Y	-	Y	-	Y	-
Pharmacy C: Explicitly Technician-led						
Label	Y	-	Y	-	Y	N
Assemble	Y-unusual	-	Y	-	Y	N
Check	Y*	-	Y	-	N	N
Bag	Y	-	Y	-	Y	Y
Handout	Y	-	Y	-	Y	Y
Pharmacy D: Implicitly Technician-led						
Label	Y	-	Y	-	-	Y
Assemble	Y	-	Y	-	-	Y
Check	Y**	-	N	-	-	N
Bag	Y	-	Y	-	-	Y
Handout	Y	-	Y	-	-	Y
Pharmacy E: United Front						
Label	Y	Y	Y	-	-	Y
Assemble	Y	Y	Y	-	-	Y
Check	Y*	Y	N	-	-	N
Bag	Y	Y	Y	-	-	N
Handout	Y	Y	Y	-	-	Y
Pharmacy F: Team-spirit						
Label	Y-unusual	-	Y	Y	-	Y
Assemble	Y	-	Y	Y	-	Y
Check	Y*	-	N	N	-	N
Bag	Y	-	N	N	-	N
Handout	Y	-	N	Y	-	Y
<i>P: Pharmacist; ACT: Accredited Checking Technician; PT: (trainee) Pharmacy Technician; DA/PA: (trainee) Dispensing/Pharmacy Assistant; UQ: Unqualified dispensary support staff (may have MCA); MCA: MCA on medicines counter</i> <i>Y=Yes; N=No</i> <i>*Distinct stage of the dispensing process</i> <i>**Indistinct stage of the dispensing process</i>						

4.3 Dispensary support staff interviews: key themes

Thus far, each of the six community pharmacy cases have been described in detail, drawing on the observational and contextual data gathered. The different models of skill mix identified from the research have been

summarised. The results presented in this next section of the report describe key themes from the interviews conducted with support staff. These include experiences and views on tasks and activities, regulation and CPD, as well as training issues, and are described in more detail below.

4.3.1 Experiences and views on tasks and activities

The dispensary support staff found it quite difficult to articulate the number and range of different tasks and activities that they performed, although what they identified concurred with the observations made by the researcher. Instead, they made more general comments regarding the many aspects of dispensary-related activities that they were involved with, for example:

'When you're in the dispensary you have to be very multi. You do a bit of everything really ... Whatever needs to be done, I don't think, oh, that's not my job. If it needs to be done I get on with it. I'll put the order away, I'll write the methadones up, I'll do the prescription book, whatever needs doing, I will do it ... So you've got to be able to do a little bit of everything, I think.' #01

Some dispensary support staff identified broad areas of activity, for example, dispensing prescriptions, stock management, dispensing compliance packs and methadone preparations. However, one dispensary support staff member identified the latter as the sole activity that she was involved with, and in doing so had created a niche for herself:

'Methadone. (laughs) I think that's basically it, isn't it, making up methadone. Methadone scripts, that's what I do, yeah ... I just like to come in and know what I'm doing, just get it over and done with.' #03

Interestingly, the Dispensary Manager (#14) in Pharmacy C (Explicitly Technician-led) spoke of her commitment to the role, which carried a high level of responsibility. She described her job and the dispensary as being:

'This is my baby ... You know, I have like standards, every day here's something different, and I always, I've just got to make sure that everything runs smoothly and all the jobs are actually done that we set out the beginning of the day to do, and everybody knows what they're actually doing.' #14

In terms of likes and dislikes about the tasks and activities undertaken, the views of the dispensary support staff varied. On the whole, the dispensary support staff enjoyed their work and identified, for example, their relationship with the patients and customers was an aspect that they particularly enjoyed:

'Just knowing the patients and knowing the medication and being there to help them ... There's a lady in [location], she always rings up and asks for me, and it's only to say that she's put a prescription

in and 'You know what to do with it, won't you, my dear.' 'Yes, Mrs [X], I do. Blah-blah-blah.' But it's knowing that you're there on the end of a phone to help them, if you can help them. Cos a lot of our patients are elderly and they rely on us, so it's just nice to know that they know me, even though I've never met Mrs (...), I know her voice, she knows mine, and ... I'm here if she's got a problem.' #22

In contrast, the customer and patient contact was one aspect that one dispensary support staff member did not enjoy. Notably, this person was responsible for the day-to day management of the shop area of the pharmacy, alongside performing dispensary-related tasks:

'I hate that shop ... I shouldn't say I hate it, I love doing all the ordering and I love fitting the shop out, but serving ... Some of them [Customers] are so ignorant, you know, you think ... Just not worth it.' #08

Similarly, other areas were one person's like and another's dislike. While one person enjoyed working in the MDS Room because she liked the notion of having a patient base, another did not want any involvement in this activity owing to the perceived volume of paperwork and workload:

'I'd rather be in the MDS side, because you sort of build up your own people, don't you. I mean, still be involved, but I do prefer actually doing the home side of it like that.' #15

'I'm not involved with any of the homes prescriptions or any of the dispensing for like the monitored dosage or care in the community people, but I'd rather stay well clear of that ... It's a lot of paperwork for people, and they're always in and out of hospital so their medication always changes, you spend ages putting all the drugs into these little packs and then two days later it all changes and I just couldn't put up with that.' #02

Another area that some of the dispensary support staff interviewed identified as one that they least enjoyed was stock management. In particular, the dispensary support staff spoke of the monotony of dealing with dispensary orders:

'I can't think of anything really that I don't like doing. I find it pretty boring putting the dispensary order away, but I've got better now, probably cos I didn't know where the stuff went.' #21

In general, the dispensary support staff aimed to become competent to undertake the whole range of dispensing-related activities. This was especially true for those dispensary support staff who were less experienced. One example involved a dispensary support staff member who was learning how to run the service that the pharmacy provided for the nursing and residential homes:

'At the moment I'm still just doing the packs and I've only done bits of process and stuff like that, but eventually I wanna be up to the scratch with [#13], you know ...' #15

Others identified specific activities that they were not currently involved with, but wanted to be competent to perform, for example, dispensing methadone preparations or fitting oxygen cylinders.

Some of the dispensary support staff identified the task of accuracy checking. If this issue was not raised spontaneously, the researcher probed their opinions on it. Indeed, views on accuracy checking were mixed with dispensary support staff both for and against undertaking this task. Some of the dispensary support staff were keen to take on this additional task and felt that they were better trained than the pharmacist to check certain prescription items, such as dressings, and felt confident to check the accuracy of dispensed prescriptions:

'I'd feel quite happy if they asked me to do it, or if they said I could do it'. #22

However, the feeling more generally was that it was a good idea, but some dispensary support staff were reluctant to take on accuracy checking. This was because there was a fear of making a mistake and harming a patient and there was also some confusion about whether they or the pharmacist had overall responsibility:

'I wouldn't like to harm anybody or I wouldn't like to be responsible for anybody, you know, for giving anybody the wrong things, I don't think I'd like to do that.' #10

4.3.2 Training

Both formal and informal patterns of training were identified from the interviews with dispensary support staff and by observing them performing their routine dispensary-related activities. The dispensary support staff interviewed were a mixture of qualified and unqualified staff. While some had attained dispensing qualifications equivalent to Dispensing/Pharmacy Assistant or Pharmacy Technician, others were still working towards them. Indeed, two of the dispensary support staff interviewed did not possess, and were not undertaking any formal dispensing qualifications. However, informal and ad hoc 'on-the-job' training was a key observation in all pharmacies visited in the study, where tasks were demonstrated or dispensary support staff were shadowed.

The dispensary support staff undertaking their dispensing qualifications were at different stages of their courses. While some were in the initial stage of enrolling on a Pharmacy Technician course, another had enrolled but not commenced their course work, others were part way through, or had completed their Dispensing/Pharmacy Assistant's or Pharmacy Technician's

course. Regardless of their rate of progression, several common issues and barriers to undertaking the training emerged.

Time to undertake the training and therefore achieve a Dispensing/Pharmacy Assistant's or Pharmacy Technician's qualification emerged as a strong issue. Some dispensary support staff explained that the Pharmacy Managers or owners did not allow them training time during work hours. One Pharmacy Owner commented that paying for the course was his commitment to the staff and that they should reciprocate this by investing their own time. When Pharmacy Managers or owners *did* allow their staff training time during work hours, they were rarely able to take it. Reasons for this included: insufficient staff coverage, inadequate workspace, conditions that were not conducive to studying, as well as competing demands on their time to perform priority dispensing tasks, as captured by the following dispensary support staff member:

'Doesn't give you no time. Not [Pharmacy Owner], but the job, the job in general, you've always something to do ... We're just too busy, we haven't got the staff to cover ... We used to have [in previous job] an upstairs and we used to take ourselves off up there. So everything was down there if you needed it, but you was out of the way and you didn't have to keep running back and to serving, then running back, it's no good. I don't think you can concentrate like that.' #08

Some dispensary support staff refused to undertake their course work during their own time as it encroached on their domestic commitments:

'The dispensing course, I've not even opened it ... Simply because I've not had the time ... I've got twin girls and soon as I leave this place my time's all took up with them ... I literally, I won't spend any more time taking work home with me ... You know, I'd love to do it, but it's actually fitting it in ...' #08

'It's just it's all course work really. If you've got to do it at home, how long's it gonna take me? I don't want to be spending a couple of hours a night, you know ... My daughter's pregnant as well, so she's gonna be having a baby in March, I'm not sure ...' #10

The time involved for those dispensary support staff members who undertook their course work at home was fairly onerous; one trainee Pharmacy Technician (#13) spent an average of 20 hours a month completing her course work. In this Pharmacy, (Pharmacy C), the Pharmacy Owner allowed training time, in principle, but the dispensary support staff were too busy to take it during work hours. However, limited access to reference sources and other staff was the downside to studying outside work hours. Although, on balance, sacrificing their own time did not appear to pose a problem for some of the dispensary support staff as they felt that they benefited from the training in the long-run:

'I tend to do most of it at home, cos we don't have much time to do it here ... Sometimes I feel as if I could do with doing some of it here. Because if I'm doing it at home if something comes up that I don't quite understand I've got to wait until next day or when we can get a minute to discuss it ... It's just because it's so busy, I understand that ... It's for my benefit as well ... It's something that I want to do, so I've got to do my share' #13

'Dun't bother me really, as long as it's like worth it in the long run, isn't it, it's like a few hours a day or a few hours a week you do, if you get a good level ... it dun't really bother me.' #12

'You know, I wun't mind like doing the dispensary course, which like [#13]'s doing at the moment. I wouldn't mind having summat like that under my belt, because it's always there, innit, and it's a good thing ...' #15

A lack of support was also raised as an issue by the dispensary support staff undertaking their training. They felt isolated and unsupported by the pharmacist, particularly when completing distance-learning training:

'I was totally on my own, with a pharmacist who gave me no help at all. After the first two months, maybe the first couple of modules or a bit longer than that, she'd given up interest ... I knew nobody else that was doing the course, it was just a case of constantly on my own, trying to read it up and learn it, and I found it very difficult.' #03

One pharmacy, Pharmacy A, had recognised and addressed this issue of supporting dispensary support staff through their training, by introducing a mentoring system. Here, the dispensary support staff themselves identified the pharmacist that they would prefer as their mentor:

'A few months ago we were all, we had an interview and we had to choose who we wanted to have as a mentor ... and then if we'd got any problems went to them ... But no, he's, when I've needed him he's helped me, but a lot of it I've done myself' #01

As well as a mentor, the dispensary support staff were able to draw on support from their peers, as each member of the dispensary support staff completed their training and achieved their dispensing qualification:

'So I would say that if I could help anyone in any way with their course, I would say to them that you've always got somebody to come to ask something, because I never had that.' #02

'I mean, at times I'm stuck on a question and I tend to ask, I even rung them up from college and say, 'What is so and so?' You know,

so I do get help from fellow students here doing the NPA course, and also the pharmacists.’ #05

However, the down-side to having dispensary support staff undertaking their courses simultaneously is that there are competing demands for training time:

‘We used to get like an afternoon off or a couple of hours off to go home and do the written work, but then they stopped that because it ended up where we’d got about eight people on courses and if everybody had an afternoon off it just got ridiculous, we just couldn’t cover the hours’ #02

Dispensary support staff taking their training time also put pressure on the other staff to undertake additional tasks and activities:

‘[Pharmacy Technician] used to do it [training], and she used to do quite a lot at work, but then when the person’s doing it at work, she’d spend more than two hours, other people’d have to be pulled from somewhere to do her job ... Staff had to be checking the orders off all the time and checking the orders off in the shop, and I just thought on balance it seemed like you’re having priority over other people, rightly or wrongly, I don’t know.’ #21

Once people had overcome the barriers, including time to undertake the training for their dispensing qualification, the dispensary support staff interviewed spoke of difficulties they encountered completing the course work. Different styles of learning proved to be an issue for some dispensary support staff. Different options are available, including distance- and college-based learning. The employer often favours the former since they are not affected by staff shortages, while the student is more likely to favour the latter as the training takes place during work hours, and some might say, requires less self-discipline:

‘I always wanted to go to the day release at the college to do the BTEC course, simply for the reason that I find it harder to work at my own pace and like distance learning and whatever. When you’re doing a full time job you don’t really, well, I never did anyway, think it was a priority to then go home and start studying, so I always wanted to go to the college for one day, but it turned out not to be possible.’ #02

Notably, the one dispensary support staff member who was undertaking a BTEC in college, which involves day-release from the pharmacy, was funding the training himself. Although, this person was largely atypical since he was an over-seas student who intends to train as a pharmacist in the UK.

Some dispensary support staff also conveyed difficulties around compiling portfolios of evidence to support their training. Lack of clarification from the training providers about what to write as evidence, as well as the task of

actually writing contributed to the anxieties and frustrations of dispensary support staff completing their training:

'... Unless you have a college or classroom situation where you've got your assessor there, it is quite difficult to understand what's needed on the NPA ... It's a vocational qualification, you've got to prove how you, that you've done all these tasks, and it's quite hard to know what exactly they're wanting, when in the end you're only writing about simple, everyday facts that you do without thinking, and yet you've got to sit down and write all about it, it's quite hard to know what exactly they need to know' #02

'... Things that you do on a regular basis, actually writing down every single thing that you do ... You have to treat the examiners, they said, as though they're thick. When we went for the first interview she said 'Just treat us all as if we are total idiots. And write down absolutely everything.' So I did quite a lot of re-writing.' #22

The more experienced dispensary support staff felt it strange to have to undertake a qualification to do the job that they were already doing. They themselves felt competent to perform the practical aspects of their job as they had received training 'on-the-job':

'See, I already picked up a lot from [former owner], because that's, that used to be his way of training ... as we were giving the drugs they'd say, 'This is for this, this is for that.' So a lot has stuck in my head anyway ... ' #16

This was also evident from observing the dispensary support staff undertaking their daily duties. If they were unsure of how to perform a particular task, for example, execute a function on the computer or place an order, they sought help from their peers and the pharmacist. A work shadowing technique was also employed where dispensary support staff were being taught how to, for example, dispense compliance packs. However, the formal dispensing qualifications taught them, to different degrees, the knowledge underpinning these practical elements:

'This course taught me a lot about the drugs and the different medical issues that you could give one drug for, and [#17] course didn't seem to do that. Like sometimes she still asks what these drugs are for, and I'll say, 'Well, it can be used for this, but not only it can be used for this, it can be used for that as well.' And I've learnt a lot off that course, even though I didn't enjoy the portfolio and what have you, but the main part, five folders of the course taught me a lot.' #16

Once the dispensary support staff had achieved, in particular, their Pharmacy Technician qualification, the job itself remained the same. Coupled with the

fact that they were often already doing the job of a Pharmacy Technician, this could perhaps act as a disincentive for undertaking the qualification:

'Ok, you do the course and get the qualification, but you're still doing the same job.' #03

The lack of career progression or opportunities once dispensary support staff had qualified as a Pharmacy Technician was also identified:

'I don't know where you can go as a technician because no matter how many years experience you have or training you have done, you are still a pharmacy technician' #02

Whether dispensary support staff completed their training and achieved their dispensing qualifications appears to rely on the individual. If they have the drive for personal development and are willing to make sacrifices then they are more likely to overcome the barriers to training and obtain their qualifications.

4.3.3 Views on regulation and CPD

The subject of regulation by the RPSGB was raised and responses ranged from having little or no understanding of the matter to a limited amount of knowledge. Occasionally, the dispensary support staff had heard about these issues from reading about it in *The Pharmaceutical Journal* or, more likely, from the pharmacist. There was a sense that important changes were taking place in 2005 and interviewees spoke of a need 'to be qualified', referring to minimum standards of training, and 'having to register', referring to regulation of Pharmacy Technicians:

'All I understand is that you've got to have somebody that's qualified and trained' #21

'[Pharmacy Manager] just said that I would have to register at some point ... No, we don't know anything else about it ... [Pharmacy Manager] just said from 2005 I would have to be on a register, how did I feel about that. I said fine.' #22

Regulation was interpreted as registration, akin to pharmacists and doctors who have to register with their respective professional bodies:

'Well, I always took it, cos we've read a little bit about it in the Pharmaceutical Journal, or somewhere like that, and I always thought that it was a bit like a pharmacist is registered with the Society or a doctor's registered with the medical thing ...' #02

Another, #03, believed that regulation was being introduced to prevent people from re-entering pharmacy after a period of absence, and having to 'sit exams

every year like pharmacists do to upgrade'. Finally, one interviewee (#05) thought that it may have been for insurance purposes.

Although there was only limited knowledge and understanding about what regulation meant, it was considered to be a positive move. One of the better-informed dispensary support staff recognised that regulation would ensure protected use of the title, 'Pharmacy Technician':

'I always took it that any technician would be, once you got your full qualification you'd be registered and you would be ... not more official, but ... it wouldn't be as if you'd made it up that you were a pharmacy technician ... As opposed to people that have just been working in a pharmacy for years and years and don't actually want to take the courses, you still get people calling themselves technicians' #02

Others felt that regulation would bring about recognition and a sense of professionalism:

'Well, it makes it more professional, professional body behind it. And I think it's better for the person actually doing the job, you know, it's ... How can I put it? It's ... I suppose a bit of recognition, you know, the fact that you are not just a dispenser ... That you're registered like a pharmacist or a doctor or whatever. Cos it is, it's not just a case of counting pills, you've got to know a lot more, and I don't think the recognition's been there before.' #13

However, the dispensary support staff did not feel that these changes would affect them or how they performed in their role. Also, the notion that one is 'qualified', but not necessarily competent, as well as the issue that they have been performing the role of a Pharmacy Technician was raised:

'Just because it's a piece of paper and letters behind your name doesn't mean that you're necessarily gonna do your job any better, does it. And I can't, maybe, well, an outsider maybe could see how I could improve, but at the moment I don't see how I can improve, apart from growing six more arms and another brain...!' #16

'But when people have been doing the job for years I think really ... does it matter that you've not got a bit of paper? Or it matters to them if they get a pay increase because of it, yeah, cos they've got the qualification, so that means all the people that've been doing it for years, why have they never been paid for the job they're doing?' #21

The term CPD was one that the dispensary support staff interviewed were largely unfamiliar with. However, after consideration, it was viewed in terms of further education and training in order to keep up-to-date:

'Well, I would, I presume you're learning all the time, aren't you, and you've got to keep up with the new drugs, the new ways of working, which the pharmacists do anyway really, don't they' #02

CPD was on the whole considered to be beneficial and was something that dispensary support staff were prepared to undertake:

'Well, I don't know much about it, but yeah, if we've got to be on a register and carrying on learning, well, if that's part of the job, yeah, it is an ongoing thing, isn't it, with new drugs coming out, you're learning all the time.' #22

However, for one dispensary support staff member, the prospect of having to undertake further training acted as a disincentive to her staying in pharmacy:

'Is that like further education? I haven't heard of it. I can understand why, it's something personally I really wouldn't want to do, just because I've done my study. I don't really want to go back to that again ... But I dunno, if that was the case I don't know if I would ... maybe look elsewhere. I really don't want to go back into education.' #03

Thus far, each of the community pharmacy cases have been described drawing on the observations made, the interviews conducted and the contextual data gathered. This next section gives a brief account of the findings from the survey. Only descriptive statistics are reported given the small size of the achieved sample.

4.4 Stage 2: community pharmacy support staff survey

4.4.1 Characteristics of survey respondents

The achieved sample of 51 community pharmacy support staff comprised mainly females (48) and White (46) respondents. They were an average age of 37 years (minimum: 17; maximum: 55), had worked in the pharmacy profession for an average of almost 10 years, and in that pharmacy for an average of five and a half years.

The majority of the sample (84%, n=43) had obtained their MCA qualification, 69% had completed their Dispensing/Pharmacy Assistant's training, and an almost equal number (61%) had their Pharmacy Technician qualification, with a further 29% currently undertaking it. Three-quarters (75%) of the sample were intending to undertake an accuracy checking qualification, 14% had already completed it and 11% were currently undertaking the training.

Interestingly, 71% of the sample indicated that they were going to register with RPSGB as a Pharmacy Technician. Notably, just 18% of the survey

respondents indicated that they were going to leave community pharmacy to work in the hospital sector.

4.4.2 Characteristics of pharmacies

The majority of survey respondents (45%, n=23) worked for a pharmacy that was part of a large-chain (more than 25 branches). The remainder of the sample were evenly distributed across a range of other pharmacy types. The pharmacies where survey respondents worked tended to be either high or low volume with 35% dispensing between 2,000 and 3,999 prescription items each month, while 28% dispensed more than 7,000 prescription items each month. The majority of pharmacies where the survey respondents worked (51%) were open for between 40 and 49 hours each week. Almost one quarter (24%) were open for between 50 and 59 hours each week, while one fifth (20%) were open more than 60 hours each week. These pharmacies offered a range of services, which are summarised in Table 9.

Table 9. Services provided by pharmacies

Service	N	%
Prescription collection	46	90.2
Oxygen	37	72.5
Supply of methadone preparations	35	68.6
Prescription delivery	32	62.7
Nursing and residential homes	28	54.9
Repeat dispensing	19	37.3
Medicines management	13	25.5
Diagnostic testing	12	23.5
LPS	11	21.6
Needle exchange	6	11.8
<i>Note. Categories not mutually exclusive</i>		

As shown in Table 9, the most popular services provided by the pharmacies where the survey respondents worked were prescription collection (90%), oxygen (73%), supply of methadone preparations (69%) and prescription delivery (63%).

The majority of pharmacies where the survey respondents worked (63%) had a pharmacy manager and a similar number (61%) had a non-permanent pharmacist working there.

Survey respondents were asked to indicate their agreement on a seven-point Likert scale with a series of attitudinal statements relating to their level of work satisfaction. These are described in Table 10.

Table 10. Satisfaction with work

Aspect of work	% Level of satisfaction. 1=extreme dissatisfaction, 4=Neutral, 7=extreme satisfaction						
	1	2	3	4	5	6	7
Physical working conditions	-	7.8	3.9	19.6	31.4	27.5	9.8
Choose own method of working	2.0	3.9	13.7	19.6	15.7	27.5	17.6
Colleagues and fellow workers	2.0	3.9	-	9.8	11.8	39.2	33.3
Recognition for good work	5.9	9.8	5.9	15.7	27.5	17.6	17.6
Amount of responsibility given	3.9	3.9	5.9	9.8	21.6	31.4	23.5
Remuneration	16.3	10.2	18.4	30.6	10.2	8.2	6.1
Opportunity to use abilities	2.0	8.0	6.0	16.0	22.0	30.0	16.0
Hours of work	3.9	2.0	3.9	11.8	17.6	33.3	27.5
Variety in job	3.9	7.8	7.8	9.8	23.5	37.3	9.8
Patient contact	3.9	-	-	9.8	19.6	43.1	23.5
Overall, how you feel about your job	-	3.9	3.9	7.8	21.6	39.2	23.5

As shown in Table 10, one third (33%) of survey respondents were extremely satisfied with their colleagues and fellow workers. On the other hand, the aspect of their work that respondents were extremely dissatisfied with was their remuneration, representing 16%. On the whole, respondents felt satisfied with their job with 84% indicating some level of satisfaction.

Survey respondents were also asked to indicate their level of agreement on a five-point Likert scale with other aspects of their role. The results are shown in Table 11 overleaf.

As shown in Table 11, the majority of survey respondents (59%) strongly agreed that staff carrying out accuracy checks of prescription medicines using SOPs, but without the supervision of the pharmacist, should be qualified to S/NVQ Level 3 (or equivalent). Almost half (47%) strongly agreed that there should be a minimum standard of competence for all staff involved in the aspects of the dispensing process that are relevant to their job. Two-fifths of the sample (40%) strongly agreed with the statement that they were prepared to undertake further training during work time. An almost equal number (39%) strongly agreed that they considered their job a career. Interestingly, the respondents were fairly even spread across their level of agreement with the statement relating to whether that had overall responsibility for management of the dispensary.

Over two fifths of the sample (44%) strongly disagreed with the statement 'I currently check the accuracy of dispensed medicines without the pharmacist supervising me'. Notably, nearly one third (30%) of survey respondents strongly disagreed with the statement concerning their understanding of regulation of pharmacy support staff by RPSGB.

Table 11. Levels of agreement with aspects of role

Aspect of role	Strongly Disagree (%)	Disagree (%)	Neutral (%)	Agree (%)	Strongly Agree (%)
I play a pivotal role in this pharmacy	5.9	13.7	52.9	27.5	-
I am responsible for the overall management of the dispensary	11.8	25.5	19.6	27.5	15.7
I am responsible for supervising other members of staff	7.8	31.4	21.6	27.5	11.8
I am responsible for the overall management of a specific area(s) within the pharmacy e.g dispensing methadone preparations, services to nursing or residential homes	13.7	21.6	19.6	23.5	21.6
I currently check the accuracy of dispensed medicines without the pharmacist supervising me	44.0	18.0	16.0	10.0	12.0
I consider my job a career	3.9	5.9	15.7	35.3	39.2
I would like to develop my skills in a clinical area, e.g. asthma, diabetes	7.8	23.5	29.4	39.2	
I would like to develop my business skills e.g. personnel management	2.0	7.8	43.1	31.4	15.7
I would like to have an educational role in my pharmacy e.g training and developing others	9.8	19.6	52.9	17.6	
I am prepared to do further training in work time	-	-	12.0	48.0	40.0
I am prepared to do further training outside work time	9.8	17.6	41.2	31.4	-
I would like to own or part-own a registered pharmacy	30.0	26.0	26.0	10.0	8.0
I understand what regulation of pharmacy support staff by the Royal Pharmaceutical Society of Great Britain (RPSGB) means	30.0	26.0	26.0	10.0	8.0
There should be a minimum standard of competence for all staff involved in the aspects of the dispensing process that are relevant to their job.	2.0	-	7.8	43.1	47.1
Staff carrying out accuracy checks of prescription medicines using SOPs, but without the supervision of the pharmacist, should be qualified to S/NVQ Level 3 (or equivalent)	3.9	-	13.7	23.5	58.8

5 Summary and Discussion

This discussion draws on the findings from observation work in six community pharmacies summarising how skill mix is configured within the context of these case studies. The discussion endeavours to show that structural and other, less tangible factors, including behaviours and relationships influence the complexity and diversity in community pharmacy. This in turn affects how the work is organised and which particular tasks and activities are performed by the dispensary support staff. Finally, this discussion draws on the observations and interviews with dispensary support staff to highlight how experience and issues relating to training and qualifications are key

determinants of how work and hence skill mix is configured against a backdrop of important regulatory changes. Where relevant, material from the survey is utilised to support findings from the observations and interviews. However, caution must be exercised when interpreting these results, as the sample achieved in the survey was relatively small.

5.1.1 Complexity and diversity in community pharmacy

Six diverse community pharmacies were visited in the study. These cases were purposively selected according to a number of parameters, including, services provided, personnel, locations and environments, as informed by previous research^{19;34}. Unsurprisingly, this research showed that these structural factors influenced how dispensary support staff were utilised in community pharmacy. However, the study also revealed that other, less tangible factors affected their utilisation. These included cultures and traditions, as well as implicit and explicit roles and behaviours assumed by, and relationships between, the dispensary support, the pharmacist / pharmacy owners / managers / locums, and the other community pharmacy staff i.e. MCAs. Collectively, these structural and intangible factors contributed to the uniqueness of each community pharmacy case, particularly given that they offered similar services and therefore the dispensary support staff performed similar activities.

The physical size and layout of the community pharmacy premises, including the dispensary, varied across the cases, as did the dispensing volume, the number and type (qualified and unqualified) of dispensary support staff employed and services provided. This variation is congruent with previous research that has illustrated this diversity¹⁹. It is worth drawing attention at this point to the arguably inadequate facilities observed in three of the community pharmacies visited. Having the right level of skill mix is paramount to community pharmacies providing additional services and enabling all staff groups to extend their role. It is also necessary for community pharmacies to ensure that the infrastructure is in place to meet the requirements of a modern-day pharmacy. However, it is difficult to envisage how some of the cramped and overcrowded community pharmacy case studies in this research can accommodate counselling areas and any other necessary equipment for providing these additional services. These issues are especially apparent when drawing comparisons with community pharmacies in other European countries that are often spacious, free of clutter and portray a highly professional image.

Other differences and similarities are drawn from these six community pharmacy cases with respect to the organisation of work, and the 'dispensary manager' role, areas of responsibility and tasks performed, as well as experience training and qualifications. These are discussed in the following sections.

5.1.2 Organisation of work: the ‘dispensary manager’ role

The ‘dispensary manager’ role that was apparent in each of the community pharmacies in the study is an important finding. Pharmacy managers, owners and dispensary support staff assumed this role both implicitly and explicitly. Those pharmacy staff that performed the ‘dispensary manager’ role worked on a full-time basis and solely in that pharmacy. This gave them the knowledge required to provide a continuous service.

Within this role, the ‘dispensary manager’ took responsibility for overseeing the smooth running of the dispensary-related activities within the context of the services provided, for example, to drug mis-users and nursing and residential homes. Consequently, the ‘dispensary manager’ guided and supervised, rather than closely managed, the tasks and activities performed by others. Often, these activities were undertaken in response to an unpredictable workload and dispensary support staff reacted accordingly. Therefore, there was less of a need to manage their work. This was supported in this study by the strong sense of team-spirit and ability of dispensary support staff to ‘just get on with it’, ‘muck in’ and ‘do whatever needs to be done’. The ‘dispensary manager’ role, then, was more strategic, ensuring that sufficient numbers of staff were deployed in the dispensary to adequately cover the service provision.

Interestingly, the Pharmacy Technician who was allocated the role of ‘dispensary manager’ in Pharmacy C (Explicitly Technician-led) was very prescriptive about which staff undertook what particular tasks. Also, her intense managerial style somewhat stifled the ability of other dispensary support staff to take ownership for their work. This perhaps highlights the importance of delegation as a route to ensuring appropriate levels of skill mix.

This study demonstrates that the pharmacists and dispensary support staff perform this ‘dispensary manager’ role in a similar capacity. This has important implications on the range of additional services that community pharmacies are able to provide. Anecdotally, the large locum workforce currently working in the community sector⁴⁵ is thought to prevent community pharmacies from providing additional services since many are thought to operate on a named-pharmacist basis. However, this research has illustrated that dispensary support staff are competent, and indeed often manage and run community pharmacies that are staffed by locums or pharmacists in similar non-permanent positions. This suggests that community pharmacies could provide extra services, for example, a minor ailments scheme⁴⁶, with an named and appropriately trained ‘dispensary manager’ who is a dispensary support staff member.

5.1.3 Areas of responsibility, and tasks and activities performed

While the pharmacist or a member of the dispensary support staff undertook the role of ‘dispensary manager’, other staff members were allocated or assumed responsibility for a particular area. With the exception of Pharmacy F

(Team-spirit), the community pharmacies in the study provided compliance packs to patients in the community, as well as nursing and residential homes and retirement villages. In all cases one member of the dispensary support staff was charged with the responsibility of managing this service. This was either a Pharmacy Technician, or a dispensary support staff member who was working towards this qualification. The survey showed that not all support staff were responsible for managing a particular service.

While one particular (trainee) Pharmacy Technician managed the service, many of the other dispensary support staff were observed undertaking the operational aspects of the service, including, assembling the compliance packs and dispensing the external preparations. Although they were competent to perform these particular tasks, they were not trained and therefore not competent to engage with the overall management of the service. For example, not all dispensary support staff members were familiar with the details of individual patients and did not know, for example, when their prescription was due to be ordered, or where they resided. Pharmacy A (Distinct Roles) was the only pharmacy in the study to implement a comprehensive SOP for this service. Consequently, *all* of the dispensary support staff that were involved in either the strategic or operational aspects of this service were fully informed and understood the mechanics of this rather complicated system. In contrast, where SOPs were not in place, the dispensary support staff involved with the operational aspects of the service were not familiar with its organisation.

Responsibility for other services provided was found to vary across the community pharmacy cases. Four of the community pharmacies in this study dispensed methadone preparations to drug mis-users. Since a large number of drug mis-users utilised this service provided by Pharmacy A (Distinct Roles), three Pharmacy Technicians organised and managed the service while all other dispensary support staff assembled and dispensed the methadone preparations. Similarly, this pharmacy had a SOP for this service. The methadone prescriptions were dispensed solely by the pre-reg in Pharmacy C (Explicitly Technician-led), equally between the pre-reg and the Pharmacy Technician in Pharmacy F (Team-spirit) and by any one of the dispensary support staff in Pharmacy B (Owner-run).

While all of the pharmacies visited operated a prescription collection and delivery service, this was not necessarily a discrete service that one particular member of the dispensary support staff was responsible for. Often, systems were in place whereby prescriptions were collected at a particular time, and dispensed in time for the delivery. Therefore, dispensary support staff were able to input into the system accordingly.

In terms of the task of dispensing prescriptions, whether collected from the GP surgery, brought in by a patient, faxed or telephoned this research has shown that a range of pharmacy staff, including pharmacists and dispensary support staff, were involved in some or all aspects. Patterns were also identified whereby the pharmacist was considered hands-on and involved with the labelling and assembly, as well as checking of the prescriptions. This was the

case for four of the pharmacies visited (Pharmacy B: Owner-run; Pharmacy D: Implicitly Technician-led; Pharmacy E: United Front and Pharmacy F: Team-spirit). In contrast, in the other pharmacy cases (Pharmacy A: Distinct Roles and Pharmacy C Explicitly Technician-led), how the pharmacist was involved with the dispensing process clearly had an impact on how the dispensary support staff were utilised. There was also a perception by the dispensary support staff that the hands-on pharmacists are in some way 'better'. This was apparent in Pharmacy F (Team-spirit) when the dynamic of the pharmacy team changed in the presence of a locum who would only check the prescriptions, rather than getting involved with the labelling or dispensing of prescriptions. The dispensary support staff considered the locum's behaviour inappropriate. This style of working was completely different to that of the usual Pharmacy Manager who was extremely hands-on. Consequently, the dispensary support staff adjusted their roles in the presence of the locum to compensate for the Pharmacy Manager's absence. More generally across the six community pharmacy sites, the tasks of labelling, assembling, bagging and handing out of prescriptions were undertaken interchangeably and to different degrees by the dispensary support staff in the study.

Interestingly, accuracy checking by members of the dispensary support staff was observed in three of the six community pharmacy cases. In Pharmacy B (Owner-run), this was undertaken by two trainee Pharmacy Technicians and concerned the external preparations accompanying the compliance packs. The Dispensary Manager, who was also a Pharmacy Technician, checked the accuracy of the compliance packs for the homes in Pharmacy C (Explicitly Technician-led). The ACT in Pharmacy E (United Front) checked the compliance packs for patients in the community. Only in this latter pharmacy had the ACT undergone an in-house accredited accuracy checking programme. The ACT could only be implemented once the conditions had been met, including, two Pharmacy Technicians assembling prescriptions. However, these conditions were difficult to meet and this impeded the ACT operating to her full capacity. However, in the less formal and less restrictive environments where the accuracy checkers were not necessarily accredited Pharmacy Technicians, the system was more likely to be operational. Interestingly, the survey showed that accuracy checking in the absence of the pharmacist was not the norm for most respondents.

This summary of the areas of responsibility, as well as tasks and activities undertaken has shown that the role of dispensary support staff has expanded vertically into areas, such as, management of service provision and accuracy checking. While the dispensary support staff have taken on additional tasks and hence have increased their level of responsibility, the pharmacist retains accountability. In these cases, the Pharmacy Owners have largely driven the expansion in the role of their dispensary support staff. By releasing the pharmacist in Pharmacy C (Explicitly Technician-led) from checking the compliance packs for the homes, the pharmacy has become an LPS level two pilot site and is hoping to introduce a minor ailments scheme. In Pharmacy B (Owner-run), the Pharmacy Owner has redeployed his time to concentrate on extending his ownership from one to three and potentially more community pharmacies. However, the introduction of the ACT in Pharmacy E (United

Front) had only enabled the Pharmacy Manager to take a lunch break and released her from checking compliance packs, owing to the stringent conditions.

There appears to be a trade-off between ensuring safe practices and stifling innovative models of skill mix. This is demonstrated in the community pharmacies where accuracy checkers were operating. The restrictive, and one could argue safer, systems that were in place for the ACT prevented her from functioning as an accuracy checker. Where the accuracy checker roles have developed in the other two pharmacies in the study, this has not been accompanied with the implementation of safe systems. This is in sharp contrast to three comparator countries, visited in a previous study, where the IT incorporates a series of internal checks to ensure that the role of the Pharmacy Technician has expanded within a safe system³¹.

This study has also highlighted that although dispensary support staff were involved with many different aspects of the different services provided by the six community pharmacies in this study, they ranged in experience, level of qualification and training. The importance of experience and informal training over qualifications in relation to extended role is discussed in more detail in Section 5.1.4 next.

5.1.4 Experience, pharmacy qualifications and training

The dispensary support staff in this study were predominantly female and ranged from being unqualified to working towards, or having already achieved their dispensing qualifications, including: Dispensing/Pharmacy Assistant and Pharmacy Technician. Notably, dispensary support staff working in these six case studies had acquired a wealth of pharmacy experience. In crude terms, the 21 dispensary support staff, from whom information was gathered, had nearly 300 years of pharmacy experience between them. They were also very committed and loyal to the community pharmacy where they worked, having often worked in that same pharmacy for many years. The tasks and activities that the dispensary support staff performed, as well as areas of responsibility assumed varied. However, there appeared to be no link between the level of responsibility and qualifications. For example, only one of the four dispensary support staff members operating as accuracy checkers were accredited. Decisions concerning which particular member of the dispensary support staff was charged with performing additional tasks were taken by either the Pharmacy Manager or the Pharmacy Owner. These decisions appeared to be based on trust, rather than on dispensing qualifications. In these cases, the dispensary support staff members were very experienced and had an established working relationship with the pharmacists. This helped to inform the pharmacists' judgement about the capabilities of dispensary support staff members.

Decisions about extending the role of particular members of the dispensary support staff were shared and inclusive. This is perhaps why becoming an accuracy checker was more achievable for the Pharmacy Technician in

Pharmacy C (Explicitly Technician-led) than it was for the ACT in Pharmacy E (United Front). In the latter case, this role extension was driven by the company as a whole, but not necessarily in partnership with the individual pharmacy. Therefore, that the pharmacy as a whole was not 'signed-up' to the role change is likely to explain why the ACT experienced a degree of resistance. Sadly, disappointment and a lack of acceptance by others of her ACT role has led this individual to re-consider her future career within the company, after several years of commitment, dedication and loyalty to that same company.

During the course of gaining experience, the dispensary support staff received a combination of informal, ad hoc 'on-the-job' training and formal training, largely working towards a dispensing qualification. The informal training was likely to involve learning the practical aspects of the job, often by shadowing or receiving explanations from another dispensary support staff member or the pharmacist. In terms of the formal training towards dispensing qualifications, several issues emerged as impediments to dispensary support staff undertaking it. Barriers related to a lack of support, albeit from the training provider or the pharmacy owner and included: insufficient training time and inadequate support for the theoretical components. Other obstacles to undertaking formal training related to heavy workloads and inadequate facilities. However, the survey showed that support staff were willing to undertake further training during work time.

Completing formal dispensing qualifications was perceived as a means of gaining official status as a Dispensing/Pharmacy Assistant, Pharmacy Technician or an accuracy checker, and in some cases, receiving a salary increase. There was a perception that the job itself did not change on completion of their dispensing qualification. Rather, the dispensary support staff had acquired the knowledge that underpinned their job. This perhaps also helps to explain why the pharmacist valued the competence and experience of the dispensary support staff over official dispensing qualifications when allocating additional tasks and delegating specific areas of responsibility.

Dispensary support staff undertaking and completing dispensing qualifications was also considered an exercise to meet the forthcoming regulation of introducing a minimum standard of competence. They are therefore expected to overcome the barriers to training identified to comply with the new requirements. Notably, the dispensary support staff interviewed in this study had a very limited understanding of the regulatory reforms that are effective from 2005. This was supported with findings from the survey where the majority of respondents stated that they did not understand these regulatory reforms. Often, the Pharmacy Owner or Pharmacy Manager was the only source of information concerning these changes. Consequently, how informed the dispensary support staff were about the regulatory reforms and their implications depended on the pharmacists' knowledge and understanding of these matters. If dispensary support staff were not proactive in seeking out this information, for example, by perusing *The Pharmaceutical Journal*, then

they relied on the pharmacist cascading and sharing this information with them.

6 Conclusions and recommendations

This study has demonstrated the complexity and diversity in community pharmacy. The six community pharmacies visited have also illustrated the variation in terms of how dispensary support staff and work are configured. Structural as well as cultural factors are important factors when considering the reasons for differences in how the dispensary support staff are utilised i.e. the skill mix across these community pharmacy cases.

Common to all the community pharmacies visited in the study was the role of 'dispensary manager' performed by either a pharmacist or a member of the dispensary support staff. In contrast, how the dispensary support staff were utilised across the community pharmacy cases varied. Some cases were examples of the pharmacist and dispensary support staff staying within the traditional boundaries of their roles. However, others were examples of community pharmacies that employed innovative models of skill mix. Dispensary support staff now performed tasks traditionally undertaken by the pharmacist, for example, accuracy checking compliance packs. This had enabled the pharmacist to concentrate on providing additional services through the LPS scheme, or in another case, the Pharmacy Owner extending his business ownership. Although not always accredited, the role of accuracy checker was more successful in the community pharmacy cases where there was a drive from the pharmacist and a willingness to delegate, trust and understanding between them and the accuracy checker and a shared and common goal. Where these were lacking, the role of accuracy checker was not as effective, as in the case of Pharmacy E (United Front).

As Hassell *et al*¹⁹ concluded from their study and as exemplified in the research presented in this report, one model of skill mix cannot fit all community pharmacies. This research suggests that decisions about how dispensary support staff are utilised are more appropriately made at an individual community pharmacy level. This would allow the important structural and cultural factors, identified in this study, such as the type of pharmacy, as well as relationships between the pharmacists and the dispensary support staff to be considered. However, while there needs to be flexibility around skill mix decisions, this should be within a fixed regulatory framework, with clarity of roles and clear lines of accountability. One inference drawn from this study suggests that some community pharmacies, particularly the independent-type, have operated innovative models of skill mix, for example, dispensary support staff as accuracy checkers, for some time. In the process of implementing the regulatory framework, caution should be exercised to avoid stifling good examples of skill mix models. Clearly, pharmacists value other factors that assure competence of dispensary support staff, such as experience and trust, as equally, or more important than

simply holding a dispensing qualification or 'piece of paper'. How these factors can be incorporated into the regulatory reforms is likely to prove a challenge to RPSGB. However, undertaking CPD as part of the regulation and registration of Pharmacy Technicians will be an opportunity for them to demonstrate, through their portfolios of evidence, their competence to perform additional tasks. In time, Dispensing/Pharmacy Assistants will perhaps compile their portfolios of evidence in a similar fashion. Interestingly, some Pharmacy Technicians may be quicker to engage with CPD than pharmacists have, given their competence-based approach, providing written evidence to gaining their NVQ level 3 qualifications.

More generally, RPSGB has a wider role to play in educating pharmacists and dispensary support staff about innovative skill mix practices within the context of the regulatory reforms and with a view to community pharmacies providing additional services. These in turn will help to meet local health needs and enable community pharmacists to develop their role as outlined in the new pharmacy contract. However, for RPSGB to achieve this, there needs to be more effective methods of communication with the dispensary support staff. This study has highlighted the lack of knowledge and understanding of the regulatory issues by the dispensary support staff. However, the difficulties in accessing dispensary support staff, as illustrated by the methodological problems encountered in the survey, is likely to be a barrier to opening up channels of communication with them. RPSGB could perhaps overcome these barriers by hosting road shows or disseminating newsletters, which communicate key messages to dispensary support staff to ensure that they understand the full implications of being regulated.


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8 Appendices

Appendix 1: Stage 1 – dispensary support staff questionnaire



THE UNIVERSITY
of MANCHESTER

DISPENSARY SUPPORT STAFF QUESTIONNAIRE:
PLEASE FILL IN IF YOU ARE INVOLVED IN ANY DISPENSING ACTIVITY

This is a short questionnaire to find out some general information about your background. This will help to build up a picture about the different type of people who work in your pharmacy.

- What is your job title? _____
- How long have you worked in pharmacy? _____ years _____ months
- How long have you worked in your current job? _____ years _____ months
- On average, how many hours do you work each week? _____ hours
- Do you have/are you currently doing any of the following qualifications? (please tick which ones)

	Already have	Currently doing	Don't have
Medicines Counter Assistant	<input type="checkbox"/> ¹	<input type="checkbox"/> ²	<input type="checkbox"/> ³
NPA dispensing technician	<input type="checkbox"/> ¹	<input type="checkbox"/> ²	<input type="checkbox"/> ³
City and Guilds dispensary certificate	<input type="checkbox"/> ¹	<input type="checkbox"/> ²	<input type="checkbox"/> ³
Society of Apothecaries examinations	<input type="checkbox"/> ¹	<input type="checkbox"/> ²	<input type="checkbox"/> ³
S/NVQ Level 3 Pharmacy Services	<input type="checkbox"/> ¹	<input type="checkbox"/> ²	<input type="checkbox"/> ³
BTEC/ScotVec in Pharmaceutical Services	<input type="checkbox"/> ¹	<input type="checkbox"/> ²	<input type="checkbox"/> ³
Other (please describe) _____	<input type="checkbox"/> ¹	<input type="checkbox"/> ²	<input type="checkbox"/> ³

- Are you:

Male	<input type="checkbox"/> ¹	Female	<input type="checkbox"/> ²
------	---------------------------------------	--------	---------------------------------------
- Which ethnic group would you describe yourself as belonging to:

White	<input type="checkbox"/> ¹	Black – Caribbean	<input type="checkbox"/> ⁶
Indian	<input type="checkbox"/> ²	Black – African	<input type="checkbox"/> ⁷
Pakistani	<input type="checkbox"/> ³	Black – Other	<input type="checkbox"/> ⁸
Bangladeshi	<input type="checkbox"/> ⁴	Any other ethnic group	<input type="checkbox"/> ⁹
Chinese	<input type="checkbox"/> ⁵		
- Do you have any dependents under the age of 19? Yes ¹ => how many? ____
No ²
- What is your date of birth? _____
- What is your marital status? (please tick)

Married/living as married	<input type="checkbox"/> ¹	Separated/divorced	<input type="checkbox"/> ³
Single	<input type="checkbox"/> ²	Widowed	<input type="checkbox"/> ⁴

To help with my understanding of the findings overall, would you mind providing your name: _____

NB. All information provided, including your name, will be treated CONFIDENTIALLY
THANK YOU VERY MUCH FOR COMPLETING THIS QUESTIONNAIRE

Appendix: 2: Stage 1 – community pharmacy data collection form.



PHARMACY PROFILE

Name:

Location:

- Inner city ¹ Rural ⁴
 Suburb ² Other ⁵
 Town ³

Pharmacy type:

- Independent ¹
 Part of a small chain (<10) ²
 Part of a large chain (>10) ³
 Supermarket ⁴

Number of pharmacists employed in the pharmacy? _____

Number of items dispensed per month, on average? _____

% of average monthly turnover which is NHS prescriptions? _____

Pharmacy services provided:

- Patient medication records ¹ Oxygen delivery ⁵
 Diagnostic testing ² Methadone ⁶
 Services to residential homes ³ Prescription collection ⁷
 Needle exchange ⁴ Prescription delivery ⁸

Other initiatives?

- LPS ¹
 ETP ²
 Repeat dispensing scheme ³
 Medicines management schemes: NPC ¹ PSNC ² None ³

	Non levy		Pill		Levy		No charge items?	Walk-in items	Colf' items	Nursing home items	Methadone Rx's	Total no of items
	Forms	Items	Forms	Items	Forms	Items						
Mon												
Tues												
Wed												
Thur												
Frid												

Appendix 3: Stage 2 - Community Pharmacy Support Staff Questionnaire



COMMUNITY PHARMACY SUPPORT STAFF WORKFORCE SURVEY

This is a short questionnaire about support staff who work in community pharmacy and their views and experiences of working in this area. This information will help to build up a picture of the different types of people who work in pharmacy, so that the profession can meet their needs more appropriately.

NB. All information provided will be treated **CONFIDENTIALLY**
This questionnaire will take approximately 10-15 minutes to complete.

About the pharmacy you work in ...

1. Please describe the type of pharmacy you work in:

- Independent ¹
- Small-chain (2-4 branches) ²
- Medium-chain (5-25 branches) ³
- Large-chain (more than 25 branches) ⁴
- Supermarket ⁵
- Healthcentre ⁶

2. Approximately how many prescription items are dispensed in this pharmacy each month?

- 1,999 items or less ¹
- More than 2,000 but less than 3,999 ²
- More than 4,000 but less than 4,999 ³
- More than 5,000 but less than 5,999 ⁴
- More than 6,000 but less than 6,999 ⁵
- More than 7,000 ⁶

3. How many hours is this pharmacy open each week?

- 39 hours a week or less ¹
- Between 40 and 49 hours a week ²
- Between 50 and 59 hours a week ³
- More than 60 hours a week ⁴

4. Which of the following services does the pharmacy that you work in provide?

- Oxygen ¹
- Services to residential &/or nursing homes ²
- Prescription collection ³
- Prescription delivery ⁴
- Diagnostic testing ⁵
- Methadone ⁶
- Needle exchange ⁷
- Local Pharmaceutical Service (LPS) scheme ⁸
- Medicines management scheme ⁹
- Repeat dispensing scheme ¹⁰

5. Which of the following pharmacists work in your community pharmacy? (Please tick all that apply)

- Pharmacy Owner ¹
 Permanent Pharmacy Manager ²
 Permanent second Pharmacist ³
 Non-Permanent Pharmacist (i.e. locum) ⁴

About your job ...

6. What is your job title? _____

7. In total, how long have you worked in pharmacy? (exclude time off for having children etc)

_____ years _____ months

8. How long have you worked in THIS pharmacy?

_____ years _____ months

9. On average, how far do you travel to work each day? _____ miles

10. On average, how many hours do you work each week? _____ hours

11. What is your hourly rate?

- Less than £3.99 an hour ¹
 Between £4.00 and £4.99 ²
 Between £5.00 and £5.99 ³
 Between £6.00 and £6.99 ⁴
 Between £7.00 and £7.99 ⁵
 Between £8.00 and £8.99 ⁶
 Between £9.00 and £9.99 ⁷
 £10.00 or more ⁸

12. Do you have/are you currently/intend to do any of the following qualifications? (please tick all that apply - if unsure please see list of courses at the end of the questionnaire)

	Already have	Currently doing	Intend to do
Medicines Counter Assistant (or equivalent)	<input type="checkbox"/> ¹	<input type="checkbox"/> ²	<input type="checkbox"/> ³
Dispensing/Pharmacy Assistant(or equivalent)	<input type="checkbox"/> ¹	<input type="checkbox"/> ²	<input type="checkbox"/> ³
Pharmacy Technician (or equivalent)	<input type="checkbox"/> ¹	<input type="checkbox"/> ²	<input type="checkbox"/> ³
Accuracy Checking	<input type="checkbox"/> ¹	<input type="checkbox"/> ²	<input type="checkbox"/> ³

13. Work satisfaction: please indicate how satisfied you are with each of the various aspects of your job, identified below:

Please circle on the scale, where: 1 = extreme dissatisfaction, 7 = extreme satisfaction							
Physical working conditions	1	2	3	4	5	6	7
Freedom to choose your own methods of working	1	2	3	4	5	6	7
Your colleagues and fellow workers	1	2	3	4	5	6	7
Recognition you get for good work	1	2	3	4	5	6	7
Amount of responsibility you are given	1	2	3	4	5	6	7
Your remuneration (salary)	1	2	3	4	5	6	7
Your opportunity to use your abilities	1	2	3	4	5	6	7
Your hours of work	1	2	3	4	5	6	7

2

Amount of variety in your job	1	2	3	4	5	6	7
Patient contact	1	2	3	4	5	6	7
Taking everything into consideration, how do you feel about your job	1	2	3	4	5	6	7

14. Please indicate, by circling the number, to indicate your level of agreement with the following statements, where:

Strongly disagree Disagree Neutral Agree Strongly agree
1 2 3 4 5

- a) I play a pivotal role in this pharmacy
1 2 3 4 5
- b) I am responsible for the overall management of the dispensary
1 2 3 4 5
- c) I am responsible for supervising other members of staff
1 2 3 4 5
- d) I am responsible for the overall management of a specific area(s) within the pharmacy e.g. dispensing methadone preparations, services to nursing or residential homes
1 2 3 4 5
- e) I currently check the accuracy of dispensed medicines without the pharmacist supervising me
1 2 3 4 5
- f) I consider my job a career
1 2 3 4 5
- g) I would like to develop my skills in a clinical area, e.g. asthma, diabetes
1 2 3 4 5
- h) I would like to develop my business skills e.g. personnel management
1 2 3 4 5
- i) I would like to have an educational role in my pharmacy e.g. training and developing others
1 2 3 4 5
- j) I am prepared to do further training in work time
1 2 3 4 5
- k) I am prepared to do further training outside work time
1 2 3 4 5
- l) I would like to own or part-own a registered pharmacy
1 2 3 4 5
- m) I understand what regulation of pharmacy support staff by the Royal Pharmaceutical Society of Great Britain (RPSGB) means
1 2 3 4 5

<u>Strongly disagree</u>	<u>Disagree</u>	<u>Neutral</u>	<u>Agree</u>	<u>Strongly agree</u>
1	2	3	4	5

n) There should be a minimum standard of competence for all staff involved in the aspects of the dispensing process that are relevant to their job.

1 2 3 4 5

o) Staff carrying out accuracy checks of prescription medicines using Standard Operating Procedures, but without the supervision of the pharmacist, should be qualified to S/NVQ Level 3 (or equivalent)

1 2 3 4 5

15. Are you a member of The Association for Pharmacy Technicians UK?

Yes ¹ No ² No, but I intend to become a member ³

About what you intend to do in the future ...

16. In the future, I intend to (tick all that apply):

- a) Register as a Pharmacy Technician with RPSGB ¹
- b) Register as a Dispensing/Pharmacy assistant with RPSGB ²
- c) Continue to work in pharmacy, but not register with RPSGB ³
- d) Leave community to work in hospital pharmacy ⁴
- e) Leave community pharmacy to work in another pharmacy sector (e.g. primary care) ⁵
- f) Leave pharmacy completely ⁶

About you ...

17. Are you:

Female ¹ Male ²

18. Which ethnic group would you describe yourself as belonging to:

- White ¹
- Black or Black British ²
- Mixed ³
- Asian or Asian British ⁴
- Chinese ⁵
- Other ethnic group ⁶
- Refused ⁷

19. Do you have any dependents under the age of 19?

Yes ¹ ⇒ how many? _____ No ²

20. What is your marital status? (please tick)

Married/living as married ¹ Separated/divorced ³
 Single ² Widowed ⁴

21. What is your age? _____

22. Are you the main breadwinner in your family?

Yes ¹ No ²

NB. All information provided will be treated CONFIDENTIALLY
THANK YOU VERY MUCH FOR COMPLETING THIS QUESTIONNAIRE

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FURTHER INFORMATION TO HELP ANSWER QUESTION 11 ON QUALIFICATIONS

Medicines Counter Assistant

Cambridge Counterpart Course
Medicines counter assistants (Buttercups)
Medicines counter assistants training programme (AAH/Lloyds/Celesco AG)
Pharmacy assistants course (Tesco Stores)
Pharmacy Interact (NPA)
Sales of medicines course (Moss)
The healthcare assistant's course (Boots)

Dispensing/pharmacy assistant

Boots Pharmacy assistants training course
Buttercups Dispensing assistant course
Lloydspharmacy Dispensing assistant training course/
dispensers training programme
NPA dispensary assistants' course

Pharmacy technician

S/NVQ level 3 in Pharmacy Services
BTEC national Certificate in Science (pharmaceutical)
BTEC national Certificate in Applied Science (pharmaceutical)
BTEC national Certificate in Pharmacy Services
SCOTEC National Certificate in Pharmaceutical Science
SCOTVEC National Certificate in Pharmaceutical Science
SQA National Certificate in Pharmaceutical Science
City and Guilds of London Institute, Dispensing Technicians Certificate
Certificate of the Society of Apothecaries
Dispensing Certificate of the Royal Army Medical Corps or the Royal Air Force
NPA 2-year Dispensing Technicians correspondence course completed prior to 1998
Boots 2-year dispenser training programme completed prior to 1993
Boots 1-year dispensing assistants' course from 1993 onwards



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Presentations relating to this research

Mullen R, 'Skill mix in community pharmacy, exploring and defining the role of dispensary support staff' Practice Research Awards Seminar. London: RPSGB, 21 April 2004.

Mullen R, Hassell K, Noyce PR. 'Skill mix in community pharmacy: a case study approach to explore the activities of dispensary support staff'. London: www.hsrpp.org.uk/abstracts_2004.shtml

Mullen R, Hassell K. 'Skill mix in community pharmacy, exploring and defining the role of dispensary support staff.' 6th Annual Conference of the UK Federation of Primary Care Research Networks. 24/25 November 2003. Birmingham.