

**COLLABORATIVE PRESCRIBING WITHIN THE OPIOID
SUBSTITUTION TREATMENT PROGRAM IN
SOUTH AUSTRALIA**

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I dedicate this thesis to my Father

Ly Luan Le

You dedicated your life to your family and community

You succeeded despite hardship and taught me to succeed despite hardship

You had the potential and the dream to pursue your PhD,

but never the opportunity

I share your love of knowledge and have fulfilled your dream now.

Statement

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Glossary

Term	Definition
Community pharmacy	A community pharmacy deals directly with consumers in their local area. It has responsibilities including the checking, dispensing and supply of medicines in accordance with the prescription or, when legally permitted, the sale of medicines without a prescription. Other professional activities include patient counselling and compounding of medications. There is a legal requirement for a registered pharmacist to be on site.
Consumer	Any member of the public who uses, has used or is a potential user of a health service.
Dependent prescriber	Dependent prescribers do not establish the patient's diagnosis, but they carry out ongoing patient care roles. Under this arrangement, the doctor (independent prescriber) diagnoses; then the dependent prescriber monitors and continues the patient's treatment.
Detoxification/ withdrawal program	A process which involves the transfer of patients from an opioid to a drug-free state through the provision of reduced doses of buprenorphine/naloxone over a period of days.
Drug and Alcohol Services South Australia (DASSA)	<p>Drug and Alcohol Services South Australia (DASSA) is a statewide health service and is responsible to the Minister for Mental Health and Substance Abuse. It is governed by the South Australian Department for Health and Ageing and addresses alcohol, tobacco, and pharmaceutical and illicit drug issues across the state.</p> <p>The DASSA pharmacy is a specialist clinic pharmacy and is not defined as either a community or hospital pharmacy.</p>
Drugs of Dependence Unit (DDU)	The Drugs of Dependence Unit (DDU) is a regulatory body responsible for administering those parts of the <i>Controlled Substances Act 1984</i> relating to drugs of dependence.
Independent prescriber	Independent prescribers have sole responsibility for the patient's assessment, diagnosis and clinical management.
Medicare	Medicare is Australia's universal public health system. Australian citizens and permanent residents have access to free treatment in public hospitals. They can also receive subsidised treatment from medical practitioners, eligible midwives, nurse practitioners and allied health professionals who have an allocated Medicare provider number.

Non-medical practitioner/prescriber	Prescribing of medication by specially trained health professionals, other than doctors and dentists, working within their clinical competence as either independent and/or dependent prescribers.
OST	Opioid substitution treatment. Refers to methadone, buprenorphine or buprenorphine/naloxone treatment for opioid-dependent patients
Patient	Registered user of the health care service provider.
Pharmaceutical Benefits Scheme (PBS)	The Pharmaceutical Benefits Scheme (PBS) provides Australian citizens and permanent residents with access to affordable and timely prescription medications. The PBS subsidises the cost of listed prescription medicines, making access to medications more affordable for all Australians.
Scope of practice	The area and extent of practice for a health professional with consideration of their education, experience, expertise and demonstrated competency.
Take-away dose	A dose that is consumed by an opioid substitution treatment (OST) patient without supervision by a health professional. Take-away doses require specific preparation to ensure that the dose is administered correctly and safely without supervision.

Abstract

In Australia, the demand for prescribers to service opioid substitution treatment (OST) patients exceeds the interest of general practitioners in fulfilling this prescribing role. One response to meet unmet prescribing demands which has been introduced internationally is the use of pharmacist prescribing for a range of chronic medical conditions, including for OST.

In this thesis, I explore a policy proposal for pharmacists to prescribe OST collaboratively (co-prescribing) with doctors. To examine this policy and its implications, I collected data from three sources: face-to-face interviews with 14 OST patients, three focus group interviews with 18 South Australian pharmacists and a study tour of pharmacist prescribing in Alberta, Canada and California, USA. A total of 28 key informants were met with during the study tour. This included people based in a range of research/academic units (5), policy/governance bodies (3), clinical sites where pharmacist prescribing was practised (12) and sites which provided an understanding of the health care system (8).

My key findings are as follows.

First, OST patients had varied experiences with the existing model of care. They reported varying levels of treatment access, varied degrees of pharmacist supervision and a lack of continuity of care from clinic doctors. They also displayed a range of attitudes toward the need for privacy. Although most patients valued privacy to some degree, not all did: indeed, the same layout was experienced and perceived differently by different patients.

Second, the current model of OST care draws on a prescription approach to pharmacy practice, whereas co-prescribing is more aligned with patient-centred care. Under the current model of care, pharmacists are limited in their ability to actively respond to OST patient needs because their activities are primarily focused on the prescription directions. In contrast, pharmacist co-prescribing can deliver aspects of patient-centred care that cannot be provided as effectively through conventional care. It offers flexibility for the pharmacist to respond to the patient's needs. This includes enhanced patient participation in treatment decisions, access to treatment and respect/privacy. Co-prescribing also offers

continuity of treatment care due to the therapeutic relationship which already exists between a pharmacist and a patient from supervised dosing.

Third, the experience of Albertan and Californian pharmacist prescribers suggests that it should be possible for Australian pharmacists to pursue similar responsibilities. These roles are possible in both hospital and community pharmacy settings, provided key facilitators are addressed.

My research acknowledges that there are various challenges for pharmacist prescribing. However, the perspectives of the patients and pharmacists in my study, in conjunction with insights from Alberta and California, can be used to formulate a strategy for collaborative prescribing for OST patients in South Australia.

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Chapter 1 Introduction

1.1 The research problem

Opioid dependence is a chronic and relapsing medical condition and its harms to both individuals and the community are extensively documented. It has substantial costs to the community in terms of associated criminal activity, health care costs, loss of productivity from premature death or dysfunction, social welfare and work absences.⁽¹⁾ Other risks of injecting drug use include premature death; an increased risk of blood-borne disease transmissions (such as HIV and hepatitis B and C); and high social and economic costs associated with criminal activity or dysfunction^(2,3) as a result of funding drug use. Worldwide, one in every 10 HIV-infected persons is an injecting drug user⁽²⁾ and 83 percent of hepatitis C cases in Australia are contracted by injecting drug use.⁽⁴⁾ There is a strong connection between opioid dependence and criminal behaviour to fund drug purchases and the enactment of crime under the influence of drugs.⁽³⁾

Harm reduction policies aim to reduce the harms of illicit drug use for both individuals and the community. These policies acknowledge that illicit and licit drug use creates high costs to both society and individual users, and therefore they aim to reduce the harms that result from such activities. These policies were adopted by Australia in the 1980s in response to the increasing HIV rate amongst injecting drug users. The approach has seen the provision of harm reduction programs including OST (opioid substitution treatment) and the establishment of the Clean Needle Program. These policies are also supported internationally in some European countries, Asia and Canada.^(2,3)

OST involves the use of a prescribed opioid such as methadone or buprenorphine to assist opioid-dependent patients to implement lifestyle changes necessary for their recovery. It is designed to assist patients to achieve a reduction in, or total abstinence from, the use of illicit opioids as well as a reduction in drug-related crime.

There is strong evidence supporting the cost-effectiveness of OST for opioid-dependent individuals. Commencement on OST has been shown to significantly reduce robbery⁽⁵⁾, property crime, drug dealing and violence.⁽⁶⁾ It is estimated that for every dollar invested in OST programs, there is a cost saving of between four to seven dollars to the community

through a reduction in drug-related crime, theft and incarceration costs.⁽³⁾ Commencement in the OST program reduces heroin use and thus injecting drug use which reduces the risk of blood-borne disease transmission. By providing access to OST to approximately 39,000 people in Australia⁽⁷⁾, the risk of mortality, crime and blood-borne disease transmission is reduced in the community.

Nationally, Australia has a rate of HIV infection amongst injecting drug users of 1.2 percent.⁽⁸⁾ In contrast, a reported rate of 12 percent of HIV infections in the USA are from injecting drug use.⁽⁹⁾ OST is well supported by international organisations including the World Health Organization, United Nations Office on Drugs and Crime, and the Joint United Nations Programme on HIV/AIDS (UNAIDS)^(2,3) due to its effectiveness.

In Australia, the demand for the OST program outstrips the availability of medical prescribers for OST. Quantifying unmet patient treatment places for OST is difficult both juristically and nationally. Although Australia lacks a system to quantify the demand for OST, through a crude calculation, there are an estimated 10,000–30,000 unmet OST places.⁽¹⁰⁾ However, these estimations are believed to under-report the number of users owing to the selection criteria of the general population sample that was used.⁽¹¹⁾

The most important reason for the imbalance between supply and demand is the shortage of medical practitioners able and/or willing to prescribe OST. Recruiting medical prescribers for the OST program has been an ongoing challenge both nationally and in South Australia (SA). The National Centre for Education and Training on Addiction (NCETA) acknowledges that the provision of education and training to general practitioners (GPs) alone is an inadequate solution⁽¹²⁾ to meet the demand for OST: it is clear that demand for treatment is greater than the interest of GPs in filling the required prescriber role. Barriers to GPs prescribing OST include colleague and practice staff disapproval, existing heavy workload, poor remuneration or past negative experiences^(13,14,15), and lack of knowledge and confidence to work with substance misuse patients.^(14,15) Furthermore, the mature age of the existing private prescribers, the high proportion of trained but inactive prescribers⁽¹⁶⁾ and the reluctance of new prescribers to pursue accreditation severely limit treatment vacancies in the short- and long-term future.

Alternative models to provide this service need to be investigated. One possible alternative is for pharmacists to prescribe collaboratively with an accredited doctor. This thesis explores the potential for this prescribing model using findings from:

- Qualitative semi-structured face-to-face interviews with 14 OST patients,
- Three focus group interviews with 18 pharmacists, and
- A study tour of Alberta, Canada and California, USA.

Using the data collected, I will show that:

- The patient and pharmacist stakeholders interviewed welcomed pharmacist co-prescribing for OST, subject to particular provisions.
- Pharmacist co-prescribing for OST patients in a community setting offers a model that is more aligned to the principles of patient-centred care (PCC).
- Solutions to the identified challenges of pharmacist prescribing can be drawn from international practice.

1.2 Thesis aim and research questions

1.2.1 Thesis aim

The aim of this thesis is to explore (describe and explain) the potential implementation of pharmacist collaborative prescribing (co-prescribing) with medical practitioners for OST patients from the perspectives of pharmacists and patients.

1.2.2 My research questions

The thesis will address the following research questions:

- 1: What are patients' experiences with the existing model of care for OST, including their experience of privacy in the pharmacy?
- 2: What views do patients have about doctors and pharmacists co-prescribing for OST?
- 3: What views do pharmacists hold on co-prescribing with doctors for OST?

4: What are the facilitators and barriers to the implementation of pharmacist prescribing in the United States (USA) and Canada?

1.3 Terminology

A number of terms are used interchangeably throughout this thesis. In the patient chapters (Chapters 5 to 7), the term ‘participant’ is used interchangeably with ‘patient’ and refers to the patients who I interviewed. In the pharmacist findings chapter (Chapter 8), the term ‘participant’ is used interchangeably with ‘pharmacist’ and refers to the pharmacist focus group participant. OST is the term used to describe methadone and buprenorphine treatment for opioid-dependent patients. It can also be referred to generally as treatment for opioid dependency, or opioid pharmacotherapy. Therefore, the terms OST, opioid dependency and opioid pharmacotherapy will be used interchangeably throughout this thesis.

1.4 Thesis structure

My thesis has 11 chapters with five of these chapters presenting my findings. Following this first introductory chapter, Chapter 2 describes the context for my research in SA. Chapter 3 provides a literature review on pharmacist prescribing and OST and Chapter 4 describes my thesis methods.

Chapters 5 to 7 present the findings from interviews with patients. In these interviews, I explored patients’ opinions about a policy proposal^a that pharmacists be allowed to co-prescribe methadone and buprenorphine for opioid dependence in collaboration with doctors. Chapter 5 explores patients’ experiences with current OST prescribing arrangements. It focuses on patients’ experiences of access to initial treatment and their concerns about existing treatment arrangements. Chapter 6 focuses on OST patients’ views about the policy proposal, including the facilitators and barriers to a co-prescriber model of

^a In this thesis, the term ‘policy proposal’ refers to concept I propose that that pharmacists be allowed to co-prescribe methadone and buprenorphine for opioid dependence in collaboration with doctors.

treatment care, as well as potential pharmacist co-prescriber roles. Chapter 7 then discusses patients' views on their privacy when accessing OST at a community pharmacy.

Chapter 8 reports on my second qualitative study which used focus groups with pharmacists to explore their views on pharmacist co-prescribing OST in collaboration with doctors. I will show that the pharmacist focus group participants held a range of views about pharmacist co-prescribing for OST.

The lessons learnt from the study tour are presented in Chapter 9. I visited a broad range of health areas in community and hospital settings where pharmacist prescribers practised. In this chapter, I report on my insights gained from a study tour of pharmacist prescribing practices in Alberta, Canada and California, USA.

My final two chapters discuss my thesis findings, conclusions and future directions. In Chapter 10, I draw on and examine areas of commonality between my findings and, in particular, describe the key themes which recur across my findings. Finally, in my last chapter, I outline the conclusions which stem from all of the above. Additionally, I provide recommendations for future directions with a policy perspective based on the findings: this includes the major considerations in the implementation of pharmacist co-prescribing for OST.

Chapter 2 The background and context for my research

This chapter provides an overview of the context in which my research was conducted. Background information about the country in which my research is placed will be presented in two sections. Firstly, a brief outline of the health care system and the pharmacist workforce in Australia will be outlined. Secondly, the context of OST in Australia and SA will be described. This will include an overview of patients, medical prescribers and pharmacy providers for OST in SA. This background information will show that community pharmacists in SA already play an important role in OST.

2.1 Australian health care system

The Australian health care system is supported by both private and public health care providers. The delivery of these two sectors aims to provide equity of access, choice and quality of health care providers for all Australians.⁽¹⁷⁾ The Australian government, that is, Federal and State governments, are the largest funders of health services in Australia.⁽¹⁸⁾

Australia's two major national health care subsidy schemes are Medicare and the Pharmaceutical Benefits Scheme (PBS).⁽¹⁷⁾ Medicare is the nation's publicly funded universal health care system. Australian citizens and permanent residents receive free treatment in public hospitals and subsidised treatment from medical practitioners, eligible midwives, nurse practitioners and allied health professionals who have an allocated Medicare provider number. The PBS provides Australian residents with access to affordable and timely prescription medications. The Australian Federal government funds the PBS, subsidising the cost of listed prescription medicines, to make access to medications more affordable for all Australians.⁽¹⁹⁾ The Federal government funds Medicare and the PBS whereas the State governments are responsible for funding public hospitals.⁽¹⁸⁾ Given that the State governments receive partial funding allocations from the Federal government specifically for health care, the Federal government therefore is the predominant funder of Australian health care.

2.1.1 Pharmacists and the pharmacy workforce in Australia

A brief background about pharmacists and the pharmacy workforce in Australia is provided in this section. This includes an outline of the training and registration process for Australian pharmacists, employment distribution and workforce projections. Information about medicine schedules and developments in health informatics are also covered. In addition, descriptions of the typical Australian community pharmacy layout, traditional funding arrangements for community pharmacies and emerging sector challenges are summarised.

Becoming a registered pharmacist in Australia is a five-year process. The Bachelor of Pharmacy (B.Pharm) is a four-year full-time program which, followed by successful completion of an internship, leads to registration as a pharmacist in Australia. Options for entry into the profession include community, hospital or industrial pharmacy practice. Australian university pharmacy schools focus on developing graduates with knowledge of clinical pharmacy skills.⁽¹⁸⁾ Following graduation, interns are required to pass written and oral competency assessments prior to being eligible for registration. The Pharmacy Council of Australia is responsible for accrediting pharmacy schools, programs and intern training programs.⁽²⁰⁾

Community pharmacy is the predominant Australian pharmacist employer. There is a legal requirement for a registered pharmacist to be present at a community pharmacy. Eighty percent of all registered Australian pharmacists are employed in one of approximately 5,000 community pharmacies. In 2011, there were approximately 26,000 registered Australian pharmacists. Approximately 21,000 registered pharmacists worked in community pharmacies and 4,000 registered pharmacists worked in either the public or private hospital system.⁽¹⁸⁾ Workforce projections by the Pharmacy Guild^b of Australia and the Pharmaceutical Society of Australia^c have concluded that there is an oversupply of Australian pharmacists, due to an exponential growth in undergraduate student places. The Pharmacy Workforce Planning Study⁽²¹⁾ found that there will be an additional 11,237 full-time pharmacists in the Australian workforce by 2025. *The Issues Paper on the Future of Pharmacy in Australia* by the Pharmaceutical Society of Australia (PSA) supports the

^b National professional pharmacy organisation representing Australian community pharmacist proprietors

^c National professional pharmacy organisation representing Australian pharmacists

forecast that there will be an excess number of graduates entering the profession. It reports that the number of pharmacy graduates has almost quadrupled annually from 1985 to 2007.⁽²²⁾

The main source of income for community pharmacy owners has traditionally been derived from dispensing PBS-subsidised prescriptions. It is estimated that between 50–70 percent of the income for community pharmacies is obtained from dispensing PBS prescriptions.⁽¹⁸⁾ As the PBS has traditionally been the main source of income for community pharmacies, community pharmacy has developed systems and pharmacy layouts that ensure the efficient dispensing of PBS medications.⁽¹⁸⁾ Thus, while the physical layout of Australian community pharmacies varies, they generally have an area which manages medications, and another area in which retail products are available. They are located either in shopping malls or as stand-alone premises, differing from the USA in that none are co-located within supermarkets or department stores.

Traditional community pharmacy business models face significant challenges for viability. First, there are financial challenges from reduced PBS subsidies and competitive retail activity in recent years. These challenges include reductions in the price of PBS medicines and growth in discount pharmacy models.⁽²³⁾ As a result of the Federal government's changes to price disclosure for PBS medicines, it is estimated that, over the next four years, community pharmacies will lose \$835 million in funding. The PSA has predicted that programs and services that community pharmacies have cross-subsidised through dispensing could be lost.⁽²⁴⁾ The National President of the PSA has warned that if the profession does not “change the way we do business, we may effectively force ourselves out of business”.⁽²⁵⁾ Therefore, the delivery of alternative professional services by community pharmacies presents an opportunity and a strategy for long-term sustainability.

2.1.1.1 Medicine schedules in Australia

Medicines in Australia are grouped together into schedules that require similar regulatory controls over their availability.⁽²⁶⁾ Table 1 outlines the range of medicine schedules. In Australia, consumers can access S2 and S3 medications at a pharmacy without a prescription, but require a prescription for S4 and S8 medications.

Table 1 Schedules of medicines in Australia

Medicines Schedule	Description
Schedule 2 (S2)	<i>Pharmacy Medicine</i> Pharmaceuticals that can only be supplied through a pharmacy. This category is for substances for which the safe use may require advice from a pharmacist, and should therefore only be available from a pharmacy. Examples: levocabastine intranasal spray, xylometazoline nasal drops.
Schedule 3 (S3)	<i>Pharmacist Only Medicine</i> Pharmaceuticals which must be supplied by a pharmacist in a pharmacy. This category is for substances for which the safe use requires professional advice, but which should be available to the public without a prescription. Examples: chloramphenicol eye drops, clotrimazole vaginal cream.
Schedule 4 (S4)	<i>Prescription Only Medicine</i> Medicines that can only be obtained with a prescription. This category is for substances for which the use or supply should be by or on the order of persons permitted by State or Territory legislation to prescribe (i.e. a doctor). The medication is to be dispensed by a pharmacist. Examples: citalopram tablets, penicillin capsules.
Schedule 8 (S8)	<i>Controlled Drug</i> This category is for substances that should be available for use but require restriction of manufacture, supply, distribution, possession and use to reduce abuse, misuse and physical or psychological dependence. Records and accountability are required for these pharmaceuticals. Example: morphine tablets, oxycodone tablets.

Source ⁽²⁶⁾

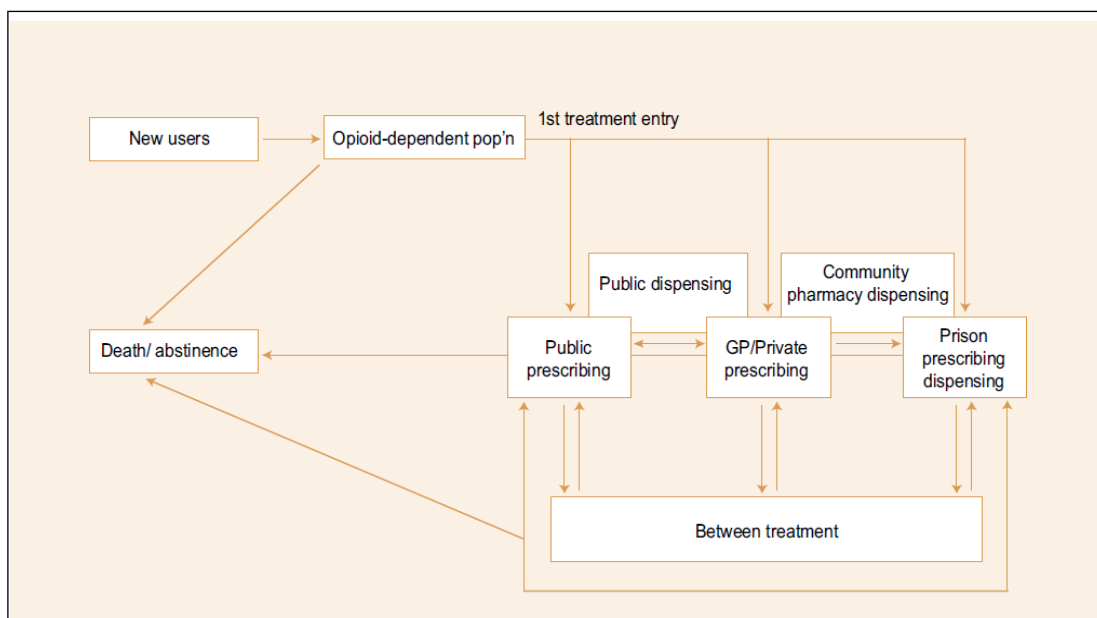
2.2 Opioid pharmacotherapy treatments in Australia

In this section, I will provide an overview of how and why the OST program was established in Australia as well as details of its funding structure. An overview of how the Australian opioid pharmacotherapy system has evolved to enable both the public and private sectors to service patients is covered. This will include explanations about why GP willingness to prescribe for OST has traditionally been limited, and the significant role that the pharmacy profession plays in the provision of OST in SA.

2.2.1 Overview of opioid pharmacotherapy treatments in Australia

Australian opioid pharmacotherapy data are managed by the National Opioid Pharmacotherapy Statistics Annual Data (NOPSAD). Australia has a population of 22.3 million people⁽²⁷⁾, and a total of 46,446 OST patients were registered in 2011.⁽²⁸⁾ NOPSAD reports that 88 percent of all Australian OST patients were dosed in community pharmacies.⁽²⁸⁾ The majority of these patients also received pharmacotherapy treatment from a private prescriber^d (65 percent). Other patients received treatment through a public prescriber (27 percent), or a prescriber in a correctional facility (7 percent).⁽²⁸⁾ The main treatment options as well as entry and exit points for opioid pharmacotherapy patients through various service providers in Australia are outlined in Figure 1.

^d Community opioid pharmacotherapy program refers to patients being treated by private prescribers. A private prescriber is also known as a GP who practises in a private clinic (i.e non-government setting).



Source: ⁽²⁹⁾

Figure 1 Model of entry and exit points for patients through the treatment process in South Australia

Three medication options are available in the OST program in Australia which are administered orally or sublingually. Australian OST patients are most commonly prescribed methadone solution for their pharmacotherapy treatment (69 percent).⁽²⁸⁾ Methadone solution was the first treatment option available and is a full opioid agonist. It is a liquid and is administered orally daily under supervised conditions by pharmacists (or nurses in some Australian states/territories). The second most prescribed OST medication in Australia is the combination product buprenorphine/naloxone (17 percent), followed by buprenorphine (14 percent).⁽²⁸⁾ Both buprenorphine and buprenorphine/naloxone products are administered sublingually due to a large first-pass effect by the liver. Buprenorphine is a partial opioid agonist and, due to its flat dose-response curve at 16 mg and above, is less likely to cause respiratory depression; therefore, it is clinically safer than methadone. Its strong affinity to the mu opioid receptor enables alternate daily dosing regimens for some patients. Patients are eligible for unsupervised doses (take-away doses) depending on their progress through the program.⁽³⁰⁾

The Australian government is the primary funder for OST services, but patients are also required to contribute payments if they see practitioners in a private (community) setting. Medicare pays for OST medication, community prescriber consultations and pathology costs.⁽¹⁰⁾ Both methadone and buprenorphine are listed under the Section 100 scheme of the PBS. Through this scheme, the Australian government provides the body responsible for dispensing (be it a public clinic, community pharmacy or prison) with methadone and buprenorphine for the treatment of opioid-dependent patients free of charge.⁽¹⁰⁾ In a prison or public clinic setting in SA, patients are not required to pay for OST dosing. However, the community pharmacy charges patients a service fee in exchange for OST service provision. (For further information on pharmacy fees, refer to section 2.2.2.3.1.) Patients may also incur other fees if a community prescriber charges a co-payment (the cost difference between the fee charged by a medical practitioner and the Medicare benefit) or in travelling to access service providers.⁽¹⁰⁾

2.2.2 The opioid substitution treatment (OST) program in South Australia

In SA, the OST program is serviced by public (state government) and private providers. Previously, OST was provided solely by the public sector, initially the mental health system, and later the Drug and Alcohol Services South Australia^e (DASSA) as well as the Prison Health Services. Since 1994, accredited general practitioners (GPs) and community pharmacies in the private sector have expanded the availability of services to patients in the community. Currently, patients can receive treatment through public prescribing (DASSA), private prescribers (GPs) or through the prison service. Pharmacy-supervised dispensing is available through public sites (at two of the four DASSA clinics), or community pharmacies in the state. In SA, treatment options are methadone solution and buprenorphine/naloxone sublingual film (or tablet if justified by the circumstances).

^e Drug and Alcohol Services South Australia (DASSA) is a statewide health service which is governed by the South Australian Department for Health and Ageing. The organisation aims to address alcohol, tobacco, and pharmaceutical and illicit drug issues across the state.⁽³¹⁾

2.2.2.1 OST patients in South Australia

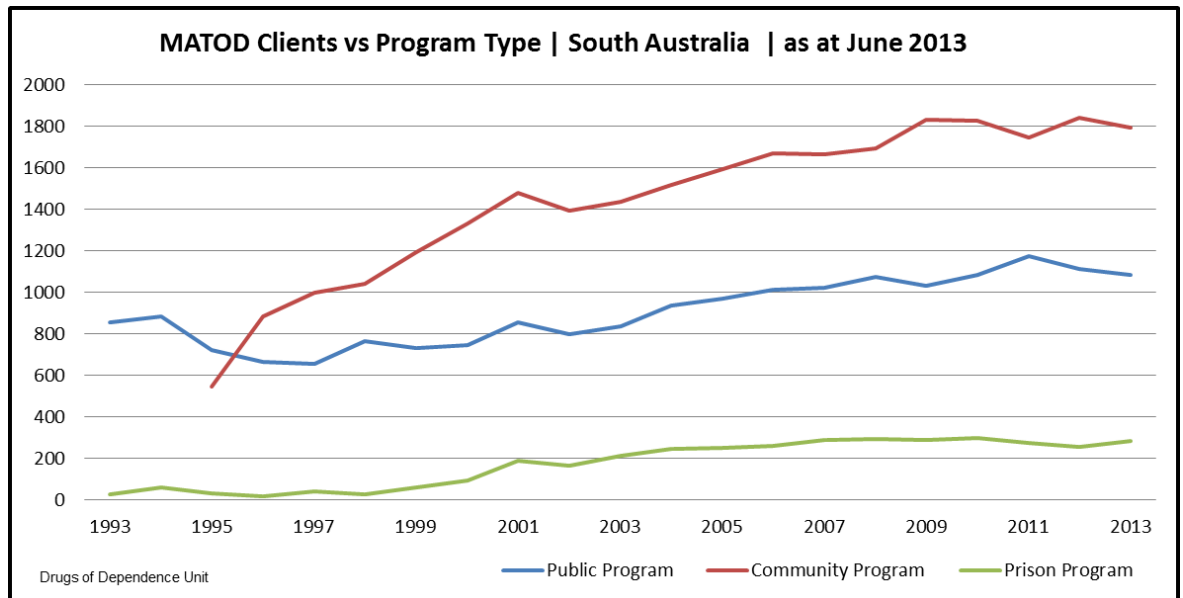
The total number of registered OST patients in SA increased in the 1990s after the introduction of community (private) services, but has gradually plateaued. DASSA was the sole service provided for un-incarcerated OST patients until the state's community services were established in 1994. As illustrated in Figure 2^f, the involvement of community prescribers and pharmacies nearly tripled through the provision of private services, but this capacity levelled in the early 2000s. Geoff Anderson, former Manager of the Drugs of Dependence Unit (DDU), reported that a total of 931 patients were registered at DASSA prior to 1994, this number being limited by DASSA resources. After the commencement of services by community GPs and pharmacies, an additional 350 patients were treated in the first six months.⁽³²⁾ Most candidates for OST are dependent on heroin, but a small percentage are dependent on opioid-based pharmaceutical products. As of April 2013, in total, there were 3,178 state OST patients through the public, community and prisons program (refer to Table 2).

Table 2 Number of OST patients per program in SA in June 2013

Opioid pharmacotherapy program	Patient number
Public opioid pharmacotherapy program	1,125
Community opioid pharmacotherapy program	1,632
Prison opioid pharmacotherapy program	265
Total	3,022
Suboxone® Expansion Policy	152
Total	3,174

Source: ⁽³³⁾

^f In the title of Figure 2, 'MATOD' is the term which the DDU uses for OST. Also, the DDU uses the term 'client' whereas in this thesis I use the term 'patient'.



Source: ⁽³³⁾

Figure 2 Number of patients receiving opioid pharmacotherapy treatment for drug dependence in South Australia

Supervision and take-away regulations for OST patients vary between Australian jurisdictions. In SA, OST patients are required to attend a pharmacy each day for supervised dosing for a minimum of two months from treatment initiation. Subsequently, patients are required to attend supervised dose administration on each day for at least two times a week (unless other arrangements are applied for and approved). The supervision requirements are determined according to the individual’s progress.

If patients are not able to access OST, options for emergency access to treatment for symptomatic relief of withdrawal symptoms exist, but are limited in availability. For patients seeking withdrawal programs due to an inability to access a medical prescriber, this wait can be up to two weeks. The accident and emergency triage system standards recommend that patients going through complete (‘cold turkey’) withdrawal should be seen within four hours, but it is not certain whether they are actually seen within this time. Patients have the option of presenting to one of DASSA’s duty counselling staff (without an appointment) in the event of an emergency, or for symptomatic relief during withdrawal where they can be seen by a duty doctor. However, patients located outside of metropolitan Adelaide, particularly rural residents, are likely to find it difficult to access emergency service.

2.2.2.2 Medical prescribers for OST in South Australia

Historically, there have been difficulties in recruiting new prescribers to service OST patients, and this has been an ongoing challenge in the state. The total number of community accredited prescribers has not increased over the last decade. Barriers to GPs prescribing OST include practice staff disapproval, existing heavy workload, or poor remuneration and past negative experiences.⁽¹³⁻¹⁵⁾ Other GPs may be reluctant due to their lack of knowledge or confidence to work with patients with substance misuse issues.^(14,15)

The relatively small percentage of doctors who prescribe opioid pharmacotherapies impacts on the availability of new OST patient vacancies. In 2011, there were total of 85[§] registered OST prescribers in SA which represents less than six percent of the total GP population.⁽²⁸⁾ Of this number, 58 were active accredited community prescribers in 2011.⁽³⁴⁾ Although accredited private prescribers (GPs) service approximately half of the opioid-dependent patients in SA, none currently offer vacancies for new rural or metropolitan patients. Further exacerbating this strain is the fact that DASSA's four clinics are usually at full capacity.

Strategies have been implemented to encourage medical practitioners to prescribe OST in SA. Initially, accreditation was a mandatory requirement for medical prescribers of OST⁽²⁸⁾, but another approach has been trialled in SA in recent years. More recently, to address the difficulties in attracting medical prescribers, an alternative strategy to increase prescribing participation was implemented. The Suboxone® Expansion Policy was implemented in April 2011 exclusively in SA (refer to Table 3 for an overview of the initial impact of this policy on patients per provider). The Suboxone® Expansion Policy permits a prescriber to treat up to a maximum of five patients with buprenorphine/naloxone (Suboxone®) film before being required to undertake accreditation.⁽³⁵⁾ A formal evaluation of the Suboxone® Expansion Policy is yet to be finalised⁽³⁶⁾, but there are preliminary indicators of varying success. It appears that the Suboxone® Expansion Policy has increased unaccredited GP participation, but it has reduced the demand for accredited GP participation and has not increased the state's total capacity to service OST patients. An

[§] This figure includes accredited community prescribers, accredited Prison Health Service prescribers and active accredited DASSA prescribers. Of this total figure, 13 were registered to prescribe only buprenorphine/naloxone and 72 were registered to prescribe more than one type.

additional 205 new unaccredited GPs have prescribed Suboxone® since the policy implementation for 337 OST patients.⁽³⁷⁾ However, the total number of OST patients serviced by the state has not increased in the period of time in which the policy has been implemented (see the comparison of the number of OST patients per provider in April 2011 in Table 3 and in June 2013 in Table 2).

Table 3 Number of OST patients per provider in SA in April 2011

Opioid pharmacotherapy program provider	Patient number
Public opioid pharmacotherapy program	1,168
Community opioid pharmacotherapy program	1,783
Prison opioid pharmacotherapy program	277
Total	3,228
Suboxone® Expansion Policy	6
Total	3,234

Source: ⁽³⁸⁾

Lack of access to OST prescribers when patients are highly motivated to seek treatment can lead to delayed or unreasonable waiting times for initial treatment access and this can have serious consequences. Records for treatment initiation waiting times, or re-entry for relapses, are not well documented, but waiting lists exist. For individuals unable to enter into treatment, there are potential legitimate and illicit options that may be attempted. The first is to enter withdrawal (detoxification) services. Any GP can offer non-opioid drug treatment for withdrawal symptom management. Another probable consequence of being unable to enter into treatment is that individuals will continue to seek illicit drugs. Engagement in these activities has additional health risks such as potential overdoses and the spread of blood-borne viruses through the sharing of injecting equipment.

2.2.2.3 Pharmacy provision of OST in South Australia

Pharmacists providing OST play an important role in patient care. Patients are required to receive regular supervised dosing as a requirement of the treatment program. Prior to dose administration, pharmacists are required to assess a patient's suitability for their OST

medication. The pharmacist then administers and supervises the patient's consumption of the medication. Supervised dosing occurs on a regular basis, from daily to twice a week depending on the individual patient's progress. Information on patient progress is relayed from the pharmacist to the prescribing doctor as appropriate. Pharmacists are also required to report patient progress concerns to the prescribing doctor, such as missed doses or intoxicated presentations. Even OST patients receiving take-away doses are required to attend a community pharmacy on a regular basis for supervised dosing by a pharmacist. A community pharmacist is authorised to provide OST patients with their supervised doses and any take-away^h entitlement/s in accordance with the prescription. These take-away doses may be authorised by a medical prescriber regularly or as a one-off event.

OST patients in SA receive regular supervised dosing predominantly from community pharmacists. In 2012, 211 community pharmacies provided OST in the state. Community pharmacists provide supervised dosing for the substantial majority (88 percent) of the state's 3,000 registered OST patients.⁽³⁹⁾ The remainder of patients are dosed within public clinics or prison settings. In 2011, the ratio of patients per dosing point site in SA was approximately 17:1.⁽²⁸⁾

In SA, pharmacist participation in OST far outweighs GP participation in OST. Less than three percent of SA GPs are active prescribers (total 58), compared to approximately 49 percent of the state's community pharmacies that are involved with dosing patients. Of a total of 1,981 (37.6 percent) pharmacies across Australia that dose pharmacotherapy patients⁽⁴⁰⁾, more than 200 are South Australian pharmacies with 78 community pharmacy dosing sites in the state being rurally located.

The capacity for pharmacies and GPs to accept new patients is routinely monitored. A database of community pharmacies which have a capacity to accept a minimum of one or more additional patients for OST dosing is collected every month. In contrast, no active accredited GPs had vacancies for new OST patients in 2013. This has been the ongoing scenario for many years suggesting that GPs are unable or unwilling to accept new patients. These are strong indicators that South Australian pharmacists have a greater

^h Take-away dose entitlements are doses that a patient can self-administer without the requirement for pharmacist supervision.

willingness and capacity to cater for additional patients compared to both accredited and unaccredited GPs.

2.2.2.3.1 Funding arrangements for pharmacy OST providers

The funding structure for pharmacy OST providers has remained relatively unchanged since 1994 when community pharmacies first became involved in SA. Australian OST patients attending a community pharmacy are charged around \$5 per dose or about \$35 per week.⁽⁴¹⁾ Some pharmacies may charge different fees owing to the additional infrastructure (such as a separate dosing area or security cameras) in which they have invested to improve service delivery or to service larger patient numbers. Variations in OST dispensing fees between pharmacy locations in SA are echoed in other Australian jurisdictions.⁽⁴²⁾ The Pharmacy Guild of Australia regards the fees currently charged to OST patients as inadequate to cover existing costs, and believes that pharmacy participation is more driven by a sense of community spirit and professional calling.⁽⁴²⁾

The standardisation of pharmacy OST fees has previously been debated, and alternative funding models have been previously explored but no resolution has been implemented to date. In 1995, a review of methadone treatment in Australia by the Commonwealth Department of Human Services and Health reported a need to standardise pharmacy charges at an affordable level.⁽⁴²⁾ In 2007, a project on alternative funding models for dispensing pharmacotherapies for opioid dependence in community pharmacies was funded by the Australian Government Department of Health and was managed by the Pharmacy Guild of Australia.⁽⁴¹⁾ Three different funding models were trialled through the project in three Australian jurisdictions, including SA. Patient participants reported reduced conflict with their partners and relatives post-trial mainly due to fewer arguments about money. In addition, pharmacy staff reported an improvement in the relationship with patients owing to improvements with debt management. Researchers recommended that patients receive (full or partial) subsidisation for their medication up to an agreed maximum.⁽⁴¹⁾ Despite the report recommendations, there have been no changes in the funding or subsidy of OST in SA.

2.3 Chapter summary

In this chapter, an overview of the Australian health care system and of opioid pharmacotherapy treatments was provided. The main funding bodies of the Australian health care system, the role of pharmacists and medicine schedules were described. Additionally, accounts were provided of the supply and demand for OST in the state, and of patient, medical prescriber and pharmacy provider patterns. From these accounts, it can be seen that pharmacists already play an important role in OST management. This is not only due to their regular contact with OST patients, but, in SA, pharmacist participation in OST far outweighs GP participation in OST.

Chapter 3 Pharmacist prescribing practices and OST: a literature review

This literature review chapter comprises three main parts. The first part reviews the literature on non-medical prescribing, including pharmacist prescribing – firstly in international and then in Australian settings. This part will outline prescribing models, the education requirements for such prescribers and present the views on and outcomes of such practices. The second part provides an overview of theories of pharmacy practice that are relevant to this thesis. This will involve contrasting the traditional and changing approach to pharmacy practice – the prescription-focused approach to patient-centred care (PCC). I will then explore the concept of privacy, how it applies to pharmacy practice and why it is important for OST patients. Lastly, I will explain why PCC is relevant for OST patients and present the research gap addressed by my thesis at the end of this chapter.

3.1 Non-medical prescribing internationally

In this section, I provide a summary of non-medical prescribing internationally. I will begin with an outline of how prescribing was traditionally practised by medical practitioners and how it has since evolved. I will then present the two broad international prescribing models and narrow the discussion to pharmacist prescribing. Lastly, the training and educational requirements for international pharmacist prescribers will be summarised.

3.1.1 The evolution of prescribing

The term ‘prescribing’ often evokes the power to authorise medications through an application of pen to paper, but it encompasses far greater responsibility. First, the differences between *prescribing* and *diagnosis* need to be distinguished. The Concise Oxford English Dictionary defines *prescribe* (of a medical practitioner) as being to “advise and authorise the use of (a medicine or treatment) for someone, especially in writing; recommend (a substance or action) as something beneficial; to state authoritatively that an

action or procedure should be carried out”.⁽⁴³⁾ *Diagnosis* is defined as “the identification of the nature of an illness or other problem by examination of the symptoms”.⁽⁴⁴⁾ Given these definitions, a practitioner’s ability to prescribe is not necessarily dependent on their ability to diagnose conditions. Moreover, the transcription of directions or recommendations from pen to paper is not necessarily required to prescribe.

Safe prescribing involves cognitive and decision-making skills. Prescribing is described as a staged process⁽⁴⁵⁾, rather than a single event.⁽⁴⁶⁾ The four stages of prescribing are information gathering, clinical decision making, communication, and monitoring and reviewing outcomes.⁽⁴⁵⁾ A prescribing practitioner in some cases makes decisions about a patient’s diagnosis and treatment of choice. The American College of Clinical Pharmacy defines prescribing as a broad set of activities which includes the selecting, initiating, monitoring, continuing, modifying and administration of drug therapy. The prescriber must also be able to order and interpret laboratory tests and perform patient assessments related to drug therapy.⁽⁴⁷⁾ Other crucial skills for prescribing include an understanding of disease aetiology and of pharmacology, as well as clinical experience and judgment.

The health disciplines that are able to prescribe have evolved in recent years. Throughout this thesis, I will refer to prescribing by professions outside the medical discipline as non-medical prescribing. Traditionally, doctors have had sole responsibility for prescribing medication, with dentists having been able to prescribe antibiotics and anaesthetics within a limited scope for some time. Internationally, the roles of nurses, podiatrists, optometrists, pharmacists and other allied health professionals have evolved to include varying degrees of prescribing privileges. These non-medical prescribers can authorise a range of medication-related changes in accordance with patient needs. They can initiate or cease a medication, adjust dosages and approve medication continuance for the management of chronic conditions. Their level of autonomy and the frequency of such authorisations vary with the clinical setting, training and prescribing model practised. International models of prescribing will be described in the next section.

Internationally, non-medical prescribing has been well established with the aim of improving patient care and health care systems. An extension of traditional health professional workforce roles has been designed to improve the efficiency of health care delivery and patient access to medications. Policy and legislative changes abroad have also

enabled non-medical prescribing to reduce the workload for doctors allowing them to focus on more complex cases.⁽⁴⁸⁻⁵⁰⁾ The evolution of traditional health professional roles also reflects attempts by the health care system to increase its capacity and provide more efficient patient care.^(51,52)

As prescribing has evolved, so have the risks involved with prescribing. Prescribing carries potential risk for both the prescriber and patient involved. A prescriber, whether from a medical or non-medical discipline, carries some degree of risk. Patients bear the greatest risk in terms of their health outcomes and safety. The reason is that, if patients are inappropriately managed, there could be dire consequences. Patients may also be disadvantaged, or have their safety compromised if there is a lack of communication between multiple prescribing team members, resulting in fragmented health care. Others have warned that pharmacists wishing to be prescribers will bear additional risks such as increased professional liability^(53,54) and the perception by the medical profession that they are engaging in professional encroachment.⁽⁵⁵⁾ The medical profession's views on non-medical prescribing will be covered later in section 3.2.3.

3.1.2 International models of prescribing

There are two categories of pharmacist prescribing models practised internationally. Pharmacist prescribing models are broadly categorised as independent or dependent. Independent and dependent prescribing models differ in the practitioner's ability to diagnose and, therefore, their level of autonomous practice. Independent prescribers have sole responsibility for the patient's assessment, diagnosis and clinical management. A medical practitioner is an example of an independent prescriber. Dependent prescribers do not establish the patient's diagnosis but they carry out ongoing patient care roles. Under this arrangement, the doctor (independent prescriber) diagnoses: the dependent prescriber then monitors and continues the patient's treatment within an agreed care plan.

There are two well-known examples of dependent prescribing models. The first is supplementary prescribing in the United Kingdom (UK) where the medical practitioner establishes the diagnosis and initiates treatment: the supplementary prescriber then monitors the patient's progress, and prescribes ongoing medication within the clinical

management plan.⁽⁵⁶⁾ The second dependent prescribing model, referred to as collaborative prescribing in the USA, is where the physician diagnoses the condition: the pharmacist then selects, initiates, monitors, modifies and continues medications as appropriate for the patient. Further details about other known pharmacist prescribing models that are practised are described in Table 4. (Note that Table 4 is not exhaustive in the types of independent and dependent prescribing models practised but serves to provide examples of the main types that exist.)

Table 4 International prescribing models

Independent prescribing models	
Independent prescribing	Prescribing practitioner entirely responsible for patient assessment, diagnosis and clinical management
Formulary prescribing	Local formularies are agreed between participating medical practices and community pharmacies which permit pharmacists to prescribe within the formulary
Dependent prescribing models	
Supplementary prescribing	A voluntary partnership between an independent prescriber (e.g. doctor) and a supplementary prescriber (e.g. pharmacist) to implement an agreed clinical management plan (CMP) with the patient's agreement. The independent prescriber diagnoses and initiates treatment, whilst the supplementary prescriber monitors and continues treatment within the CMP
Protocol prescribing	A delegation of authority from an independent prescriber involving a formal agreement and written guideline which describe the activities that the pharmacist must perform
Patient group direction (PGD)	Written directions (or protocol) signed by doctor and pharmacist relating only to supply and administration of a specific prescription medication or group to patients who may be individually identified before presentation of treatment (e.g. emergency contraceptive pill)
Repeat prescribing	Pharmacists provide medication repeat services in clinics associated with medical centres for patients who have exhausted their prescribed drugs before their next physician appointment
Collaborative prescribing	A cooperative practice relationship between a physician or practice group and pharmacist. The physician diagnoses and makes the initial treatment decisions and the pharmacist selects, initiates, monitors, modifies and continues medications as appropriate to achieve the agreed patient outcomes

Source: ⁽⁵⁷⁻⁶²⁾

3.1.3 Pharmacist prescribing abroad

Legislation that permits pharmacist prescribing for chronic conditions has been well established in the USA, UK, Canada and, more recently, in New Zealand. Pharmacist prescribers have extended roles in medication dose initiation, adjustment for therapeutic monitoring and some work in specialist clinics. Within the USA, pharmacist prescribing legislation exists in 48 of the 50 states.^(63,64) The UK recognised supplementary prescribing from 2003 followed by independent pharmacist prescribing later in 2006. In Canada, Alberta was the first province to legislate and allow pharmacist prescribing in 2006⁽⁶⁵⁾; Ontario followed Alberta's lead in 2008.⁽⁶⁶⁾ The Pharmacy Council of New Zealand recently announced changes to the scope of practice for pharmacist prescribers, effective from July 2013.⁽⁶⁷⁾

There are patient and professional benefits from pharmacist prescribers managing patients with chronic conditions. International examples of pharmacist prescribing for the management of chronic conditions include for asthma⁽⁶⁸⁾, psychiatric illnesses⁽⁶⁹⁾, pain⁽⁷⁰⁾ and anticoagulation management.^(71,72) Patients have reported benefits including an increased choice of providers⁽⁶⁹⁾, reduced waiting times⁽⁶⁹⁾ and increased rates of disease monitoring.^(69,73) Other medical and system benefits of pharmacist prescriber roles are summarised in Table 5. Reported professional benefits for pharmacist prescribers have also included an increase in job satisfaction and career advancement.⁽⁷⁴⁾ In addition, pharmacists have described their new role as challenging and professionally rewarding.^(75,76) Studies which report on pharmacist prescribing for chronic conditions and the reported benefits are summarised in Table 5 (note that this table is not exhaustive, but demonstrates a range of examples).

The role of pharmacists in prescribing in acute hospital settings has been reported less often compared to their role in chronic conditions in community settings. One Scottish study⁽⁷⁷⁾ explored the feasibility and value of pharmacist prescribing of antimicrobials in a hospital setting. This proposal attempted to move the role of a hospital pharmacist away from antibiotic policing to a co-therapist or advisor role. Such a role was predicted to have cost benefits through savings on medications or reduced antibiotic resistance from increased guideline adherence.

Table 5 Pharmacist prescriber roles abroad and the patient/system benefits reported

Clinic type and location	Patient/system benefits reported
Asthma and allergy pharmacist supplementary prescribing clinic in Scotland, UK ⁽⁶⁸⁾	<ul style="list-style-type: none"> - Increased rates of review and monitoring for patients by pharmacist. - Convenient for regular users of the pharmacy to attend.
Clozapine independent pharmacist prescribers in Bath, UK ⁽⁶⁹⁾	<ul style="list-style-type: none"> - Increased choice of prescriber for patients. - Reduced patient waiting times. - Increased monitoring of outcomes.
Pain pharmacist prescriber in New Mexico, USA ⁽⁷⁰⁾	<ul style="list-style-type: none"> - Decreased mean pain scores with continued visits. - Income generated for the clinic by pharmacist clinicians.
Rheumatology supplementary prescriber outpatient clinics in Gateshead, UK ^(71,76)	<ul style="list-style-type: none"> - Improved recording of medication history. - Opportunity to check for any medication interactions. - Patients pleased to have pharmacist prescribe additional medications required. - Patients reported that the clinical management plan has made a positive impact on their condition. - Improved inter-professional communication. - Improved continuity of patient care.
Diabetic hypertension supplementary prescriber clinics in Gateshead, UK ⁽⁷¹⁾	<ul style="list-style-type: none"> - Provision of counselling and monitoring of blood pressure - Provision of advice on lifestyle changes.
Type 2 diabetes collaborative prescriber in USA ^(82, 83)	<ul style="list-style-type: none"> - Improved planning and glycemic control of insulin protocol. - Faster initiation of treatment leading to improved disease management control. - Reduced mean direct medical costs per patient per year.
Supplementary prescriber in an intensive care unit ward in Birmingham, UK ⁽⁸⁴⁾	<ul style="list-style-type: none"> - Reduced prescribing workload for doctors, not at the cost of patient safety.
Supplementary prescriber in an intensive care unit in London, UK ⁽⁸⁵⁾	<ul style="list-style-type: none"> - Pharmacist supplementary prescriber more likely to adhere to guidelines for drug dosing in haemofiltration than doctors.
Collaborative drug therapy management for inpatients receiving thrombin inhibitors in Charleston, USA ⁽⁸⁶⁾	<ul style="list-style-type: none"> - Dosing protocol developed to improve the use of high-use medications within the treatment institution.
The Better Respiratory Education and Asthma Treatment in Hinton and Edson (BREATHE) randomized, controlled trial in high-risk asthma patients in Alberta, Canada ⁽⁸⁷⁾	<ul style="list-style-type: none"> - No differences were found in asthma control between those managed by community pharmacists and usual care.
Supplementary prescriber hypertensive clinic in Derby, UK ⁽⁸⁸⁾	<ul style="list-style-type: none"> - 93/127 of patients who that attended clinic responded to questionnaire - 57 percent reported that the standard of care was better than previously - 86 percent stated that they felt they understood more about their condition since attending the clinic
Anticoagulation pharmacist prescriber trials in UK ⁽⁷¹⁾ , South Korea ⁽⁷²⁾ , Australia ⁽⁷⁸⁾ and Canada ^(79, 80,81)	<ul style="list-style-type: none"> - Enhanced patient monitoring, education and timely access to treatment - Patients benefited from improved anticoagulation control, and a reduction in thromboembolic events compared to those receiving standard care.⁽⁸⁰⁾ - Patients reported that the management of anticoagulation patients in a multidisciplinary health care team which includes a pharmacist prescriber can reduce the workload for physicians.⁽⁸¹⁾

3.1.4 Prescribing of controlled drugs

Controlled drugs (S8 medications) have legitimate therapeutic uses, but also have addictive or abuse potential and hence require special controls.⁽⁸⁹⁾ As a result, additional security and recording are required for the handling of controlled drugs. Other countries have an equivalent to the Australian S8 category. For example, methadone is a S8 medication in Australia which is equivalent in the UK and USA as Schedule 2 and Schedule II, respectively (see Table 6). These equivalent international schedules also have restrictions that are similar to those applied to the recording and dispensing of controlled drugs in Australia.

Table 6 The equivalent of methadone (controlled drug in Australia) prescribing in the UK and USA

UK	USA
<p>Schedule 2</p> <p>It is illegal for people to be in possession of these drugs without them being prescribed by an authorised practitioner. These drugs must be stored in a locked receptacle and a register must be kept by pharmacists.⁽⁹⁰⁾</p>	<p>Schedule II</p> <p>These drugs also have a high potential for abuse but have been accepted for medical use in the United States, with severe restrictions.⁽⁹¹⁾</p>

Legislation which permits pharmacist prescribing of controlled drugs in the USA and UK evolved after the initial establishment of pharmacist prescribing rights in these countries. Non-medical practitioners in the UK and USA can legally prescribe controlled drugs and have demonstrated the ability to do so safely.⁽⁹²⁻⁹⁶⁾ In seven US states, pharmacists working in institutions under signed collaborative drug therapy management (CDTM) agreements are able to prescribe controlled drugs including opioids.⁽⁹⁷⁾ In the UK, supplementary and independent pharmacist prescribers have the authority to prescribe controlled drugs, provided it is within their competence.⁽⁹⁸⁾

Non-medical prescribing for OST patients is practised under both supplementary and independent prescribing models in the UK. Nurse^(55,92,99,100) and pharmacist prescribers⁽⁹⁴⁾ prescribe for OST patients. Since 2006, nurse independent prescribers have been able to prescribe some controlled drugs for specific medical conditions.⁽¹⁰¹⁾ In 2012, legislative

changes were made to allow nurses and pharmacists to independently prescribe controlled drugs for the treatment of addiction.⁽¹⁰²⁾ These non-medical prescribers for OST have responsibilities such as dose titration to establish the optimum dose, dose changes and termination of medication. The National Substance Misuse Non-Medical Prescribers Forum reports that there are approximately 350 nurse and pharmacist substance misuse non-medical prescribers in the UK.⁽¹⁰²⁾ These non-medical practitioners prescribing OST are located in GP practices or team clinic settings.

There are benefits attached to non-medical prescribing for OST patients abroad. These extended roles, when successfully implemented, are believed to have alleviated the shortage of medical prescribers which has traditionally delayed treatment decisions and caused patient stress or anxiety.⁽⁵⁵⁾ In addition, non-medical prescribing can improve access to medicines for OST patients due to reduced waiting times, increased choice of appointment times and providers, and increased throughput of patients. As a result, medical practitioners' time can be concentrated on more complex cases.⁽¹⁰¹⁾

Non-medical practitioners working in the substance misuse field carry high levels of risk and responsibilities. The National Treatment Agency for Substance Misuse acknowledges that the field of substance misuse incorporates a higher level of risk in comparison to other areas of prescribing.⁽¹⁰¹⁾ The agency also reports that the annual death rate of drug misusers can be as high as one percent and acknowledges that there is a probability that nurse or pharmacist prescribers for OST could encounter the death of one of their patients at some stage.⁽¹⁰¹⁾

3.1.5 Training and education for international pharmacist prescribers

The requirements for pharmacist prescribers to complete mandatory postgraduate education vary between countries. In this section, the different educational requirements for pharmacist prescribers in various countries will be outlined with each system's strengths highlighted. Pharmacist prescriber educational requirements and regulation of practices vary between countries. Jurisdictional legislation determines which practitioners are permitted to prescribe, their scope of practice and their continuing professional

education requirements. Other professional regulatory bodies also monitor non-medical prescriber practice standards and complaints within the legislative framework.⁽¹⁰³⁾

In the UK and New Zealand, pharmacist prescribers are required to complete a formal postgraduate university course. A mandatory postgraduate education approach is advantageous in assuring coverage of key theory and practice topics. In the UK, supplementary and independent prescribers are required to complete a minimum 26-day university course over six months in addition to 12 days of supervised practice by a medical practitioner. Course applicants also require support from a sponsoring organisation.⁽¹⁰⁴⁻¹⁰⁶⁾ New Zealand pharmacist prescriber applicants must already hold a postgraduate diploma qualification to qualify for the one-year part-time prescribing course. These applicants are also required to complete 20 days (150 hours) of supervision by a ‘designated medical practitioner’.⁽¹⁰⁷⁾

In contrast, Canadian and US pharmacist prescribers are not required to complete formal coursework: rather, they must demonstrate their skills and competency in practice. Postgraduate education is highly regarded for pharmacist prescribers in these countries, but it is not mandatory. This approach is advantageous because it emphasises a pharmacist’s development of advanced clinical skills in practice. In Canada, there are specific guidelines for pharmacists to follow in order to modify, initiate and continue treatment⁽⁶⁶⁾ for prescription drugs (not narcotics).⁽⁶⁵⁾ All pharmacists are required to maintain and update their skills through continuing education and self-evaluation regardless of whether they prescribe.⁽¹⁰⁸⁾ In the USA, the Board of Pharmaceutical Specialties (BPS) certifies pharmacists in five specialties: nuclear pharmacy, nutrition support pharmacy, pharmacotherapy, psychiatric pharmacy and oncology pharmacy. Board certification may be a requirement to participate in collaborative drug therapy, but it varies depending on state legislation and specialty area.⁽¹⁰⁹⁾ Additionally, the credentials and specific education requirements for individual collaborative practice agreements are determined by the collaborating practitioners at the practice site.⁽¹⁰⁹⁾

In summary, there is an extensive amount of literature which documents non-medical prescribing, including pharmacist prescribing for chronic conditions internationally. Broadly speaking, pharmacist prescribing is practised under either dependent or

independent prescribing models and can include the prescribing of prescription medicines including controlled drugs.

3.2 Non-medical prescribing in Australia

In this section, an overview of prescribing by non-medical practitioners in Australia will be outlined. Prior to focusing on the pharmacy profession's role in prescribing, I will describe other non-medical professions' prescribing roles. A summary of the arguments against the development of non-medical prescribing will then be documented.

3.2.1 Australian non-medical prescribing practice

Non-medical prescribing rights in Australia have evolved to include endorsed optometrists, nurse practitioners, eligible midwives and podiatrists. Endorsed Australian optometrists can obtain, possess, administer, prescribe or supply specified Schedule 2, 3 and 4 medicines for the topical treatment of eye conditions.⁽¹¹⁰⁾ Australian nurse practitioners can authorise the prescribing of Schedule 2, 3, 4 and 8 medications when appropriate: they can also initiate diagnostic investigations and refer patients to other health professionals.⁽¹¹¹⁾ Eligible midwives can prescribe and/or supply Midwifery Board-approved Schedule 2, 3, 4 and 8 medications for the management of women and their infants in the pre-natal and post-natal stages of pregnancy.⁽¹¹²⁾ Podiatrists who hold a scheduled medicines endorsement can administer, obtain, possess, prescribe, sell and supply specific Schedule 2, 3, 4 and 8 medications (on the National Podiatry Scheduled Medicines List) for the treatment of podiatric conditions.⁽¹¹³⁾ In order to prescribe for indications related to their field of expertise from a specified formulary, these non-medical professions are required to undergo Podiatry Board-specified training and certification processes.

3.2.2 Non-medical prescribing by pharmacists in Australia

In contrast to the international literature, there is far less Australian literature on pharmacist prescribing. To my knowledge, a few Australian studies conducted in a hospital setting have been published, but none exist about pharmacist prescribing in an Australian community setting. A 2004 literature review of pharmacist prescribing identified 18 international studies which measured outcomes of drug therapy management by a

dependent pharmacist prescriber compared to standard care.⁽¹¹⁴⁾ By 2011, the international literature on pharmacist prescribing remained well developed in comparison to Australian studies. One Australian study explored potential pharmacist prescriber models for improving access to prescription medications⁽⁵⁷⁾; others proposed that hospital pharmacists prescribe warfarin for anticoagulation therapy.^(61,78,115) The literature suggests that it would be beneficial to explore future Australian research on pharmacist prescribing in a community or outpatient setting.^(78,116)

Australian and international pharmacists possess common professional skills which are closely aligned with the prescribing process. In their traditional roles, they already influence prescribing practices through medication interventions^(117,118) and medication reviews.⁽¹¹⁹⁾ Pharmacists are close to the prescribing process: therefore, they are positioned to identify and alert medical practitioners to prescribing errors before dispensing.⁽¹¹⁸⁾ This can reduce the incidence of adverse drug events and overall drug costs.⁽¹²⁰⁾ Hospital pharmacists are also involved in taking medication histories, writing discharge medications and initiating drug orders according to protocol.^(121,122) Pharmacists further demonstrate professional judgment as they are legally entitled to refuse the supply of inappropriate medication requests.⁽¹²³⁾

Australian pharmacists have limited prescribing authority compared to the extent of that of their international counterparts. Australian pharmacists can prescribe for Schedule 2 and 3 medications, but not Schedule 4ⁱ or Schedule 8 medications. Pharmacists have demonstrated competence in independently assessing and diagnosing minor ailments independently through over-the-counter prescribing of Schedule 2 and Schedule 3 medications.^(62,124) Pharmacists can prescribe treatment for head lice⁽¹²⁵⁾, indigestion, constipation⁽¹²⁶⁾, conjunctivitis (antibiotic eye drops), vaginal candidiasis and the emergency oral contraceptive pill^(127,128) when appropriate. Thus, pharmacists in Australia already have some prescribing privileges in relation to S2 and S3 medications. The debate

ⁱ There are some exceptions: all Australian pharmacists can continue supply for three days of doctor-prescribed S4 medications under emergency supply provisions. Additionally, more recent medication continuation legislation has been approved in some Australian jurisdictions. This will be examined further in the following paragraph.

is about whether this role should be extended to other medications traditionally prescribed only by doctors.

Recent legislative changes permit pharmacists in most Australian jurisdictions to continue the prescription of lipid lowering medications and oral contraceptive pills in urgent situations. As of November 2013, continued dispensing by pharmacists is approved in South Australia, Tasmania, Victoria, Western Australia, Australian Capital Territory and New South Wales.⁽¹²⁹⁾ Continued dispensing supply is currently limited to oral contraceptives and cholesterol-lowering medicines (specifically ‘statins’) (both are S4 medications) for the purposes of continued care. Pharmacists can supply patients with a standard PBS quantity of an eligible medicine once in a 12-month period if there is an immediate need for the medicine to continue, and it is not practicable to obtain a prescription. Pharmacists are required to utilise professional judgment consistent with professional guidelines to manage any risks associated with supply of these medicines without a prescription.^(129,130)

The Australian literature has explored the potential role for pharmacists in prescribing other S4 medications for anticoagulation and mental health, but there is a paucity of studies in pharmacist prescribing for OST. For example, Khoo and Bajorek⁽¹¹⁵⁾ concluded that, in a hospital setting, there were ample opportunities for pharmacists to intervene with warfarin patients; however, pharmacists themselves felt limited in their ability to prescribe. Barriers identified included training or experience, workload, medico-legal risks and the appropriateness of hospital settings. Wheeler, Crump, Lee et al.⁽¹³¹⁾ explored health professionals’ and consumers’ attitudes and beliefs about specialist mental health pharmacists working as collaborative prescribers. They identified concerns including demonstrating competence in practice; practitioner boundary uncertainty; insufficient training; and pharmacist hesitancy to expand their role. Solutions to address these concerns included education by the profession; relationship building, training and robust competency assessments; and a structured framework for implementing a collaborative prescribing model. I am not aware of other studies which have investigated the attitudes of Australian pharmacists – either in hospital or community settings – with regard to collaborative prescribing for OST patients. However, one Master’s dissertation has

conducted a quantitative questionnaire examining the views of OST patients on pharmacist prescribing for OST in New Zealand.⁽¹³²⁾

Discussions about the development of pharmacist prescribing have generated growing interest amongst numerous Australian professional organisations. The Pharmacy Board of Australia has indicated a deferral in the development of any pharmacist prescribing proposals until it is able to ensure that such proposals are workable.⁽¹³³⁾ Meanwhile, the University of Queensland reports that it is collating research about prescribing by health professionals outside of the medical discipline with the intention of developing an evaluation framework.⁽¹³⁴⁾ Additionally, Health Workforce Australia has commissioned a project, *Health Professionals Prescribing Pathway (HPPP) in Australia*. It sets out five steps to develop a nationally consistent approach to prescribing by regulated health practitioners.⁽¹³⁵⁾ In November 2013, Australia's Health Ministers approved the final HPPP project report and its recommendations for new prescribing pathways to allow non-medical health professionals to autonomously prescribe medications.⁽¹³⁶⁾

The desire to extend and formalise pharmacist prescribing rights is growing in the Trans-Tasman region (Australia and New Zealand). An informal Trans-Tasman Teleconference Pharmacist Prescribing group which enables researchers and pharmacists to share preliminary pilots and policy progress with each other has been established. Additionally, the Pharmacy Council of New Zealand has overseen consultations which eventually led to the legalisation of pharmacist prescribers working in a collaborative team environment in New Zealand.⁽⁶⁷⁾ Legislative changes and postgraduate training for pharmacist prescribers in Australia is far from being achieved. Even so, the Society of Hospital Pharmacists of Australia (SHPA) acknowledges that the demand for pharmacists to undertake collaborative prescribing roles is already evident in Australian hospital practice settings.⁽¹³⁷⁾

Literature which explores the views of Australian and New Zealand pharmacists on being prescribers is emerging, with limited research reported on their views about the possibility of prescriptive authority for pharmacists. These views are generally supportive of dependent pharmacist prescribing models (collaborative or supplementary).^(78,138) Australian pharmacists' attitudes on expanding into a prescribing role were explored in a national questionnaire (40 percent response rate) in 2010. In Hoti, Sunderland, Hughes and

Parson's⁽¹³⁸⁾ study, 84 percent of respondents supported at least one model of pharmacist prescribing, on the condition that further training in patient assessment, diagnosis and monitoring be provided. The majority (64 percent) of pharmacists indicated a preference only for the supplementary prescriber model; the strongest support was for prescribing treatment for asthma, hypertension, pain management and diabetes.⁽¹³⁸⁾ A survey of registered practising New Zealand pharmacists (51 percent response rate) reported that the majority were in support of undertaking collaborative prescribing roles. It also identified a need for the accreditation of advanced practice services because pharmacists undertaking these roles will require greater knowledge and skills.⁽¹³⁹⁾

Other studies of Australian hospital pharmacists have found some interest in pursuing pharmacist prescribing in a hospital setting. A questionnaire survey of 1,367 SHPA pharmacist members (response rate 40 percent) found that, if a legal and credentialed framework existed, 406 (75 percent) would consider becoming pharmacist prescribers. Thirty-seven percent (141) of respondents indicated that *de facto*^j prescribing was already occurring in a range of practice settings.⁽¹⁴⁰⁾ In another study⁽¹⁴¹⁾, respondents indicated that unofficial prescribing was done regularly through dose amendments for therapeutic drug monitoring. Hence, a hospital or specialist setting has been suggested as an appropriate setting to pilot pharmacist prescribing trials.

Advanced practice clinical pharmacists who indirectly prescribe have been documented in two Australian cases. One Victorian clinical pharmacist has trialled and implemented electronic transcription services for hospital discharge medications.⁽¹⁴²⁾ In this study, a pharmacist prepared electronic discharge prescriptions for 40 consecutive patients in a neurology and respiratory ward; the prescriptions were then authorised by a doctor. A reduction in the time required for dispensing pharmacists to clarify and amend discharge prescriptions, and for doctors to prepare discharge medications was reported.⁽¹⁴³⁾ Since this study, 1.5 FTE pharmacists have been employed to transcribe discharge prescriptions for hospital patients.⁽¹⁴⁴⁾ Another New South Wales (NSW) clinical pharmacist reported undertaking various prescribing roles for aged care patients in a community setting. The pharmacist reported managing pain patients' opiate medication which included the

^j *De facto prescribing* is the term used to describe when a pharmacist initiates or stops a medication order, or transcribes orders according to a protocol which was already undertaken.

tapering of doses for withdrawal. To ensure appropriate prescribing, they used pain assessment tools, provided patient education and monitored for side effects. A doctor initiated the patient's opiate treatment and authorised these changes.^(145,146) The reported benefits of this role included a reduction in hospital stay, empowering patients within their own home setting which improved their overall quality of life.⁽¹⁴⁶⁾ Both examples illustrate the potential prescribing roles that Australian pharmacists could undertake to increase their contribution to patient care. However, it is noted that, although these pharmacists make the cognitive prescribing decisions and may even transcribe the prescription, to comply with current Australian legislation, a doctor formally authorises the prescription.

There have been attempts to credential Australian pharmacists with international pharmacist prescriber qualifications to explore its relevance and applicability to local settings. Following preliminary qualitative interviews with hospital pharmacists, trials involving pharmacist prescribers have commenced in various Australian hospitals. The SHPA reports that 13 Victorian and two Queensland pharmacists have undertaken a prescribing course at the Robert Gordon University in Aberdeen, Scotland with the intention of practising in the future.⁽¹³⁷⁾ These Australian pharmacists were credentialed through the UK non-medical prescribing course which is accredited by the Royal Society of Great Britain (the UK pharmacy registration body). After completion of training, they participated in focus group interviews and expressed the belief that for Australian pharmacist prescribing to eventuate, there has to be legislative changes and a credentialed course to accredit pharmacist prescribers, as well as support and acceptance of this expanded practice by the pharmacy community.⁽¹⁴⁷⁾

3.2.2.1 Australian pharmacists ineligible to prescribe controlled drugs

In terms of eligibility for pharmacist prescribing authority of controlled drugs, there is a difference between other countries and Australia. Australian legislation permits the prescribing of S8 drugs to patients by medical practitioners, dentists and other allied health professionals (in accordance to formulary and respective Board conditions) including nurse practitioners⁽¹¹¹⁾, eligible midwives⁽¹¹²⁾ and podiatrists who hold scheduled medicines endorsement⁽¹¹³⁾, but not pharmacists.

Pharmacist prescribing for Schedule 8 medicines, and specifically for opioid pharmacotherapy, remains an unexplored concept in Australia, although a small body of literature exists on what OST patients want from pharmacotherapy services. A search of MEDLINE, Embase, PubMed, CINAHL, Informit and Scopus found no published study that explored the views of OST patients on pharmacist prescribing. However, there are studies on patient perceptions about existing service provision. This literature identifies mechanisms to improve service delivery and reduce barriers to treatment entry. Patients have suggested that OST could be improved through better treatment by staff (relations and competencies)^(148,149), at the pharmacy⁽¹⁵⁰⁾ and through more flexible take-away arrangements.^(148,151) Other aspects that can impact on consumer satisfaction include the waiting time experienced for initial treatment access^(148,152) and the waiting time at the pharmacy.^(150,153) Patients' experiences of privacy when dosing at the pharmacy^(150,151,153) have been identified as needing improvement. Patient satisfaction can be improved with better consistency and coordination of treatment⁽¹⁴⁸⁾, as well as affordability.⁽¹⁴⁹⁾ Another study reports that a patient's perceived participation (being informed of dose changes) is a predictor of patient satisfaction.⁽¹⁵⁴⁾

As noted above, the literature about pharmacist and patient views on pharmacist prescribing for OST is scarce or non-existent, particularly in an Australian context. To date, there has been one known study which investigated the attitudes of New Zealand (NZ) pharmacists⁽¹³²⁾ about their views on collaborative prescribing for opioid dependence. In this unpublished Master's dissertation, a random sample of OST patients at 14 NZ community pharmacies completed a quantitative questionnaire. The majority of the patients surveyed by Leach (n=94) indicated support for pharmacist prescribing of OST. Leach also conducted a random quantitative survey of 250 registered NZ pharmacists (response rate 56 percent) and found that the majority of pharmacists (n=140, 75 percent) indicated that they were likely or extremely likely to support pharmacists as prescribers of OST.⁽¹³²⁾

3.2.3 Medical professional views on non-medical prescribing

The extensive literature on Australian and international health professional opinions highlights that the medical profession's opposition and concerns are a major barrier to non-medical prescribing. These concerns include non-medical proficiencies in diagnosis and prescribing⁽¹⁵⁵⁾, as well as the hindrance to a doctor's professional position or relationship with patients.⁽¹⁵⁶⁾ Other concerns expressed by medical prescribers about non-medical practitioners include patient safety^(157,158); concern about quality of patient care⁽¹⁵⁸⁾ from lack of expertise in diagnosis or through fragmented health care^(116,159); a conflict of interest if pharmacists are both prescribing and dispensing on their own^(116,158,159); as well as interference with remuneration prospects.^(116,159) Other doctors perceive that a community pharmacist's role is predominantly focused on being a retailer or shopkeeper rather than a health professional.^(160,161) Meanwhile, it has been argued that the only training that develops the expertise to correctly make a diagnosis and adequately prescribe medication is medical training.⁽¹⁶²⁾

In Australia, pharmacist prescribing in a community pharmacy setting is a contentious issue due to a perceived conflict of interest. The Australian literature from both the medical and pharmacy profession has consistently supported the separation of prescribing and dispensing to ensure safety with medication prescribing and avoid any potential conflict of interest.^(62,115,137) The National Prescribing Service agrees with such views, stating that "... traditional roles such as dispensing or administering medicines should be retained as separate functions from prescribing" as the separation of duties provides the checks and balances needed for safer prescribing.⁽¹⁶³⁾

A small number of studies have reported on the perceived benefits of non-medical prescribing from the perspective of the medical profession. One study found that some doctors consider prescribing to be a routine rationalised procedure owing to the emphasis on protocols within organisations. These doctors welcomed supplementary prescribing as it was viewed as an option to refer protocol prescribing to another health professional⁽¹⁶⁴⁾: in effect, they regarded it as the active discarding delegation of unwanted tasks to another provider. This preference indicates that 'protocol-based' supplementary prescribing can be given to nurses and pharmacists with some level of medical support.

To summarise this section, numerous Australian health professionals outside of the medical profession have already established prescribing abilities for S2, S3, S4 and S8 medications. Australian pharmacists already, to some extent, have some prescribing abilities (for S2, S3 and continued dispensing arrangements for limited S4 medications), but not to the extent of other non-medical prescribers or their international pharmacist counterparts.

3.3 Theories of pharmacy practice

So far in this chapter, the focus has been on prescribing practices. However, any discussion of pharmacist roles and activities takes place in a context which includes theories about the role of pharmacists and theories of pharmacy practice. In this section, I link my previous discussion of pharmacist prescribing practices, including OST, to a broader discussion of theories of pharmacy practice. If a pharmacist takes a prescription-focused approach to pharmacy practice, their predominant attention is on the prescription and the medication distribution process. In contrast, pharmacist utilisation of a patient-centred care (PCC) approach requires a broader view of the patient, and is therefore better suited to the additional responsibilities associated with prescribing.

3.3.1 Prescription-focused approach

The traditional role of a community pharmacist involves the preparation, storage and supply of medicines. Their primary focus is on the distribution of medications – a particular drug, drug-related monitoring⁽¹⁶⁵⁾ or medication adherence.⁽¹⁶⁶⁾ As remuneration for Australian pharmacies is primarily based on a fee for the supply of medicines through the PBS, community pharmacy has traditionally evolved around the efficient dispensing of medicines.⁽¹⁶⁷⁾

Cipolle, Strand and Morley⁽¹⁶⁷⁾ describe the traditional prescription-focused approach to pharmacy practice as activities that a pharmacist performs at the time of dispensing the medication to the patient. The patient's prescription is queued for the pharmacist to act upon; the pharmacist then acts upon the prescription at the site and time of dispensing

depending on the ‘available time’. A prescription-focused approach to medication management begins with the prescription and is almost exclusively focused on the specific medication.⁽¹⁶⁷⁾

3.3.2 Patient-centred care (PCC)

In recent years, a paradigm shift in pharmacy practice has been emphasised – from a prescription-focused approach to patient-centred care (PCC). The move from a prescription-focused approach towards PCC is a shift in the role of pharmacists and the theory of pharmacy practice.⁽¹⁶⁶⁻¹⁶⁸⁾ This changes a pharmacist’s focus from the prescription and medication to the patient who is taking the medication.^(166,168) PCC provides for more holistic care⁽¹⁶⁹⁾ in which the patient collaborates with the health care provider to identify their treatment goals and revise regimens.⁽¹⁷⁰⁾ PCC has been recognised as an important factor in improving the quality of health care which has benefits to the patient, practitioner and the health care system.⁽¹⁶⁹⁾ A number of definitions of PCC encompass similar concepts, but there is no one universally accepted definition.^(168,169,171) The usage of the term is also complicated by the fact that there are other terms for PCC including person-centred care, personalised care and relationship-centred care.⁽¹⁷¹⁾

The dimensions of PCC which are widely accepted in the literature include: shared decision making^(169,172,173), respect^(169,172-174), communication^(165,169,172,174), continuity of care⁽¹⁷²⁻¹⁷⁴⁾, involvement of family and carers⁽¹⁷⁴⁾ and access to care.⁽¹⁷⁴⁾ PCC is defined by the National Safety and Health Standards as the delivery of health care that is responsive to the needs and preferences of patients. It is a measure of health care quality^(169,171), improves patient care experiences and leads to improved outcomes.⁽¹⁶⁹⁾

A number of Australian frameworks support PCC as a standard and essential part of health care. First, PCC is supported by the Australian Charter of Health Care Rights⁽¹⁷¹⁾ which is applicable to all Australian health care settings including public and private hospitals, general practice and community settings.⁽¹⁷⁵⁾ Australian Health Ministers endorsed the Australian Safety and Quality Framework for Health Care for national use which signifies its importance and relevance to health care in the country. The framework

provides strategies to support the provision of health care that is respectful and responsive to the preference and needs of patients.⁽¹⁷¹⁾ Additionally, PCC is also supported by a range of other national and state service accreditation standards and private sector initiatives.⁽¹⁷⁴⁾ Although Australian health care organisations are increasingly becoming involved with patient care services, they have reportedly encountered difficulties in actively changing service delivery.⁽¹⁷¹⁾

The delivery of health care using the PCC approach is also widely accepted by international governments and organisations.⁽¹⁷²⁾ This includes health care providers in the UK⁽¹⁷⁶⁾, the USA⁽¹⁷⁷⁾ and the WHO⁽¹⁷⁸⁾ – all support and emphasise the PCC approach. PCC is applicable to health care providers from a range of disciplinary backgrounds including nursing, medical, health policy⁽¹⁷²⁾ and pharmacy.^(167,173)

For the purposes of this thesis, my definition of PCC will be: an approach to the delivery of health care that is grounded in mutually beneficial partnerships amongst health care providers and patients. Based on the literature, I will focus on five fundamental aspects of PCC: participation, communication, enhanced access, continuous relationships and respect/privacy. I have chosen to exclude care coordination and involvement with family/carers for the purposes of this thesis as community pharmacy practice has limitations in realistically delivering on these aspects. Therefore, for the remainder of my thesis, I will define the key characteristics of patient-centred care (PCC) as follows:

- Patient participation in decision making
- Communication
- Access to treatment
- Continuous relationships
- Respect/privacy

In the next section, I will describe in further detail each of these five aspects of PCC.

3.3.2.1 Patient participation in decision making

Chewning and Sleath⁽¹⁷⁰⁾ identified that a patient is the most critical and yet underused resource for improved health outcomes. Patient participation in decision making allows patients to tailor their treatment and set goals based on their own needs or preferences. It is also referred to as a participatory or shared decision making⁽¹⁷⁹⁾, or partnerships with health care providers.^(165,170) Patient participation in shared decision making can identify barriers to adherence and offer alternative solutions that consider the patient's perspective⁽¹⁸⁰⁾ thereby improving their ability to adhere to treatment and health outcomes.⁽¹⁶⁹⁾

3.3.2.2 Communication

Effective communication is crucial to developing a quality patient–practitioner relationship: this facilitates patient involvement with decision making⁽¹⁶⁹⁾ which influences patient health outcomes.⁽¹⁷⁹⁾ PCC is improved when effective communication promotes patient participation in decision making which, in turn, creates a positive therapeutic relationship with the provider.^(166,181) Effective patient–provider communication involves: listening⁽¹⁷³⁾, exchanging information⁽¹⁷⁹⁾, developing a therapeutic relationship⁽¹⁷⁹⁾ and making treatment decisions together that consider the patients' values⁽¹⁷⁹⁾ and treatment goals.⁽¹⁷³⁾ Effective communication also enables the practitioner to gain a broader scope of knowledge about the patient that facilitates a holistic understanding of the patient as an individual.⁽¹⁶⁶⁾ Furthermore, patients are more likely to feel that the practitioner understands and respects them and then, in turn, are more satisfied with the care provided when there is effective patient–provider communication.⁽¹⁷⁹⁾

Pharmacists traditionally communicate with patients about the medication and emphasise medication adherence.⁽¹⁶⁶⁾ One study⁽¹⁶⁶⁾ found that a pharmacist's primary reliance on dispensing the medication without consideration of the individual patient can unintentionally devalue patients' understanding of their own health and negatively affect care. In another study⁽¹⁶⁵⁾, hospital pharmacists were asked to describe their work-related activities. The pharmacists in the study frequently reported activities not related to PCC aspects. By contrast, practitioners who communicate using open-ended questions, pay

attention to patients' concerns and allow patients the opportunity to express themselves are considered by patients to be patient-centred.⁽¹⁸²⁾

3.3.2.3 Access to treatment

All Australian patients can expect to be treated in line with the principles of the Australian Charter of Health Care Rights. The first principle is that everyone has the right to access health care.⁽¹⁷⁵⁾ This means that patients have a right to access services to address their health care needs. Access to treatment can also be impacted on by geographic access and access in a language that patients can understand as well as financial accessibility.

3.3.2.4 Continuous relationships

Continuity of care for patients refers to multiple concepts. It usually refers to the patient being able to access one practitioner/s continuously throughout their treatment. However, it can also refer to record continuity (the patient's medical information being available to all providers caring for them) and site continuity (the patient accesses health care at one location).⁽¹⁸³⁾ Continuous therapeutic relationships with health providers are an important element in delivering PCC, and of particular importance for chronic condition patients. As the treatment of chronic conditions requires long-term patient involvement and management, it also provides greater opportunity for the practitioner to build a positive therapeutic relationship with the patient.⁽¹⁶⁹⁾

3.3.2.5 Respect/privacy

Practitioners who communicate and interact in a respectful manner towards patients demonstrate this element of PCC. It is important to respect patients and their culture, beliefs, values and personal characteristics.⁽¹⁷⁵⁾ Respectful relationships, in turn, facilitate the treatment of patients in a holistic manner; viewing them as a whole person and not as an illness or a collection of symptoms. Holistic care also encompasses, whenever possible, acknowledging and respecting patients' preferences, values and needs, and providing appropriate follow-up treatment as well as supporting patient autonomy and quality of life.

Respecting a patient's privacy and the confidentiality of their personal information is important for PCC. Privacy is important to facilitate the establishment of a therapeutic relationship between patients and the health professional/s involved with their care. It is also an important component in treating patients with respect as it recognises that patients should be able to control who has access to information about them and their bodies. I found it to be a significant aspect of care provision for the patients in my study; therefore, a short section on the role of privacy in pharmacy practice is included in section 3.3.3.

3.3.3 Pharmacy privacy

In the above section, the provision of privacy and respect has been highlighted as an element of PCC. The term privacy is multifaceted in its meaning⁽¹⁸⁴⁾. DeCew⁽¹⁸⁵⁾ believed that privacy is not special because privacy interests or rights can be protected in other ways. Privacy has been described as the control we have over information about ourselves^(186,187), or the respect for people's autonomy which allows them to make choices, rather than having choices imposed upon them.⁽¹⁸⁴⁾ For some people, privacy has intrinsic value as having a choice about those to whom we reveal personal information is part of being human, and is to be valued in itself. Privacy also has instrumental value: it supports good outcomes, helps to maintain goodwill and sustains interpersonal relationships.⁽¹⁸⁵⁾

Patient privacy in health care applies to their health and other personal information, particularly because these data are tightly linked to personal identity. Capron⁽¹⁸⁴⁾ described personal data as a particular aspect of one's self, much like the physical space that someone occupies. Thus, if someone has intruded on this personal space (or medical records), it is similar to experiencing another person enter your home.⁽¹⁸⁴⁾ Therefore, privacy requirements include medical records which are generated as a result of patient-provider encounters.⁽¹⁸⁸⁾

An individual's right to privacy is well documented in existing Australian legislation. The Australian *Privacy Act 1988* protects personal information, whether recorded in a material form or not, about an individual whose identity is apparent, or can reasonably be ascertained, from the information.⁽¹⁸⁹⁾ Personal information is just one aspect of privacy

which is covered in the legislation. Other aspects covered in the legislation include territorial privacy, physical or bodily privacy, and privacy of communications.

Pharmacy services must be delivered in a private manner in accordance with the privacy legislation as well as the Australian Pharmacists' Code of Ethics and Code of Conduct. The Pharmaceutical Society of Australia (PSA) Code of Ethics for Pharmacists states that a pharmacist is obliged to "[e]nsure compliance with the consumer's right to privacy" in any interaction.⁽¹⁹⁰⁾ In addition, the Pharmacy Board of Australia's Code of Conduct for all registered pharmacists specifies that: "[p]ractitioners have ethical and legal obligations to protect the privacy of people requiring and receiving care". This includes "providing appropriate surroundings to enable private and confidential consultations and discussions to take place".⁽¹⁹¹⁾ Similarly, the American Pharmacists Association has a code that supports the same principles.⁽¹⁹²⁾ These codes reaffirm the importance of privacy provision by the pharmacy profession. Therefore, any information exchanged during face-to-face consultations at a pharmacy must be protected and not shared with others without the consumer's permission. Thus, the judicious collection of patient information and storage of patient records in a secure manner is regarded as a pharmacist's professional duty. Pharmacists should only share information with patient consent, unless required by law.⁽¹⁸⁸⁾

Privacy protection is relevant to individuals who access services at a community pharmacy. Individuals may access a community pharmacy for prescriptions, medication counselling or advice for health ailments. During the course of these activities, an individual may communicate private information through face-to-face interaction with a pharmacist or other pharmacy staff. It is also possible that pharmacy telephone conversations with other health professionals or consumers may be audible to others. Pharmacy staff can also communicate private information by leaving a prescription on the pharmacy counter where others can see it. A pharmacist providing medication directions at the front counter can also communicate private information to a nearby third party. This might unintentionally occur either via verbal exchange of information or handing over medication to a person at the front counter.

An individual's privacy can be protected at a community pharmacy in a number of ways. Discussions between a pharmacist and an individual about medications or health

care issues can be conducted in a private area so that it cannot be overheard by third parties.⁽¹⁸⁹⁾ Also, discretion is needed to ensure that persons are not stigmatised by entering a place which clearly identifies (e.g. through signs) the service that they are accessing.⁽¹⁸⁹⁾ Pharmacy staff should also take care to prevent people's privacy from being violated, for example, by storing prescriptions away from the front pharmacy counter and ensuring that other people at the front counter cannot identify which items are being handed to someone else.

Studies about privacy in the pharmacy indicate that the perceived privacy provided to pharmacy consumers can influence the use or acceptability of professional pharmacy services. The international literature has identified a lack of privacy as a potential barrier to implementation and access to a range of professional pharmacy services. International studies have investigated alcohol health promotion by community pharmacists.^(193,194) A lack of privacy^(193,194), and limited pharmacist time^(193,194) and experience⁽¹⁹³⁾ were identified as potential barriers to the development of professional practice roles in community pharmacies. Pharmacy consumers have reported privacy concerns, even if there was a separate consultation room, owing to a pharmacy's retail environment⁽¹⁹⁴⁾ and space concerns.⁽¹⁹⁵⁾ Pharmacy consumers in Dhital, Whittlesea, Norman and Milligan's⁽¹⁹⁴⁾ study (sample did not include OST patients) perceived the lack of privacy as detrimental for consumers and OST patients. Other pharmacy consumers' views on OST services offered to drug misusers were explored in another study⁽¹⁹⁶⁾, the majority of respondents supported the provision of these services by pharmacies. This was on the condition that there was adequate privacy (in the form of a partitioned area or private room) so that patients received their medication with a sense of dignity.

Pharmacy practice is moving from the traditional prescription-focused approach to PCC. PCC encompasses a number of concepts including patient participation in decision making, communication, access to treatment, continuous relationships and respect/privacy. It enhances patient-provider relationships and leads to improved delivery of health care.

3.3.4 Why PCC is important for OST patients

It is imperative to adopt the PCC approach for the care of chronic condition patients like OST patients. Opioid dependence is a chronic relapsing medical condition and people from all socio-economic backgrounds, including particularly those from disadvantaged populations, are affected. The provision of patient-centred health care for vulnerable or disadvantaged populations is especially crucial because communication and collaboration with health professionals can be problematic for these populations.⁽¹⁷¹⁾

Although PCC is imperative for OST patients, consumer engagement is less reported for OST compared to other types of health care. In some areas of health care, it is well accepted for providers to engage with consumers using the principles of PCC. The role of consumer engagement in the delivery of care to mental health, disabled and alcoholic patients⁽¹⁹⁷⁾ has been reported. For example, patient-centred approaches have been used for the design of facilities for residential substance use treatment and mental health care.⁽¹⁹⁸⁾ Participating residents acknowledged that physical design which was respectful of patient privacy and independence was linked with improved quality of life and empowerment.⁽¹⁹⁸⁾ In contrast, Ritter and Chalmers⁽¹⁰⁾ reported a lack of OST patient involvement with treatment planning and brought attention to the lack of formal mechanisms for consumer involvement for such populations in Australia.

There is evidence from a number of studies that OST treatment quality can improve when a PCC approach is adopted. For example, a NZ study found that key strategies to improve the quality of OST treatment included significantly increasing patient input into treatment planning decision making about their treatment.⁽¹⁹⁹⁾ In addition, the Tasmanian government has taken active steps to include patients in the planning, development and delivery of alcohol, tobacco and other drug services in their state. The *Future Service Directions Plan for Alcohol, Tobacco, and Other Drug (ATOD)* prioritises the establishment of a patient participation framework. In another study, a sample of HIV and opioid-dependent patients reported that they preferred to receive buprenorphine in an integrated office setting owing to a greater sense of patient-centred care (PCC). They perceived greater convenience and stronger therapeutic relationships with providers in having addiction treatment and HIV care treated at one location.⁽²⁰⁰⁾

Despite these developments, it is still the case that there is a lack of OST patient involvement with treatment planning, highlighting the lack of formal mechanisms for consumer involvement for such populations in Australia.⁽¹⁰⁾ Crawford⁽²⁰¹⁾, an OST patient and an employed drug user advocate, described their treatment as constantly having to “shout through bullet-proof glass” to be heard. The author suggested that being heard as an OST patient is challenging because communication with practitioners through a glass-like barrier does not guarantee understanding. The author believed that OST is governed by guidelines and rules rather than therapeutic relationships which results in punitive and unresponsive treatment. Crawford suggested that only with effective engagement with patients can OST begin to be more effective for the people for whom it cares.

3.4 The research gap

This chapter has shown that alternative prescribing models practised internationally permit pharmacists to prescribe for a range of chronic conditions and that there are advantages to this approach. Additionally, PCC has been identified by the Australian and international literature as important for providers, patients and health organisations in delivering quality health care. Despite this acknowledgement, there is less evidence that OST patients are formally or traditionally involved with treatment decisions in line with the principles of PCC.

As noted in Chapter 2, the current medical-only prescribing model for OST patients does not fulfil the demand for services in SA. The reason is that there is an inadequate supply of medical prescribers interested in OST. The need to address increasing demands for OST via alternative prescribing models warrants exploration in the Australian setting. My qualitative research will address this research gap and explore South Australian patients’ and community pharmacists’ views about co-prescribing for OST.

3.5 Chapter summary

In this chapter, a review pharmacist prescribing and OST was conducted. The difference between pharmacy practice which focused on the supply of a product from a prescription rather than a patient-centred approach to care was described. Internationally, non-medical prescribing which includes pharmacist prescribers is permitted in a range of settings for the care of a variety of chronic conditions. There is some overlap between the development of non-medical prescribing in Australia and internationally, but the extent of pharmacist prescribing is more developed internationally in comparison to Australia.

Chapter 4 Methodology and methods

In this chapter, the methodology and methods used for the three components of my research are described, including their rationale. Firstly, face-to-face interviews with OST patients and, secondly, focus group interviews with community pharmacists were conducted. Thirdly, the process for selecting and recruiting study tour participants will be discussed. For each component, I will outline how participants were recruited, the interview schedule and participant demographics. Next, I will describe the approach that I took to analyse the transcribed data analysis and provide examples of how this approach was used. In the last part of this chapter, I will discuss reflexivity and how it played a role in my research journey.

4.1 Rationale for methodology

Qualitative research provides tools for exploring and understanding individual and group meanings with respect to a social or human problem.⁽²⁰²⁻²⁰⁴⁾ It focuses on answering the ‘why’ and ‘how’^(203,205) of social problems and phenomena. Qualitative research methods are especially relevant to the discipline of public health owing to their ability to describe and understand people’s experiences, opinions, perceptions, values and attitudes. These methods provide an insight into people’s experiences, which cannot be articulated as effectively using quantitative methods⁽²⁰³⁾, and human interaction is also important to understand their experiences and attitudes.⁽²⁰⁶⁾

Qualitative research was the most appropriate method of inquiry for my research as I aimed to explore and understand patients’ and pharmacists’ experiences, opinions, perceptions, values and attitudes toward current pharmacy practice for OST patients and collaborative prescribing with medical practitioners. Additionally, on my study tour, I explored the experiences of international practitioners and policy makers who were involved with pharmacist prescribing. During this research process, I identified the impact that my own life experience had on my interactions with participants.⁽²⁰⁵⁾ (The ways in which I shaped all three phases of my research will be discussed in section 4.9 of this chapter under ‘Reflexivity’.)

Theories provide researchers with different lenses through which to look and a framework within which to conduct their analysis.⁽²⁰⁷⁾ They can help to design a research question, guide the inclusion of relevant data and data interpretation, and provide explanations for research findings.⁽²⁰⁷⁾ To best answer my research questions, I have used an interpretivist theoretical perspective. Interpretive researchers understand the social world from the perspective of individual experiences. Interpretivists believe that humans are creators of their own worlds: this is how individuals shape their everyday perception of the world^(203,208) and how the world shapes an individual's perceptions, social phenomena and social experiences.

Interpretivism aims to understand human (social) action and its meaning from the perspective of the participants being studied. An interpretivist's understanding of the participant and their experiences and views is an intellectual process whereby they gain knowledge about the meaning of human action.⁽²⁰⁹⁾ To achieve this aim, interpretivist researchers' focus is on understanding and interpreting. Interpretivists also regard exploring human interactions as central to their research.

Interpretivism is relevant and appropriate as a basis for my research as my focus is on understanding how co-prescribing would be understood and interpreted by patients and pharmacists. This will, in turn, contribute to an appreciation of how pharmacist co-prescribing for OST could impact on patients and on some health providers. My research is interested in understanding how professionals and patients would experience the policy of co-prescribing if it were enacted. It therefore seeks to understand patients' experiences with the existing model of care as well as patient and pharmacist views on pharmacist co-prescribing for OST.

4.2 Methods for face-to-face interviews with patients

I chose to conduct semi-structured face-to-face interviews with 14 OST patients at a state government drug and alcohol clinic. I had considered a range of research methods before deciding on face-to-face interviews. Questionnaires were considered as less ideal due to potential literacy problems amongst the sample population, and the inability of questionnaires to gain an in-depth understanding of opinions. Focus group interviews were

also considered, but patients might have been deterred from participating if their identity were revealed in a group setting. Face-to-face interviews with patients also offered a number of advantages. It is possible that some patients might not have wished to participate in the study if it unintentionally disclosed their treatment details to other people. During a face-to-face interview, the researcher can provide the participant with their total attention and ensure anonymity. The interviewer can also prompt the interviewee for further detail during the discussion^(210,211), and clarify or further probe participants to better understand participants' responses.⁽²¹²⁾

4.3 Recruiting and interviewing participants to the study

4.3.1 Recruitment of participants

I conducted the interviews at the place of recruitment (a state government drug and alcohol clinic) between April and May 2011. The data access agreement (Appendix 4) provides verification on how access to the recruitment site was approved. I placed a poster in the waiting room of the outpatients clinic setting (refer to Appendix 1) to attract potential study participants. Patients who were eligible to participate in the interview were currently on methadone, buprenorphine or buprenorphine/naloxone treatment (without a history of treatment for chronic pain) for 12 or more months and living in the Adelaide metropolitan area, as defined by the Australian Bureau of Statistics (ABS).⁽²¹³⁾ The poster indicated that potential participants should ask the receptionist for an information sheet if they were interested in finding out more about the study. If a potential participant indicated their interest to the receptionist, the receptionist contacted me either via paging or email. I then either presented to the outpatients waiting area immediately or telephoned the potential participant to discuss their potential involvement with the study. Participants had the opportunity to ask me any questions about the study and to clarify whether or not they wanted to be involved. Participants were required to sign a consent form and received a \$30 supermarket debit card as compensation for their time and travel costs to attend the interview.

The clinic provides a range of services for patients with drug and alcohol issues in an outpatient setting. Owing to the wide range of services provided, not all patients who

attended the clinic were on opioid pharmacotherapy and, therefore, eligible for the study. Approximately 600 patients are registered with the clinic from which patients were recruited, but it is not known how many OST patients attended during the period of recruitment (April to May 2011). For these reasons, it is difficult to accurately ascertain the total number of eligible patients who entered the clinic during the recruitment period.

During the recruitment period, a total of 19 potential participants approached reception staff and indicated their interest in the study. After these 19 potential participants had read the information sheet and discussed the study with me, all agreed to participate in the study. I scheduled an interview time for the 19 potential participants, but five did not attend their scheduled interview. I contacted these five potential participants to reschedule the interview, but none of them responded to my missed call or voice message. In total, I conducted 14 face-to-face audio recorded interviews with a mean duration of 51 minutes (range: 26-75 minutes) within a secluded room on the clinic premises.

Due to anticipated time constraints involved with travel to conduct face-to-face interviews in rural districts, this study included only metropolitan patients. I acknowledge that there would be value in interviewing patients who are rurally located but unfortunately this was not feasible. Also, with considering the small number of rural patients presenting to the clinic, I anticipated that it was not likely that data saturation could be reached with a rural sample at this recruitment site. There would have been value in interviewing patients who could not access OST services or who were on a waiting list. However, I considered it unethical to ask individuals who could not access services for an interview as they would be likely to be in a distressed or vulnerable state. Therefore, only patients accessing the one (metropolitan-based) government clinic and living in metropolitan areas (as defined by the ABS) were eligible for my study.

4.3.2 Interview schedule and data collection

I conducted the face-to-face interviews and was guided by a semi-structured interview schedule (see Table 7). Initially, I designed the interview questions from questions that were already in my head from the development of my thesis. (The reflexivity section about how the project idea was conceived will be detailed later in section 4.9.) My existing

experience and knowledge about the use of open-ended questioning and prompts were incorporated into the design of the interview schedule to extract as much information as possible from participants. My supervisors and I then revised the interview schedule on numerous occasions when refining the research questions and aim.

I initially conducted two pilot interviews which were used to finalise the interview questions. After each of these interviews, I asked the participant whether or not they had any feedback comments about the questions, or ways to improve the interview schedule. Based on the feedback received, no amendments were made to the interview questions or prompts; therefore, the pilot interviews were included in the final data set.

During the interviews, I recorded brief field notes (by hand) to enable reflection on observations and transcripts afterwards. I de-identified participant details before the interview audio recordings were independently transcribed verbatim by a professional. I then coded the transcripts after the completion and transcription of every two interviews to monitor for data saturation before continuing participant recruitment.

Table 7 Patient interview schedule

Key question	Prompts
Tell me how you managed to find a doctor to start on the program?	<ul style="list-style-type: none"> • Ease in access to and travel to doctor? • Other people’s experiences? • What waiting time is reasonable? • Choice of doctors available? • Travel time to prescriber? Is this easy for you? • Travel time to pharmacy? Is this easy for you?
What qualities do you think a doctor prescribing for the program should have?	<ul style="list-style-type: none"> • Availability for appointments? • Time spent with patient sufficient to meet their needs? • Convenience to get to location? • Ideal professional qualities? • Cost? • Support felt?
What are your thoughts on a pharmacist being able to prescribe collaboratively with your doctor?	<ul style="list-style-type: none"> • How would this work for you? • Reasons for support? • Reasons for objection? • Functions a pharmacist should not be able to do, and should only be left to a doctor? • Functions a pharmacist might be able to do further than currently to better contribute to your care? • Privacy concerns?

I asked the participants about their views on privacy if a pharmacist could co-prescribe for them. Participants responded to this question by talking about their previous experiences when attending for supervised dosing at a pharmacy. They discussed their views on confidentiality (data or records kept about them by the pharmacy) as well as privacy when attending the pharmacy for dosing. I had not anticipated that participants would discuss their experiences of privacy when attending the pharmacy under existing treatment arrangements. However, privacy was clearly an important issue and, therefore, I have included an analysis of patient experiences of privacy at the pharmacy in Chapter 7.

4.3.3 Participant demographics

The participants' time on treatment ranged from 1.5 to 28 years (10 participants reported a treatment length ranging from 1.5 to 5 years) and half of the participants had take-away dose entitlements. All participants received OST medical services through a clinic, except one patient who consulted with a community GP. Interviewee demographic characteristics are described further in Table 8.

Table 8 Interviewed patient demographics

Patient number	Age range	Sex	Current OST	Previous attempts on the program	Current prescriber	Current take-away entitlements	Length of time of treatment	Transport to doctor	Transport to pharmacy
C1	51-60	M	Suboxone®	NO	DASSA	YES	5 years	1-1.5 hours by bus	30 minutes by foot
C2	31-50	F	Methadone	NO	DASSA	NO	4 years	10-15 minutes by bus	1.5 hours by bus
C3	51-60	M	Methadone	NO	DASSA	NO	28 years	1 hour by bus	1 hour by bus
C4	31-50	F	Methadone	YES 12 years ago	DASSA	YES	18 months	15-20 minutes by car	10 minutes by foot
C5	31-50	M	Methadone	YES this is her third attempt	DASSA	YES	4 years	1 hour by bus	45 minutes by foot
C6	31-50	M	Suboxone®	YES	DASSA	NO as just switched from methadone	5 years	20 minutes by bus	20 minutes by bus
C7	31-50	M	Methadone	YES 5 years ago	DASSA	NO	18 months	15 minutes by car	15 minutes by car
C8	31-50	F	Suboxone®	YES	DASSA	NO	3 years	40 minutes by bus/train	20 minutes by foot
C9	51-60	F	Suboxone®	YES 24 years ago	DASSA	NO	24 years	2 buses	10 minutes by foot
C10	31-50	M	Suboxone®	YES 15 years ago	Private GP	YES	5 years	20 minutes by car	20 minutes by foot
C11	51-60	F	Methadone	NO	DASSA	YES	25 years	20 minutes by car	20 minutes by foot
C12	31-50	M	Methadone	NO	DASSA	YES	10 years	45 minutes by car	5 minutes by car
C13	31-50	F	Methadone	YES in 1998	DASSA	YES	3 years	1 hour by car	Not recorded
C14	31-50	M	Methadone	Yes 16 years ago	DASSA	NO	8-9 years	15 minutes by car	10-minute walk

4.3.4 Participant motivations for participation

There were varied motives for patients to participate in my study and it is unlikely that they represent the views of the entire clinic or OST patient population. I acknowledge that the 14 interviewed patients represent a small proportion of the clinic or state's OST patient population. Individuals who were willing to participate appeared to be motivated by a number of reasons. These motivations ranged from wanting to share their experiences with someone who would listen to wanting to complain about specific pharmacy or clinic issues. Another patient was seeking potential employment opportunities, and others were likely to be motivated by the gift voucher.

4.3.5 Data analysis: the framework approach

I managed the transcripts using NVivo and used the five-step framework approach for the analysis.^(212,214,215) The framework approach is increasingly being used for applied policy and health care research. It offers a systematic approach to sifting, charting and sorting key issues and themes. It is completed through applying five steps: familiarisation with the data; identifying a thematic framework; indexing (thematic framework is applied to the data); charting; and mapping and interpretation. An overview of the framework approach's five steps is described in Table 9. The end result is the formulation of a thematic framework which is mapped and interpreted to define concepts, associations and explanations for the findings.^(215 216) The five interconnected steps enable the researcher to move back and forth across data to explore data in depth and refine themes in a transparent manner. These steps also guide researchers to systemically analyse the data through to the development of descriptive explanatory accounts.⁽²¹⁴⁾ Key themes were discussed with my supervisor before being refined.

Table 9 The five steps of analysis using the framework approach

Familiarisation Researcher immerses themselves in the raw data through reading transcripts and listening to recorded interviews to list key ideas and recurrent themes.
Identifying a thematic framework Key issues, concepts and themes are identified by returning to the research notes. This is done through identifying themes/issues raised by respondents, or determined in advance from the aims and objectives of the study.
Indexing Transcripts and data are then coded into an index. This is the process whereby the thematic framework is systemically applied to the data in their textual form.
Charting The indexed data are categorised into the appropriate thematic framework. These charts are used to define concepts. This is done to create an overall picture of the data as a whole from a range of perspectives for each issue or theme.
Mapping and interpretation Associations between themes are identified to provide an explanation for findings. The charts and research notes are revised and contrasted to seek patterns and explanations within the data.

Sources: (212, 215, 217)

A more detailed account of the data analysis stages (see Appendix 2) documents the codes that I anticipated prior to data analysis. It also outlines how the main themes and codes were developed and documents how I continued to recruit more patients until the point of data saturation was determined.

4.4 Evolution of the research question

As I was analysing the data, I revised the original research question on numerous occasions. The original research question that I had established was: what are the views of patients on collaborative pharmacist prescribing of methadone or buprenorphine with accredited doctors in SA? At the start of the data analysis phase, I was focused only on the most recent version of the research question. However, as I continued to analyse the data, it became apparent that other information-rich data which were not directly related to the original research question had been collected during the interviews. After discussions with my supervisors, we established that, in addition to the original research question, two

additional research questions could be answered through the data collected. Eventually, the three research questions relating to the patient interviews were finalised:

- 1) *What are patients' experiences with the existing model?*
- 2) *What are patient's experiences of privacy at the pharmacy?*
- 3) *How could pharmacist co-prescribing impact on the delivery of opioid substitution treatment (OST)?*

Extended documentation of how the first two research questions evolved throughout the data analysis can be found in Appendix 3.

The main theme of privacy developed during the data analysis phase. Originally, I had included a prompt in the interview schedule about privacy with the intention that participants could discuss whether or not they had any privacy concerns about pharmacist co-prescribing. However, most participants ended up discussing whether or not they had privacy concerns when attending the pharmacy under existing arrangements. The issue of patient privacy affects current OST services and would also have significant implications for the proposed model of care on which this thesis focuses. For these reasons, I decided that the main theme of patient privacy would be a stand-alone chapter.

I analysed patient views on their experience of privacy at the pharmacy. This was completed by a comparison of their views about where they were dosed in the pharmacy and whether or not they believed that their privacy was violated. In addition, patient responses that related to them not caring about privacy were collated. Appendix 9 provides a more detailed account of how patient views of privacy were analysed. Later in Chapter 5, I will describe how the patient typologies of difficult and easy access to OST services were established. I then analysed the theme of privacy according to initial patient access to OST to examine whether or not there was a correlation between patient views on privacy and this typology. Appendix 10 documents how patient views of privacy were analysed according to patient typology.

4.5 Methods for pharmacist focus group interviews

In the second part of my study, I conducted three focus group interviews with 18 pharmacists to explore their views on a policy proposal which would allow them to co-

prescribe for OST patients. I selected focus group interviews for a number of reasons. Focus groups allow differences in opinions or attitudes to be discussed^(203,208,218) on topics on which there may be variable understanding and/or familiarity. As I anticipated that South Australian pharmacists might have a limited understanding of these overseas practices, focus groups were ideal for my study. My research topic was also related to a policy which has relevance to a whole group. Focus groups provide the opportunity for robust conversations amongst participants of the same profession, during which the range of views can be canvassed. Moreover, focus groups are good at identifying the breadth of views and providing a semi-public forum in which those views can be heard and checked against the views of others. It provides participants with the opportunity to discuss, reflect and clarify their own and each other's thoughts.^(212,219) Thus, communication between participants of a focus group interview can generate and exchange ideas which enable a deeper exploration of a topic of public significance.

The term *collaborative prescribing* was used in this thesis title to capture the essence of prescribing jointly in a team setting between pharmacists and prescribers. The term was used so that there would be no bias amongst the participant sample about their preference for either the independent or supplementary prescribing model. To shorten the term *collaborative prescribing*, the term *co-prescribing* was used.

4.6 Recruiting and interviewing participants

4.6.1 Recruitment of participants for focus group interviews

As per the data access agreement (refer to Appendix 4), DASSA, SA Health provided me with a list of 212 South Australian pharmacies that dispensed methadone and/or buprenorphine in 2011. I stratified the population of OST (212) pharmacies in SA by remoteness classification by categorising each pharmacy suburb according to the Australian Standard Geographical Classification (ASCG) remoteness areas. These remoteness classifications were RA1 (major city), RA2 (inner regional), RA3 (outer regional), RA4 (remote) and RA5 (very remote).⁽²²⁰⁾ The location of each pharmacy was categorised by entering its address into DoctorConnect.gov.au (an interactive tool developed by the Australian Government Department of Health and Ageing Remoteness Area based on the ABS remoteness area structures). I then randomly invited 50 percent of

the sample from each remoteness classification to participate in the study. Of the randomly invited pharmacies, invitations were issued, firstly, by fax and, secondly, by a follow-up phone call after five weeks if they had not responded, seeking their participation in a focus group interview. The response rate was approximately 18 percent (Figure 3 outlines the response rates at various phases of the study). Focus group participants and the rural classification of their employing pharmacy are outlined in Table 10.

Participants were required to meet two inclusion criteria to participate in the study. First, participants needed to have been registered South Australian pharmacists for more than one year and, second, they needed to be currently dispensing regularly for the OST program. All focus group participants signed a consent form to indicate their voluntary participation and did not receive any financial reimbursement for taking part in the research.

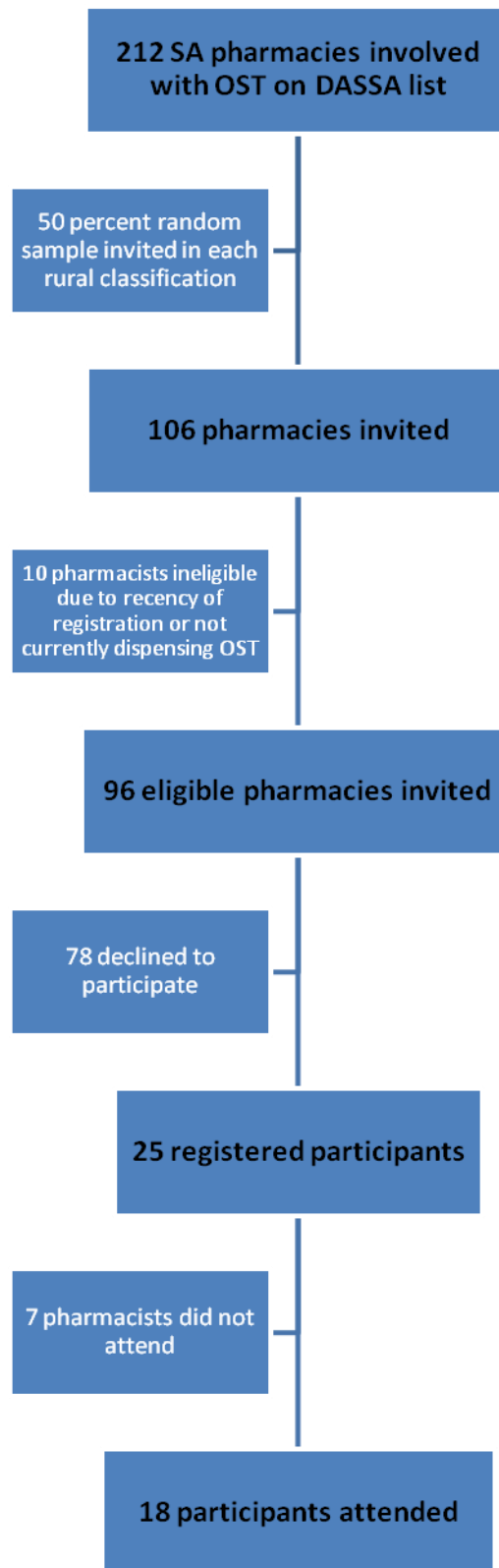


Figure 3 Pharmacist^k response rate to the focus group interviews

^k In Figure 3, pharmacist refers to the participants who responded and pharmacies refers to the business in which they were based.

Table 10 Participants who attended and the rural classification of their pharmacy

Pharmacy rural classification	Number of faxes sent	Pharmacists who participated in a focus group interview (n=18)
RA1	70	14
RA2	15	2
RA3	15	2
RA4	4	nil
RA5	2	nil
Total	106	18

4.6.2 Focus group interview schedule and data collection

Prior to the focus groups, I developed a semi-structured interview schedule to guide my role as the facilitator. Refer to section 4.3.2 for details on how the interview schedule was developed. In my role at DASSA, I am familiar with speaking to pharmacists to seek relevant information, so these skills were also used to develop the interview schedule and prompts. A summary of the key interview questions and prompts is outlined below in Table 11.

As noted previously, I conducted three focus group interviews with 18 South Australian community pharmacists between March and May 2012. Two focus group sessions were conducted in a metropolitan conference room and the third was an audio recorded teleconference to enable participation from all geographical areas. All three focus group interview audio recordings were transcribed verbatim by a professional transcriber.

Table 11 Pharmacist focus group interview outline

Key question	Prompts
What are your views on pharmacists co-prescribing ¹ for methadone and buprenorphine with accredited doctors?	<ul style="list-style-type: none"> • Why do you support or object to this idea? • What might be the risks? • What might be the benefits?
If this policy were approved, what key features of a co-prescribing model do you think should be considered?	<ul style="list-style-type: none"> • What aspects would you object to? • What aspects would make it successful? • Where would the pharmacist be located? • How would the pharmacist be remunerated? • Training and maintenance of skills?

I anticipated that pharmacists were unlikely to know about international models of prescribing so provided pre-reading material about this topic prior to the focus group interview. The pre-reading material (see Appendix 6) described international models of prescribing and differences between independent and supplementary prescribing models. I prepared and sent this reading material to participants prior to the scheduled focus group to maximise available discussion time. To ensure that participant responses were not biased in a particular way, I intentionally ensured that pre-reading material did not provide any opinions about the content.

4.6.3 Focus group participant demographics

A total of 18 pharmacists participated in three focus group interviews: five in the first group, seven in the second group and six in the third group. Half of the total focus group participants (9) were aged 40 years or less, and the other half (9) were aged 41 years or more. Of the 18 participants, 12 were male and 6 were female. These pharmacists had been registered for an average of 14 years (range 1-36 years), with an average of 12 years (range 0.5-31 years) of experience with OST. A more detailed description of participant demographics is presented in Table 12.

¹ *Co-prescribing* is a shortened version of the term *collaborative prescribing*.

Table 12 Focus group participant demographic details

Focus group number	Pharmacist number	Age range	Sex	Years as a registered pharmacist	Years of experience dispensing OST	Pharmacy rural classification
1	Phc1	≥61	M	44	26	RA2
1	Phc2	18-30	F	1	2	RA1
1	Phc3	41-50	M	24	24	RA1
1	Phc4	41-50	M	23	21	RA1
1	Phc5	51-60	F	32	31	RA2
2	Phc6	18-30	F	6	6	RA1
2	Phc7	51-60	M	25	25	RA1
2	Phc8	18-30	M	6	4	RA1
2	Phc9	41-50	M	14	14	RA1
2	Phc10	18-30	M	4	0.5	RA1
2	Phc11	18-30	M	2	1	RA1
2	Phc12	41-50	F	22	20	RA1
3	Phc13	31-40	F	9	9	RA3
3	Phc14	≥61	M	36	12	RA1
3	Phc15	18-30	M	3	2	RA3
3	Phc16	18-30	F	2.5	3.5	RA1
3	Phc17	41-50	M	20	12	RA1
3	Phc18	18-30	M	5	5	RA1

4.6.4 Data analysis

I managed the focus group transcripts using NVivo and analysed the data using the five-step framework approach.^(212,214,215) This method was also used to analyse the patient face-to-face interviews and has been described in further detail earlier in this chapter. At the first step of the framework approach, I read and re-read the transcripts whilst simultaneously listening to the audio recordings. This was to familiarise myself with the data and assist with the identification of the key ideas and recurrent themes.^(212,214) Refer to Appendix 7 for documentation on how the codes were developed and analysed from the focus group transcriptions. Through this analysis process, I again refined the main and sub-themes. I then sorted these themes into benefits, barriers and measures that could be implemented to address these barriers (i.e. facilitators) for three key groups: patients, pharmacists and doctors. Refer to Table 18 in Chapter 8 for an outline of these finalised themes.

4.7 Ethical approval and data storage

The DASSA's Research Review Committee approved the research application on the condition that ethics approval was sought and granted for the project. The study was approved by the Human Research Ethics Committee of the University of Adelaide (Approval number H-208-2010) and the SA Health Human Research Ethics Committee (Protocol number: 427/01/2014).

As per the approved ethical protocol, all participants consented to being recorded and the audio recordings were securely stored. All study participants were provided with an information sheet and signed their consent to indicate their willingness and voluntarily participation in the study. Participants were also reassured that their responses were confidential. With participant consent, these interviews were audio recorded and the audio recordings as well as the electronically transcribed data were stored on a password-protected computer at the University of Adelaide.

4.7.1 Data access approval

I signed a data access agreement with the University of Adelaide and SA Health which provided me with information on participating OST pharmacies in the state (see Appendix 4). Shortly after the data access agreement was signed, changes occurred to organisational reporting lines within SA Health. A Deed of Novation was then signed (see Appendix 5) to reflect these changes and re-instate the terms and conditions of the original agreement. The signing and approval of both contracts involved a University of Adelaide lawyer and the Crown Solicitor's Office and took a total of 13 months to be finalised.

4.8 Study tour approach

Published study tours in the literature have demonstrated that a study tour can be a valuable and valid method of enquiry. International study tours have been used to investigate a range of aspects of health care including nursing practices^(237,238), public health funding⁽²³⁹⁾ and men's health.⁽²⁴⁰⁾ These authors identified international practices or lessons that could be extrapolated and applied to their work environment at home.

Incorporating an international context in my thesis was crucial as pharmacist prescribing models are well established internationally, but not in Australia. I considered, but then ruled out, interviewing Australian key informants as they would be unable to provide the experiences of international key informants who had worked in a jurisdiction where pharmacist prescribing was legalised.

To explore international models of pharmacist prescribing, I considered other methods before choosing to undertake a study tour. I considered video-conference interviews over the internet or teleconference with international key informants, but decided these were not ideal owing to the practical limitations which were likely to reduce the quality of data collected. I also considered conducting a questionnaire or telephone interviews, but decided that there was far greater advantage in conducting a study tour due to the rapport provided by face-to-face meetings. The opportunity to observe practice sites and therefore to see firsthand some of the things discussed with key informants was particularly relevant as aspects such as layout and sites of pharmacies were easier to understand if I could see them.

4.8.1 Identifying and interviewing key informants

I identified key study tour sites through a search of the international literature. Establishments visited were: i) academic or research units; ii) organisations involved with the development, implementation or governance of pharmacist prescribing policies; iii) clinical sites where pharmacist prescribing was practised; and iv) other sites which provided an understanding of the country's health care system. Persons in leadership positions were identified⁽²⁴¹⁾ from academic papers, and leading pharmacy institutions and organisations and contacted by email before my study tour. Some of these leaders then facilitated my contact and meeting with other key experts or practice sites in their state or province. Note that there were similar prescribing experiences in literature from the United Kingdom but due to resource limitations only two countries, the US and Canada were visited on the study tour.

I conducted face-to-face meetings with key informants and observed practice sites on the study tour. Key informants consented to the meeting by their approval of the meeting time or practice site visit. Depending on the key informant's usual area of work, expertise and availability, I conducted a face-to-face meeting and/or observed their practices. One key informant was originally available, but had to reschedule to a telephone meeting via Skype due to competing commitments. Where possible, the key informant's contact details such as an email address were provided to allow for later clarification of matters if required.

Based on the study tour aims, I prepared a semi-structured question schedule. These questions guided the discussion and were selected according to relevance as well as participant time availability. The four guiding questions were:

- What are the models and functionality of pharmacist prescribing?
- What have been the facilitators of pharmacist prescribing?
- What have been some of the challenges of pharmacist prescribing?
- How are models of pharmacist prescribing funded?

Although the above questionnaire outline was prepared prior to the study tour, it was amenable to change pending the available time and relevance to the key informant as well as the emergence of new topics.

I met with a total of 28 key informants including people based in a range of research/academic units (5), policy/governance bodies (3), clinical sites where pharmacist prescribing was practised (12) and sites which provided an understanding of the health care system (8). The duration of interviews was between one and two hours; except for clinical practice site observations which were up to half a day.

During meetings and practice site observations, I took brief notes by hand. Then, at the end of each day, I recorded an extensive electronic diary to reflect on observations and discussions.

4.9 Reflexivity

One of the central tenets of qualitative research is that the researcher's background and skills influence all stages of the research process. This process, termed *reflexivity*, is central to the qualitative research activity itself.⁽²⁰⁸⁾ Reflexivity describes the ways in which researchers shape, either intentionally or unintentionally, all aspects of the research.⁽²²¹⁾ In qualitative research, the researcher develops the capacity to interrogate the biases, values and experiences that they bring to the research.^(203,222) The reason is that their background shapes how they ask questions and how they collect data. It also influences what findings are noticed by the researcher and those findings that they discard. In addition, the researcher's background influences how findings are analysed and interpreted.

The rigour of qualitative research is increased if the researcher is reflexive about their position in the study. One of the steps I undertook to develop reflexivity was to maintain a research diary throughout the research process. This raised my awareness of my potential influence on the data collection and interpretation. These steps were taken to acknowledge the influence of my background on the research and to minimise its influence on participant responses. The reflexivity process discussed the assumptions, conscious biases, values and experiences that I brought to the research.^(212,222) The accounts of my reflexivity are set out in the following section.

Prior to my PhD, I had observed pharmacist prescribing practices in the UK and was well aware that the shortage of OST medical prescribers in my home state of SA was an ongoing and long-term problem. I thus needed to acknowledge that, due to these prior experiences, all the codes and themes identified in this research may have a positive bias to the development of pharmacist prescribing. Prior to the commencement of my PhD, I participated in a Rotary exchange to Wales which provided me with first-time insights into pharmacist prescribing practices in the UK. My perception was that these practices seemed somewhat radical compared with mainstream Australian pharmacy practice, but they were exciting to me. The combination of my experiences on this exchange and my DASSA work experience conceived this PhD journey.

4.9.1 My reflexivity

Reflexivity through reading the literature and discussions with colleagues and my supervisors assisted in improving my technique as an interviewer and facilitator. Although I have previously observed focus group interviews being conducted, these were the first where I was the facilitator. I read numerous texts to gauge the ideal level of moderator involvement and enhance my questioning technique^(203,204,208,223) to prepare for the interviews. I also participated in discussions with colleagues at the discipline's Qualitative Methods Research Group. Discussions with my supervisor prior to and after the first focus group interview allowed me the opportunity to debrief and discuss how my approach as facilitator could be improved.

My position as an employee at the clinic influenced the interview data obtained during the patient face-to-face and focus group interviews that I conducted. For this reason, I clearly distinguished for participants a separation between my role at the clinic and my role as a researcher to minimise the potential influence of my employment on their responses. I am a pharmacist at the clinic, but it is important to distinguish that my role is to provide a clinical consultancy and liaison service to community pharmacies (external to the clinic), not to dispense medications. The Senior Pharmacist (a separate role from my position) is responsible for dispensary management, which includes the provision of patients' supervised doses. In addition, my work office is located in a different building to the

pharmacy dispensary which creates a distinct physical separation between my role and that of the dispensing pharmacist at the clinic.

Patients could have been influenced by my employment at the clinic, although we had no direct clinical relationship. I was conscious that patients might have felt obliged to respond positively to the policy proposal if they believed that their responses impacted on the care they received at the clinic. For this reason, I informed patients at the start of the interview that although I was a clinic employee, I had no involvement with or influence over their care. They were also reassured that their participation and responses were confidential and would not impact on their treatment. Additionally, I kept a research diary to raise self-awareness of potential influences on data interpretations and to assess the potential impact of my background on the findings.

Being a pharmacist could have been a disadvantage if patients believed that I was in a position of authority and were therefore intimidated or less willing to speak to me. To convey a first impression that I was not a figure of authority, I intentionally wore casual clothes rather than professional attire to the interviews. I also did not refer to myself as a pharmacist but as an employee of DASSA in case the title of 'pharmacist' intimidated them. In a few interviews, however, it became apparent that some patients already knew of my pharmacist background as they assumed that I understood things that a layperson would not have known. In these scenarios, I responded by asking the interviewee to explain the information that they presumed I had understood. My request for clarification was intended to reiterate to patients that they were not speaking to a pharmacist, but to a researcher.

Previous work experience was likely to have aided my comfort levels in interviewing patients. If I had not been familiar with the environment or topic, I would probably have felt less comfortable and confident in conducting face-to-face interviews. Owing to my prior pharmacy experience, I feel comfortable interacting with a range of people in a professional setting. I felt assured and safe due to the familiar interview location and supportive front reception staff. Additionally, all interview rooms had a duress alarm, although the need for this did not even slightly emerge. All of these factors helped to maintain my confidence and comfort levels throughout the face-to-face interviews.

I believe that the familiar environment in which the interviews were conducted was advantageous to the research process. These circumstances probably helped me to build rapport with patients in the first instance which made participants feel more comfortable in speaking about their experiences with me. The clinic location and setting was an environment familiar to both the interviewees and me. This familiarity helped us to feel comfortable with the physical environment in which the interviews were conducted.

At the start of the face-to-face interviews, I felt keen and conscientious to try and collect a good data set, and this eagerness probably aided with improving my interview technique. Prior to the interviews, I understood that some patients were likely to have endured life hardships, so was conscious to listen and respond sensitively during interviews. After listening to the audio recording of the first interview, I became aware that my pre-planned conscientious sensitivity made me attentively listen to patient responses, but that I forgot to ask for more detail. Thereafter, I noted to probe patients for further detail after I listened to their responses. This probing technique assisted me to gain a deeper understanding of patient opinions in the later interviews conducted.

The unexpected theme of privacy emerged during data analysis. With consideration of the importance and potential implications of the topic to existing and future pharmacy practices, my findings about privacy were developed into an entire chapter. Despite my familiarity with different pharmacy layouts prior to this research, it had never occurred to me that a private dosing room was not always considered private by patients. As I reflected on participant responses about privacy at the pharmacy, I became aware that my prior experience was as an insider in the pharmacy looking outward. By the end of the interviews and analysis, I had gained a sense of appreciation of how it felt to be a patient experiencing the pharmacy as an outsider looking in.

My perceived age could possibly have influenced participants' responses. I have been told in the past that I look younger than my actual age. If this perception is true, then my age could have been advantageous as it may have enhanced a patient's sense that I was someone who did not understand or have a great deal of life experience. I perhaps ended up gaining more information than originally anticipated through interviews with patients.

The process of reflexivity has made me appreciate the privileged position of a researcher. I appreciate that the patients interviewed voluntarily shared some very personal

details about themselves to explain their responses or feelings. During the more sensitive discussions, I reminded patients that they could voluntarily have a break from the interview if they felt uncomfortable, but none wanted to. This indicated to me that the patients must have felt comfortable with me and reassured of their confidentiality to continue with the interview. I was in a privileged position to be able to speak to patients about their treatment experiences and views on the policy proposal.

Prior to conducting the focus groups, I was mindful that my background and potential prior interactions with pharmacist colleagues through professional circles could influence pharmacist responses. The pharmacists were all involved with dispensing OST (as per the study inclusion criteria), so it is highly likely that they were already aware that I worked for DASSA. Even if I had not directly spoken to them as a DASSA employee, participants could have known of me through DASSA pharmacy notices, newsletters or events with which I am often associated. I was officially on sabbatical leave when approaching, recruiting and interviewing participants for the study. Thus, at the start of each focus group interview, I clearly stated that my involvement with the research was not as an employee of any organisation, but as a university researcher. Additionally, all research correspondence was sent with the university logo so that participants did not associate the letter with DASSA.

I was conscious during the pharmacist focus group interviews to not respond to professional questions as my role was to facilitate, not to be a participant. Any participant questions directed to me that related to professional knowledge were redirected to the group for their discussion. This strategy prevented any involvement by me in the discussion as a study participant due to my presumed knowledge or background. Thus, the possible influence of my background on participant responses was minimised. I found it a challenge at various times to not respond in a professional capacity to the questions being asked. For example, during one focus group interview, there was a discussion about OST legislation in the state. One participant initially asked me for clarification about OST legislation; I responded by referring the question back to the group. After a period of brief silence, eventually another member of the group answered the question and the discussion moved on. This enabled me to continue my role as the facilitator, and not to become involved as a study participant.

Pharmacists could have responded more favourably to the proposal if they perceived that I was a professional colleague who was a facilitator with the intention of extracting only positive responses. To minimise this potential effect, I played the ‘devil’s advocate’ and challenged their positive responses to the concept of pharmacist co-prescribing. I used this technique with the intention of creating a balanced discussion on both the facilitators and challenges to the policy proposal. Otherwise, the risk was that only the benefits or positive aspects of the policy might have been discussed in the focus groups.

My status as a PhD candidate and a registered Australian pharmacist could have unintentionally influenced the responses of study tour key informants. At the time of contacting potential key informants, I used my researcher status and professional background to substantiate my study tour as legitimate. It is likely that my professional background influenced the decision of key informants to meet with me as well as their responses to some degree. Key informant pharmacists may have been less likely to openly report on their own errors or practice limitations to another international and professional colleague. From a professional perspective, this approach is understandable, as one’s professional reputation, particularly with an international colleague, would be regarded as important. Thus, key informants might have responded in a more optimistic or positive manner to the questions due to my background. They may conceivably have under-reported or been less critical of the pharmacy profession’s prescribing practices, including their own. Therefore, I acknowledge that the perspective gained from the study tour may have under-reported the limitations of pharmacist prescribing and been inclined to advocate in its favour.

I felt a sense of eager anticipation at the start of my study tour, and was reassured by the support provided to me by key informants. Prior to the study tour, I was worried that I might not arrive on time for all the meetings. My accommodation, the roads and mode of transport in a new country were all unfamiliar to me. I regard punctuality as an important aspect of professionalism, so coordinating my travel and arrival times with consideration of the above factors was the source of mild stress. Fortunately, one or more of the key informants kindly assisted with the coordination of my travel within their jurisdiction. This support helped me to develop preliminary rapport with these key informants prior to meeting them and also ensured that I arrived on time with a sense of calm for all the planned meetings.

Informal discussions aided with rapport building and made me feel more comfortable during my interactions with key informants. It was difficult to objectively provide and maintain a neutral account of my study tour experiences, especially due to the great Canadian hospitality. The Canadians were friendly, warm and generous, and I was invited to social catch-ups with some key informants outside of working hours. Other opportunities for casual and informal dialogue emerged when driving from one location to the next. For these reasons, casual dialogue and rapport building became intertwined with the study tour objectives. My interactions with participants could have been regarded as compromising my neutrality but actually added to the richness of the data collected. Understanding the social, cultural and political context of pharmacy and prescribing practices in their country was also enhanced due to these informal interactions.

My study tour experiences changed the way in which I viewed pharmacist prescribing, my research and pharmacy practice in the context of my home country. After having observed how hospital and, in particular, community pharmacists were involved with prescribing, I knew of the barriers but, more importantly, saw policy and practical solutions to my own research questions. The study tour was a major turning point which strengthened my independent thinking and views about the project direction. The people who I had met and the generosity of the Canadians inspired me. They also changed the way in which I viewed the possibility of pharmacy practice in Australia in the future. The ability to interact with, discuss and observe pharmacist prescribers in real work environments made my research topic appear as more than simply a possibility. I had witnessed a reality, rather than a theoretical concept, and it was an empowering experience.

4.10 Chapter summary

In this chapter, I have outlined the methodology and qualitative methods used for my multi-phase case study research. This included the methods by which face-to-face interviews with OST patients and focus group interviews were conducted. I have also outlined how the research question evolved throughout the research process; how data were analysed; and have documented my own process of reflexivity. The following three chapters (Chapters 5-7) will present the results from the 14 OST patient interviews that I conducted. Chapter 8 will then present the results from the three focus group interviews that I conducted with 18 South Australian community pharmacists.

Chapter 5 Patients' experiences with existing models of care

5.1 Introduction to three patient results chapters

Chapters 5 to 7 present my findings on OST patients' views on the following policy proposal: that pharmacists be allowed to co-prescribe methadone and buprenorphine for opioid dependence in collaboration with doctors. Chapter 5 explores patients' experiences with current OST prescribing arrangements. It focuses on patients' experiences of access to initial treatment and their concerns about existing treatment arrangements. Chapter 6 focuses on OST patients' views about the policy proposal, including the facilitators and barriers to a co-prescriber model of treatment care, as well as potential pharmacist co-prescriber roles. Chapter 7 then discusses patients' views on their privacy when accessing OST at a community pharmacy.

In Chapter 5, I show that patients had variable experiences with treatment commencement and reported a range of concerns about the current model of care. First, there were mixed reports about the ease of access to initial commencement onto pharmacotherapy; some reported a waiting list, but others reported prompt appointments. There were serious consequences of delayed treatment access, including continuation of illicit drug use and engagement with criminal activities. Second, concerns about both medical and pharmacy professional practices within the existing model of care were raised in the interviews I conducted. Patients described their inconsistent relationship with clinic doctors and its impact on long-term treatment planning. Pharmacy-related issues were also reported, including inadequate pharmacist supervision which increased the opportunity for diversion, and differing pharmacy fees between locations. Third, a patient's attendance at the pharmacy could have unintentional negative consequences. This included re-engagement with other drug contacts, or being identified as a 'drug addict' owing to inadequate privacy provisions when attending for supervised dosing.

Chapter 6 describes patients' beliefs about how the proposed policy proposal would impact on them and the delivery of OST services. The majority of interviewed patients supported pharmacist co-prescribing due to the continuing relationship that they developed with the pharmacist from regular pharmacy attendance. In addition, the doctor's continued

involvement in patient treatment was also strongly supported. Suggested pharmacist co-prescriber roles included the authorisation of short-term treatment continuation and dose or take-away entitlement amendments. Patient concerns about this policy proposal included pharmacists having too much power over them and whether it was suitable for all cases. Others queried the adequacy of pharmacists' qualifications to authorise such decisions, or were concerned that individuals may intentionally manipulate the policy. They identified the potential change in the relationship dynamics between a pharmacist and a patient.

Finally, Chapter 7 explores patients' experiences of privacy when attending the pharmacy for supervised dosing. Most patients valued privacy, but interpreted and defined their experience of privacy differently. Some patients did not want their identity and the fact of their addiction revealed to other members of the public or to other patients who attended the same pharmacy because they felt others would look down upon or judge them as a 'drug addict'. Other patients felt stereotyped as untrustworthy if they were not allowed to enter the front pharmacy door like other customers. A queue or crowd of patients outside a pharmacy was identified as a hindrance to an individual's privacy.

5.2 Introduction to Chapter 5

In the previous chapter, I described the methods by which 14 face-to-face interviews were conducted with OST patients. This chapter explores patients' experiences with existing treatment arrangements. It answers the research question: what are patients' experiences with the existing model of care? The main findings of this chapter are presented in three sections (refer to Table 13). Common to all of these themes is the notion of variability. First, patients reported variable experiences in starting OST; second, there was variability in how patients were monitored; and third, there was variability in patients' relationships with the health professionals involved with their care.

Table 13 What are patients' experiences with the existing model?

Major theme	Sub-theme
Variable access to and experience of treatment	Variability of initial treatment access Difficulties in transferring from clinic to community settings The implications of difficult access to treatment Different expectations of access to and cost of treatment access Differing views on whether immediate treatment access is crucial Differing pharmacy fees
Variable monitoring of patients	Differences in pharmacist supervision and misuse of medication
Variable relationships with health professionals	Importance of relationship with the community pharmacist Disjointed relationship with the clinic doctor Variability in perceptions of privacy (further elaborated in Chapter 7)

The current treatment model for OST appeared challenged in its ability to uniformly deliver services that reflected patients' needs and it was also inflexible. The interviewed participants experienced variations in the quality, timeliness and level of service received. They also reported significant variations in their ability to access treatment and the cost of medications. Whether or not patient needs were met at all or were met in a timely manner, also varied. These varied experiences accounted for the inconsistent experience of the current OST model of care. Current treatment services met the needs of some patients; however, for others, services were not satisfactory. Their encounters with the different health professionals involved with their care further contributed to the mixed levels of treatment satisfaction. Participants reported disjointed relationships with clinic doctors, with, by contrast, some continuity of care provided by the pharmacist. The current model of treatment did not provide the flexibility that would allow any health professional to provide true treatment continuity in all cases.

5.3 Variable access to and experiences of treatment

The first major theme in patients' encounters with the existing model of OST care was their varied access to and experiences of treatment. Some experienced easy access to treatment, while others experienced the opposite. The ease or difficulty in treatment access experienced was influenced by a range of factors including when and where patients requested treatment, good luck, prior engagement with other clinic services, and incarceration. Those who found treatment access difficult were not aware of which doctors could prescribe OST or were advised that there were no treatment vacancies. Other patients were advised to seek another doctor or be placed on a waiting list (time ranged between a few weeks and six months) for a medical appointment. The implications of difficult access to treatment included the continuation of injecting drug use and/or ongoing criminal activities. Further contributing to the varied patients' experiences of OST were their differing expectations with regard to treatment access and pharmacy fees.

5.3.1 Variability of initial access to treatment

Participants experienced a waiting list time between one week and six months for a first medical appointment. After they requested a medical appointment to commence on OST, some were placed on a waiting list, or knew of other people who had been placed on a waiting list. Reported waiting times for initial medical appointments varied according to when the initial request was made, the practice location and whether the practice/clinic being sought was at capacity.

Patients reported mixed experiences when accessing medical appointments for OST initiation. They could be categorised into two groups with respect to their ease of access to treatment: those who found it easy to get into an OST program and those who found it difficult. I developed two typologies – easy and difficult access – to better understand why the patients had different experiences in accessing treatment. For simplicity of reference, I describe these two groups below as 'easy access' patients and 'difficult access' patients. Easy access patients (C4, 5, 6, 7, 8, 9, 10, 11, 12, 13)^m believed that they worked really hard or that the system worked for them when accessing treatment (see Table 14). Difficult

^m Note that the letter C and a number are used to indicate individual patients. Pharmacists are denoted by Phc and a number.

access patients (C1, 2, 3, 14) were either in pain, or believed that the system did not work for them. Further documentation on the establishment of patient typologies can be found in Appendix 8.

Table 14 Quotations from difficult and easy access patients about initial treatment access

Easy initial treatment access	Very difficult initial treatment access
I worked really hard	I was in pain
<p><i>“I had tried that about five times [to detox] and because I was going back to the same situation, it took me a long time to realise, no, go and get on the program and see how that goes ...” (C9).</i></p> <p><i>“Yes it was actually [easy to get an appointment to see a clinic doctor]. I don't know whether that was because I had been in here, inpatients, or not. I don't know whether that was a factor, but yes, they were very, very good” (C9).</i></p>	<p><i>“I found when I first started it was a real pain, it was, because I went to see the doctor and then I had to go back three weeks later or something to get an appointment” (C1).</i></p> <p><i>“... the wait I had to go through because it was murder. That's what I was trying to do, I was still wanting to give up in a way. I just needed help to do it” (C1).</i></p>
<p><i>“I was given a list of doctors ... [I] went through it and I phoned every practice and got through to the receptionist, and the receptionist would either say yes or no to, do they have a prescribing doctor there? If it was a yes, sorry, we're all full at the moment, sorry, see you later. Then I came across (doctor's name) and she had a spot, so that's when I first got onto the methadone” (C10).</i></p>	<p><i>“It took me a while for youse [the clinic] to actually take me on ... I came here very crook and [the receptionist] said to me – what am I going to today? ... I said, well, you're at work, where do you live, and that made her open her eyes up a bit ... I know the next day I was on the methadone program. I told them I was breaking into houses for a living, but you're at work so obviously you're not at home” (C14).</i></p>
<p><i>“I rang up (the clinic) and asked for some prescribers in my area. They gave me some doctors that prescribed methadone and I rang them myself, and then asked if he would take me on and he did ... So that two months [waiting time] is still a long time to, you know, where you have to stay on the heroin otherwise you're crook in bed, aren't you? (C13)</i></p>	
<p><i>“If you're really fair dinkum about getting on a program you know you've got to ring up the operator and ask for the DDU number or something and then you pretty much can go from there, can't you? So I don't think availability is a problem, do you? I don't think so. I've never found it a problem in any state. They've always had a – even in (town) there was a bloody prescriber lo and behold. That one took a bit of finding, but I found one” (C7).</i></p>	

From the patients' perspective, whether or not initial treatment was easy seemed to be based partly on luck. Some participants described securing a doctor's appointment as easy through a 'drop-in' visit or telephone call.

"If you're lucky it can be very, very quick. If you happen to ring the right place at the right time – say we've had information that there's placements at a doctor's because of one thing and the other, then somebody can ring up and then get an appointment quick smart. Otherwise you can be ringing everywhere and get nowhere so you've got to be lucky" (C11).

However, sitting behind this explanation were a number of factors which seemed to make access to initial treatment relatively easy. First, prior contact with a clinic could be helpful. Patient C9 had previously attempted and completed detoxification as an inpatient at the clinic. Prior engagement with the clinic could have aided her relative ease in access to a pharmacotherapy medical appointment. She said: *"Yes it was actually easy [to get an appointment to see a clinic doctor]. I don't know whether that was because I had been in here, inpatients, or not. I don't know whether that was a factor, but yes, they were very, very good" (C9).*

Second, referral from another professional helped. Two interviewed patients who had been referred by another professional to the clinic reported their experience of relatively easy access to initial pharmacotherapy medical appointments.

"At first I was referred here by a doctor. That was previous and then this time I just came to the centre, well the clinic, rather ... I was seen within a week" (C8).

"I was actually taken to [a] hospital and they referred me to here. They actually rang up here and got me an appointment and so forth to come out and go onto the program. They put me into the in-patients I think it was for 10 days before, to start me on the program" (C2).

Another two former prisoners who initiated treatment when incarcerated were not required to actively search for a prescriber, so they perceived treatment access to be easy.

"I was in prison and the prison doctors organised all that for me. I just went to the doctor and said that I'm using drugs in here and I want to stop and they said oh we'll put you on the methadone program and they sorted it out" (C12).

"I was a drug dealer to start off with and I ended up in jail and I ended up getting on the methadone program through jail" (C6).

Patient C7 insisted that he had no troubles in locating a prescriber despite moving numerous times. He reported being treated by a number of OST private prescribers previously, including interstate, and reported no major difficulty in accessing them based on the condition that self-effort could be demonstrated. He believed there was no problem with access to an OST doctor.

“If you're really fair dinkum about getting on a program you know you've got to ring up the operator and ask for the Drugs of Dependence number or something and then you pretty much can go from there, can't you? So I don't think availability [of doctors] is a problem, do you? I don't think so. I've never found it a problem in any state. They've always had a [OST prescriber] – even in (rural town name) there was a bloody prescriber lo and behold. That one took a bit of finding, but I found one” (C7).

Patient C7 was one of two interviewees who spoke about having dependent children. It is possible that, as he had more than one dependant, service providers could have prioritised his request for treatment transfer. Having a dependent child could be one potential explanation as to why transferring to a new prescriber, even from an interstate location, was easy for him on numerous occasions.

Finally, some patients who had found it easy to access services were well aware that access to an initial medical appointment was not easy for all people. They either knew of other people who had experienced difficulties, or had previously attempted to access the program and encountered difficulties. This patient admitted: *“... it is a lot harder for people [than my experience] to actually get on the program – you know like a user to actually accessing a program which will take them on and start dosing them daily ...” (C8).* Another patient had previously attempted the program multiple times and described her latest attempt to access treatment as easy, possibly because she already knew where services were. She described another episode when she had attempted treatment entry: *“... two months [on the waiting list] is still a long time ... where you have to stay on the heroin otherwise you're crook in bed, aren't you? So I was using [heroin] until I seen him [had the first doctor's appointment] ...” (C13).*

A second group of patients found it difficult to access services. They had contacted GPs but were advised that the practice was at full capacity and unable to accept new patients. They therefore continued to look elsewhere for treatment vacancies or to be placed on a waiting list.

“There was a lot of prescribers that only take a certain amount of people and you have to wait until a list” (C13).

“Like I said, initially we got a list of all the doctors in Adelaide who would write the methadone. I went through the whole list, two of them would even consider seeing him, because they were either overbooked – with how many methadone patients that they had – or they weren't interested in taking on anyone new [patients]” (C2).

According to one patient, the change in treatment entry criteria was an explanation as to why the demand for OST today is greater compared to in the last decade. Standard treatment entry criteria in recent practice were perceived to be more relaxed than previously. A decade or more ago, “[a] decent habit” (C11) of heroin was required before being eligible for treatment entry.

“I mean we even had people saying listen, I'm doing armed robberies, I'm doing this, I'm doing that and at that time you'd get the attitude keep on doing what you're doing. Don't come back. If you came back here without a habit, you wouldn't get on the program (C11).

“So even if you had such a piddly heroin habit of say \$50 a week but still it was causing an impact in your life, if it was so low, you wouldn't get on a program because they'd think it's not worth it. Where nowadays any impact in your life, you can get on a program. You can go on a low dose but in those days if you didn't have what's classed as a decent habit, you would not get on a program” (C11).

5.3.2 Difficulties in transferring from clinic to community setting

Some patients had actively tried to transfer their OST care from a clinic doctor to a community doctor, but encountered difficulties. A number of the interviewed patients wished to transfer to a community GP (also referred to as a private prescriber) either for convenience or due to a lack of satisfaction with the clinic. However, they were not able to do so because community prescribers were full, there was a waiting list, or they did not know any GPs who prescribed OST.

At the time of the interview, a total of three patientsⁿ reported actively seeking to transfer treatment from a clinic doctor to a community GP and encountering difficulties. They maintained their treatment in the clinic because vacancies were not available but preferred to have the option of transferring their care to a community GP (referred to as a private prescriber).

“And like, it's just too hard to find a private prescriber, basically. Once they [the GP] find out that you've got help [at the clinic] already basically they won't take a new patient on anyway. That's what I've found with most private prescribers. Either they can't prescribe to you because they've got too many on their list, or they'd rather you stay with (the clinic) ...” (C6).

“I don't know of any doctors that prescribe other than coming to (the clinic) and my doctor at home I've never asked him. I've told him I'm dosing but I've never asked him if he can prescribe it so I've just left it at coming to (the clinic) all the time but if I could find a doctor closer I would definitely use it” (C1).

“Finding a doctor, a private doctor, to write for you is very hard. Once you're in with (the clinic) it's different, but to find a private doctor is just near on impossible and you really have to push limits to get them” (C2).

In particular, patient C6 felt that he had no other option but to be treated by a clinic doctor. Despite not being satisfied with the rotating roster of clinic doctors (this will be elaborated on later in this chapter), he could not find a community prescriber to whom to transfer his OST care.

“As soon as you call them on the phone, if you let them know that you're there for an opiate problem or a benzo problem like, they basically make it harder for you to see a doctor to start off with. So you're better off just walking in and talking to them face to face. Then sometimes they are better – you can get through to them ... when you're on the phone you're getting – they'll tell you straight out that they won't be able to see you for six months. Within six months you're either going to have a raving habit or you're going to be dead aren't you? Well you've got no choice but to come here [the clinic]” (C6).

Patient C7 reported that his social worker had also been unsuccessful in being able to locate a community doctor to whom he could transfer his OST care. He said:

ⁿ Note that all except one of the interviewed patients were being treated by a clinic doctor. However, six of the patients reported previously attempting to transfer to, or previously being treated by, a community prescriber.

“I've got a counsellor for my anxiety and she's looking for a private prescriber to get me away from all this but she can't even find one. She works for Anglicare and they ring up everyone. She can't get me an appointment anywhere. So it's not just me that can't do it [find a private prescriber]” (C6).

Being treated through a community doctor rather than a clinic doctor appealed to this patient, but he did not understand why his doctor did not prescribe OST. As a result, he continued treatment through the clinic because he did not know of any community prescriber options.

“Well if I could get a, like a private doctor, I'd go to a private doctor, if you know what I mean? There's not many private doctors who do it, like my private doctor doesn't do it, you know? I don't know why” (C5).

“... I don't see why can't any doctor do it? Why can't any doctor prescribe methadone here? Is it, is there certain doctors only allowed to prescribe methadone? I don't know. I wouldn't know. The only reason I come here [to the clinic] is because I don't know no private doctor that does it” (C5).

5.3.3 The implications of difficult access to treatment

For individuals who found access to treatment difficult, the consequences of being placed on a waiting list or refused treatment access were serious. All patients who encountered placement on a waiting list also reported involvement with numerous activities during that time to counteract withdrawal symptoms. Withdrawal symptoms were described as so severe that they would drive a person to commit criminal activities to fund continued drug use to relieve these symptoms. The consequences of being placed on a waiting list included continued engagement with criminal activities to fund ongoing illicit drug use or to seek relief from withdrawal. Furthermore, individuals on a waiting list reported loitering outside the pharmacy to obtain pharmaceutical medications for relief of withdrawal symptoms.

Heroin withdrawal was an intense emotion that drove people to pursue money and medications or to commit crime at whatever cost. Withdrawal symptoms were on a number of occasions described as feeling ‘sick’. To avoid feeling ‘sick’, they would continue drug use when on the waiting list for treatment.

“... even if you want to get into outpatients to go to detox, you have to wait on the waiting list, you know what I mean? Because it just takes too long. But in the meantime, you've got to keep, you've got to keep using otherwise you get sick, don't you?” (C5).

“'Cause I mean if you can imagine your body full of boiling hot water and the fattest person you've ever seen sitting on every limb while someone's jabbing at your eyes or something with hot sticks at the same time, all at once. That's just the start of it. So if you can avoid that you will ... Sometimes you're not proud of it, but you will [do anything to avoid withdrawal]. I've done ridiculous things to stop from having that [withdrawal]” (C7).

“... it starts off like a minor cold, then you get aches all over your body, you can't eat, you can't drink. By the third or fourth day, you've got diarrhoea and you're being sick at the same time plus you can't hold nothing down and you've got a headache, hot and cold sweats, you can't sleep ... Then you think you're right because you come good for an hour and then all of a sudden you'll crash again” (C6).

“Well if you've got no choice: either you just lay there and be sick like that for a couple of days or weeks or whatever for how long you feel like you're going to die rather than – you either get up when you've got to get up and do something or you lay there and be sick. It'll drive you to do anything if you've been through it before. You don't think of the consequences. All you're thinking of is trying to make yourself better. You steal cars and do anything. Lie, cheat and steal to get it – whatever you've got to do” (C6).

Doctor shopping for opioid prescriptions was one solution to relieving withdrawal if OST medical appointments could not be accessed. Prior to commencing OST in jail, patient C6 had attempted to enter treatment in the community. He was unsuccessful at entering into treatment (in a community setting) and therefore actively sought morphine scripts by ‘doctor-shopping’ to avoid withdrawal symptoms. This involved attending various medical practices in an attempt to obtain multiple scripts for morphine from a range of doctors.

“... because before I went to jail I did try and get onto the program a few times and just – there was no way in hell I could get on – no chance in hell I could get on the program ... I couldn't do it every day still – not the way I was doing it. It's either that [withdrawal] or you just go doctor shopping with some other Medicare card and try and get morphine in the doctor's” (C6).

It is likely that he would then have had these prescriptions dispensed at different pharmacies to avoid detection. Although not explicitly stated, if these prescription opioids were not administered orally, it is possible they were crushed and injected to avoid withdrawal symptoms.

Individuals placed on a waiting list for a medical appointment would continue heroin/other drug use or commit crime. A waiting list to access initial treatment was reported by some patients (and other people who they knew about). Participants spoke about what they or other drug users would do if they could not find a doctor to prescribe OST for them when requested.

“Before you get into the doctor, you've got to keep using before you get on the program – like you've got to keep using, you know, so obviously to get money you're doing crime more or less” (C5).

“I went and used them [heroin] again [during the waiting time]” (C1).

“I went out and I only had one \$50 deal every day and it only just held me, but I needed that otherwise I would've been shut down, I wouldn't have been able to have the strength to get on a bus to come here every day. So I did that, but I was also proving that I did have a problem as well and I still needed to use to have the energy to get here [to the clinic] every day ... because I had a \$300 a day habit. At one stage it was up to \$600 a day, so going from \$300 to \$50 deal every day ... I wasn't sleeping or anything but it just took the edge off” (C9).

“They'll definitely be using in between that time until they do see a doctor but if people want to get on it, you do wait, you will just be using in between that time” (C12).

“It was very frustrating because I was at my wit's end. I was doing a lot of crime like I only ever did larcenies from shops and things like that, and I'd sell it for a third of the price and that would get me my heroin” (C13).

“We hear from people all the time about how much trouble it is and just what's associated with finding a doctor ... Oh they just get the drugs off the street. They just buy, beg, borrow or steal, most of them” (C3).

This patient engaged in paid sex work to fund her continued drug addiction. She said: *“... you're a total mess and every day you've got to get up and you've got to chase that one more hit, that one more hit and that's not a life. It's not a life at all. I actually sold myself on the streets of (name) because I was never a thief” (C9).*

Additionally, loitering outside pharmacies for medications to either fund continued drug use or to self-medicate for withdrawal symptoms was reported. Patient C5 reported being propositioned outside the pharmacy by individuals who were unable to secure a treatment placement or who were on a waiting list. He reported being propositioned to sell any take-away doses, other opioids and/or benzodiazepines.

“... some people are there every day [loitering outside the pharmacy]. Like they know when you get done [have your dose]; they know who you are. Then they'll be there waiting [outside the pharmacy]. Oh you get your take-aways today. Don't you want to sell us something?” (C5).

“... I was probably one of the ones that used to hang around the pharmacies, you know what I mean? Like looking for drugs, you know? Because you know you can get them from – or someone that can get them, you know? A lot of people do that. I haven't done that like since I've been on the program the first time you know” (C5).

Seeking illicit drugs was described by patient C3 as easier compared to accessing a doctor to initiate OST. He said:

“It seems to be easier to get it from the streets than it is to get it the right way, to see a doctor ... When they make it harder for people to find a substitution, I suppose you'd say, to getting drugs off the street or they can even get the drugs that they supply through (the clinic). You can even buy those on the street, the exact same drugs” (C3).

Difficulties in finding a prescriber or being placed on a waiting list was perceived to be a disincentive for some people in trying to stop illicit drug use.

“I thought the whole thing is to try and stop people from using off the street ... but in actual fact it's not, it's harder for them to get [treatment] because you can't get a doctor's appointment” (C2).

“... [if they don't get an appointment] they'll go out and use heroin and if they're on heroin they probably won't even make another appointment because they're feeling good and then tomorrow they'll say I wish I went to the appointment, because they're hanging out again and they've got to go out and do another job to get their heroin” (C13).

“I know quite a few people who have just said, blow it, couldn't be bothered and so they still keep using off the street” (C2).

In summary, there were serious consequences to difficult access to treatment. Individuals who had difficulties in accessing treatment continued injecting illicit drugs,

committed crimes or loitered outside pharmacies. Obtaining illicit drugs was perceived as easier than obtaining a medical appointment by some participants. Although the sample interviewed were all in treatment, they were all very aware that those who request treatment initiation and those on a waiting list were not all able to access treatment.

5.3.4 Different expectations of access to and cost of treatment

Patients' expectations differed about what were considered a reasonable waiting time for treatment access and cost for medication. Views about what would be considered as timely and reasonable differed amongst participants. The majority of interviewed patients believed that it was extremely important for initial treatment access to be easy: their needs were not adequately met unless initial treatment could be accessed within 24–48 hours. They provided evidence of the negative consequences of difficult access to treatment (as previously discussed) as a justification for why immediate access was crucial. In contrast, two interviewed patients did not believe it was crucial to have immediate access to treatment. These two patients believed that a waiting time was reasonable to ensure, firstly, that genuine patients entered the program and, secondly, patient safety during treatment initiation. Lastly, patients' expectations around pharmacy costs also varied within the sample interviewed. Each of these areas is explored in more detail below.

5.3.5 Differing views on whether immediate treatment access is crucial

The majority of interviewed patients desired immediate access to initial treatment upon request. Early engagement with services upon request was believed to minimise discomfort as well as the likelihood of continued drug use or criminal activity. Immediate access to medical treatment on request was believed to reduce the risk of continued criminal activity and drug use.

“I think if an addict comes in and sees the doctor he should be more or less treated straight away. Maybe put off for a day just to sort him out sort of thing but not the wait I had to go through because it was murder ... I was still wanting to give up in a way. I just needed help to do it” (C1).

“... when somebody asks for help you need to give it to them that day, not three days later ... that day – immediately. These people, right, that ask for help, they've hit rock bottom. If you don't give it to them then you're going to lose them” (C14).

“I reckon it should take basically, if you ask for help, within two days, two to three days, because after that you become desperate and you're willing to do anything. So if you are willing to get help and you ask for help you should be able to get it” (C6).

“A day, two days max. Because ... in that waiting time, they've got to sustain their level of opiates in their body, and the only way they're going to do that is by any means possible – by that I mean crime” (C10).

When individuals were unable to access immediate help, disengagement with treatment and continued drug use were described (refer to previous section 5.3.3). If a heroin user was not immediately engaged with treatment when they sought help, it was predicted that they would continue their drug use. This patient believed it was crucial to immediately engage patients in treatment when they requested help:

“When people need to get on a program, it's then and there. Otherwise things happen, whether they commit a crime and get money and it's another thing or they just go through themselves and then they find themselves using again, maybe a couple of weeks later and it's the same process over and over and over if they don't eventually get on a program” (C4).

In contrast, two patients did not believe immediate access to treatment was crucial. Patient C9 and patient C11 did not believe that a person needed be seen within 24–48 hours. Patient C9 was concerned that, if treatment was provided immediately and easily, it might then be manipulated by opportunistic drug seekers. Thus, they could continue to misuse illicit drugs even after treatment commencement and subtract resources from individuals who had genuine intentions of stopping drug use.

“Now if there's a waiting list, they just have to wait. I really believe that because if they're serious about it they will wait and they will do the right thing. There's so many that will waste resources, time and they're not ready [because] they go and use every day but they'll still go to the chemist and take their dose, but they'll use on top of it. That's ridiculous because it is wasting the resources of the government and I don't like that at all. So I believe two weeks [waiting time], that's fine” (C9).

Patient C11 believed a one-week waiting time to get an appointment for OST commencement was reasonable because there were concerns about potential precipitated

withdrawal if treatment was commenced and the patient was still using illicit drugs. She acknowledged that this process was difficult, but understood that it was necessary to prevent precipitated withdrawal upon treatment initiation.

“I know there's a process to work through ... it's very frustrating ... It's hard because you want to get off it, do you know what I mean? But you know you've got to wait because there's that time frame there [where you can get precipitated withdrawal if you commence treatment]. You've got to go through all the paperwork and you've just got to sit and wait. It's hard” (C11).

Patient C9 and patient C11's contrasting opinion about waiting times compared to the remainder of the interviewed sample could be explicable because they had both been long-standing patients. They were both female and had been on treatment for 24 and 25 years, respectively. It is possible that after more than two decades on OST, their memory of the intensity or pain they had felt at the start of their treatment was less vivid compared to someone who had more recently experienced it.

5.3.6 Differing pharmacy fees

Differing pharmacy fees were commonly reported within the sample interviewed. The difference in fees charged at different pharmacies for the same medication was a contentious issue. Many interviewed patients supported the implementation of more consistent pharmacy fees.

Varied pharmacy OST fees being charged were frequently reported by interviewees.

“Some chemists are \$4 a dose and some are up to \$7 a dose which is a vast range ... As I said, one month I was paying \$30 at [one pharmacy]. I'm paying \$25 at [another pharmacy]. It's different. When I went to [name of] pharmacy I was paying \$6 a dose ... (C4).

“The cost of the methadone program can be alright depending on the pharmacies. There's no set price for a pharmacy” (C11).

“That's another thing. Every pharmacy charges different. That's what I don't understand, do you know what I mean? Like where I am, I pay \$64 a fortnight. Someone else at my chemist gets exactly the same as what I do and she pays \$50, you know what I mean? What's the, because she's been there longer than me, that's what I don't understand, you know? Or I can go up the road and get it for \$40 a fortnight, you know what I mean? ... It's stupid” (C5).

“... but some of the pharmacies are quite expensive. To be dosed you've got to look around as well because some of them are charging up to \$7 a day now and we're lucky where we go is only \$3 a day. It was \$2 for about two and a half years and it's only just gone up to \$3. In that way it's affordable but if it was at \$7, I don't know, I think I'd be looking at going off it or something because \$7 a day is a little bit too much” (C2).

These patients were in strong support of a consistent OST dispensing fee across all pharmacies.

“Why can't they all get together and just charge one amount? Or the government stepping in and saying this is the set rate – this is what it's going to be” (C5).

“I think in that respect they need to actually put one price on it, either four or five dollars a dose or whatever, X amount per week, but make it one and then make it probably right out like Australia-wide, so then it's no different anywhere” (C4).

“I mean \$50 a fortnight is fairly cheap. That's what I'm paying, but there are people paying more, there are people paying less. There are chemists out there that don't charge a thing. I've come across one that doesn't charge anything at all because it's free to them: it's just the dispensing fee. That's something that I think should be worked on” (C10).

5.3.7 Summary of theme: Variable access to and experiences of treatment

Many elements of the current OST model contributed to the immense variation in treatment access and experiences among study participants. Within the sample interviewed, access to and experiences of treatment were not uniform. Pharmacy fees varied between locations. Additionally, the ease of access to treatment also varied within the interviewed sample. Some participants were advised that doctors were at capacity, did not prescribe OST or that a waiting list existed. Easy or difficult access appeared to depend on random factors including: prior engagement with other clinic and health services, good luck, the location of the request and referral by another health professional.

Intense withdrawal symptoms drove some patients to engage in activities or to seek funds for continued drug use. If treatment for heroin-dependent individuals could not be commenced within a reasonably short time frame of heroin cessation, patients suffered from intense physical and psychological withdrawal effects. To avoid intense opioid withdrawal symptoms, they continued injecting illicit drugs or loitered outside pharmacies

for drug supplies. Others funded continued drug use through paid sex work or committing criminal activities.

5.4 Variable monitoring of patients

Interviewed patients reported some variation in pharmacist supervision of OST. Although only one patient reported direct experience of inadequate pharmacist supervision, other patients were aware of it. In some cases, treatment was reportedly used as ‘back-up’ for when illicit drugs could not be obtained and diversion of OST medication was used to continue injecting drug behaviour. Thus, the variation in monitoring created opportunities for patient medication misuse.

5.4.1 Differences in pharmacist supervision and misuse of medication

The differences in pharmacist supervision after dose administration varied between people and locations. Medication misuse or diversion arose from differences in pharmacist supervision levels. Diversion reportedly occurred through spitting out medication which was intended for oral consumption, and then injecting it. It also reportedly occurred through the sale of take-away doses to generate income for a preferred drug of choice. Manipulation of existing treatment arrangements was possible if an individual continued illicit drug use up to a few days prior to a scheduled urine drug detection test.

Diversion was perceived to be easy because supervised dosing in a community pharmacy appeared to be less rigorous than at a government clinic, according to one patient.

“See, that's where it [pharmacist supervision] differs from here [the clinic]; they make people sit down and wait. Then they actually open their mouth and look at it and make sure it's gone, it's dissolved. Whereas it doesn't have to be that harsh but some chemists are a bit lax than others, and depending on who you know is on that day, whether it's Peter, Paul or Mary [synonym pharmacist names]” (C10).

Relaxed or inadequate pharmacist supervision increased the opportunity for patient medication misuse. Therefore, the level of supervision was not necessarily based on need, rather on luck as to whether or not the duty pharmacist was relaxed about overseeing

supervised dosing. One example of treatment misuse was through self-injection of OST medication.

“[With] Mary you can get away with a lot more than you can with Paul. Paul will make sure that you say goodbye after you've swallowed your methadone; whereas Mary just walks away so ... you know how you're supposed to say something after you have your methadone? Whereas Mary just walks away. So that person [the patient] just holds it in his mouth and spits it out and then injects it ...” (C10).

“... I had a phase where I was injecting my Subutex® for ages ... I would just dry my tongue out till it was really dry, and get six milligrams of Subutex® and just go and blast it. You know put it straight into a syringe and have it” (C10).

Diversion of OST medication also occurred when individuals experienced withdrawals because their medication dose was perceived to be too low. Others intended OST to be their medication source to avoid withdrawal for a short period of time, but had no intention of stopping illicit drug use. For these individuals, treatment attendance was regarded as a ‘back-up’ when illicit drugs could not be sought.

“When I first got on the program, I used to abuse it and methadone was the back-up, you know, that stopped me from hanging. Stopped me from doing crime, you know, so I didn't have to go and get money” (C1).

“A lot of people use the programs as a crutch, so if they can't get drugs for that day, they know that they can go to their chemist and they can get their dose. Then the next day, especially if they get a payday, they can go and use the drugs” (C9).

Other individuals reportedly diverted their medication through the sale of take-away doses or supervised doses to generate income for their preferred drug of choice.

“They'll go and get their dose but then they'll have a hit on top of it. Then if they have take-aways and they're in the position where they have money to go and score, a lot of them will go and score but they'll sell their take-aways” (C9).

“There are people that take their methadone out, and there are people that take their Suboxone® out and sell it” (C10).

“A lot of people do sell it, you know? People selling powdered methadone, it sells for a dollar a mil, \$2 a mil. If you want to sell it, if you want to sell it, well they'll pay whatever really if they want it. If they're sick and they've got the money and they can't afford any other drug, they will buy it for anything, you know?” (C5).

Misuse of other illicit drugs in addition to their medication was also described by one patient as a loophole to the existing treatment model. He hypothesised that:

“I could be using drugs for 10 weeks and stop, you know, if I wanted to. Because I know I have to be clean by such and such a date [the doctor’s appointment]. I mean I’d have a urine [test result] that would be clean [by the time of the doctor’s appointment]. He’d [the doctor would] think, oh you’re a good boy, you know? Just prescribe me another one” (C5).

Thus, patients who intended to continue illicit drugs whilst on OST could avoid detection by stopping illicit drug use prior to their scheduled medical appointment. This ensured that any urine drug tests conducted at their next appointment would return a negative result: the doctor would have no knowledge of illicit drug use and their next prescription would be re-issued.

5.4.2 Summary of theme: Variable monitoring of patients

Levels of pharmacist supervision after supervised dose administration differed between individuals and locations. Pharmacist supervision of patients was not uniform and did not always correlate with the individuals’ monitoring needs. Some patients were well monitored and others who did not receive adequate monitoring used it as an opportunity to divert their medication.

5.5 Variable relationships with health professionals

The third major theme in patients’ experience of the current model of care related to the nature and frequency of patient relationships with clinic doctors compared to pharmacists involved with their opioid pharmacotherapy care. Most of the patients were treated by a different clinic doctor every time they presented and they compared this unfavourably with the consistent relationship with the pharmacist that they believed developed from regular attendance for pharmacy-supervised dosing. They valued having a continued and respectful relationship with the pharmacist. The contrast between their relationships with the clinical doctor and their pharmacist was a key reason for their support of pharmacist co-prescribing (further elaborated in Chapter 6).

5.5.1 Importance of patient relationship with the community pharmacist

A patient's relationship with the pharmacist provided them with a sense of holistic care for a number of reasons. First, the patients believed they received continuity of care from the pharmacist due to their frequent and continued interactions with the pharmacist. Second, the opportunity to build and maintain a relationship with the pharmacist was possible owing to regular supervised pharmacy attendance. Lastly, the perceived value of a patient-pharmacist relationship was influenced by how respectful this relationship was believed to be.

A meaningful relationship with the community pharmacist developed from regular pharmacy attendance. A positive and encouraging relationship with their pharmacist was described by the following patients.

"She [my pharmacist] praises me, which is the best thing a pharmacist could do ... She praises me all the time, saying [name], you're doing really well and that to me, gives me a lift and helps me to keep going" (C13).

"Overall, my chemist is very good. So you can ask him anything and he'll tell you and he's great. So I'm very lucky like that" (C11).

"Most of the pharmacists that I've had anything to do with have been very helpful and very giving. They have a heart" (C3).

The sense of continued care provided by the pharmacist was facilitated by requirements for regular supervision and a respectful relationship. Patient C2 actively sought to receive her supervised doses at a pharmacy which treated her with respect. In response to encountering a negative pharmacist attitude, she moved to another pharmacy. Being treated with respect by the new pharmacist outweighed any difficulties associated with increased travel.

"... [at the previous pharmacy] people would come in with scripts and you could be sitting there waiting to get dosed and the pharmacist would walk off and do all the scripts and everything and then come back and sort of sigh. You walk in and say, hello and it's like, well you know and she's just stood there and said hello to everybody who's gone and got a script, but she can't talk to us. I just said one day, are we second-class citizens? She goes, I suppose you could call it that ..." (C2).

"... I moved within a week from then because I just couldn't handle the [pharmacist's] attitude. I was getting to the point where I would rather go without [my medication] than put up with her. If I knew she was on, I'd just not go there

and I'd go a day or two without my dose ... I vowed and declared I would not let her put me down, if you know what I'm saying” (C2).

The relationship that pharmacists built with OST patients differed from that with other pharmacy customers due to the requirement to provide patients with supervised dosing at a nominated pharmacy. As a result of these frequent encounters, patients endorsed a pharmacist's ability to understand a patient's progress.

5.5.2 Disjointed patient relationship with the clinic doctor

The patients contrasted the holistic relationship they had with the pharmacist to the disjointed relationship that some had with clinic doctors. This was for two reasons. Firstly, patients saw the pharmacist more frequently.

“... because they see you regularly whereas the doctors don't. I think yes they do have a bit more understanding of the person. So, in that way, I think they can make a bit better judgment” (C2).

“... you see because the pharmacist sees them, I'll say, every day or even every second day. It's still a lot more one on one than what the doctor would – the doctor's 15 or 20 minutes – and I reckon they'd hear a lot of stories and garbage, yeah”(C3).

Secondly, the patients were dissatisfied with the reported rotating roster of clinic medical appointments.

“I think you should always stick to your same doctor ... I was shoved to another doctor today and I was not happy at all, not happy at all, because he didn't know nothing about me. I didn't know nothing about him and doctor [name] knows all about me and I'd just rather speak to someone that knows me” (C13).

“... once you see a doctor you should see the one doctor and not just be palmed off to whatever” (C6).

The perceived benefits of consultation with one doctor included being familiar with each other and improved support to reach longer-term goals. Appointments were frequently scheduled with a different, and sometimes an unknown, practitioner who had different approaches to treatment.

“When you see the doctor once every two to three months and here [at the clinic] you see a different doctor every time, just about. That's the problem with ideas is

that you see different doctors and they've all got different ideas about the way that you should be treated” (C6).

“... it's hard for us to be able to talk to different doctors all the time too, you know? They don't really get to know where our situation's at. They're just basically reading off a book. Nothing against doctors that work here but it's pretty hard to be a good doctor if you don't know the patient. That's basically all there is to say about the doctors here” (C6).

Such experiences were described by this patient as a hindrance to his goal of eventual treatment exit. He initiated OST in prison and since his release from incarceration had been treated by a clinic doctor. He said “[t]hey [the doctor] seem to be just prolonging the situation ... whereas they should be treating you to get you off it [OST] instead of just stabilising you” (C6).

5.5.3 Variability in perceptions of privacy

Patients’ relationships with their pharmacist as well as pharmacy layout impacted on their experiences of privacy. Although most cared about privacy to some degree, not all did. Furthermore, interviewed patients valued privacy in different ways. Their differences in opinion were reflected in their varied experiences of the same pharmacy layout. It was also reflected in their altered sensitivity to privacy if they felt respected by the pharmacist. As the matter of privacy was so important, the next chapter will discuss in further detail patients’ experiences of privacy when dosing at the pharmacy.

5.5.4 Summary of theme: Variable relationships with health professionals

The patients were clear that the pharmacist is a crucial figure for the delivery of OST. Patients valued the opportunity to build relationships which provided continuity of care and a more holistic approach to care. They contrasted this continued and stable relationship with the disjointed relationships with clinic doctors. A sense of continued care provided by the pharmacist was facilitated by requirements for regular supervision and respectful relationships.

5.6 Chapter summary

The three major themes in this chapter described how patient experiences with the existing OST model of care differed immensely between individuals. These themes explained how challenges and inconsistencies with the delivery of OST services under the existing model of care have eventuated. First, participants' experiences when commencing OST were variable. Access to treatment initiation was problematic for those who were told that there were no treatment vacancies or who were placed on a waiting list. The consequences of difficult access to treatment included engagement in criminal activities and ongoing drug use which impacted on the individual and wider community. Inconsistent pharmacy fees between locations further exacerbated the sense of inequitable treatment access. Second, different levels of pharmacist supervision contributed to the variable monitoring of patients: this increased the opportunity for medication misuse. Despite pharmacist supervision requirements, manipulation of existing treatment arrangements through diversion already occurred. Third, the crucial relationship patients had with their pharmacist provided them with an important sense of treatment continuity and value. In contrast, a meaningful relationship with clinic doctors was difficult to establish owing to a rotating roster. The continuity of care and relationship building opportunities through a pharmacist contributed to a holistic and respectful therapeutic relationship.

Chapter 6 Patient views on pharmacist co-prescribing for their opioid substitution treatment

6.1 Introduction

In this chapter, I will explore patients' views about the policy proposal for pharmacists to co-prescribe for OST in collaboration with doctors. This follows on from my previous chapter which examined patient perceptions and experiences with the existing model of care. In this chapter, I describe how pharmacist co-prescribing is predicted by patients to impact on the delivery of OST. I will answer the research question: what views do patients have about doctors and pharmacists co-prescribing for OST? I will outline how pharmacist co-prescribing from the perspective of patients could differ and partly address some problems raised in Chapter 5 about the existing model of care. In Table 16, I have outlined how the themes of Chapter 5 and Chapter 6 are linked.

My main chapter findings will focus on three major themes which describe how patients predicted pharmacist co-prescribing would impact on the delivery of OST (refer to Table 15 for an outline). First, patients predicted enhanced and convenient access to services for patients from pharmacist co-prescribing. Next, they anticipated improved patient monitoring due to pharmacist co-prescribing. Third, patients explored changes to health professional roles and inter-professional relationships involved with their care.

Prior to discussing the three main themes of this chapter, I will explain how patient-centred care (PCC) underpins these patient views on pharmacist co-prescribing for OST. I will show that the three underpinning themes in this chapter are related to fundamental aspects of PCC.

6.2 Patient-centred care

Previously in section 3.3.2, I defined PCC as an approach to the delivery of health care that is grounded in mutually beneficial partnerships amongst health care providers and patients. It encompasses the five concepts: patient participation in decision making, communication, access to treatment, continuous relationships and respect/privacy. In this section, I explore how these concepts relate to patients' views.

An aspect of pharmacist co-prescribing which was apparent in patients' views was the potential for pharmacist co-prescribing to be more aligned with PCC compared with the existing model of care. Participants welcomed having a choice of practitioner and location from which to seek prescription renewals because currently a choice does not exist. They wanted to be empowered by being involved in shared decision making. Those who wished for a greater sense of engagement with treatment decisions approved of pharmacist co-prescribing in anticipation that it would aid with the ease of dosage reductions or eventual treatment exit. Despite these anticipated benefits, the patients in this study did not think that all patients would be suitable for co-prescribing as they expected some would behave opportunistically or manipulatively. They feared opportunistic patients could request unnecessary dosage increases and, for these reasons, many concluded that long-term patients on a stable dose were the ideal candidates for a co-prescriber model of care. Others thought that patients might be disadvantaged by co-prescribing as it would magnify the power that a pharmacist had over their prescription and medication.

6.2.1 Enhanced choice

Patients were attracted to having a choice in deciding the location and practitioner for prescription renewal because a choice in where to renew prescriptions was currently not available within the existing model of care.

“Like I was saying if you're on the [a] stable dose ... instead of being able to come in [to see a doctor] and get just the same script again and again, the pharmacist should just be able to ring a doctor and just get a continuation” (C6).

“... to have the option of the chemist to be able to do more – may be able to extend your script and stuff like that. That'd be excellent because I mean sometimes you forget” (C7).

Having the option of continuing prescriptions in the short term through a pharmacist co-prescriber was especially useful when a doctor was absent or unavailable. Patients C10 and C11, however, emphasised that a pharmacist co-prescriber continuing prescriptions for an indefinite or extended period of time was not ideal.

“I think if doctors are not available and the chemist can then extend, do you know what I mean? Or do it for the next three months or two months or whatever but to

not put it fully on the chemist to have the whole say of everything. Because then that's not looking at the issues of a person” (C11).

“Well I believe that ... if your script runs out the pharmacist should continue it, regardless if he's got a script or not, because you may not be able to get into your doctor that week, and your script runs out mid-week. But continuation long term is another story in itself” (C10).

6.2.2 Increased patient empowerment and autonomy

Some participants anticipated that pharmacist co-prescribing would enable greater personal involvement with treatment decisions. They were optimistic that a pharmacist co-prescriber could provide them with greater support, opportunities and encouragement to achieve personal long-term treatment goals. Those who wished to gradually taper their doses believed that pharmacist co-prescribing would benefit them because it would increase their role in shared decision making. They anticipated and welcomed the opportunity to make dosage reduction requests at the pharmacy.

“I think if I was to come in and ask the pharmacist, okay I think I'm ready to go down on a dose and I can't see the doctor but the pharmacist is there and the pharmacist is still seeing me, as I said, he sees me on a regular basis more than what the doctor would. Okay (patient's name), yes I think you're okay to go down on a dose, yes I think you should. They haven't got that right at the moment actually. I think they should have that right” (C4).

“Really just going reducing, you really, I suppose, could just ask and discuss that, like over the counter ... So yes. For me I really wouldn't mind actually, talking to the pharmacist about that and reduction, yes. I would definitely be willing to do that, yes” (C8).

Patients C1 and C10 stated a desire to eventually function without the need for medication for their addiction.

“... your goal ultimately would be to get off the stuff. It would be helpful instead of having to make an appointment to travel to the doctor just for one or two milligrams [reduction], to be able to do that at the pharmacy ...” (C10).

“... I don't want to spend all my life taking this stuff. I've been a drug addict for that many years ... So if the pharmacist could get me off it without me going through any pain or anything, I'd be quite happy” (C1).

6.2.3 Suitability of co-prescribing for selected patients

The patients thought that increasing patient autonomy would be a positive benefit of pharmacist co-prescribing, but they predicted this would only work well for certain groups. Some patients and circumstances would not be suitable for pharmacist co-prescribing. The patients warned that intentional exploitation of the treatment program could become more prevalent with pharmacist co-prescribing. Therefore, they concluded that this policy proposal was unlikely to suit unstable or opportunistic individuals; rather, it was more suitable for long-term stable patients. For patients who were long term or progressing well, continued involvement by a doctor but at less frequent intervals seemed a good option.

“I reckon it'd be the best way for me to be dosed – definitely – because I've been on the same dose constantly for so long. Nothing's changed ... So for them four years that I was on the same dose it would have meant that I wouldn't have had to make the double visits from here back to the chemist every four weeks or whatever, if they could continue it on” (C6).

“I reckon it'd be alright for certain patients I think, not all patients – wouldn't suit all patients I don't think. Some of them, you know, probably me but, you know, for people that are trying to get off drugs and that. Not for people that are still using drugs I don't think” (C5).

“Different individuals, you know. I think 90 percent of the people, oh say 75 percent of the people should come and see a doctor. Then 25 percent that are doing the right thing, then the pharmacist could say, yes he's doing well. The pharmacy could more or less keep in contact with the doctor themselves, you know?” (C5).

“Yes it would probably work for me because I'm not interested in taking any drugs or anything. People like myself and other people who work really hard and they're getting their life together and they've proven themselves, yes that would be awesome, that would be really good” (C9).

“People who have been on it for a long time. New patients should have to go back to the doctor a lot more just in case things are going wrong. But people that have been on it for years, they've been on it for years, nothing's been happening, they're pretty stable, they're not going up and down all the time, so I reckon instead of having to go to the doctor just to go through the pharmacist until you do want to go up and down and then maybe go back to the doctor” (C12).

The patients in this study thought that patients who already had intentions to manipulate the system would find another outlet for their behaviour through collaborative

prescribing. As discussed in Chapter 5, some patients reported extensive manipulation of the existing treatment model. They were concerned that the introduction of a co-prescriber could opportunistically increase medication misuse and manipulative behaviours. The potential impact of power and manipulation on treatment and relationships will be discussed further in the following section.

Patient C5 acknowledged that, although co-prescribing was predicted to benefit patients who have genuine intentions of stopping illicit drug use, not all people were suitable. He said: *“It might work for me, you know what I mean? But it wouldn't work for everybody. Like, they'd abuse it”* (C5).

6.2.4 Power and manipulation

Not all the evidence from the interviews entirely supports all aspects of PCC. Some patients worried about the loss of autonomy if a pharmacist co-prescriber had too much power over a patient which does not support the concept of greater patient autonomy. They feared the authority of a pharmacist to abruptly cease their treatment in response to personal conflicts or behavioural issues. Others were concerned that a pharmacist co-prescriber was certain to be targeted for manipulative requests such as unnecessary dose increases. However, despite their concerns about a power imbalance, patients also thought it would be manageable if there were appropriate mechanisms to manage pharmacist co-prescribing.

Two patients feared a pharmacist's increased power over them and their treatment. Their major fear was of experiencing withdrawal effects from abrupt treatment cessation due to a pharmacist co-prescriber *“playing God”* (C7).

“If they [the pharmacist co-prescriber] cut you off, what happens? ... if you've got a personal conflict with them and they cut you off because they've got all the power over your script what happens then? I just don't reckon one person should have that much power” (C6).

“... as long as they're [the pharmacist is] not going to play God because he's angry that day or something and has the power to not dose me or something 'cause he's angry or something” (C7).

Others feared that patient misbehaviour at the pharmacy could result in the pharmacist co-prescriber reducing patient doses as a punishment.

“Some people are scared that their chemist [pharmacist] has got too much power over them. That's probably what it is. If they go off at the chemist [pharmacist], they've got no option, they'll get cut off [the program by the pharmacist] ... That'd be only one problem I'd see with that whole thing [policy proposal]. If you had a personal conflict with the chemist and he was dosing you. If they refused to dose you, what would you do?” (C6).

Patient C11 suggested disallowing co-prescribing pharmacists the power to terminate treatment to prevent abrupt treatment cessation as a result of personal conflicts. He said:

“On their own I don't think they should be able to just cut people off, off ... I think that needs collaboration so the cutting off of patients by a pharmacist, I don't think that's right ... So I think cutting off patients from their doses, I don't think they [the pharmacist] should be allowed to do that” (C11).

A regulating body for patient complaints was believed to be necessary to ensure that both practitioners were not acting to disadvantage patients. Two patients proposed the establishment of a regulating body to govern co-prescriber practices and prevent personal conflicts (with a pharmacist) from being a catalyst for dose reductions or abrupt treatment termination.

“There'd have to be a fail-safe or a fall-back otherwise ... there'd be chemists who get – personal conflicts with you I suppose ... If they had someone like the health board to answer to – something like a fall-back – like a fall-back sort of a thing” (C6).

“So it needs to be monitored quite well because some pharmacists are not good people ... I think the voice of the people needs to be listened to so if they make a complaint or anything like that ... I think that, as long as it's two people [the pharmacist and doctor] that are following what's going on and if there's any issues raised or too many people getting cut off from programs because of the pharmacist or he wants to pick his patients and stuff like that, then that needs looking at. Otherwise, I think it's a fabulous idea. I do, I like it” (C11).

Authorisation by a pharmacist co-prescriber of dose increases was cautioned against due to predicted manipulative behaviour or requests. As previously mentioned, manipulative behaviour by some patients was reported to be already occurring. Participants therefore were certain that a pharmacist co-prescriber would receive requests for unnecessary dose increases. They warned that intentional manipulation of the co-

prescriber's role through unnecessary dosage increase requests was a major concern and had serious consequences.

"Obviously you might look fine to the pharmacist then. But then half an hour after you've had your dose and plus you've asked him to increase it as well. You get a half an hour up the road when it's pumping through you, unbeknownst to him you're bloody on the nod scratching your nose going, ha ha ha got him. Then by the next morning you're looking alright again aren't you? So that would be my only concern" (C7).

"... decreasing that would be okay [for a pharmacist co-prescriber to do] but increasing, most definitely you'd have to see a doctor" (C9).

"... I don't think they [a pharmacist] should be able to increase your dose ... Just only because I can see definitely that being abused. Like 100 percent definitely. A lot of people would abuse it" (C7).

"I'm thinking of people trying to rort the system here and I think if they did do that [pharmacist co-prescribing], people would find a way to really, you know, to rort the system. That's all I can say. They'd find it easy some way or other. I don't know how they're going to do it but they would" (C1).

In Chapter 5, patient C5 acknowledged that he and others had abused the current model of treatment. He therefore concluded that it was inevitable that pharmacist co-prescribers would be targeted by manipulative patients.

"I don't think that's a good idea really because a lot of people abuse the system. As I said, 50 percent plus would abuse the system and they wouldn't – I've been around a while, you know what I mean? So I've been on the heroin for 23 years so I've been around the traps. A lot of people do abuse – I used to be one of them myself. I used to be on the – when I first got on the program, I used to abuse it and methadone was the back-up, you know, that stopped me from hanging. Stopped me from doing crime, you know, so I didn't have to go and get money. I don't think it [pharmacist co-prescribing] would work, no" (C5).

Patient C7 strongly recommended that dose increases be authorised by a medical practitioner to prevent intentional manipulation of the co-prescriber. However, he pointed out that requests for dose reductions were unlikely to be manipulative in nature.

"I mean you can only have good intentions if you're trying to decrease obviously eh? I can't think of a scam or possible gain or illegitimate reason why you could get out of decreasing" (C7).

A good relationship between patients and pharmacists could reduce patients' fears that power and manipulation would be an issue with co-prescribing. Patients also suggested appropriate mechanisms to minimise these concerns including limiting the scope of a co-prescriber's authority. On balance, although there were concerns about the power gained by a pharmacist co-prescriber, in the context of the bigger picture, they welcomed the increased participation in their treatment which the policy could bring.

The concept of PCC underpins the interviewed patient views on pharmacist co-prescribing for OST. In the next section, I will show how the three main themes of this chapter (see Table 15) relate to PCC and link with the previous chapter's findings (see Table 16).

6.3 Themes from patient views on pharmacist co-prescribing for OST

Most patients supported pharmacist co-prescribing because they believed that its impacts would be positive in three main ways. First, participants predicted that the new model of care would provide greater convenience for suitable OST patients. Those who welcomed pharmacist co-prescribing also supported ongoing consultations with a doctor, but at a reduced frequency from what is currently required. However, they considered that not all patients would be suitable candidates for pharmacist co-prescribing owing to their manipulative or opportunistic behaviour. Second, participants indicated that patient monitoring could be enhanced if the pharmacist co-prescriber had access to more complete information about them. Third, pharmacist co-prescribing was expected to change the role of health professionals and their relationships with patients. The patients discussed the roles that they preferred a medical practitioner to continue to have and their concerns about the impact of co-prescribing on pharmacists, and they suggested potential additional training requirements. Each of these aspects relates to the findings about patients' views on the existing model of care that I described in Chapter 5.

Table 15 From the perspective of patients, how could pharmacist co-prescribing impact on the delivery of opioid substitution treatment?

Major theme	Sub-theme
Convenient access to services	Convenient location Reduced cost and number of visits to the doctor
Improved monitoring of patients	Improved monitoring of patients
Modification of roles and relationships with health professionals	Preferred medical practitioner roles Impact of co-prescribing on pharmacists Additional training for pharmacist co-prescribers

Table 16 Comparison of themes between Chapter 5 and Chapter 6

What are patients' experiences with the existing model? (Chapter 5)		From the perspective of patients, how could pharmacist co-prescribing impact on the delivery of OST? (Chapter 6)	
Major theme	Sub-theme	Major theme	Sub-theme
Varied access to and experiences of treatment	Varied ease of initial treatment access	Convenient access to services	Convenient location
	The implications of difficult access to treatment		Reduced cost and number of visits to the doctor
	Different expectations of access to and cost of treatment		
Varied monitoring of patients	Misuse of medication	Improved monitoring of patients	Improved monitoring of patients (combine with patient safety and urine testing sections)
	Drug contacts met at the pharmacy		
Varied relationships with the health professionals	Disjointed relationship with clinic doctor	Modification of roles and relationships with health professionals	Preferred medical practitioner roles
	Importance of relationship with the pharmacist		Impact of co-prescribing on pharmacists
	Varied perception of privacy (further discussed in Chapter 7)		Additional training for pharmacist co-prescriber

6.4 Convenient access to services

The first key benefit which patients saw arising from pharmacist co-prescribing was the possibility of improved convenience in access to services. The patients were already regularly attending the pharmacy for supervised dosing; therefore, access to a co-prescriber located in a community pharmacy was considered ideal. Others spoke about the greater sense of continuity of care that could be enabled through co-prescribing due to their already frequent pharmacist contact. Patients anticipated a reduction in the number of medical appointments required and were keen to benefit from savings in time and travel costs.

6.4.1 Convenient location

Patients welcomed pharmacist co-prescribing as they believed it would be more convenient for them to see a pharmacist rather than a doctor. In Chapter 5, patients described experiencing difficulties in accessing medical appointments either for initial treatment or for transfer of treatment from a clinic to community setting: they viewed pharmacist co-prescribing as a potential solution to these difficulties. They were already attending the pharmacy regularly; therefore, the ability to receive both their medication and some prescriptive needs at the one location was regarded as a convenient arrangement. I asked patients who supported the idea their preferred pharmacist co-prescriber location (i.e. either in a clinic or other setting) and the response from all patients was the community pharmacy for the reason of convenience.

“It sounds like a good idea if you could just go to the pharmacy or a specific pharmacy and organise it through the pharmacy would be quite a good idea. I think it would be a good idea rather than running back to the doctor to the pharmacy to and fro all the time. If the pharmacist could prescribe, I still suppose you’ll have to go and find a doctor to get on it but, yeah, I feel it would be easier that way” (C1).

“... it would be great for a pharmacist to be able to say, oh [name] your script's coming up soon. Would you like me to extend it for you? Rather than having to only have that one option of the doctor or no dose sort of thing” (C7).

“Yeah, bloody oath. It would be excellent. It would be so much easier” (C7).

“Easier compared to the current model, yeah, not as much time wasting. If it doesn’t take a long time to see a pharmacist as well. I like this model if it doesn’t take longer than it is already, like you might want to see the – renew your script, if it’s not going to take a few weeks before you can do it, yeah” (C12).

6.4.2 Reduced cost and number of visits to the doctor

Patients welcomed the benefit of a reduction in the number of required medical appointments if prescription continuation could be authorised at the pharmacy. They also predicted flow-on benefits from savings in bulk-billing fees to the government, patient time and transport costs.

The patients believed that a pharmacist was better positioned to coordinate dose reductions due to their already frequent interaction with patients. Long-term stable patients who were interested in gradually reducing their dose believed it was more convenient to discuss dosage adjustments with their pharmacist rather than the doctor.

“... if everything was fine in your life and things were working well, and your goal ultimately would be to get off the stuff, it would be helpful instead of having to make an appointment, travel to the doctor just for one mil, maybe one or two milligrams, make an appointment, get another script, cost the government more, etc., then go back to your pharmacist, give him the script, okay I’ll take you down two mils” (C10).

Others anticipated that these changes would be advantageous for patients and the government because they could lead to a reduction in the number of medical visits which could reduce time and transport costs for patients. This, in turn, could reduce the cost of bulk-billed medical appointments for the government.

“I really do think it’d be a good idea if the pharmacist had that sort of power to continue your script because it would save a lot on the cost of seeing doctors” (C6).

“Personally, I think it’s not a bad idea at all, because sometimes it’s hard to get back to the doctor for a follow-up script or so forth. Then if you can’t get a script or your script say runs out on the 10th and you can’t get to a doctor until the 16th, you’ve got to come out and get an interim for that time ... the pharmacist could just follow it on and you wouldn’t have to worry about following up that script all the time. I think it would save a lot of time and a lot of hassle and a lot of money [on transport]” (C2).

6.5 Improved monitoring of patients

The patients believed that a pharmacist co-prescriber was well positioned to respond immediately to patient presentations which, in turn, could improve their monitoring and safety when necessary. They also thought that pharmacists had a better understanding of a patient's overall progress than doctors. Therefore, they considered that pharmacists would be more capable than doctors of making prescriptive decisions which were reflective of actual patient circumstances. Pharmacists were already positioned to see patients on a more frequent basis than doctors. In contrast, stable patients saw doctors once every few months, so doctors were believed to be less attuned with their overall progress. Participants suggested pharmacist co-prescriber functions could include short-term prescription continuation and dose or take-away entitlement amendments. Two patients additionally believed that a pharmacist co-prescriber required access to urine test results to better monitor patients and make well-informed prescription decisions.

6.5.1 Improved monitoring of patients

Participants believed a pharmacist co-prescriber would have an enhanced capacity to make decisions which optimised patient monitoring and safety. They believed that a pharmacist co-prescriber, with access to urine test^o results, could modify OST doses to improve patient monitoring. Pharmacists were believed to have greater overall understanding of a patient's progress in the longer term due to their more frequent contact with patients compared to doctors. A trusting patient and pharmacist relationship was also believed to facilitate improved patient monitoring.

A pharmacist having access to urine test results could be a catalyst for greater monitoring and facilitate better informed decision making with respect to future prescriptive decisions. These test results were highlighted as especially relevant for pharmacists responding to patient requests for dosage increases because urine test results detected manipulative behaviour and medication compliance.

^o Urine test results can determine the presence or absence of specified drugs or their metabolites and provide insight into medication compliance or other illicit drug use.

“... I would have to say yes, to take the urine testing. Because otherwise what justification would the person have for asking for it to be raised, other than being uncomfortable ...” (C8).

“I think that is excellent, but there again lies with when they have to give a sample. That urine sample must be given because that's the only way you're going to tell whether they're abusing the system or not ... Every time you come for your script review, you should give a urine [sample] and you should be made to give a urine [sample]” (C9).

“But in the chemist being able to supply them and not get a prescription and things like that, I think that's awesome but I do believe that they [the patient] should give a urine [sample] once a month. Then that ensures that they are not using other drugs, because they must be – the doctor and the chemist – must be informed of things like that if it's happening ...” (C9).

These participants discussed how pharmacists were better positioned in their observation and understanding of a patient's overall progress owing to the range of physical and emotional states in which patients presented to the pharmacy.

“I think that's a good idea because I think the pharmacist gets to know more about the person by seeing them, even if they only go every second day. They're [the pharmacist is] having a lot more contact and seeing them [patients] in different stages” (C3).

“I think the pharmacist and the person that's involved need to know everything ... I think the pharmacist is a big part of that because you're dealing with that person every day, or you know, if you don't get the take-aways, so the pharmacist has every right. So I think that's a very good idea. As I said, the pharmacist actually gets to see you more than the doctor would. They get to see you on a daily basis and get to see that you're still doing okay” (C4).

Patients had more frequent contact with their pharmacist than with the doctor which better enabled the pharmacist to monitor a patients' progress.

“... I think that's good because the pharmacist is seeing you every day, and how you're coping, and also if you're going in there stoned or things like that, you know what I mean. I think that's a very good idea” (C13).

“They can see that you're doing okay because you're seeing the pharmacist more than what you do [see] the doctor. So they know more about you, do you know what I mean? ... More about you, your ways each and every day. Your eyes, they can tell if you're stoned or anything like that, more so than a doctor here because they don't see you often enough, whereas your pharmacist does. Now, your

pharmacist would know if you've walked in there stoned because they see you straight every day and then one day you go in there stoned ...” (C13).

Patient C6 said that a trusting relationship emerged from frequent interactions between himself and the pharmacist. This trusting relationship was a reason for his support of pharmacist prescribing.

“I feel that'd be a hell of a lot better because your pharmacist you see every day and they know you personally and know when you're angry, know when you're not angry, you know? They know your personal life a bit more – better than the doctor can because he's too busy. I've got enough trust in my pharmacist that I know that they would prescribe me properly because I've been with them for so long ... I would actually prefer it if they would prescribe me” (C6).

Patient C6 had previously been well monitored by the pharmacist and advocated for legislative changes to enable pharmacist prescribing. He said:

“I've got a pretty good pharmacist I suppose, but I always have ... basically as long as they're (the pharmacist is) doing what they're doing just monitoring that you're not using – they can tell when you're using. I know that for a fact because my pharmacist's told me before you're off your head and go away. So they can't really better themselves I don't think without any laws being changed” (C6).

6.6 Modification of roles and relationships with health professionals

The third aspect of a new model of care highlighted by the patients was the potential for changes to the roles of doctors and pharmacists and the relationships between patients, doctors and pharmacists. Participants had definite ideas about a doctor's role within the co-prescribing model of care and they wanted the doctor to maintain a significant role. They were also concerned about the potential impact of co-prescribing on the pharmacist's existing work demands, physical workspace, security and financial remuneration. Participants valued a pharmacist's contribution to shared decision making and were conscious that policy changes might impact on inter-professional communication. They discussed and had mixed opinions about whether or not additional training for a pharmacist co-prescriber was necessary.

6.6.1 Preferred medical practitioner roles

Patients who welcomed the role of a pharmacist co-prescriber also believed that a doctor needed to maintain involvement with their care. In Chapter 5, patients described their disjointed relationship with doctors. Even so, they nominated roles for the medical practitioner that they did not foresee being fulfilled by a pharmacist co-prescriber. Most participants were in support of a doctor initiating treatment, and allowing a pharmacist to continue OST after a patient was stable. They also had mixed views about the degree of autonomy that a pharmacist co-prescriber should have.

Many participants strongly recommended that treatment initiation should remain exclusive to medical practitioners owing to significant safety concerns.

“I don't think pharmacists should be allowed to initiate such a thing [OST] because people could die” (C10).

“I think the original treatment or medication should start with the doctor; it should definitely start with the doctor” (C3).

“No, I think a doctor most definitely [should initiate treatment]. It comes down to a doctor and a doctor who is well versed in that field that really knows what they're doing, because users are very, very manipulative people. They're extremely manipulative. It's sad but it's so true and most of them believe their own lies. I did, yes I was once like that you know” (C9).

“For new people who had just come on to the methadone program change their dose up and down a lot ... Yeah or when they've only if they've been on them a few months, I reckon the pharmacist shouldn't be able to change it, I reckon the doctor should be the only person who changes that” (C12).

In contrast, patient C1 supported a co-prescriber being able to authorise dose amendments during the initial period of stabilisation for the reason of convenience.

“I think if the pharmacist could increase your dose without you having to go back to the doctor that would be a great help during stabilisation. If you could just do it all at the pharmacy, it would be a lot easier than having to travel because I did it all on buses, see. So I was travelling a fair way all the time to go between pharmacy and doctor” (C1).

Patient C10 believed that the doctor must be regularly involved with their treatment plan, even if the pharmacist tapered their doses.

“I think you could ask the pharmacist to make a reduction, etc., but you still need to go and consult with your doctor not necessarily extremely regularly but certainly regularly ... well, you shouldn't have to go and see your doctor to go down by 0.4 milligrams, you know, you should be able to just ask the chemist. Some of the chemists are pretty cluey, and they can either say, yes, or, I would like you to see your doctor first. So you could down and maybe then down again in two weeks' time; maybe they could have a certain level and then you have to go back and consult your doctor and tell them what you've done, but the doctor still needs to review it. Maybe not as regularly but still be in the loop” (C10).

The above participants supported the idea that a co-prescribing pharmacist could decrease a dose on patient request. However, as discussed previously, they cautioned against a pharmacist being able to increase doses due to the risk of potential manipulation.

These participants believed that a medical practitioner's training and experience in physical examinations were reasons why dose initiation and changes during stabilisation must remain a doctor's role.

“Because a doctor has been trained more in methadone use and that. It's a more important time when they're coming onto the methadone, during stabilisation. Especially, different people react differently to methadone” (C12).

“'Cause I mean a doctor's been more trained and he's going to do your pulse and your eye or whatever. He's going to sit there and spend time with you, isn't he, inside the surgery? Do you know what I mean? He's going to notice things isn't he?” (C7).

“A doctor has to go through that [dose initiation] first because you need to go through all your check-ups and everything like that ... Yes, well your pharmacist isn't trained to do all that ... the pharmacist can't give you ... a prod and a poke and all that ... a doctor would have to give you a thorough examination before that could happen” (C4).

These two participants questioned a pharmacist's ability to initiate medication and/or adjust doses. One participant regarded pharmacist co-prescribing as dangerous and another participant believed that medication selection/initiation should only be done by a doctor.

“Because it's the doctor's final call, mate. He's the one that spent 10 years in school. The pharmacist only spent four ... Because the pharmacist is not qualified to make them decisions, right, and these are decisions that affect our daily lives. One mistake by the pharmacist could potentially put our loved ones in danger” (C14).

“Yeah, going up on dose and maybe choosing or varying from different medications. Like methadone might work for some people better than Subutex® or something like that. A pharmacist shouldn't be able to make that decision” (C10).

Patient C2 believed that dosage adjustments must remain exclusively a doctor's role as a pharmacist could not make appropriate decisions as they did not have a patient's full medical history. This patient said:

“Increasing or decreasing, yes I think the doctor should do that, because a pharmacist doesn't have the full medical history of the patient. I think, like I said before with the scripts running out and that, the pharmacist should be able to continue on until you do get a script of whatever like that. As for increasing it or decreasing it or whatever, I don't agree with that, no” (C2).

Despite these reservations, many patients supported a pharmacist being allowed to continue treatment for the same dose after the stabilisation phase.

“Obviously they wouldn't let a pharmacist start if the person wasn't stable, 'cause then it would be a bit silly wouldn't it? ... Best case scenario. It took me a year, but a few months – three months say [to be stabilised]. If you were legitimate, not new to them ra-ra-ra, you'd be stabilised. Then it would be okay just for the pharmacist to ongo your treatment I reckon” (C7).

“Yeah if you're being stabilised it's not a good idea because you don't know where you're at really. But after stabilisation, yeah, I think it's very innovative” (C6).

“Like I was saying if you're on the stable dose I reckon they should be able to – instead of being able to come in and get just the same script again and again, that the pharmacist should just be able to ring a doctor and just get a continuation” (C6).

“I reckon it would be good to be able to like do this model [have a pharmacist co-prescriber]. I reckon it would be good to just let the pharmacist renew your script, it would be a lot better than how it is, a lot more easier” (C12).

6.6.2 Impact of co-prescribing on pharmacists

Participants were concerned about the impact that co-prescribing could have on pharmacists: their concerns included a pharmacist's existing work demands, physical workspace, security and financial remuneration. However, they anticipated that co-prescribing could enhance inter-professional communication between doctors and pharmacists which would also be beneficial for them.

Patient C5 regarded pharmacies with large patient numbers as unsuitable for co-prescribing. He perceived that the pharmacist would be too busy to spend additional time consulting with patients on their prescriptive needs and said:

“... the big pharmacies wouldn't be able to do it [co-prescribe]. Like (pharmacy name) have got 3,000 patients or whatever and they wouldn't know everyone by name ... As I say, if the doctor rings up and says how's Joe Blow going? How's Mary Jane going? They wouldn't know. There's so many of them to keep an eye on” (C5).

Others (patient C11 and patient C8) were unsure of a pharmacist's capacity to perform their existing workload as well as additional responsibilities.

“They can't expect to be everything, a counsellor, a doctor, a chemist all the time to a patient. So you need a few simple answers – not too much to be put on the chemist either. Otherwise you're going to burn them out with everybody's concerns” (C11).

Patient C8 also believed it was fair for a pharmacist co-prescriber to be paid for the additional responsibility being undertaken, saying:

“[t]he only worry would be like the extra workload of the pharmacist, whether they'd be compensated for that. I'm not sure. Well if they're prescribing, then they ought to be paid for the prescribing and also being qualified to do so ...” (C8).

In addition, patient C8 was concerned about the impact of co-prescribing on the security of pharmacists and the pharmacy environment. She worried that co-prescribing pharmacists could be subject to a potential increase in aggressive or violent behaviour by demanding patients.

“It's just my major concern is people [other patients] getting upset [at the pharmacy] ... you do hear of chemists being robbed and it's not very nice, especially if someone gets stabbed ... it's just the risk of violence towards the doctor or a pharmacist really. So I think there'd be some form of security unfortunately” (C8).

Security for patients attending the pharmacy was another concern, especially if there was only one pharmacy option. Another patient believed that:

“[i]t would be good to have a bit of security there, especially if that was the only dosing place you could go, like if that was the only one I could go to [to see a pharmacist co-prescriber], you know” (C5).

Patient C5 believed that the establishment of co-prescribing required additional space which required prior approval by the pharmacy owner. They said: “[t]he pharmacy would have to have a say too I suppose because it is his shop and that ... They'd have to build another room, especially at my pharmacy, you know what I mean? (C5).

Patient C4 predicted that co-prescribing could benefit patient care through enhanced inter-professional communication and information sharing between pharmacists and doctors. She had experienced inconveniences as a result of her pharmacist not being informed by phone or fax of her treatment changes saying:

“There's a lot of lack of communication between them [the clinic and pharmacy]. I'm not sure why. I really don't understand why. If they had that communication there, I think they would have a lot better interaction with work, do you know what I mean? They wouldn't have arguments over the phone, whereas they do. They wouldn't have them late faxes” (C4).

She predicted that a co-prescribing relationship between doctors and pharmacists could improve communication processes and be beneficial for all parties. Patients were expected to benefit from more efficient communication channels between pharmacists and doctors. Pharmacists could also benefit from reduced miscommunication or delays about treatment or prescription changes.

“I think that's a really good idea what we've just spoken about. Pharmacists I think, as I said, need to know. They know a lot about you anyway, but like the more they know about you, the more interaction they have with the doctor, I think will be a lot better. I think will be a lot better for the patient and a lot better for the pharmacists, actually. They probably wouldn't get as frustrated either” (C4).

Patients mentioned their concerns about pharmacist co-prescribers being overburdened with additional responsibilities. These comments are indicative that patients appreciated the existing role that a community pharmacist already played.

6.6.3 Additional training for pharmacist co-prescribers

Patients held mixed views about the necessity of additional training for pharmacists with prescribing authorisation. Some, but not all, believed that pharmacists were already qualified in medication management so did not require any further training. Others believed that newly graduated pharmacists were not suitable for the co-prescriber role.

Most of these views were based on the presumption that pharmacists already have a basic level of knowledge or training, skills or experience with OST.

Patient C3 regarded additional training for a pharmacist co-prescriber as unnecessary as pharmacists already had extensive knowledge of and experience with medications.

“I think the pharmacists would have as much knowledge and rapport [as doctors] with being involved with drugs. I mean, they understand, probably, more about what drugs do and don't do for people than – it's probably the wrong thing to say – than a doctor” (C3).

Pharmacists were presumed to have achieved the relevant knowledge and skills if they were dispensing OST. As a result of this presumed knowledge, additional training to be a co-prescriber was not regarded as necessary: *“... some chemists don't dose methadone because they haven't got the right to. They don't know about it whereas these pharmacists do, the ones that do give it out. So they have got knowledge of it already” (C4).*

Another patient thought that additional training was unnecessary for a pharmacist co-prescriber as there was no real difference between a doctor and a pharmacist. He said:

“The pharmacist is just about like a doctor anyway, isn't he or her? Maybe I cut in a bit short there and cut you off but I thought to myself that the pharmacist was just as qualified as the doctor anyway. I don't know what made them different but one went on to medicine and one – I don't know. I don't know the difference between a doctor and a pharmacist” (C1).

One patient proposed joint pharmacist and doctor training sessions to ensure that both practitioners could work together afterwards to manage patient care in a collaborative manner.

“But it would have to be not just a matter of training the pharmacists all together and then training the doctors, I think they'd have to train together to get to know how each other works and how they're going to get on. Like what's best for the pharmacist to do or should they leave it for the doctor? They wouldn't know those things unless they have had sort of a bit of training together” (C2).

Another patient did not regard a graduate pharmacist as suitable for the role of co-prescriber owing to insufficient experience.

“I don't think it should just be like somebody's just done their – a pharmacist degree – I mean a 23 year old just out of uni – I don't think it should be that. I think it should be [the] lead pharmacist or someone who's been trained ... [They need]

to know basically what everyone knows. When you look in someone's eyes when they're pinned – if you think they're going to OD or whatever else. I know it's a hard thing to pick – you can't pick it. But if you've got any – and how to bring people back – needle stick injuries – they need to know all that sort of stuff. Just all basic training like that they probably already have ...” (C6).

Patient C11 believed that pharmacists with no experience with OST must undergo some form of training before becoming a co-prescriber.

“If they need it, yeah. If it's needed and if they're not showing that they've been in the system and been doing what they've been doing for any length of time or it's a new pharmacist, then yes I think they should [complete some form of training]” (C11).

6.6.4 Summary of theme: Modification of roles and relationships with health professionals

All participants maintained that they wanted a doctor to be involved with their treatment initiation and ongoing care, but some believed that this involvement could be at a reduced level from what was currently required. Such arrangements would allow a pharmacist co-prescriber to manage patients after stabilisation. Even so, participants worried about the impact of co-prescribing on pharmacists including increased pharmacist workloads, pharmacy security concerns and limited workspace. They recommended further consultations with the pharmacy profession to better understand these impacts. Participants held mixed views about mandatory requirements for pharmacist prescribers to complete additional training. One participant anticipated that co-prescribing would enhance inter-professional communication between pharmacists and doctors and the delivery of patient care.

6.7 Chapter summary

The views of the interviewed patients, albeit from a small sample, indicated the existence of a degree of patient support for OST pharmacist co-prescribing. Most patients supported a pharmacist co-prescriber continuing prescriptions for a short period of time for stable patients. Others nominated pharmacist co-prescriber roles (for stable patients) for dosage amendments, particularly for dose reductions when patients are actively seeking to exit treatment. Despite these benefits, pharmacist co-prescribing was not regarded as suitable for all cases with stable patients viewed as ideal candidates.

In the previous chapter, the interviewed patients described the challenges and variable aspects of the delivery of OST under the existing model of care. In this chapter, I have outlined how PCC underpins the three major themes of how patients believed that a pharmacist co-prescribing model of care could impact on the delivery of OST. Patients welcomed increased choice, empowerment and autonomy. Firstly, most patients supported pharmacist co-prescribing as it provided greater convenience in access to services. Predicted potential benefits included a reduction in travel time and costs as a result of fewer medical consultations. In contrast (in Chapter 5), patients described variable access to treatment initiation in the current model of care. Secondly, a pharmacist's judgments on some prescriptive decisions were believed to better reflect actual patient needs. A pharmacist was regarded as better positioned compared to doctors in understanding a patient's overall condition. For this reason, patients justified the opinion that pharmacist co-prescribers provided continuity of care and enhanced patient monitoring. In contrast (in Chapter 5), patients reported variable levels of patient monitoring. Thirdly, co-prescribing was predicted to alter the relationship dynamics between patients and their health professionals as well as inter-professional interactions. Patients stated strong support for a doctor to oversee treatment initiation and to remain involved with patient care, but to a reduced degree in the longer term. In contrast (in Chapter 5), patients reported that a meaningful relationship with clinic doctors was difficult to establish owing to a rotating roster in the current model of care.

Chapter 7 Privacy in the pharmacy: the views of interviewed patients

7.1 Introduction

One important aspect of OST is privacy and I have briefly noted this in the previous two chapters. As privacy is relevant to both the existing model of care and the potential co-prescribing model of care, I have dedicated an entire chapter to discuss this important topic. Most of the patients interviewed cared about maintaining privacy at the pharmacy, although they had a wide range of views as to how important privacy was, and how best to achieve this outcome. Patients who valued privacy did not want to be treated differently or seen to be different from other pharmacy consumers. Different patients had different interpretations of how the pharmacy layout would or would not support their privacy. These findings suggest that one standard layout is unlikely to be perceived as private by all patients. However, independent of the layout, a positive relationship or interaction with the pharmacist could dampen their sensitivity to privacy.

The main findings of this chapter are presented in three sections. First, views of patients who did not have any privacy concerns when being dosed at the pharmacy are presented. Next, the findings are discussed for three different pharmacy layouts: dosing at the front counter, dosing in a separate room and dosing in a screened or partitioned area inside the pharmacy. Finally, the chapter will conclude with a discussion on the impact of a patient's relationship with the pharmacist on privacy sensitivity.

7.2 Patients who had no privacy concerns

A small number of interviewed patients had no privacy concerns when attending their pharmacy for OST dosing: they either were not bothered, or did not care, about privacy. Two patients described themselves as "*openly on the program*": they did not care if others knew about their treatment. Thus, regardless of the pharmacy layout, they had no major privacy concerns. When asked if they had any privacy concerns if a pharmacist could co-prescribe, their responses were:

“Not really because I'm on the program openly and willingly you know? If anyone asks me I don't care about privacy rules. If anyone asks me, I tell them. I know what I'm doing. I don't see how it'd be any different. People see you sitting out the front of here and they know what you're doing. If you're going sitting out in front of the chemist it'd be less of a privacy [you know] because you could be there for anything, whereas if you're here [at the clinic], you're here for that – or the detox. So yeah I reckon the private way – I don't see our privacy would be affected at all” (C6).

“Not really, privacy doesn't really bother me as much as some people. If you told this to other people it wouldn't really bother me. Some people like to be more private than that, but I haven't really got many, much concerns at all” (C12).

These two patients (C6 and C12) had some common features, including the fact that they had both commenced methadone treatment when incarcerated. Both were male, between 31-50 years of age, and had not previously been on the treatment program prior to its initiation in prison. The commencement of methadone in prison for patient C6 was approximately 5 years ago, while it was 10 years ago for patient C12. It is possible that the experience of being incarcerated, whereby they are likely to have experienced less privacy than the average person, could have dampened their sensitivity to personal privacy upon their prison release.

It is conjecture that being afforded little privacy during interactions with previous health care providers could have lowered patients' expectations about privacy. If previous experiences with health care providers showed little regard for patient privacy, then they may believe that this is normal practice. Therefore, these patients could have been conditioned to being treated with less privacy as this had been their regular experience.

Although patient C6 was clearly not bothered about his own privacy at the pharmacy, he indicated that he no longer wished to engage with former associates through the pharmacy queue.

“Just the people that go there [to the city pharmacy which has a queue of patients]. And I grew up in the city here. I used to sell drugs in the city. Everyone that comes here I know from jail just about [does] too. It's just that I'm just trying to break that circle really” (C6).

Patient C6 was actively seeking to minimise contact with former drug-using associates at the pharmacy. Therefore, knowing other patients attending the same pharmacy can impact on those who wish to establish a new circle of associates.

Two other patients who were not bothered by privacy in the pharmacy did value privacy, but felt protected by privacy laws. Patient C7 felt confident that his privacy was not affected by the pharmacy location for OST administration because he believed that privacy laws protected his personal details from being released to others. As a result, he felt reassured that his confidentiality was maintained at the pharmacy.

“They're all confidential anyway. That's silly. That's just being a bit silly I think isn't it? It's all confidential anyway, anyway. How would it be any different to the privacy involved now than then? Really if you think about it” (C7).

When asked about how he would feel if all of his medical history was shared with the pharmacist, he responded:

“Wouldn't worry me as long as – I probably wouldn't like them to know criminal-wise. But obviously my medical history, I mean the more they knew about me in that way the better really, isn't it? Like I said, they might be able to suggest things or offer things or if they know that something's been an issue in the past ...” (C7).

Thus, he was very willing to share his medical records with the pharmacist and believed that this could benefit his health care management. However, he was reluctant to share information which might be perceived as either irrelevant, or negative.

Finally, patient C9, like patient C7, also agreed that a person's medical record at the pharmacy was confidential. She suspected that individuals who were concerned about the confidentiality of their medical records at the pharmacy may not have genuine reasons for being on treatment.

“I think with the privacy part, that's quite silly. You go to the chemist, they get to know you as a person anyway so why shouldn't they know your medical background and why shouldn't they know anything else that is known about you? I don't have a problem with that at all and I don't think it should be a problem. If people want to be secretive then that rings alarm bells for me, they must be hiding something. Do you get where I'm coming from?” (C9).

The patients who did not have privacy concerns were either not concerned about the topic of privacy or, if they did value privacy, they believed that their privacy was protected by legislation.

7.3 Views on privacy according to pharmacy layout

In this section, I show that the same pharmacy layout could be interpreted and experienced differently by patients. As a result, there were mixed views from the interviewed patient on the adequacy of privacy protections offered by the range of pharmacy layouts.

7.3.1 Dosing at the front counter

A range of views were expressed on whether or not front counter dosing protected patients' privacy. Being dosed at the pharmacy front counter was perceived as adequate privacy for some patients and inadequate for others. Underpinning both sets of views was the desire to avoid being seen as different to other pharmacy customers when attending for supervised dosing. Patients also valued being treated like other pharmacy customers. Thus, their sense of privacy protection appeared to be closely linked with their belief that they could be treated like other pharmacy customers. Each individual wanted to blend in with everyone else, but they interpreted whether dosing at the front counter could do this in different ways.

7.3.1.1 Comfortable with front counter dosing

Those who were comfortable with front counter dosing felt that this meant they were being treated like everyone else. One patient felt a sense of pride when entering the pharmacy front door like every other customer: consequently, she preferred front counter dosing. Being able to walk through the front pharmacy door like all other customers gave her a sense of dignity. It also made her feel reassured that pharmacy staff did not stereotype or judge all OST patients as untrustworthy.

“I prefer to go in the front for the simple reason I know I can trust myself. I'm not a thief. I'm not going to steal. I'm not going to do anything untoward to the chemist but then not everybody's the same as me, but a lot are as well. Even if they just walked in and just stood there and waiting like a prescription, signed for their prescription, drank it and left. You feel better in yourself because they're [pharmacy staff] not looking down at you. They're not looking, [like] oh they're [the patient is] going to knock off everything in the store because not everybody's like that, but we have a few” (C11).

Dosing at the front counter for patient C6 was viewed as discreet because they could be waiting for assistance on any number of matters. Thus, being dosed at the front counter was perceived as being treated like any other pharmacy customer. In contrast, he regarded being seen by members of the public when entering the clinic as less private.

“People see you sitting out the front of here [at the clinic] and they know what you're doing. If you're sitting out in front of the chemist it'd be less of a privacy issue because you could be there for anything. Whereas if you're here [at the clinic] you're here for that [OST], or the detox ... I don't see our privacy would be affected at all [by front counter dosing]” (C6).

Two other patients felt reassured of privacy at the pharmacy front counter because conversations with a pharmacist were conducted in a discreet area, for example, away from the pharmacy front counter.

“They pull you to the side and have a little talk to you in their little corner so that not everybody's listening and hearing” (C2).

“I think you can get as much privacy as you need. Usually the pharmacist will walk somewhere into the pharmacy where you can talk where there's not a lot of people around” (C3).

7.3.1.2 Not comfortable with front counter dosing

Those patients who were not comfortable with front counter pharmacy dosing felt that they were being treated or judged as different to everyone else. The reason was that they were required to consume their medication at the front counter where other people could see them. In contrast, other pharmacy customers are not required to consume their medication at the front counter, so supervised dosing clearly identified patients as different to everyone else.

Patient C5 believed that other pharmacy customers knew what his medical condition was when he sat and waited for his dose next to other customers at the front counter. He believed that having to consume his dose and receive take-away doses over the counter clearly indicated to other pharmacy customers that he was on OST.

“We sit down here and people are just right next to you. They know what you're doing of course, they know we're drug addicts, you know what I mean?” (C5).

“It’s not very, you know [private], because people look at you. When they're giving you a couple of stuff and you've got to sign for it and drink it and then you leave or you get your take-aways. People look at you funny” (C5).

He felt embarrassed and ashamed that other pharmacy customers at the front counter judged him as a drug addict. A belief that other people knew about his past habits dampened the sense of pride he felt about the efforts he was making to change his life.

“You know, like normal people that come and get their prescriptions filled or come and get nappies or whatever they want from the chemist. Sometimes it gets embarrassing, you know? ... Ah I feel down and that, yes. Feel ashamed, you know? Because no one else should know my business, you know what I mean? I know I've stuffed up in my life but I'm trying to make amends for it, but just don't like people looking at me” (C5).

Likewise, patient C13 was embarrassed when third parties at close proximity to the pharmacy front counter saw her medication being administered. However, because the dosing pharmacist treated her with respect, the embarrassment was lessened. She said:

“... because it is quite embarrassing to go in there and people look at you drinking this thing and they're wondering what you're doing and that. But my pharmacist has been great. She praises me all the time, saying [name] you're doing really well and that to me, gives me a lift and helps me to keep going” (C13).

It is possible that, if patient C13 encountered a pharmacist who did not make her feel valued, her embarrassment and sensitivity to privacy matters might be heightened.

7.3.2 Dosing in a separate room

Dosing in a separate room at the pharmacy was considered as privacy protection by some patients, but not by others. If it was possible to observe individuals accessing the entrance of a separate dosing room, then a patient’s medical condition could be deduced by their association with this area. When being dosed in a separate room, patients might be required to queue or enter through a different pharmacy entrance to other customers. Their views on this pharmacy set-up appeared to be linked to their sensitivity on being judged about their medical condition by other people.

7.3.2.1 Comfortable with dosing in a separate room

A separate or side entrance to the pharmacy which led to a designated OST dosing area was described as having advantages for patient privacy. It was perceived as ideal by this patient as the general public could not see them after they had entered.

“The pharmacy [name] has got the best set-up, because it's got the little door at the back and it's totally separate from the chemist, well it is but it isn't. That's ideally the best set-up that I've seen” (C2).

Receiving OST in a room accessed through a separate pharmacy entrance was believed by patient C12 to be a more discreet alternative compared to front counter dosing.

“Maybe in the front counter would be a bit of a problem but in a closed room I don't see why there would be worries about privacy in there in like a private dosing room. Ours has got a – you go round the side and there's a wall there and no one can see what you're doing in there or anything like that. It's not closed up but just that no one can see you and that's fine with me” (C12).

It appears that patients who were dosed in a separate room but were not required to stand in a queue felt that their privacy was protected. It is possible that these patients attended a pharmacy which serviced a smaller number of OST patients which might explain why they did not have to stand in a queue.

7.3.2.2 Not comfortable with dosing in a separate room

Those patients dosed in a separate room who were required to stand in a different queue to other pharmacy customers felt that their privacy had been violated. Patients regarded the experience of standing in a different pharmacy queue to other customers as being treated differently to everyone else. Therefore, administration of OST dosing in a separate pharmacy room with a visible queue of patients did not necessarily assure them of privacy. Furthermore, whether patients believed that other people's perception of their condition could negatively impact on their future goals could be another explanation as to why they were more sensitive to their privacy when in the pharmacy queue.

Patient C11 felt that her privacy had been violated by queuing outside of the pharmacy dosing room because it enabled other community members to identify her as a 'drug user'.

Being treated differently to other members of the public made patients feel judged and looked down upon.

“... methadone people are always taken to one side or they've got a different door that they've got to go in. Or they stand at a window and they've got to wait their time. [Other] people know they're methadone people ... So people are looking at you all the time and you're looked down at from the outside” (C11).

When patients were waiting in the pharmacy queue (at a different entrance from where other customers entered), other shopping centre patrons could identify them. In addition, patients believed that passing police identified them as ‘drug addicts’ through the pharmacy queue. Police attention was not desired by those who felt they were stereotyped as troublemakers or as being different to everyone else. Patients with a criminal history probably wanted to avoid being seen as different to everyone in the community to deter unnecessary police attention.

“There's a line-up at that time of the morning, do you know what I mean? Even like that one at (suburb) is exactly the same. You've got to line up, they only let one person through the door and when people are walking through the shopping centre, they're looking at you, you know what I mean? The police are driving past all the time. It's not [private], I don't like it” (C5).

“They know that what you're doing – the police know what we're doing ... either here [at the clinic] or at the pharmacy [queue] – because they actually know that we're there because we're drug addicts. They don't see it that people are trying to get better. They just see that people are drug addicts and are vulnerable targets”. (C6).

While queuing in the pharmacy line for his dose, patient C5 had been identified as a drug addict by other people. He felt ostracised and embarrassed that other members of the public singled him out as different to everyone else.

“Sometimes it gets embarrassing, you know? Especially if you see them up the shop, like at the shopping centre. They point at you, he's the bloke who's on methadone or drugs, you know? I've had that happen to me. Look at that, he's that bloke who was lined up at the chemist getting his methadone, you know?”(C5).

Patient C5 believed that through the pharmacy queue, other people who knew about his addiction looked down on him. This knowledge took away the sense of pride he felt in taking active steps to change his life.

“Same as when you're in [pharmacy name] lined up. They'll look at all them drug addicts and that, you know? Some of us might be, but at least we're trying to get back, you know? They don't give us a second chance, if you know what I mean? I might be a drug addict but it doesn't mean we're all the same, really. Or some people are doing it for the right reason and some are not” (C5).

Furthermore, other patients attending the same pharmacy queue could identify each other and what medications were being administered to each of them. This was believed to impede patient confidentiality as everyone in the same queue knew each other as OST patients.

“A lot of them line up at a certain time of the day whether it's first thing in the morning and they still talk drugs and everything else. It's not a good environment a lot of the time. It works out that there's no confidentiality on whose on a program and stuff like that” (C11).

Patient C11 had employment, and if being identified as a ‘drug user’ in the pharmacy queue could negatively impact on employment, this could explain why she was conscious of her own privacy.

Another patient had goals to live independently and prove that he could be trusted to visit his grandchild without supervision requirements. He could have been concerned that other people who saw him in the pharmacy queue would judge him as a drug user, or someone who was doing the ‘wrong thing’. Feeling judged through the pharmacy queue did not make patient C5 feel comfortable because he was actively trying to do the ‘right thing’ and did not want to be seen as otherwise.

“You know, my aim is to get my granddaughter so I can look after her as well again. I used to look after her but now they took her off me and I'm not able to live there. Not allowed to take her nowhere, you know, I've got to be supervised now. It's a long story that goes on and on so I've got to do the right thing” (C5).

Patients who were seeking to make or maintain lifestyle changes were more sensitive to the dosing room queue because they thought they were identifiable as different to everyone else. Their sensitivity might be elevated if they believed that other people’s perception of their condition could negatively impact on their future goals. However, individuals who were not required to queue in a pharmacy line, or who were less concerned about the public’s perception of their condition, appeared to be less bothered about being dosed in a separate room.

7.3.3 Dosing in a screened or partitioned area inside the pharmacy

Dosing OST patients in a partitioned area inside the pharmacy was another layout that could provide privacy protection. This arrangement would enable patients to enter through the same entrance as other pharmacy customers and be dosed inside the pharmacy. Additionally, a screened or partitioned area integrated inside the pharmacy would provide privacy protection for OST patients. One patient believed that a screened or partitioned area inside the pharmacy was the ideal arrangement because it enabled patients to receive their dosing away from the view of other pharmacy customers. At the same time, patients were not required to queue for their dose outside the pharmacy in full view of the broader public. In addition, they entered the pharmacy like any other customer and, therefore, they were not identifiable as being different to everyone else.

The purchase of pharmacy weight loss products was highlighted by patient C5 as an example of treatment differentiation by medical condition. To provide privacy for weight loss products' customers, a partitioned area is set up in some community pharmacies. This sensitivity to consumer privacy was perceived as equally appropriate for dosing OST patients.

“They should have a bit private, like, they've got a section screened off for people when they weigh them – why can't they do that for like us [OST patients] and use that, you know? No one can see you ... if you can't see them when they're getting weighed, why can't they do it like that? It doesn't take much to put a screen in here [in the pharmacy]” (C5).

Aside from patient C5, no other interviewees mentioned being dosed in a screened or partitioned area inside the pharmacy. This might be because other patients did not have experience or were not aware of such settings. It might also be an indication that dosing in a partitioned area inside the pharmacy is an uncommon arrangement. Patient C5 was also the most sensitive of all interviewed participants about the topic of pharmacy privacy. As discussed in the above section, patient C5's heightened sensitivity to public perceptions may be due to his future goals.

7.4 Impact of relationship with pharmacist on patient experiences of privacy

A trusting and supportive relationship with the pharmacist could dampen down a patient's sensitivity about their own privacy when at a community pharmacy. Patients who valued and trusted the pharmacist seemed to be less sensitive to privacy issues. As described in Chapter 5, three patients (C3, C11 and C13) indicated a positive relationship with their pharmacist. The same three patients also indicated that their interactions with the pharmacist impacted on their perception of privacy when dosing at the pharmacy. The link between a positive relationship and/or interaction with the pharmacist and reduced sensitivity about privacy at the pharmacy is illustrated below in Table 17.

Table 17 Comparison of patient views about pharmacist relationship and their views on pharmacy privacy

Relationship with the pharmacist	Views on privacy
<p><i>“Most of the pharmacists that I’ve had anything to do with have been very helpful and very giving. They have a heart” (C3).</i></p>	<p><i>“I think you can get as much privacy as you need. Usually the pharmacist will walk somewhere into the pharmacy where you can talk where there’s not a lot of people around” (C3).</i></p>
<p><i>“Overall, my chemist is very good. So you can ask him anything and he’ll tell you and he’s great. So I’m very lucky like that” (C11).</i></p>	<p><i>“I prefer to go in the front for the simple reason I know I can trust myself. I’m not a thief. I’m not going to steal. I’m not going to do anything untoward to the chemist but then not everybody’s the same as me, but a lot are as well. Even if they just walked in and just stood there and waiting like a prescription, signed for their prescription, drank it and left. You feel better in yourself because they’re [pharmacy staff] not looking down at you. They’re not looking, [like] oh they’re [the patient is] going to knock off everything in the store because not everybody’s like that, but we have a few” (C11).</i></p>
<p><i>“She [my pharmacist] praises me, which is the best thing a pharmacist could do ... She praises me all the time, saying [name], you’re doing really well and that to me, gives me a lift and helps me to keep going” (C13).</i></p>	<p><i>“... because it is quite embarrassing to go in there and people look at you drinking this thing and they’re wondering what you’re doing and that” (C13).</i></p>

7.5 Chapter summary

An exploration of OST patient views on privacy at the pharmacy revealed that privacy was important for nearly all the patients, but there were mixed responses on how best to achieve it. In accordance with the Pharmacists' Code of Conduct and Code of Ethics, ensuring privacy for all pharmacy consumers is obligatory. However, as the findings above show, it may be difficult for pharmacies to maintain privacy to the satisfaction of all patients. Some patients in this study were satisfied with pharmacy privacy provisions as they were not bothered about privacy, had no reluctance in revealing their condition to others or felt protected by privacy laws. Other patients were concerned about privacy, but this appeared to be unrelated to the type of pharmacy layout. Additionally, having a supportive relationship with their pharmacist might reduce a patient's sensitivity about privacy.

Chapter 8 Pharmacist views on collaborative prescribing for opioid substitution treatment

8.1 Introduction

In this chapter, I will explore community pharmacists' views on co-prescribing for OST patients in answer to the research question: what views do pharmacists hold on co-prescribing with doctors for OST? I conducted three focus group interviews and will present my findings through four main themes (refer to Table 18 for an outline of the main themes and sub-themes). I will show that focus group participants held a range of views about pharmacist co-prescribing for OST. They recognised the benefits, challenges and facilitators of co-prescribing which impacted on the three stakeholder groups (patients, pharmacists and doctors). Benefits to stakeholders included improved convenience and greater inter-professional collaboration. Barriers to co-prescribing included the co-prescriber being subjected to intentional manipulation, workload pressure concerns and professional encroachment. Participants identified facilitators of co-prescribing which could partly minimise or address these barriers. These facilitators included the selection of stable patients for co-prescribing, additional pharmacist training and electronic inter-professional communication.

Focus group participants were cautiously supportive of pharmacist co-prescribing for OST provided certain conditions were addressed. Those who supported pharmacist co-prescribing anticipated serious challenges to its implementation. They believed that the policy formally recognised existing pharmacist practices and saw benefits for patients having more convenient access to treatment. In particular, rural patients living in areas with limited access to medical appointments benefited from reduced travel time for prescription continuation. Despite these potential benefits, not all participants wanted to be a co-prescriber because of the additional responsibility, workload or pressure involved. Furthermore, they acknowledged that the feasibility of pharmacist co-prescribing required changes to pharmacy physical infrastructure, alternative funding models and more efficient inter-professional communication processes.

In summary, I found that the majority of focus group participants were cautiously supportive of co-prescribing for opioid dependence subject to a number of conditions. Participants identified that pharmacists were already involved with patient dose reductions; therefore, co-prescribing was regarded as a formal recognition of existing practices. They suggested a co-prescriber could fulfil (in appropriate circumstances) short-term prescription continuation and dosage or take-away amendments. A co-prescriber was believed to be ideally positioned at the pharmacy due to the trusting pharmacist–patient relationship which developed from regular supervised dosing. However, they also considered that a number of conditions would need to be in place for pharmacist co-prescribing to work. These conditions included the establishment of a patient’s initial diagnosis and treatment by a doctor, provision of an appropriate pharmacy environment, completion of additional training and amendments to funding structures. Nevertheless, not all pharmacists wanted additional responsibility beyond their existing role.

My findings from these focus group interviews will be presented through four main themes. I will first describe focus group participant views on a co-prescriber model of care. This includes details of the type of working relationship that a pharmacist co-prescriber could have with the doctor, and the co-prescriber’s function within patient care. I will then present the next three themes according to their relevance to each of the three stakeholder groups (patients, pharmacists and doctors). This includes the predicted benefits of a co-prescriber model and its barriers or weaknesses. Lastly, I will discuss the ways that participants suggested the identified weaknesses could be managed – in this section, the facilitators of the co-prescriber model of care will be explored. Underpinning the main themes of this chapter is PCC which will be discussed further in Chapter 10.

Table 18 Main themes and sub-themes from pharmacist focus group interviews

*White text indicates where the theme applies to more than one stakeholder group.

		Participant views on pharmacist prescribing	
		Preference for independent or dependent prescribing	
		Working relationship with doctor within dependent prescribing	
		Reasons for support of co-prescribing	
	Benefits of the co-prescriber model of care	Barriers of the co-prescriber model of care	Facilitators of the co-prescriber model of care
For patients	Improved convenience to treatment access	Manipulation of loopholes in the co-prescriber system	
	Improved monitoring of patients		
	Increased vacancies for patients		
	Increased ownership over own health		
For pharmacists	Increased work satisfaction for pharmacists	Pharmacist workload and work pressure concerns	Limited prescribing authority
		Unwanted responsibility of pharmacist co-prescribing	Co-prescribing only for selected patients
	Improved collaboration between doctors and pharmacists*	Pharmacy infrastructure	Collaborative management plan
		Pharmacist competency	Legislative and funding changes
		Professional lack of interest in OST	Training for pharmacist co-prescribers
			Alternative and more efficient communication between doctors and pharmacists
For doctors	Improved collaboration between doctors and pharmacists	Professional encroachment	Alternative and more efficient communication between doctors and pharmacists
	Reduced workload for doctors	Professional lack of interest in OST	

8.2 Focus group participant views on pharmacist prescribing

For this theme, I will describe four facets of focus group participant views on pharmacist prescribing for OST. Firstly, I will outline participant preferences for the type of prescribing model to be practised, followed by how they envisage their working relationship with the doctor to function within this model. Thirdly, I will describe the reasons given by participants for their views. Lastly, I will suggest potential reasons for why participants held different opinions.

8.2.1 Preference for independent or dependent prescribing

Most focus group participants supported a dependent prescribing model. They debated whether the dependent (collaborative) prescriber should be the community pharmacist, or a separate entity to the pharmacy. From the three focus group discussions, a dominant and minority view emerged. I found that the dominant participant view (among all three focus groups) supported the co-prescriber and community pharmacist roles being combined. Most participants assumed that the community pharmacist was the co-prescriber but did not specify how these arrangements would work. Instead, it became apparent to me as the discussions continued that this was their assumption. Fewer participants imagined that the co-prescriber and community pharmacist roles could be separated from each other.

In one conversation in the third focus group, a few participants proposed that the co-prescriber and community pharmacist roles be separated. Pharmacist Phc15 suggested having two separate pharmacists to distinguish between the dispensing and co-prescriber roles. He suggested that, although co-prescribers would function within a supplementary prescriber model, they would operate as a separate entity to the community pharmacy. Such arrangements were similar to the current home medication review (HMR)^P pharmacist arrangements with community pharmacies.

^P A medical practitioner assesses a patient's need for a HMR and can refer the patient either to a community pharmacy, or directly to an accredited HMR pharmacist. The HMR-accredited pharmacist visits patients in their home and undertakes a review of the patient's medications and use. They then provide a report to the referring medical practitioner, outlining possible issues as well as solutions about the patient's medications

“... some accredited pharmacists set up a whole business just doing HMRs and [are] getting paid that way. What about if we have a similar structure with these type of patients, with methadone patients, [and] get a special certification and you could be in charge of doing these assessments and be the one that’s already having the benefit of the remuneration?” (Phc15, FG3).

In response to this idea, another participant added that the co-prescriber could travel to different pharmacies throughout the day and service a large number of patients. The co-prescriber then would have the opportunity to utilise their skills with a greater number of patients than only those at one pharmacy.

“... you [accredited pharmacists] could even do that independent of the pharmacy or not even in the pharmacy setting itself. Or you could be the accredited pharmacist with proper scheduling. You could even do two or three pharmacies within a group or within a shopping centre or within an area” (Phc18, FG3).

Adding to the group discussion, pharmacist Phc17 indicated that having the co-prescriber role separated from any medication administration responsibilities would make it more feasible. He said that existing dispensary workload challenges⁹ limited the time available for undertaking co-prescribing but that having a separated role had advantages because: *“[t]hat would, as you all say, take the heat off and make it so that it is possible to make an appointment [with the co-prescribing pharmacist] when the main dispensing pharmacist is meant to be probably doing other stuff” (Phc17, FG3).* In response to this discussion, one pharmacy owner was strongly against having a separated co-prescriber role from the community pharmacy. His views are further elaborated in section **Error! eference source not found.** of this chapter under ‘Reasons for differing participant views’.

It is worth noting that two participants (pharmacist Phc4 and pharmacist Phc15) supported independent prescribing under the condition that *“the main dispensing pharmacist is meant to be probably doing other stuff” (Phc17, FG3).*

“Yeah, I think I myself would be happy to work either alongside a doctor or independently. I myself would be pretty comfortable. I think if you've got a lot of experience, you at least know what you're dealing with ... obviously, there'll be

and their use. It is mandatory for registered pharmacists to complete a credentialed certification process to become an accredited HMR pharmacist.⁽¹⁸⁾

⁹ Dispensary workload challenges will be further discussed in section 8.4.2 of this chapter.

extra training things to do, but, I certainly – myself – feel okay with that” (Phc4, FG1).

“I think it’s a matter of what sort of training is involved and what sort of qualifications are also required for a pharmacist to be able to conduct these diagnoses and it all has to tie into our treatment as well. So that’s another barrier because of how we’re going to conduct these diagnoses if we’re going to take it on. Yeah, that’s not to mention the training that’s also needed of us as well. But I wouldn’t mind sort of giving it a go” (Phc15, FG3).

8.2.2 Working relationship with doctor within dependent prescribing model

The participants were generally supportive of a co-prescriber working with a doctor within a dependent prescribing model. Most participants in all three focus groups strongly believed that the assessment and diagnosis of opioid dependence needed to be done by a DASSA doctor or an accredited GP. However, post-diagnosis, focus group participants were supportive of co-prescribing for patients provided that the pharmacist had completed additional training. They suggested that an appropriately trained pharmacist co-prescriber was capable of continuing prescriptions (short-term) or amending doses for patients who were unable to access a doctor.

“All the diagnosis very much falls on the responsibility of the doctor. I wouldn’t be comfortable taking that on at all” (Phc15, FG3).

“I think the doctor definitely needs to be diagnosing and that’s their specialty, shouldn’t be involved in that. We should just be able to continue it in certain situations and like he said, have a safety net, you know, you can only do it for a certain amount of time” (Phc11, FG2).

“I think the initial diagnosis I feel uncomfortable doing, just because I wouldn’t have the training for it. But, thereafter, with things like, if I thought the dose wasn’t high enough for them and they’re suffering and they can’t see the doctor, then it makes sense if a pharmacist should be able to do something about it, if they’re clearly getting withdrawals when they start on the program” (Phc2, FG1).

The participants in all three focus groups agreed that a pharmacist co-prescriber would work in a collaborative manner with the doctor. They envisaged that the patient would maintain ongoing contact with the doctor, as would the pharmacist co-prescriber, but that

their interactions were as a health care team rather than separate entities. This working relationship would also provide the option of referring complex patients back to the doctor if extra support was needed. The main participant views from all three focus groups were illustrated in the following dialogue from the first focus group:

Phc1: I'd be happy to work with an accredited doctor. I think you need to develop a relationship with him, but actually work together as part of a team. Certainly the whole health industry is heading in that direction, that we work as part of a team.

Phc2: I think it's a good idea in theory, providing that it's done correctly and you do form that relationship with the doctor, because it does need to be a fairly tight relationship, because both of you need to trust each other and trust what the other's doing and that you're on the same page with the therapy.

Phc5: I think it's a good idea in practice. When I first thought about it, I did worry, myself, whether I was able to prescribe for my patients and within the – of course within a team situation in relationship with the doctor – how much pressure that would put on me from my patients ... At the moment, I can hide behind the fact that the doctor's written a prescription is where it is, and my job is just to fill the prescription. So I did worry about how I personally would handle that extra pressure – or perceived extra pressure. I don't know if it would actually be extra pressure.

Phc3: Again, in theory, I think it's a great idea. But there are lots of things we have to consider; whether we have the facilities in our own pharmacies to do it, as far as one-on-one consultations; privacy; remuneration for it; and education as well, for – training education – being able to prescribe.

Phc4: Yeah, I think I myself would be happy to work either alongside a doctor or independently. I myself would be pretty comfortable. I think if you've got a lot of experience, you at least know what you're dealing with. I think, as professionals, just using more professional knowledge – obviously, there'll be extra training things to do, but, I certainly – myself – feel okay with that.

8.2.3 Reasons for support of pharmacist prescribing

Participants gave three main reasons for their support of pharmacist co-prescribing for OST. First, they regarded co-prescribing as an extension to existing medication review roles. Therefore, they believed it was reasonable that a pharmacist with adequate

experience and training would be capable of co-prescribing for OST and also managing the patients' other prescriptive needs if needed. Second, participants viewed co-prescribing as a formalisation of their existing practices because they already had experience with overseeing dose reductions. Third, a pharmacist was well positioned to provide patients with continuity of care; this was frequently cited as a reason for their support of pharmacist co-prescribing.

The participants believed that a pharmacist's existing role with medication reviews could be extended to the co-prescribing role. Pharmacist Phc1 said:

"... home medication reviews have been very successful when running collaboration, where a doctor and a pharmacist work together. We [doctors and pharmacists] haven't had the same training, but they use our expertise in dosage and treatment. I said the same here that we're working together. The doctor's responsible for a diagnosis. The doctor's responsible for initiating therapy, but that doesn't mean he doesn't take our advice and our knowledge about adjustments to that therapy. I see this as adjusting therapy" (Phc1, FG1).

Participants in the second focus group regarded co-prescribing as a formalisation of their existing practices. They reported already recommending dose reduction rates based on their own judgment and experience. In these scenarios, the doctor indicated a reduction range on the prescription, and the pharmacist oversaw dose tapering at an appropriate rate and time.

"It's just a formalisation of what we already do, to a certain degree, anyway. So, just recognition of what we can do. You know, like, if a doctor writes a reduction of [between] 2.5 to 5 [mg], then we're doing a lot of these things that you're already talking [reducing doses] about anyway" (Phc8, FG2).

"We already have a bit of that, especially with the private prescribers, because I get a lot of them reduced at their own discretion and they quite often say to me, I want to go down, what do you think, you know? Go down one milligram for a week, then we might advise them on that. So there's already some of that happening" (Phc7, FG2).

Pharmacist Phc8 in the second focus group added that he had gained confidence in his ability to oversee dose reductions due to existing practical experience and clinical judgment. He had learnt how to negotiate with and advise patients on how to reduce their

doses and minimise discomfort through experience.

“The script says reduce [between] 2.5 to 5 milligrams at patient’s request or something like that. And they go [the patient requests to] oh I’ll reduce every three days and whatever. And then you say [to the patient] well, maybe that’s not a good idea, you shouldn’t be doing that” (Phc8, FG2).

In contrast, some participants in the third focus group reported lower comfort levels in overseeing dose reductions, as in the following discussion:

Facilitator: I think, Phc16, you said earlier something about dose reductions, could you just expand on that?

Phc16: Well I wouldn’t be comfortable, if some of the patients say they are ready to reduce, I wouldn’t be comfortable as to actually, like determine how many mls to reduce unless, that’s something I’m not comfortable – I think it’s something the doctor should be responsible for deciding.

Phc14: Quite often the prescriptions often state that, don’t they? ...

Phc16: Yes, yes but what I’m saying is I’m not comfortable in actually issuing a reduction unless – there’s got to be something written from a doctor, yeah ...

Phc15: I would probably collaborate with the doctor first and maybe work with the doctor in terms of a reduction program as opposed to just on my judgment and the patient’s judgment to just cut it and for many reasons. The main one is if I say give them a lesser dose, they could go to maybe authorities and say my dose is written as this but he didn’t give me that much so he’s storing some more for him, that sort of legal issues like that. So I would be happy to do it but in collaboration with the doctor.

The continuity of care provided through the existing pharmacist–patient relationship was a major reason for supporting the policy proposal in all three focus group interviews. Participants recognised that patients had more frequent and regular contact with pharmacists, compared to doctors. This relationship developed from the sometimes daily or, at a minimum, weekly pharmacist encounters with patients for supervised dosing. These frequent interactions enabled rapport to develop and ideally positioned pharmacists for the co-prescriber role. Participant views about how their relationship with patients aided their understanding of patients are exemplified through the following second focus group dialogue:

Phc8: We [pharmacists] see our patients on a daily basis so you can, in terms of monitoring their progress, you're monitoring it closer than the doctor is.

Phc7: And like you mentioned before, even the fact that they'll come in different times, gives you hints that something's going on. Like, they regularly come in the morning, then they come one minute before you close up; you know something's going on here.

Phc9: Doctor doesn't see the state they're in. When they come in each day that week, they can hardly stand up, some of them.

Phc12: We are health professionals and doctors are health professionals and with the training, like the doctors, we're quite capable of ...

Phc7: Managing that.

Phc12: Yeah, managing certain patients in certain situations, I believe.

Later, the sentiments of this conversation were summarised by pharmacist Phc12 at the end of the second focus group. She said:

“Oh, I think it's a good idea that we be given an opportunity to work with the doctor to look after the patients because I think you get a very good rapport with them [patients]. Or if they're good patients in your pharmacy, you see them every day, you can see all their ups and downs and you sort of know where they're at and yeah, I think we probably know them more than the doctors know them ... and we hear the whole story and everything. So you get to know them very well then” (Phc12, FG2).

Participants in all three focus groups reported that patients saw doctors less frequently than pharmacists, sometimes only once every few months. Patient interactions with their doctor contrasted with their regular interactions with pharmacists. In the second focus group, pharmacist Phc7 suspected that a patient's presentation to the doctor every few months differed from their presentation to their daily pharmacy. He said: “[patients are on their] [b]est behaviour when they go to the doctor, whereas we see them constantly” (Phc7, FG2). Thus, altered or unusual patient behaviour was believed to be more easily detected by a pharmacist than a doctor.

Participants in all three focus groups understood that clinic patient medical consultations with doctors were on a rotating schedule, so continuity of care from one provider was not always assured. In contrast, patients had a regular and continued

relationship with one pharmacy.

“Most of the (clinic) patients do not see the same doctor. In fact, they often see a doctor they've never seen before and there's no relationship in that situation. The only stable relationship they've got is actually with the supplier [pharmacist]” (Phc1, FG1).

“I mean the doctor sees them once a month; they do their assessment but wouldn't we have a better sort of take on how the patient actually is than the doctor if you see them on a daily basis?” (Phc15, FG3).

In the first focus group, participants believed that the stable relationship they had with patients positioned them best to provide greater patient continuity of care. A patient's relationship with their pharmacist was highlighted as a routine and stable, which was believed to contrast with many other aspects of their life. Maintaining continued or trusting relationships was believed to be difficult for many patients given their chaotic history and the rotating roster of clinic doctors. The following participants thought that patients experienced and valued the consistent relationship they had with their pharmacist. These perspectives were clearly outlined in the following first focus group dialogue:

Phc4: ... I think one of the things that's obvious from these people on opiate programs is they want the same person. They do ... Most of the time their own relationships have broken down. It's not [like] everything in my life is wonderful and now I'm just sticking rubbish in my veins and I just couldn't stop. They have severe relationship problems as much as anything. As you would know, I think, especially, because you've done it a long time, you are someone in their life. You know that for a lot of other people in pharmacy we're someone in their life but this is even more personal. I know in my experiences, if you want to know the experiences of a drug addict and what they think about it both personally and overall, once you've done it for a while, they'll tell you. So they trust you.

Phc4: You'll get some people who aren't honest, but really, the longer you have them, they want to be trusted by someone. You've actually, I think, got a far, in some ways, better chance of helping them with their needs, because you are the same person. They know you care. Because they'll know if you don't, because you've spent such time with them. You see most of them every day, so they're going to know.

Phc5: They don't like change. If you say you're going on holidays for three weeks ...

Phc4: Exactly.

Phc5: It throws them into a tailspin. Who's coming? Who's going to be here? Will they know?

Phc4: But you're actually helping their therapy. These people have an underlying issue with a lack of consistency in their own life and a lack of predictability. You're often one of the few things, because, as we know, a lot of them will turn up at the same time for whatever reason.

Phc4: But that's one of the problems ... [with] how it's currently done. Prescriber-wise is that, who am I getting today? Want to make an appointment. They'll turn up and they've got a wait list. It doesn't help them. When you're looking at all the aspects of their condition, then they need continuity. They need someone who cares, because if you're doing any sort of drug withdrawal, if you don't care, then you're not helping.

Although pharmacist interactions with patients were more frequent and consistent compared to those with a clinic doctor, the same pharmacist could not always be present at a pharmacy. Some participants in the first focus group acknowledged that, for pharmacies which have extended opening hours or have multiple pharmacists rostered, seeing the same pharmacist could not always be assured. For this reason, communication between the doctor and pharmacist was highlighted as especially crucial under a co-prescribing model of care.

Dialogue from the first focus group:

Phc3: You talk a lot about the doctor being consistent. We've got to think of our side though as well. Don't forget the pharmacist isn't always the same pharmacist at the pharmacy.

Phc1: We're more regular than the doctors though.

Phc3: We are, but we – like our holidays, as we talked about before ...

Phc1: I know.

Phc3: We might have a day off a week, or two days off, whatever it may be. We may have multiple pharmacists working there, so that's also going to be ...

Phc1: Becomes part of an issue – you're right.

Phc5: Some of the bigger – the 12-hour-a-day pharmacies, or even 24-hour-a-day pharmacies, obviously have a [pharmacist] turnover, a bit of a roster and they don't always know who they're going to see when they go there. So I think we might

have a fairly specialised practice ...

Phc1: ... in that sense, we do.

Phc5: ... in sole ownership, or whatever, but – yeah.

Phc5: That's true. The other thing is, we're talking about communication, that would mean that – the co-prescribing model – we'd need a system whereby we feedback the dose change. If we've made a dose change, then we need a system whereby we can feed that back to the prescriber, so that if the patient goes back to the prescriber, they know that we've increased the dose to such and such. Because these patients do have the ability to play off one side against another and they do that when there are different pharmacists, they do that with different doctors.

Phc3: Yep.

Phc5: So there needs to be that really good communication between the base of the prescription and the dispenser for dose treatment.

Participants held differing views for a potential range of reasons and these will be elaborated further in the discussion chapter.

8.2.4 Summary of theme: Focus group participant views on pharmacist prescribing

Focus group participants primarily preferred supplementary prescribing over independent prescribing. Most also preferred the combined role of a co-prescribing and community pharmacist over having the two roles separated. They envisaged that a doctor would diagnose and initiate OST, but a pharmacist would monitor patients after stabilisation. They supported the doctor's ongoing involvement with patient care, but with an emphasis on a team-based approach to patient care. Pharmacists already recommended dosage reductions based on clinical judgment; therefore, they regarded co-prescribing as a formalisation of existing practices. Meaningful patient–pharmacist relationships that developed from supervised dosing thus best positioning a pharmacist co-prescriber and providing continuity of care. In contrast, other aspects of a patient's life including their relationships with clinic doctors did not offer the same sense of stability or continuity.

8.3 Benefits of the co-prescriber model of care

In all three focus group interviews, pharmacist co-prescribing was predicted as beneficial for patients, pharmacists and doctors in different ways. Participants believed that patients gained the greatest benefit from pharmacist co-prescribing of OST. The most commonly cited patient benefits were improved convenience as well as flexibility of treatment access. In particular, rural patients would benefit from reduced travel time for prescription requests which, in turn, could reduce the workload for a doctor or increase vacancies for new patients. They also believed co-prescribing would encourage increased patient ownership over their health. Lastly, increased work satisfaction for pharmacists and improvements with inter-professional communication processes were other predicted benefits.

8.3.1 Benefits for patients

8.3.1.1 Improved convenience of treatment access

Participants in all three focus groups overwhelmingly agreed that a pharmacist co-prescriber model of care could improve treatment convenience for patients and pharmacists. Pharmacists and patients reportedly experienced inconveniences with OST medication administration owing to delayed communication of prescription changes by doctors. A pharmacist co-prescriber was believed to be especially convenient for patients when GPs were unavailable during unexpected absences or holidays. Focus group participants suggested improvements in patient convenience if pharmacists were authorised to continue a prescription for a short period, or to modify supervision requirements when appropriate. Other increases in patient convenience that were predicted included a reduction in time and travel costs. For rural patients, having access to a pharmacist co-prescriber was expected to reduce the time and costs associated with travelling to medical appointments.

The majority of participants in all three focus groups supported a co-prescriber's authorisation of prescription continuation for short periods of time in emergency situations. Numerous pharmacists recalled situations when the doctor was away or unexpectedly

absent which resulted in great inconvenience and stress for patients who had prescriptive needs. In these circumstances, participants believed that a co-prescriber's authorisation of short-term or interim treatment decisions offered a solution and greater patient convenience. These views were repeated throughout the three focus groups which is illustrated by the following dialogue from the second focus group:

Phc11: I could definitely see, in certain situations, for example, recently at my pharmacy, there is a doctor that was away and we were a bit stuck for a while without a prescriber and just in situations like that, we could probably just continue the treatment until the doctor returns. You know, that would be good.

Facilitator: Any other thoughts?

Phc7: Yeah, I think that's definitely a good idea, I mean, doctors aren't available, it's hard for them to get in to, and to be able to say just continue it for a week or a couple of weeks until they can get in to see the doctor, get their appointment if their script runs out. Or, on other occasions I've had, they've been in hospital but you haven't been notified, you don't know what's going on, because they've missed four or five days, you can't dose them. So they have to go back to the doctor, it might take them a bit of time to get back in, so you know, there's a period of time there, they're left without any treatment per se.

Phc6: I think it'd be particularly good for rural areas where there are potentially not that many doctors locally and then the patient might have to go into town, like, come back to Adelaide to see their doctor and that's not always convenient really. So if they could have the pharmacist help with that, that would be good.

Participants in the third focus group also highlighted that rural patients travelled long distances: they could especially benefit from improved convenience from the availability of a pharmacist co-prescriber.

Dialogue from the third focus group:

Phc14: My experience in the country, in the rural areas, has been that I've not encountered any problems from, let's call them patients. We have quite a small group. It varies and fluctuates greatly but at the moment we only have three, two on Suboxone®, one on methadone. But the biggest trouble is trying to get other doctors and pharmacists involved in the program. I'm sure (facilitator name), you've found that in your professional capacity too.

Phc17: Just probably the other thing that would interest me about the pharmacist having a bit more of a role is that from time to time when a patient does need to

have their prescription renewed, and there's been situations where a GP's gone away or something like that and it just hasn't all quite gone to plan, it would be really sort of useful for us to be able to have a little bit more of a say as far as how long the prescription can last for. So I suppose that could be, it makes me think that if we did actually have some sort of extra prescribing rights there then that could be quite helpful.

Phc15: I agree with that too. I've got two patients with my pharmacy and whenever they run out of script, they actually have to travel all the way from [name of rural town] to Adelaide just to renew a script. Sometimes that's not really convenient.

Facilitator: What's the distance travelled?

Phc15: Maybe 250 to 300 kilometres ...

Phc17: That's each way?

Phc15: Yeah, each way. That's probably the same situation you'll probably encounter with other rural pharmacies – that they do have to travel quite a lengthy distance to be able to get that script.

Phc14: That's right. The shortest distance our patients are involved in is probably 50 kilometres each way. The supplementary prescribing model I found particularly attractive ...

Participants in the first focus group envisaged that a management plan could also be convenient for patients reducing doses so they could be cared for through the pharmacy rather than sending them back to a GP. A shared management plan would ensure that the scope of practice boundaries could be recognised whilst still enabling pharmacist co-prescribers to care for patients.

Dialogue from the first focus group:

Phc5: We don't have the ability to help them in the community, without sending them back to their prescriber. That would be a useful thing to be able, in agreement with the prescribing doctor, to work within the limits of a range of doses that we can give them over that time they're withdrawing.

Phc3: We are very limited in what we can do. We've got our hands tied behind our backs really, to help them the way it's meant to be. Helping them ...

Phc5: Then if they can't access the doctor from (the clinic), they'll go and see a local prescriber and that's when you start getting the mixture of methadone with

benzodiazepines and all the other things that they need to help control the symptoms that they're getting because they've come down too quickly.

It was also believed that a collaborative management plan could benefit patients and this will be discussed further in the 'Facilitators' section later in this chapter.

One participant in the first focus group added that, if some prescriptive needs were met at the pharmacy, then patients would benefit from reduced contact with negative influences at a clinic. Although pharmacist Phc5 was reluctant to be a co-prescriber herself, she acknowledged potential patient benefits from such arrangements. She said:

"My female patient says to me, I hate going to (the clinic). There are a whole lot of druggies there. Part of the benefit for her from the program is that she's totally removed from that culture that she used to be involved in. For her to have me to be able to adjust her prescription would be a wonderful thing, because she wouldn't have to go back down there and make that appointment down there – from the country back down to (the clinic)" (Phc5, FG1).

8.3.1.2 Improved monitoring of patients

Participants previously identified that a co-prescriber's authorisation of take-away doses could reduce delays with treatment access. Focus group participants also believed that a pharmacist co-prescriber was ideally positioned to identify potential patient harms through their frequent interactions with patients.

Pharmacist co-prescribing potentially improved patient monitoring as pharmacists were better positioned to respond immediately. This position differed to that of doctors where there is often a time lag between when patient circumstances change and their medical appointment. For example, if a pharmacist believed, based on previous compliance (or lack of compliance) and urine test results, that a patient required greater monitoring for safety reasons, they could authorise a reduction in take-away dose entitlements. Pharmacists in all three focus groups discussed how a co-prescriber could contribute to take-away dosing authorisations with this highlighted in the following dialogue from the third focus group.

Dialogue from the third focus group:

Phc17: All right, well in the sort of, just a thought if the pharmacist was making the

decision to, you know, if it did come down to that, if the pharmacist was the person to make the decision on the take-away, I'd think you'd want to be able to get that result.

Phc14: I think that's a reasonable expectation in any aspect of the supplementary prescribing or in varying the take-aways.

Facilitator: Okay, so there's mixed thoughts on whether or not we should authorise take-aways. Is there a difference in opinion to increasing take-aways to reducing take-aways or is it much the same?

Phc17: That would be interesting. I think there would be times where we would like to reduce take-aways. I think that if we see someone going off the rails, then of course we contact the prescriber but there are times when – I can't think of any particular times at the moment but where I've just sort of seen someone go downhill and thought I just want to see you every day just to make sure you're doing the right thing.

Participants in all three focus groups agreed that they had more frequent patient interactions compared to doctors. Owing to their understanding of patients, their input was important in making informed take-away dose decisions. In the following dialogue, participants suggested that access to urine test results was required to make informed decisions when amending take-away entitlements.

Dialogue from the third focus group:

Phc15: ... take-aways are a privilege then if we're the ones that are actually seeing these customers on a daily basis, aren't we the best person to judge whether this person is stable or not?

Phc14: Absolutely. I think we do have a closer, well what's the term? At the coalface if you like. We see them more frequently than the doctor.

Phc15: Yeah, that's right ... I mean the doctor sees them once a month, they do their assessment but wouldn't we have a better sort of take on how the patient actually is than the doctor if you see them on a daily basis? In saying that, just having take-away doses, I mean pharmacists, is there any reason why pharmacists shouldn't be involved in that aspect of this whole thing?

Phc17: There is a protocol to follow as far as, when take-aways are introduced also. So I think pharmacists could probably interpret that. Presumably there'd have to be some sort of testing to make sure people had clean urines [samples] too

though.

Phc15: Yeah, definitely and that's what I think our roles can be expanded to as well.

8.3.1.3 Increased vacancies for patients

A reduction in work for doctors was predicted to result in increased vacancies for new OST patients. How new OST vacancies could eventuate is discussed later in section 8.3.3.2 under 'Reduced workload for doctors'.

8.3.1.4 Increased ownership of own health

Participants in the first focus group had experienced and witnessed the motivation of patients when they 'owned their own health'. Patients who were engaged with and had a sense of ownership of their own treatment plan or outcomes reportedly felt more positive and motivated. A greater sense of owning one's own health was particularly reflected in patients' responses when they requested a dose reduction and were involved with the decision.

Dialogue from the first focus group:

Phc1: ... you'll know that when people own their own health, they're more likely to do something about it. At the moment, the system with methadone people is not their bemoaning the problem.

Phc4: Reinforces that they've been naughty.

Phc1: Exactly.

Phc4: Yeah, unfortunately.

Phc1: They don't own it. They're not part of the decision-making process.

Phc3: That's a good point, because you can see the excitement in them when they are saying to you, oh, I want to reduce by x milligrams and they think they've done well. They've achieved something by reducing and that excitement comes from, what you're saying ... They've decided to reduce it and they feel good about it.

Based on these experiences, participants in the first focus group concluded that co-prescribing encouraged a greater sense of patient ownership over their health owing to the shared decision-making process that was enabled.

Dialogue from the first focus group:

Phc3: You'd be interested [in co-prescribing] because you want to help them. The bottom line.

Phc1: Yeah. One of the things is some of these people have no one in the world they trust and that's a frightening position to be in, that you can't trust anyone. The social problems – I take mine out to tea every now and again and we sit there and have a meal at the pub and what you hear about their lifestyle, none of us would want to live the life they live. It's just horrible and they're trying to survive with a background structure and poor social skills and a drug habit.

Phc4: In a way, you're actually – you are working with them – yeah, as opposed to practising medicine at them. I think that's a big point, because, as I said, when you're dealing with, I think not even this area, but any serious medical problems, they don't feel you're actually with them and are listening to them. You don't practise medicine at people, or pharmacy at people, you practise it with them. You help them through – it's negotiation in a way, even though you're more in control of the negotiation. But it's always negotiating – and most of them respond better [to negotiations]. You can be a lot more responsive with this too [the co-prescribing model] ... Really, the aim of the opiate program is to keep it stable and by seeing them daily and if you've got guidelines of where you can go, both professionally and personally with the patient, then the guide to keeping them stable so they don't have – we might have a bad day, but a bad day for them might derail them severely.

8.3.2 Benefits for pharmacists

8.3.2.1 Improved work satisfaction for pharmacists

Pharmacists in the second focus group predicted that they would feel more professionally satisfied in being able to provide a more convenient service to patients. They agreed that they valued playing a more active role with patient care decisions. A benefit to co-prescribing for pharmacists was the potential increased professional job satisfaction from having a more active role in patient care.

Dialogue from the second focus group:

Phc11: Yeah, making pharmacists more useful than just dispensers.

Phc6: Or you might feel more productive, I suppose, yourself. You think you might actually be adding a little bit more to the patient's experience than just handing them a dose. You might actually be having a chance to actually speak to the patient and act, go, okay, well if you want to have an increase in your script length of time, from me I will need to speak to you about some stuff and they will actually have to talk to you a bit more and then you've got more interaction and build that relationship a bit more.

Phc10: Better rapport with the patient. It's very important.

Phc7: I think you'd improve the whole system. I think greater interaction – it's all very rigid now: a dose from the pharmacist, a diagnosis script from the doctor, the patients got to set the rules whereas if everyone's working together in a more flexible pattern it would improve the outcomes.

8.3.2.2 Improved collaboration between doctors and pharmacists

Participants predicted that improved collaboration between doctors and pharmacists would strengthen inter-professional relationships. They anticipated that collaborative working relationships would be mutually beneficial for pharmacists and GPs. However, pharmacists also identified that owing to the rotating roster of clinic doctors, the prescriber with whom they communicated about an individual patient would not always be consistently the same doctor.

Dialogue from the first focus group:

Phc1: I would think it would be a better relationship with the doctor over the long term, because if we respected each other, we're actually working together. At the moment, we are just simply carrying out someone else's instructions. Our reporting back to the doctor is very much a policeman-type role, whereas, in joint prescribing, you would be consulting and working together. I would see that as developing a much better relationship in prescribing.

Phc5: That works when you have a [consistent] prescriber in your community. We don't, so our patients have to come to (clinic name) for their prescriptions. So, when I'm ringing doctors, I'm ringing whoever's on duty at (the clinic).

Participants predicted improved relationships with GPs, but the reverse effect was also a possibility. I will discuss the potential damage to professional pharmacist–doctor relationships due to these changed roles later in section 8.4.3.1 under the theme of professional encroachment.

8.3.3 Benefits for doctors

8.3.3.1 Improved collaboration between doctors and pharmacists

Practitioner collaboration was predicted to be enhanced between doctors and pharmacists. I have discussed this theme in the previous section.

8.3.3.2 Reduced workload for doctors

Pharmacist co-prescribing was predicted to be beneficial for doctors because it would reduce their workload pressures which, in turn, could increase vacancies for new patients. Doctors therefore could benefit from pharmacist co-prescribing through greater inter-professional support and reduced work pressures.

Participants in all three focus groups envisaged that, if the co-prescriber assisted with some treatment decisions, a doctor’s workload for patient management might be reduced. They said:

“You know, they’re [doctors are] under a lot of pressure and it’d take the pressure off them and you know, the health system, if the pharmacists can carry some of that load” (Phc12, FG2).

”Hopefully, if we could take some of that workload then you could stretch out the length of the scripts, you could do a lot of other things so less doctors can do more important work ...” (Phc1, FG1).

“I guess I see a few prescribers, still seeing fairly stable people every month and perhaps that is part of the answer. That if those stable people can be just seen every three months [by the doctor] and we [the pharmacist] can be trained so that if there are any issues in the meantime, that we can deal with those, than that might free up the prescribers ...” (Phc17, FG3).

Pharmacist Phc8 in the second focus group predicted flow-on benefits from a reduction in a doctor's workload which included increased patient treatment access due to increased vacancies: "... if you can reduce the doctor's workload that means more patients who don't have access to the program will be able to get onto the program. So reducing the pressure off the doctors, really" (Phc8, FG2). Other flow-on benefits such as a reduction in the waiting list time for individuals already trying to access treatment were also anticipated by pharmacist Phc9 in the same group.

"I think something like this has to happen because there's not enough doctors to see these patients out there, or potential patients who want to actually try and do the right thing for a while. So I mean, we get people ringing up and obviously I'll ring up (the clinic). Apparently the waiting list is still quite bad and sometimes you'd send them round to see a private doctor; they don't always get in" (Phc9, FG2).

Other participants acknowledged that a doctor's workload could actually increase if the pharmacist was not competent. Furthermore, the professional lack of interest in OST by both doctors and pharmacists was indicated as a major rate-limiting step to pharmacist co-prescribing. These concerns about a pharmacist's competency and lack of professional interest in OST are further discussed later in this chapter.

8.3.4 Summary of theme: Benefits of the co-prescriber model of care

Participants foresaw that co-prescribing directly benefited patients, pharmacists and doctors. They supported a pharmacist co-prescriber having a prescriptive scope of practice as an additional option for patients. A pharmacist co-prescriber's authorisation of OST prescription continuation (short-term) and the amendment of take-away dose provisions – especially when doctors were unavailable or unexpectedly absent – offered greater convenience. Rural patients would particularly benefit due to reduced travel time and costs. Additionally, pharmacists were ideally positioned to identify and actively respond to identified harms and improve patient monitoring. Increased motivation for patients from being involved with shared decision making was another benefit. Furthermore, reducing a doctor's workload would facilitate vacancies for new OST patients. Pharmacists predicted greater job satisfaction in providing an improved and more convenient service to patients. Moreover, it was anticipated that a more collaborative approach to care would enhance inter-professional communication and strengthen relationships.

8.4 Barriers of the co-prescriber model of care

Participants in all three focus groups anticipated various barriers and weaknesses to the policy proposal's feasibility. The potential manipulation of the policy by opportunistic patients was identified as a serious concern. Not all pharmacists wanted the responsibility of being a co-prescriber and identified existing work constraints, such as the pharmacy set-up, to this practice. Additionally, the willingness and competency of all pharmacists to co-prescribe was questioned. Other identified policy challenges included the views that the medical profession would perceive this as professional encroachment and that there was a lack of interest in OST.

8.4.1 Barriers for patients

8.4.1.1 Manipulation of loopholes in the co-prescriber system

Pharmacist co-prescribing was highlighted as problematic owing to manipulative patient behaviour. Participants in the second focus group cautioned that patients could intentionally provide different information to their pharmacist and their doctor to obtain privileges such as take-away doses. Despite requiring re-stabilisation, patients who were suspected of being manipulative could then avoid seeing a doctor by requesting a prescription extension through a pharmacist. Additionally, patients could potentially request dose changes at the pharmacy for non-medical reasons if a pharmacist was perceived to be more accessible and potentially easier to persuade than a doctor. Patient manipulation of the pharmacist co-prescriber could result in additional and unwanted work for pharmacists. Most participants supported the co-prescriber role in certain situations, but also believed that some restrictions were needed to ensure that patients did not abuse this role.

Participants in the second focus group discussed limiting the scope of practice for pharmacist co-prescribers through a management plan to minimise the likelihood of being manipulated. Pharmacist Phc9 in the second focus group strongly believed that an inexperienced pharmacist was already more likely to be the target of manipulative patient behaviours. They discussed how manipulation already occurs with the existing model of

care, and how they could minimise manipulative behaviours under a co-prescribing model.

Dialogue from the second focus group (note that I will refer to this same dialogue in section 8.4.2.1 under ‘Pharmacist workload and work pressure concerns’):

Phc7: Yeah, it can be restricted: you can sort of like agree to some sort of care plan between the doctor, pharmacist and patient, and you can only do it for those people, not for anyone. Then they know not anyone can just come in and say I want methadone stuff ...

Facilitator: ... How do you foresee this working?

Phc7: It most probably'd be part of the plan. It's in there so, yes, it would be something that would be agreed to beforehand between the three parties.

Phc10: Yes, we could do both but it has to be in the plan. Yes.

Phc9: It has to be a constant reduction as well. Some of them like to think well, I feel pretty good today, I'll just have a reduction today and they come in a couple of days later, oh I'm not feeling so good today, can I go up again? Well, no, script says reduction only. Oh but I don't feel so good. It's just more work for us, got to change computer, oh you're going up today, oh, down tomorrow. Up today? Down tomorrow? It's like, you know?

Phc7: That's not appropriate; it would be something that they've agreed to – yes.

Phc9: Has to be one way or no way, yeah.

Phc10: Yeah, that's why I said the restriction criteria ...

Phc7: If they want it increased again they have to go back to the doctor ... and that's something they would have agreed to beforehand.

Facilitator: Okay, so (pharmacist Phc9), your main concern is that ...

Phc9: I think they'll just abuse the system.

Facilitator: Okay, what about say, for example, if someone wanted to request a dose increase, how would you feel about that?

Phc9: Even worse.

Facilitator: No?

Phc9: No.

Facilitator: Why?

Phc10: The whole idea of the methadone program is to make them – used to improve their quality of life and contribute to society but then if you're allowed to increase the dose well, it would be more likely that they will abuse the system ...

Phc8: Sometimes dose increases are required in order so they can maintain their lifestyle or whatever, so that is still an important thing. You can't really just say well, you should always be reducing.

Phc9: It might increase for the weekend for their take-aways because they can sell them for more, you know.

Phc7: Yeah, that's right.

Phc9: I need an extra Suboxone® tablet or a film, you know? Oh, you got a good buyer this weekend have you? You know? Sorry to be so ...

Phc11: Maybe it should only be weekly or monthly they can increase, but decrease, they can go down as often as they want, do you know what I mean? So you can only increase so often, so they've got to really think about it before they drop and if they go back up, they've got to stick with it for a while.

Phc7: I think what you're saying is these people need discipline; they need someone to be – they don't have discipline in their lives; they need someone to impose discipline on them. So if we give them too many freedoms and ...

Phc9: Yes, they'll abuse it more and come amuck.

Pharmacist Phc9 in the second group was extremely concerned that patients could intentionally avoid medical appointments for urine tests (which can monitor compliance and detect illicit drug use) through prescription requests at the pharmacy. He did not want the pharmacist co-prescriber to become the person who unintentionally aids patients wishing to avoid medical appointments.

“... some of them: they don't want to go to their doctors. Be it because they might get urine tested or they might get asked questions they don't want that ... If it's a situation like doctor [name] buggers off on holiday for two months and doesn't tell anyone, fine. Out of hospital, yes, definitely. But I think in a lot of cases, the patients just don't want to go to the doctor; they've got appointments and they don't want to go, and I wouldn't want to be involved in it” (Phc9, FG2).

The reason for pharmacist Phc9's distrust of some patients may have been due to his

experience in working at a pharmacy with a wide range of patients.

Manipulative behaviour was a major limitation of the pharmacist co-prescriber model of care with this section having described the extensive discussion by and views of participants on how to address or prevent manipulative behaviours.

8.4.2 Barriers for pharmacists

8.4.2.1 Pharmacist workload and work pressure concerns

Community pharmacists were already very busy, and this was noted as a potential barrier to the feasibility of pharmacist co-prescribing in all three focus groups. Earlier in this chapter, I described how co-prescribing could be beneficial as it could increase pharmacist work satisfaction. However, with the increased responsibility, there was also concern about increased workload: whether or not all pharmacists could fulfil these additional responsibilities was questioned.

In all three focus groups, participants highlighted the varied ability of different pharmacists to handle the added pressure of being a co-prescriber. Some pharmacists were not sure whether they could handle or be comfortable with increased workload pressure (increased volume of work through patient prescriptive requests on top of existing workload) and/or work pressure (increased complexity or varied tasks/requests). Such unwanted pressure was a concern for these pharmacists in all three focus groups.

“I thought, would I really like to be in a situation where they had that pressure or expectation from me? ... I do worry about how I personally would handle that extra pressure” (Phc5, FG1).

I think it's a good idea in practice. When I first thought about it, I did worry, myself, whether I was able to prescribe for my patients and within the – of course within a team situation in relationship with the doctor – how much pressure that would put on me from my patients? ... I thought, would I really like to be in a situation where they had that pressure or expectation from me?” (Phc5, FG1).

“... if they think that business[co-prescribing] is sort of like a charity house so that we can offer, they'd be pushing it and I would be a bit worried about it because you affect the business and also affect the normal customers. Yes, so that's what I'd be

a bit concerned about” (Phc10, FG2).

Pharmacist Phc16 in the third focus group already struggled to attend to professional duties owing to existing dispensary responsibilities. For this reason, she did not believe that additional work could be carried out without changes to the number or role of dispensary staff.

“But you bring up a really good point about the way our community pharmacy works. It’s hard enough now that we need to – I mean there’s new technology and dispense techs and this sort of thing but it’s a lot of work for us to even spend time with the customer. It’s hard on a day-to-day basis. So yeah I do get your point when you said there’s too much stuff we need to do on a daily basis and this will – and it’s hard to – because sometimes the owner doesn’t actually want us to take more and enrol people onto the methadone programs” (Phc16, FG3).

In the second focus group, one pharmacist suggested limiting consultations to set times, but another pharmacist argued that this was impractical for an unreliable patient population who may not attend scheduled times.

Dialogue from the second focus group:

Phc6: You have to have set times where you could consult: if you're going to do consulting, it would have to be set times.

Phc9: Set times for these sorts of people? I don't think so, so you'll come in, I want to see you four o'clock tomorrow? They'll come in a day later, oh, didn't know you meant Tuesday; oh it's Wednesday.

The challenges of having an appointment system for solo pharmacist practices were further noted as a barrier. In the third focus group, pharmacist Phc17 asked: “[w]hen do we have a proper appointment with a patient if there is only one pharmacist?” (Phc17, FG3). Regardless, pharmacist co-prescribing would almost certainly increase a pharmacist’s workload pressure and work pressure with flow-on effects to the entire pharmacy.

8.4.2.2 Unwanted responsibility of pharmacist co-prescribing

Pharmacist Phc5 in the first focus group indicated that she preferred a doctor to make final prescriptive decisions and did not want the additional responsibility of being a co-

prescriber. She preferred her role to focus on dispensing the prescription: “[a]t the moment, I can hide behind the fact that the doctor's written a prescription ... and my job is just to fill the prescription” (Phc5, FG1). Participants in the first focus group discussed how the current dispensing model allowed pharmacists to defer the final decision making to doctors, especially when patients pressured pharmacists to act against OST guidelines.

Dialogue from the first focus group:

Phc5: My comment on this program was: for the patients to know that we have the ability to change their doses or adjust their doses; would I feel comfortable with that? I'm not sure. I don't know. I haven't been in that position. I've been put under pressure by patients to give extra take-aways, or they've vomited up, or whatever, and you know that the rules of the program are the rules of the program and you know what you can and can't do, so you can deal with the pressure. You can offload it. There is no choice, but to send them back to the prescriber. But when they know that we have a choice, I'm not sure that I would cope with it. But that's not to say that it shouldn't be that way.

Phc2: But then again, what's the difference between them pressing their doctor for the same thing, rather than you?

Phc5: Because it's the doctor, not me.

Phc2: Yeah, but then you're just delegating authority to someone else.

Phc5: Exactly.

Pharmacists already prescribed Schedule 2 and Schedule 3 items, but only some participants agreed that prescribing for OST was simply an extension of existing skills. Being a co-prescriber carried additional responsibilities beyond routine pharmacy practice. Pharmacist Phc5 in the first focus group described how she felt a heightened sense of responsibility and accountability with opioids (Schedule 8), which differed from pharmacist-only (Schedule 3) medications. She was reluctant to be a co-prescriber due to her long-established practice and comfort zone that was probably difficult to change owing to her age.

Dialogue from the first focus group:

Phc4: I'm quite comfortable with prescribing or ordering testing, all that sort of stuff and having to deal with that sort of – not just providing things at a basic health care level, or just because a doctor's prescribed it, but actually taking more

responsibility. But that's an obvious thing. Different people are going to be more comfortable at different levels.

Phc5: I'm quite happy with chlorsig eye drops and chlorsig eye ointment, but methadone and Suboxone® is a whole other step – bigger step than that. The ramifications of getting it wrong are bigger. But I realise in saying that, you've – I guess I'm older. I've been not used to prescribing. I've been used to a supply role in my role as a pharmacist. So for me, I would find it a little bit harder to make that step to becoming a prescriber. But having said that, I realise that's the way our profession is heading and that it's possibly something I should do to extend my idea of what I feel I can do as a pharmacist.

Phc1: You've been counter-prescribing for years.

Phc5: I know. But it's not with a Schedule 8 controlled drug.

Phc4: It's follow-through though, I think, a lot of the time. Because often we will prescribe something and we're not really following through. Because a lot of what we do standard is very short-term symptomatic for a lot of what we've been doing. To actually have to follow someone through and make decisions based on their progress, or how they feel – their response – is different than the standard stuff of what we do.

Phc2: I think the initial diagnosis I feel uncomfortable doing, just because I – yeah, you – I wouldn't have the training for it. But, thereafter, with things like, if I thought the dose wasn't high enough for them and they're suffering and they can't see the doctor, then it makes sense if a pharmacist should be able to do something about it, if they're clearly getting withdrawals when they start on the program.

Pharmacist Phc4 from the first focus group added that a risk in having two practitioners involved with co-prescribing was that neither party took responsibility for their decisions or adequately communicated with each other. Having another practitioner to blame for clinical decisions was a risk for patient care and was not ideal.

8.4.2.3 Pharmacy infrastructure

Participants in the first and third focus groups identified that a pharmacy's existing physical infrastructure was another barrier to pharmacist co-prescribing for OST patients. Not all pharmacies were adequately set up to provide a private consultation area for co-prescribing: changes to layout were believed to be a matter that ultimately only proprietors could address.

Participants in the third focus group discussed the need for a private environment for co-prescribing. Pharmacist Phc18 acknowledged that many of the drawbacks of the proposal, including changes to pharmacy infrastructure, were ultimately the decision of pharmacy owners.

Dialogue from the third focus group:

Phc18: ... So we need training, we need a proper area to actually dose these people and sit them down. We need time, extra staff members, all of these things are essentially controlled by people who own the pharmacy ... If you're spending a lot of time doing this, then to your employers, if it's not profitable, that is, it doesn't seem like a good way to spend your time, they're unlikely to be in favour of having people come in from the program. So I think making it profitable is a bit of a hurdle as well that ties into extra training and extra responsibility and proper dosing areas within the pharmacy which I know I don't have ...

Facilitator: What sort of proper area do you think would be needed?

Phc18: It would have to be somewhat private from the rest of the shop and away from the rest of the traffic flow in the general shop and customer area. I mean it's not so much a problem with the film but ... You need time to spend with the customer especially if a significant issue turns up that you have to now resolve. It's now your responsibility to resolve this issue, you need to spend time with the person and you'll need to have a private area in which you can do that. With the current set-up, I wouldn't be able to do that in this shop. There's people everywhere. There's customers within earshot. There's no seats, there's no desks, there's nothing.

8.4.2.4 Pharmacist competency

Not all participants thought that everyone in the pharmacy profession had the competency, judgment or experience to fulfil the role of a co-prescriber. They suggested that the co-prescriber role should be restricted to individual pharmacist practitioners. However, they also recognised that, if an individual co-prescriber was absent or changed their place of employment, maintaining a co-prescriber service at one particular pharmacy would be a challenge.

There was no consensus in the focus groups about whether an individual pharmacy or pharmacist should be the authorised or designated co-prescriber service or practitioner. The following dialogue from the second focus group highlights how either arrangement presented practical challenges for the implementation of pharmacist co-prescribing for OST.

Dialogue from the second focus group:

Phc9: I'd be very concerned if you had different pharmacists working at the pharmacy. I mean, I've got an elderly pharmacist that works for me and he'd just do what they say, you know. Honestly, some of his decision making just startles me. So I'd be very concerned if a pharmacist was working for me who wasn't that experienced and one of my cunning patients came in and said oh, yuk, my car got stolen or you know the s--t, and then he writes them out a script for a week, you know? So I'd like to deal with them [patients], but if I wasn't working I wouldn't want – I mean, I trust (employee name) now, but a year ago, I wouldn't trust (employee name), because (employee name) was believing everything they said. Oh, his granny dies so, you know ...

Phc6: Wouldn't it be restricted to the pharmacist and not the pharmacy as such? It wouldn't be a thing like anyone in the pharmacy can do it. It would be this pharmacist, in this pharmacy is registered to be able to do script continuation. It's only them.

[Many participants talking at the same time]

Facilitator: Okay, hands up – the recorder can only accept one person, so just be conscious of that. So (pharmacist Phc6) was saying that rather than registering the pharmacy that it's a pharmacist.

Phc10: Yes.

Facilitator: Yes – who is regular there?

Phc9: Who knows their stories and knows their ...

Facilitator: But if they leave, what happens? Then that service leaves as well?

Phc7: Difficulty, then [is that] they'll [the patient will] have to go to the doctor.

8.4.2.5 Professional lack of interest in OST

Participants noted that long-standing low levels of professional interest by the pharmacy and medical professions in OST were barriers to the viability of pharmacist co-prescribing. In the previous section, increased pharmacist work satisfaction and reduced workload for doctors were predicted, but these benefits might not eventuate owing to inadequate professional interest in OST. Participants in the third focus group questioned whether the current lack of professional interest in OST was too great for the policy to have any impact on patient vacancies in the longer term. Patient demand for OST was perceived to currently outweigh professional interest from pharmacists, pharmacy owners and, especially, from GPs.

Dialogue from the third focus group:

Phc17: I mean there's been some changes there of course with letting more people prescribe Suboxone® [the Suboxone® Expansion Policy] but there probably still is a bit of a lack of prescribers all the same.

Phc14: I'd agree with that. I was at a meeting just recently with the Division of General Practice on (location name) and I found that – well I didn't find that there were any GPs that were particularly interested in taking it on.

Facilitator: You mentioned a good point there. Does anyone else have any thoughts on pharmacists co-prescribing?

Phc16: I've been involved with this program for one and a half years now. Even from the perspective of the owner of the pharmacy, sometimes they are really reluctant for us pharmacists to actually enrol people into the program. So yeah, there's a big barrier there to actually enrolling people on top of the barrier where there's a lack of doctors unable to actually start people on it as well.

Facilitator: Any other thoughts?

Phc14: My experience in the country, in the rural areas, has been that I've not encountered any problems from, let's call them patients. We have quite a small group ... But the biggest trouble is trying to get other doctors and pharmacists involved in the program ...

Pharmacist Phc14 later questioned: *"I'm just wondering, if it ain't broke, don't fix it ... I think we resolved that [there are] insufficient prescribers and insufficient pharmacists involved in the present scheme. I'm not sure that the supplementary prescribing role is going to solve that"* (Phc14, FG3).

8.4.3 Barriers for doctors

8.4.3.1 Professional encroachment

Pharmacists in all three focus groups were in no doubt that the medical profession would resist prescribing rights being gained by another profession. They anticipated that doctors would perceive that any professional encroachment would far outweigh any potential benefits including reduced workload or enhanced inter-professional communication. However, they also suggested that medical practitioner concerns might gradually be relieved if the pharmacist demonstrated an ability to contribute to patient care in a meaningful way. They suggested that offering financial incentives for both doctors and pharmacists practising under collaborative care models could encourage co-prescribing.

Reference to the word 'prescribing' in conjunction with a non-medical profession could automatically trigger a defensive reflex response from doctors. Pharmacist Phc1 suggested that avoiding the use of the word 'prescribing' could reduce the likelihood of resistance by doctors.

Dialogue from the first focus group:

Phc1: Yeah. I don't like the word prescribing. I think it will cause problems when you talk about the co-prescribing and I think we're co-workers in adjusting doses and that's where I'd leave it at.

Facilitator: So just adjusting doses?

Phc1: Yeah. I think you'd go anywhere near prescribing, the doctors – you're going

to get a blank wall put up straight in front of you straight away.

Participants predicted medical profession resistance to pharmacist co-prescribing due to previous responses by some doctors to home medication reviews (HMRs). However, participants in the second focus group believed that professional resistance would be reduced if a meaningful relationship was eventually established between the two practitioners.

Dialogue from the second focus group:

Phc10: I'm sure we've all come into lots of barriers when introducing HMR to the doctor before. So we would be a long way if you were going to do co-prescribing for methadone.

Phc11: HMRs are very hard to introduce.

Phc10: Yeah, I still see doctors uncomfortable for pharmacy to do HMR for them ... when I was in the country, they [the doctor] normally only want you to find out whether patients are compliant with the medication. They didn't want you to do anything else. Like they're not keen to know a drug interaction or anything else.

Phc11: Yeah, they don't want you to recommend treatments, but ... when they get used to you, you start making suggestions and you see they start listening a bit more, you know. When they get to know you a bit better.

Phc10: Yes [it] take[s] time to develop a relationship and – you know?

Phc7: That's what it's about. Getting their confidence and a good relationship, I mean, it's just a natural thing; it just has to happen.

The establishment of nursing prescribing rights was noted as a sign of possible future indicators for the pharmacy profession. Participants in two focus groups discussed how various non-medical professions had established prescribing rights and had overcome the medical profession's resistance.

Dialogue from the third focus group:

Phc17: I think there's lots of situations where other professions have taken up some sort of extra prescribing role like optometrists and nurses. I certainly think that ...

Phc14: Dentists.

Phc17: Yep exactly and although those people didn't necessarily start off with

those roles and they are busy people – that those changes have gone absolutely fine.

Any professional encroachment perceived as such by doctors was a serious political obstacle. Participants in the second focus group recognised that persistence was needed to achieve legislative changes for co-prescribing. Medical practitioner monetary reimbursement for involvement with a management plan or with a co-prescriber was suggested to gain support from the medical profession.

Dialogue from the second focus group:

Phc10: [The] AMA (Australian Medical Association) has been unhappy about it [medication continuation proposal] and they're also unhappy about the idea of pharmacists doing vaccinations. So I presume that ...

Phc7: But they automatically oppose all of that, like nurse prescribing, everything. It's just automatic – but still they're able to get these programs through, so there's still a way of doing it.

Phc11: Yeah, it's just going to take persistence, I think.

Phc8: It depends on the doctors: (clinic name) doctors work within teams of nurses, pharmacists – and they discuss patients like that, so perhaps with private prescribers you'd have more difficulty because you may be taking away some of the their – cutting in their turf.

Phc7: I think some of them wouldn't mind because like you said, they're very time-poor and if it was part of a care plan, which they also got remunerated for ...

Phc11: That's what it is.

Phc7: Like the HMRs: pharmacists get money; the doctors get money as well ...

Phc11: That's what it comes down to: if you can show them that it's going to make them money, then they'll do it.

8.4.3.2 Professional lack of interest in OST

The pharmacy and medical professions' lack of interest in OST was identified as the rate-limiting step to the proposed policy changes. This topic was previously discussed in section 8.4.2.5.

8.4.4 Summary of theme: Barriers of the co-prescriber model of care

Participants in all three focus groups discussed the barriers and weaknesses to pharmacist co-prescribing of OST. A pharmacist co-prescriber being subjected to manipulation was a major concern and potentially detrimental to patient progress. Not all pharmacists wanted the additional work pressure or responsibility attached to being a co-prescriber. Others had concerns about whether or not all pharmacies and individual pharmacists were capable of fulfilling the role of a co-prescriber. The existing inadequate interest from doctors and pharmacists was believed to be a rate-limiting step to expanding OST service delivery. Additionally, medical profession resistance was anticipated as a major hurdle to the implementation of pharmacist co-prescribing. The pharmacy profession's persistence was recognised as necessary to overcome resistance to change and to succeed in achieving co-prescribing when faced with this barrier.

8.5 Facilitators of the co-prescriber model of care

In this section, I will describe focus group participants' views on the facilitators that could minimise or partly address some of the barriers to co-prescribing which they had identified under the previous theme. Participants suggested selecting suitable patients for management under the co-prescriber model of care, and limiting the scope of a co-prescriber, to minimise occurrences of manipulative behaviour. Pharmacist co-prescribing could also be facilitated by changes to existing legislative and funding models. To further a pharmacist's clinical skills, training and mentorship opportunities were welcomed. Furthermore, efficient communication methods, between doctors and pharmacists, through the internet, were facilitators to implementing a collaborative model of care.

8.5.1 Facilitators for pharmacists

8.5.1.1 Limited prescribing authority

In previous sections, I have noted that participants raised serious concerns about a co-prescriber being targeted for manipulative requests. In this section, I describe how limiting

a pharmacist co-prescriber's authority could decrease these requests. A second way to manage manipulative requests is discussed in section 8.5.1.3.

There was no consensus within any of the focus groups on whether or not a pharmacist co-prescriber should be able to increase a patient's dose. In the second focus group, participants debated a co-prescriber's authorisation of dosage reductions. They suggested an appropriate scope of practice needed to be agreed beforehand by all three parties. Refer to the previous dialogue in section 8.4.1.1 for documentation of this conversation.

An alternative suggestion to deter manipulative requests was to limit the number of dose increase requests a patient could have in a set period of time. However, pharmacist Phc8 acknowledged that small dose increases in certain situations are required for maintenance treatment. Therefore, the co-prescribing of dose increases cannot be completely ruled out under all circumstances. *"Sometimes dose increases are required in order so they can maintain their lifestyle or whatever, so that is still an important thing. You can't really just say well, you should always be reducing"* (Phc8, FG2).

Participants in the second and third focus group suggested limiting the scope of practice to better manage the program.

"Yeah, it can be restricted: you can sort of like agree to some sort of care plan between the doctor, pharmacist and patient, and you can only do it for those people, not for anyone. Then they know not anyone can just come in and say I want methadone stuff. So you agree to it, like they have now, that care plans a lot of doctors get us to sign. A similar sort of thing with the methadone for certain people" (Phc7, FG2).

"I think that, for me, I would like this to happen within an agreed treatment plan, so there's an algorithm. If this and this happens then you can do this. If this and this doesn't happen, then you must refer back to the prescriber. So you know fairly well the limits of what you can do and that has been pre-agreed with the prescriber and with the patient" (Phc5, FG1).

Their discussions about limiting a pharmacist's prescribing authority led to the following theme of co-prescribing only for selected patients.

8.5.1.2 Co-prescribing only for selected patients

Pharmacist co-prescribing for selected patients was a second strategy to minimise manipulative behaviour or requests. There were mixed views in all three focus group interviews about which patients were best suited for management by a pharmacist co-prescriber. Although more stable patients (i.e. treatment dose stabilised and compliant with pharmacy attendance requirements) were frequently nominated as the most ideal candidates for this model of care, it was also acknowledged that all patients deserved equitable access to these services.

The first focus group discussion provided an indication of the debate by the pharmacists on whether co-prescribing should be available for all patients and, if so, how to manage equitable access to services.

Dialogue from the first focus group:

Phc5: I have to say though, that not every patient is going to be the same. Somebody who's 50 and still on methadone and has been for the last 40 years – ah no, they couldn't have been could they – 30...

Phc1: 30 – 25 years, yep.

Phc5: It's so not ...

Phc1: I've got one of them.

Phc5: ... 30 years and they're stable. They're on 40 milligrams. They've got a job. They're on a stream where they only have to visit us once a week and they get six take-aways. They're not going to want any more involvement. So it's going to have to be on a case-by-case individually negotiated agreement, I think, because not everyone will want ...

Phc4: They opt in.

Phc5: Yeah.

Phc4: You wouldn't force anyone to do that.

Participants in the first focus group recognised that a co-prescriber needed to cater for a range of patients to ensure equitable access, but they also saw that this was complex.

Dialogue from the first focus group:

Phc3: ... I don't think there should be anybody excluded. I can't think of any basis that anyone should be excluded from ...

Phc4: Yeah, I'd agree with that.

Phc3: Unless anybody can come up with something, I can't ...

Phc4: I think if you actually start picking and choosing, then it'd be a case of, well, you guys just want the easy ones. Or – that's not – if this is going to be just provide better access to patients for their care ...

Phc4: ... you can't then just go, well, no, I don't like you and I don't like you. So how's that improving? Everyone wants the easy things in life, but that's not really helping. If trying to improve access and patient care, then you can't, I think, pick and choose.

Phc5: But ... there must be criteria for the different streams A, B and C within the program. So maybe people that are on the C just aren't suitable for co-prescribing, because they have so many changes.

Phc2: But then again, I think if you had proper training as well, you'd be able to make some of those decisions. You can tell when people are declining and starting to get back to their old habits, because you just see it. Sometimes, you're thinking – you call the doctor and go, something's not right. And they're still getting the four take-aways. You're like, no, that person is going downhill. I think you should put them back onto another stream. Some decisions you can, I think, sometimes just manage out of commonsense as well. I think it's a case-by-case basis where you just come to a point where you're not comfortable enough to either increase it or decrease it. You go, look, I think you really should go and see a doctor. But I think in the easiest scheme where you feel okay, where it's just by one ml that way, one ml the other way, it's not a big deal.

Participants in the second and third focus groups supported restricting the program to selected patients to maximise the chance of success. They did not want to be a co-prescriber for patients who were manipulative or not stable, or who did not attend their medical appointments. Some suggested that long-term stable patients would be the ideal candidates for pharmacist co-prescribing. This would involve closer monitoring by the medical prescriber for the patient's initiation of OST, and the pharmacist co-prescriber playing a greater role in monitoring stable patients.

Dialogue from the second focus group:

Phc9: I mean, I think it has to be a really controlled doctor and see them for a year and once they've proven themselves and okay, all right, if it's a public holiday or – okay, I can help you out. But I don't want to be dealing with them for the first three months or six months.

Phc7: Yeah it can be restricted: you can sort of like agree to some sort of care plan between the doctor, pharmacist and patient, and you can only do it for those people, not for anyone. Then they know not anyone can just come in and say I want methadone stuff. So you agree to it, like they have now, that care plans a lot of doctors get us to sign. A similar sort of thing with the methadone for certain people.

Phc8: How many times have you seen patients start the program, go really well for about a month or two and then something happens and they disappear off the face of the planet kind of thing? Yes, but I think in terms of long-term patients, it'll be really good.

8.5.1.3 Collaborative management plan

Pharmacist co-prescribing was suggested as a guiding framework with the implementation of a collaborative management plan. Participants in the first and second focus groups believed that it could also partly address concerns about pharmacist competency and perceived professional encroachment. A pharmacist co-prescriber's scope of practice would be outlined within this proposed management plan to ensure quality of care for patients.

Dialogue from the first focus group:

Phc2: There's always the chance of aggressive behaviour, even when you've refused to give them that extra take-away when they're not suitable for it. So it'll be the same thing. You just go, look, I don't think that you can have that dose increase yet. You're not at that level ...

Phc1: This would come within the algorithm ...

Phc2: Yeah?

Phc1: We can't – we couldn't go outside the range anyway.

Phc2: Yeah.

Phc1: So they'd be only requesting something that was within the range that they've agreed with the doctor.

Phc2: Hmm.

Phc4: I think you'd almost have a contract with the patient as well, as part of the process to go, that certain behaviour, under these circumstances you would be referred back to your prescriber for that. And get the patient to sign that, so that they know what behaviour is not acceptable, resulting in them being referred back to that – and to not be able to go through that process either again, or for a period of time.

Pharmacist Phc4 in the first focus group was concerned that neither party might take responsibility for their actions if there was a co-prescriber and suggested the establishment of clear guidelines to prevent pharmacists from practising without accountability.

Dialogue from the first focus group:

Phc4: I think you have – there'd have to be really clear guidelines about who can do what, or that if you're doing this, then that's fine, it can be changed in consultation with the other prescriber. But I think, sometimes, if you're in a collaborative relationship, neither party might go, well, it's not really my responsibility. I don't think you really want that either. You want to be collaborating where someone actually has to – if someone's seeing you, then you're the one having to do that and report back and get guidance on that more so.

Facilitator: So you're liable for the decisions you make and they're liable for the decisions they make.

Phc4: You're liable for the decisions, but whether it's – if it's a prescriber, then you're actually having some regular contact if there's any change in their condition, to then talk about that. But you can't go, I'm just co-prescribing, I'm not going to deal with this now. It's all too hard. That's not fair to the patient.

Pharmacist Phc5 in the third focus group was initially reluctant to undertake prescriptive roles, but suggested that the implementation of a management plan would reduce her workload pressures if she was required to be a co-prescriber. She also suggested any potential perceived professional encroachment could be reduced if all parties were aware of each other's scope or role. Pharmacist co-prescribing for dosage tapering was

thus seen as being facilitated with the utilisation of a collaborative management plan.

Dialogue from the first focus group:

Phc1: We've got one of our patients coming down at the moment. Now, there are going to be days when maybe an extra bit would get her through the tough time. I think that is the role where we can then adjust with the relationship with the patient, then keep re-tapering down within a framework that the doctor has actually established.

Phc5: That's an important thing. I think that, for me, I would like this to happen within an agreed treatment plan, so there's an algorithm. If this and this happens then you can do this. If this and this doesn't happen, then you must refer back to the prescriber. So you know fairly well the limits of what you can do and that has been pre-agreed with the prescriber and with the patient. So (pharmacist Phc1)'s routine of discussing the treatment plan for his patients with the prescribing doctor is excellent. That way everybody knows what they're doing and that you know – you've decided between you and the doctor, the limits of your professional discretion with the dosing changes during stabilisation. But I think we'd use it more with people wanting to withdraw.

Phc1: Withdraw. Exactly.

8.5.1.4 Legislative and funding changes

Participants clearly wanted an alternative model of financial remuneration for both pharmacy owners and employees. They identified that legislative and funding changes were essential to reform pharmacy infrastructure, implement training and attract increased professional interest. The reimbursement of pharmacists for consultations (separate from the dispensing fee) via direct patient co-payment was ruled out as unlikely as many patients were believed to already struggle with existing pharmacy charges. Furthermore, as patients currently have no out-of-pocket expenses related to medical appointments, they were unlikely to favour the implementation of additional pharmacy payments.

Pharmacists, particularly in the third focus group, believed that a co-prescriber needed to be financially remunerated and they debated potential funding models.

Dialogue from the third focus group:

Phc17: Again I don't think we want to take on the full responsibility of prescribing and so forth, but certainly for the day-to-day continuation, we know how the patients are going but to be able to refer them back to a prescriber at some point if we felt that they were going astray a little bit or if indeed still to have that reasonably regular review, I think would be a great way to go. If we do need extra training, I suppose the only issue, if it were more responsibility, I guess the only issue as always, is who would actually pay for that? I think usually sometimes the patients already find it a little bit hard to make ends meet as far as paying for the actual service in the first place. I guess that's probably – the other thought that I have is, as always, if there's extra responsibility and extra time taken on our behalf, so long as at some point there would be some sort of remuneration perhaps from the government or something like that for particular people who are accredited to do it then that would be super.

Phc14: ... I think there would need to be a funding source and I think because of the value to the community at large in this service, even as it is, I think that the funding needs to come from a centralised source, state or federal government.

Phc15: I agree with a lot of what's coming up now in terms of extra training. We need it. All the diagnosis very much falls on the responsibility of the doctor. I wouldn't be comfortable taking that on at all. But yeah, you've got to ask yourself with all this extra training, where's the extra money going to come from if we take on the extra responsibility, extra time, phone calls, faxes, where's the extra money going to come from? Because as you said, people already find it hard to pay \$3 a day. That's a lot of money for them. If you jack it up to \$5 a day which isn't really a big change as far as we're concerned, that's going to be a big change for the patient.

Phc17: I guess then there's the possibility of making the case that if it's doctor time we're saving, then it sort of comes out of the Medicare budget really in the end.

Participants in all three focus groups had detailed discussions about whether a state or federal approach was most appropriate for policy implementation. These discussions helped them to nominate potential funding and regulatory sources. They decided that state government funding was required if co-prescribing were a state-based program, whereas federal government funding would be suitable for national initiatives. I have used dialogue from the third focus group to illustrate how they came to this view.

Dialogue from the third focus group:

Phc14: ... my opinion is that the present charge that we have to make is a disincentive for some patients to continue. I think some patients find it difficult to adjust their priorities such that they can afford the ongoing treatment ...

Facilitator: Okay, any other thoughts about cost and remuneration?

Phc18: I think we'd have to have some sort of state or Medicare or something of the like, some sort of funding behind it which would generate constant profit really because if it's not profitable, then it's not going to happen.

Phc17: The patients just don't have the resources I don't think.

Phc18: Like we can't charge the patients \$10 a day. It's not possible.

Phc13: You know like with the DVAs^r and your Webster packs, you know how the PBS has got its own little item number, so yeah I think it's \$10 for each DVA ... if there was some way we could tie this in with that and like dispense it basically each day as a PBS item maybe, that would be cool.

Phc15: Weekly or monthly supply or something like that, depending on how stable they are. It's a possibility. That would make it possible and then the money falls on Medicare and we know how much more money.

Phc14: ... I do think that the Medicare model would be the way to go ... I can tell you, the argument can be very easily made with the cost saving to the community at large when people don't have to fund their alternative drug habit ... I think there would need to be a funding source and I think because of the value to the community at large in this service, even as it is, I think that the funding needs to come from a centralised source, state or federal government.

Pharmacist Phc4 in the third group strongly believed that service payments for consultation time needed to be a separate scheme from Pharmacy Practice Incentive (PPI) payments (refer to dialogue below). This would ensure that pharmacist co-prescribers were reimbursed for consultation time, irrespective of whether or not a prescriptive decision was made during the consultation.

Whether the pharmacy owner, the pharmacist prescriber or both should receive remuneration for undertaking these roles was debated in the first focus group. There was a

^r Department of Veterans' Affairs (DVA) prescriptions are listed on the PBS for eligible veterans, war widows/widowers, and their dependants.

clear divide in responses between the pharmacy owners and pharmacy employees about who should receive payment for a co-prescriber's services. Both groups believed that they should be reimbursed; otherwise, there was no incentive for them to deliver these additional services.

Dialogue from the first focus group:

Facilitator: Going back to this remuneration aspect, if it was put through a PPI structure, would that remuneration go to the accredited pharmacist, or would that go to the pharmacist owner?

Phc1: Pharmacist owner.

Phc2: I would say the pharmacist. What's the point of getting accredited then if it's going to go to the owner that doesn't even ...

Phc4: I think it should be like HMRs.

Phc1: HMRs go to the owner.

Phc4: Ah, yeah, it does, but ... if you're going to do this, you should be paid for the service, not based on if you have to do three dose changes. If you're making appointments on some sort of predetermined basis, depending on where people are at, you should be paid for that service. You're a health professional, you're doing a consultation. I think if you wrap it up in a PPI and take into account the federal and state thing, it should be paid as a consultation. You're a professional doing something. We're not just flicking around the edges and going ah, hopefully they'll bundle it up under some other thing. It's a proper consultation.

Phc5: The payment needs to go to the business, then the business needs to decide whether the pharmacist ...

[Many participants speaking at the same time]

Phc4: Ah, no. I don't think that's relevant. I just think that whether it's for a Medicare payment or a state-based, I think you get paid for the service, not for consultation ...

Facilitator: Okay. The recorder can only accept one voice at a time, sorry. So (Pharmacist Phc4) you're saying that the professional themselves should be paid. Is that right?

Phc4: Well, the professional service should be paid. I'm not getting into an argument about where that – who's bank account that money first goes into ... if

you've got a consultation, then you – that's a private room. You're not – if you're doing a monthly consultation to see how they're going, then that's not just hi, how are you? How are you feeling? You have to do that in proper consultation, otherwise we're not doing a good job ...

Phc4: So it should be a specific fee-for-cost consultation fee.

Phc3: I would have thought for simplicity, it would go to the business, the same way HMRs are and all the other payments are, but I take (Pharmacist Phc2's) point is that you want to be remunerated if you've done the training for it, etc. So I suppose if that's – if you're a pharmacist dispensing methadone and you're employing someone that's got the training for it, then they would be remunerated at a different level to someone who hasn't got that accreditation or training.

A definitive remuneration model was required for pharmacists to fully support the policy; however, there was no consensus on an alternative payment model. Clarification on the relevant legislative and funding logistics was suggested to better determine the policy proposal's acceptability to the pharmacy profession.

8.5.1.5 Training for pharmacist co-prescribers

In all three focus group interviews, pharmacists were definitely keen to undertake further training before authorising prescriptive decisions. The completion of training and receiving professional support in the form of mentorship were believed to partly address concerns about pharmacist competency and confidence. The following quote from pharmacist Phc17 in the third focus group indicates the majority view about training amongst participants in all three focus groups.

Yeah, I don't think I'd have any problems with all of that as long as we're trained. I've had a lot of times where people have had dose reductions and sort of quite, would feel reasonably confident about that within some sort of limitations just like happens at the moment. I guess I could see a time, well I know that we'd be able to follow a protocol as far as take-aways go but I guess that would just probably be something that would probably still just rest with the prescriber all the same. Yeah, I wouldn't really again have a problem with any of the supplementary idea at all (Phc17, FG3).

Participants from the second focus group suggested that a training period of six months

on the job at an appropriate pharmacy could be a requirement to be a co-prescriber.

Dialogue from the second focus group:

Phc12: Yeah, I think it's a good idea. I'm all for it, with the proper training and remuneration, you know, to recognise the extra experience you have in dealing with this sort of situation. And yes, I think it's a good idea to pursue because it takes the pressure off the public system with the doctors, because you know, you always hear them complain they can't get in to see doctors. And I think it'd just benefit the whole community if we can take some of the load off the doctors and – yes.

Phc11: I was just going to say maybe you just need to do like, six months training to be able to do this sort of thing, just like you could refer HMRs and things like that; you can't just go and say I'm going to do a HMR, you know?

Phc9: Six months training on the job, in the pharmacy.

Participants understood that GPs undertook a short course to become an accredited methadone prescriber: this same course was suggested for pharmacist co-prescribers to ensure that the same learning needs would be met.

Dialogue from the third focus group:

Phc18: Basically that we need the same training that's required by doctors at this stage and I don't know what that is, because I haven't done it. I imagine there'd be different things to consider and we'd have to have the power I suppose, to access blood tests and perform blood tests – or at least ask them to be taken. Clean urine and things like that, we'd need all these things in order for this to be safe in my opinion. So we'd need training in all that and the ability to do so.

Facilitator: Would you be comfortable with taking blood or urine tests yourself in a pharmacy?

Phc18: Again, if I had the proper training and the proper environment in which I can do that, then maybe. But yeah, I suppose at this stage, at this pharmacy at least, a long way off that. So that's a hurdle. But yeah in theory it's possible.

Other participants in all three focus groups identified that training topics for a co-prescriber would include addiction psychology, appropriate dosage adjustments and counselling. These skills were thought to be important for a pharmacist co-prescriber to carry out their duties.

“If this was to happen, I would like training in knowing more about the type of person that accesses a methadone program; the psychology around it; how they feel; how they react; some understanding – some training and understanding how chaotic their lives are and what sort of concessions you have to make to accommodate the lifestyles they live, because that's what I don't understand. I've led a very normal life. I don't understand how chaotic their lives can be and the [dose] adjustments you need to make in your judgment ... If we did that, then I would understand more about what their requirements are for adjustments of dosages” (Phc5, FG1).

“I think just more about the psychology I suppose of dependency and giving up actually ... I just think we might need a few extra skills just to make sure that we're pointing patients in the right direction if they are needing extra help” (Phc14, FG3).

Participants recommended clinical support and mentorship by a more experienced practitioner for the growth of skills and confidence. They also suggested a clinical placement at a drug and alcohol clinic as another element of a training package.

Dialogue from the first focus group:

Phc5: We want to – it would almost be like being – doing a residency – not a residency, a ...

Facilitator: A placement?

Phc5: A placement. Yep ...

Phc4: You'd be really having to sit in with doctors, nurses, counsellors, whatever they are.

Phc6: Yeah and seeing what other – if nothing ...

Phc3: I don't know about a week though.

Phc3: Probably a day, or even half a day's plenty.

Phc5: A day would be enough?

Phc5: But you want some sort of mentorship.

Participants in the first focus group also discussed trialling a co-prescriber model of care to fine-tune the model.

“What I see is that we start off with a program that's really fairly defined and

rather strict and see how that works in South Australia for a couple of years and then be prepared to change it either one way or the other, either bring it back and make it stricter, or providing we're all working well and it's all happening, well, then we've got flexibility to add extra bits to it. So, given that it would be a new program in South Australia, I'd like to see it start off with a fairly limited range of activities that we can do within an agreed model with the prescribing doctor. See how that works and if your research and the statistics show that it's working well and that could be changed again, then be prepared to change it again. I think the model of this, if this happens, that we – the model that we start out with, won't be the model we finish up with” (Phc5, FG1).

All pharmacists willing to be a co-prescriber also believed that additional training and/or education were required. A range of training formats were suggested with the possibility of a clinical placement and mentorship to nurture skill development.

8.5.1.6 Alternative and more efficient communication between doctors and pharmacists

This section presents the participants' discussion of alternative and more efficient communication channels between doctors and pharmacists to facilitate the development of co-prescribing.

8.5.2 Facilitators for doctors

8.5.2.1 Alternative and more efficient communication between doctors and pharmacists

Focus group participants thought that a co-prescribing model of patient care could be facilitated by efficient and adequate communication between pharmacists and doctors. Both practitioners could also better address or minimise manipulative requests if all the relevant information at any point in time was available. Pharmacist and medical practitioner communication processes were considered in terms of the practicalities of co-prescribing. Participants made numerous suggestions about how pharmacy notifications to doctors could be made and identified that enhanced inter-professional communication

could reduce perceived professional encroachment and strengthen relationships. Their suggestions included informing the doctor of changes by fax, electronic or internet communication.

Participants in the second focus group discussed various ways in which a co-prescriber could communicate with the doctor about treatment decisions. Telephone or fax notifications were traditional forms of communication; however, telephone messages and faxes did not always arrive in a timely manner. An alternative option was electronic inter-professional communication between pharmacists and doctors.

Dialogue from the second focus group:

Facilitator: How would you propose to communicate your dose continuation, dose taking or whatever, with the doctor? How do you propose to communicate that?

Phc9: You'd have to start doing faxes or emails or some sort of electronic system.

Phc7: Yeah, that's right.

Phc9: Yeah, I mean, yes.

Phc11: Oh, everything's gone up in the clouds at the moment. If we had methadone patients on like a web-based program, secure type thing, like a bank's website, you have to log in.

Phc9: Yes, have to be very secure, though.

Phc11: Dropbox.

Phc9: Yeah, but I mean that's what ...

Facilitator: Dropbox? A concept similar to Dropbox – maybe not Dropbox, is that what you meant?

Phc9: The doctors would have to know how to use their computers, wouldn't they? That's what, 50 percent of our patients at [the clinic]. So, we're back to square one.

Phc7: I think initially it'd just be fax ...

Phc9: First you've got to get computers, then you've got to get the internet: the internet was actually invented last century but [the clinic] probably doesn't know about that either.

Phc7: It might just be faxes and there's a free fill form that you fill in and you just fax it to them.

Phc9: The faxes get lost though, as well, and yes ...

Phc7: Or a phone call, they've got to ring you back tomorrow, you know, if you're lucky, and then you've got to follow up.

Phc9: Yeah, and then you're not there or they're not there or ...

Phc11: Stuff can get faxed anywhere you know, you don't know where it's going to go.

Participants in the first focus group also discussed how pharmacists and doctors could communicate treatment changes to each other. There were a number of ideas, but one participant noted that internet communication could be facilitated with the anticipated establishment of the Australian National Broadband Network (NBN). Real-time and interactive data transfer between practitioners was believed to be possible through the NBN. Internet coverage, however, was variable in rural areas so that was a potential limitation.

Dialogue from the first focus group:

Phc1: Well, within a collaborative thing, I would see that would be information that when the appointment's made for the doctor, that information should go to the doctor.

Phc1: Prior to the appointment.

Phc5: That's presuming they don't have a rush trip to (the clinic), or because you – because they've missed two doses, they've got to go – for all number of reasons, they might arrive at a prescriber without having told you that they're going to see the prescriber. You almost need a real-time interactive internet thing similar to what we have for pseudoephedrine.

Phc4: That's probably part of the problem now, anyhow.

Phc5: Which is – my reference to NBN is the National Broadband Network, which means you can transfer lots of data easily and quickly in real time. But you can't always do from rural.

Phc1: Yeah, well, we electronically send the S8 report each month now. There's no way known it couldn't be sent weekly or monthly via the internet – you're right.

Phc2: Or you could just give them a little summary form thing. Whenever they go and see a doctor you just write, current dose, missed dose is that number on just a little summary sheet. You don't need to send the whole thing back.

Phc5: That's my original point, was (pharmacist Phc1), that's fine if you know that they're going and they know that they're going.

Phc2: They're going. But then they – wouldn't be then up to the doctor to go ah, you're getting dose there. Like when people go into hospital, they don't know what they're on, so it's up to the doctor to give the pharmacy a call and find out all the history then?

Phc5: Yeah. That's another resource that needs to be put in place, is a pharmacist or somebody at the other end who can do a medication reconciliation and work out the relationship between what the patient is asking for and what they're actually having prescribed.

Participants in the first focus group identified that adequate communication between pharmacists and doctors was just as necessary to prevent or monitor manipulative patient behaviour. Their examples of manipulative behaviour included patients obtaining what they wanted from one practitioner, if they could not get it from the other. In the first focus group, pharmacist Phc5 said:

The other thing is, we're talking about communication, that would mean that with the co-prescribing model, we'd need a system whereby we feedback the dose change. If we've made a dose change, then we need a system whereby we can feed that back to the prescriber, so that if the patient goes back to the prescriber, they know that we've increased the dose to such and such; because these patients do have the ability to play off one side against another and they do that when there are different pharmacists, they do that with different doctors” (Phc5, FG1).

Pharmacist Phc17 in the third focus group suggested having regular patient reviews to ensure that both pharmacists and doctors were aware of any changes. Thus, if patients were telling different stories to different practitioners, it would soon be realised.

Dialogue from the third focus group:

Facilitator: (Pharmacist Phc18) was talking about the possibility that people might play each other off, you know the doctor and the pharmacist, which if they can't get one thing from the pharmacist and they could go to a doctor ... Would that be a concern?

Phc17: I think that can be covered by mandatory reviews. I think you can be on a case-by-case basis. I think it's inferred in the literature there about the supplementary prescribing where it's a collaborative thing between initial prescriber diagnoser and prescriber and supplementary prescriber. I think it's a communication issue.

Focus group participants believed that adequate communication between a doctor and pharmacist co-prescriber needed further consideration. They highlighted mechanisms to prevent or monitor manipulative behaviour and keep all parties informed of treatment decisions. A range of options, including electronic and internet communication, were discussed in all three focus group interviews.

8.5.3 Summary of theme: Facilitators of the co-prescriber model of care

Participants identified facilitating factors to reduce, prevent or minimise the previously identified barriers to pharmacist co-prescribing. Deterrence of manipulative behaviours could be achieved by applying selection criteria for patients, and limiting pharmacists' prescriptive functions as outlined in a collaborative management plan. Amongst participants, no consensus on whether or not a pharmacist co-prescriber should be permitted to adjust doses, particularly dose increases, was reached. However, they agreed that the completion of formal training and mentorship addressed concerns about pharmacist competency and could resolve the debate about authorising dosage increases. Additionally, changes to existing legislation and funding were required to modify pharmacy infrastructure and increase professional interest in OST. Previously, pharmacists identified professional encroachment as a barrier to co-prescribing, but electronic communication could be a catalyst for changing this resistance.

8.6 Chapter summary

This chapter identified focus group participants' views on pharmacist co-prescribing for OST. Pharmacists believed a co-prescriber could fulfil certain roles to provide improved services for patients and discussed how they envisaged working with doctors. My findings indicated that co-prescribing for OST could be advantageous for all three stakeholder groups (patients, pharmacists and doctors). The benefits of co-prescribing included improved flexibility, convenience and patient engagement with treatment. Additionally, inter-professional relationships and communication channels could improve. Despite these benefits, there were downfalls to co-prescribing owing to manipulative patient requests, increased workload concerns and inadequate pharmacy set-up which were acknowledged barriers to its feasibility. Also, not all pharmacists wanted the increased responsibility which was expected of a co-prescriber. Moreover, any perceived professional encroachment to the medical profession's traditional roles was believed to be a significant hurdle.

In general, focus group participants supported pharmacist co-prescribing for OST, but this was subject to certain conditions being fulfilled. The meaningful relationship that developed between a patient and pharmacist as a result of regular pharmacy attendance was the major reason for their support of co-prescribing. Participants' support was subject to, firstly, further training and/or an agreed management plan; and secondly, a doctor diagnosing and initiating treatment. Other aspects that needed to be addressed to satisfy participants included legislative, funding and pharmacy layout changes to ensure the policy's feasibility.

Chapter 9 Lessons learnt from a Canadian and US study tour of pharmacist prescribing

9.1 Introduction

In Chapters 5 to 8, I identified a range of challenges for the existing model of care and the expected challenges to implementing pharmacist co-prescribing for OST. Patients identified (in Chapter 5) their variable relationship with clinic doctors which contrasted to the regular relationship they had with a community pharmacist. In Chapter 6, I described how patients had identified aspects of co-prescribing which resonated with patient-centred care (PCC), but they also raised concerns about the increased pharmacist workload and lack of a consultation pharmacy space for a co-prescriber. Patients also discussed how pharmacy layout could affect their perception and experiences of privacy (in Chapter 7). Pharmacists (in Chapter 8) also shared patient concerns about a co-prescriber's workload and work pressure as well as adequate consultation space in the pharmacy. They also identified other challenges to the implementation of co-prescribing including professional encroachment, funding and the need to establish training/education and electronic communication methods.

In this chapter, I will identify solutions to these challenges to the existing model of care and to the anticipated challenges to co-prescribing. These solutions are drawn from international practice observed on my study tour. I will answer the research question: what are the facilitators and barriers to the implementation of pharmacist prescribing in the US and Canada? These solutions include various training/education options, shared electronic records, private pharmacy consulting areas and regulation of the pharmacy technician profession. I will also present potential options for prescribing funding models that were noted on my study tour. Caution is needed in applying these solutions in an Australian context owing to the differences in pharmacy organisations and culture between these countries.

I undertook a study tour, funded by the Freemasons' Trevor Prescott Memorial Scholarship, to gain an insight into pharmacist prescribing practices in two countries. I aimed to gain a perspective on international pharmacist prescribing in a range of clinical

areas. I visited research/academic units, policy makers and practice areas in community, hospital and clinic settings across Alberta, Canada and California, USA in 2012.

I observed numerous key innovative practices on the study tour that are not yet established in Australia. Legislation in California permits pharmacists who work in institutions (with a Collaborative Drug Therapy Management agreement), once they have registered with the Drug Enforcement Administration (DEA), to prescribe a broad range of medications, including controlled drugs such as opioids. I observed various levels of pharmacist prescribing in the Albertan community and hospital pharmacy settings, including patient assessments for prescription adaptation, and medication for therapeutic continuation or emergency access. Furthermore, approved Albertan pharmacists with additional prescribing authorisation provided patient assessments for initial medication access. Alberta had recently established a new funding model to remunerate community pharmacists for patient assessments.

In this chapter, I will explore the lessons from my study tour for the Australian pharmacy profession and policy makers with respect to pharmacist prescribing^s implementation and remuneration models. My key insights will be structured to provide discussions about the facilitators and challenges of pharmacist prescribing in hospital and community pharmacy settings (refer to Table 21 for outline). In both California and Alberta, prescriptive authority was an extension of the pharmacist's existing clinical functions. Established with the support of effective advocacy, leadership and governance and an appropriate setting, this extended function enabled pharmacists to provide more efficient patient care in hospital and community settings. However, in establishing advanced practice roles, such as prescribing, pharmacists had encountered practical, professional and political challenges. All of these findings are relevant for Australia pharmacy policy and practice.

^s In this chapter, I refer to the term *pharmacist prescribing* to include both collaborative and independent prescribing.

9.2 Background

9.2.1 Study tour aims

The aim of this study tour was to gain an understanding of pharmacist prescribing practice in Alberta, Canada and California, USA. It provided an understanding of pharmacist prescribing models, as well as the facilitators and challenges to policy implementation in Canada and the US. I undertook discussions with key informants, research/academic units and policy makers, and observation of practice sites. California provided a perspective on pharmacist prescribing from a state which had established these practices decades ago, whereas Alberta presented an outlook from a province which had more recently established pharmacist prescribing legislation.

9.2.2 Selection of study tour locations

I selected California and Alberta as key study tour sites as they have established pharmacist prescribing roles in a variety of settings. In 1979, California was the first location to permit pharmacist modification of drug therapy according to written guidelines. There is now legislation in more than 40 US states which permits pharmacist prescribing of medications^(63,64,224); however, California is one of seven states where this authorisation can be inclusive of controlled substances.⁽⁹⁷⁾ In 2006, Alberta was the sole Canadian province to permit pharmacist prescribing in community and hospital pharmacy settings. Albertan pharmacists are able to initiate, renew and modify prescriptions as well as managing drug therapies, with the exception of controlled substances.⁽⁶⁵⁾ Since the study tour, pharmacists in the Canadian province of Ontario have been permitted to renew non-narcotic prescriptions.⁽²²⁵⁾

Australia's demographics and governance are more similar to those of Canada than of the USA. Table 19 provides a summary of some key indicators. Alberta and California's population density, governance and health care systems greatly differ from each other. California's population density is much larger than that of Alberta, and greater than Australia's entire population. California has a decentralised, municipality-based approach to governance and local levels of governance are emphasised, rather than a state or national

approach: this contrasts to the Albertan centralised provincial approach to governance. Additionally, the USA health care system relies more heavily on private health insurance, which contrasts to the Canadian and Australian public approach to health care.

A comparison of population and density of physicians and pharmacists in the three countries of interest indicates potential unknown Australian capacity. Australia has a higher physician and pharmacist density than both Canada and the USA (see Table 20). It is possible that if pharmacist prescribing is feasible in countries which have a lower health practitioner density than Australia, it is also conceivable in Australia due to our higher practitioner density. I suggest that given Australia's large areas of remote and rural regions, pharmacist prescribing has even more potential to expand convenient access to medications in geographical areas where medical services are limited.

Table 19 Comparative demographics of California, Alberta and South Australia

	California	Alberta	South Australia
Population	37,253,956	3,873,700	1.66 million
Population density	619.2 person/km ²	5.7 person/km ²	1.7 person/km ²

Sources: California⁽²²⁶⁾, Alberta^(227,228) and South Australia⁽²²⁹⁾

Table 20 Physician and pharmacist density in USA, Canada and Australia

	USA	Canada	Australia
Physician density	2.6 physicians/1000 population	1.9 physicians/1000 population	2.9 physicians/1000 population
Pharmacist density	0.812 pharmacists/ 1000 population	0.9 pharmacists/1000 population	1.16 pharmacists/1000 population

Source: Physician density⁽²³⁰⁾. For pharmacist density, refer to^t below.

^t I calculated the density of pharmacists using data on the total number of licensed pharmacists in each country and the entire country's population. The density of Australian pharmacists was calculated using AHPRA⁽²³¹⁾ and the ABS.⁽²³²⁾ The density of US pharmacists was calculated using a National Workforce

I next briefly present an overview of the size of the pharmacist prescriber workforce relative to the overall pharmacy workforce in the jurisdictions at the time of my study tour. Since Albertan legislative changes first permitted pharmacist prescribing, a total of 185 pharmacists out of 4,300 licensed pharmacists (4 percent) have additional prescribing privileges. The establishment of provincial funding for community pharmacists to provide patient assessments in 2012 was anticipated to influence these figures. In California, there were approximately 40,000 licensed pharmacists in 2012, but the hospitals governed and supported prescriber practices within their organisations. For these reasons, I was unable to obtain the total number of pharmacists with prescribing privileges in California.

9.2.3 Key insights

I will present my key study tour insights in three sections in the remainder of this chapter. The major themes will be explored with respect to two settings – hospital and community – with some themes related to both environments. First, I will provide an overview of the settings in which I observed pharmacist prescribing practices. This will be followed by key findings about the facilitators of pharmacist prescribing, and lastly, the challenges to pharmacist prescribing. An outline of my study tour key insights is found in Table 21.

Survey⁽²³³⁾ and the United States Census Bureau.⁽²³⁴⁾ The density of Canadian pharmacists was calculated using Canadian Institute for Health Information⁽²³⁵⁾ and Statistics Canada.⁽²³⁶⁾

Table 21 Study tour key insights

Settings in which pharmacist prescribing was practised		
1) Pharmacist prescribers in hospital settings		
2) Pharmacist prescribers in community settings		
	Facilitators	Challenges
Both hospital and community settings	Patient response and feedback about pharmacist prescribers	Professional resistance against pharmacist prescribing
	Training, education and quality assurance for pharmacist prescribers	
	Inter-professional relationships	Funding models for pharmacist prescribers
	Shared electronic health records	
Community settings	Private consulting area to conduct patient assessments	
	Pharmacy technician regulation	

9.3 Settings in which pharmacist prescribing was practised

I observed and met with pharmacist prescribers who practised in hospital and community settings. Hospital pharmacists performed patient assessments and prescribed within their field of expertise in interdisciplinary team settings in both Alberta and California. They were authorised to prescribe the equivalent of Australian Schedule 4 items (prescription only medications) provided it was within their scope of expertise. Additionally, some Californian hospital pharmacist prescribers had a scope of practice which included controlled drugs. In contrast, the prescribing of controlled drugs was not legalised in Alberta; however, Albertan community pharmacists had other prescribing privileges not reported in California.

9.3.1 Pharmacist prescribers in hospital settings

Hospital pharmacist prescribers functioned within outpatient clinics and health maintenance organisations in Alberta and California. A range of other health professionals also worked in these settings including doctors and nurses. Patients were referred to the clinic and booked to see pharmacist prescribers who were part of a multidisciplinary team; these consultations took place in a private room. Pharmacist prescribers performed patient assessments and prescribed within their scope of practice if appropriate. They often collaborated or consulted with other disciplinary members about patient care decisions.

I met with advanced clinical pharmacists with prescribing authority who specialised in mental health, post-operative pain, menopause, anticoagulation, diabetes, heart failure and other chronic conditions. These pharmacists regarded prescribing for medications as an extended tool in their existing clinical practice, not their only practice. Pharmacist prescribers authorised a range of prescriptive decisions including medication commencement, cessation and dose amendments. I observed pharmacist-led patient assessments which covered the transcription of a patient's medical history, and discussion of laboratory and diagnostic tests. They also checked the patient's compliance monitoring as well as the patient's understanding of their disease progression and medications. Others were involved with creating patient care plans in conjunction with other interdisciplinary team members. In one case, I observed a pharmacist performing physical examinations

(blood pressure and pulse readings, listening to heart rhythms using the stethoscope) before relaying their findings and recommendations to the cardiologist for further follow-up.

Patient follow-up care by hospital pharmacist prescribers depended on the outcome of the assessment. In some cases, follow-up care required ongoing consultations or telephone contact. These follow-up interactions usually involved discussions about laboratory results, medication and compliance matters. Some clinics referred patients back to their primary health care physician after their condition had stabilised to maintain a capacity to accept new case referrals.

9.3.1.1 Prescribing controlled drugs

I was particularly interested in meeting with pharmacist practitioners who prescribed controlled drugs as this is relevant for co-prescribing for OST. Californian pharmacists were able to prescribe controlled drugs if they worked in an organisation which approved this practice. I met with two pharmacists who had authorisation to prescribe controlled drugs in a hospital setting. Both pharmacist prescribers specialised in post-operative pain management and prescribed medications including opioids as part of this role. The pharmacist initiated, amended and tapered/withdrew pain medications, in some cases opioids, as appropriate for a patient's pain management post-surgery.

The monitoring processes of pharmacists prescribing controlled drugs were approved by the hospital. Hospitals were not required to specifically notify the Pharmacy Board of these practices because practices within the legislation were considered routine. All staff within the same institution accessed shared electronic records which enabled transparency in decision making and the monitoring of patient care for quality assurance purposes. Additionally, the hospital had approval and quality assurance review processes: these involved interdisciplinary practice review boards and random chart audits.

Pharmacist prescribing of controlled drugs was not approved within the Albertan or Canadian legislation. At the time of the study tour, Alberta was the sole Canadian province which had pharmacist prescribing legislation, but this legislation did not extend to narcotics, benzodiazepines, barbiturates or anabolic steroids.

9.3.2 Pharmacist prescribers in community pharmacy settings

In Alberta, community pharmacists conducted patient assessments and could prescribe. Albertan community pharmacies had three broad areas: a retail section which sold health products; the dispensary; and a private or semi-private consultation area/room. Patients were assessed by the pharmacist in the private or semi-private consultation area/room. In one pharmacy I visited, there was one full-time pharmacist with prescribing privileges who was located in the private consultation room; other pharmacists managed the dispensary and also serviced nursing homes. In another case, I observed a rural pharmacist who had a dual role working in the dispensary and undertaking patient assessments in the semi-private area.

Patients accessed pharmacist prescriptive services through pre-booked or walk-in appointments at Albertan community pharmacies. Pharmacists were not obliged to dispense the medication at the pharmacy where the prescription was generated. Therefore, if a pharmacist conducted a patient assessment and generated a prescription, the patient was free to have medication dispensed at another pharmacy; however, it seems unlikely that many would for the reason of convenience.

Pharmacist prescribers were authorised to alter medication doses, adapt the prescription, renew the prescription or prescribe in an emergency situation. They also had access to laboratory results and the ability to order relevant laboratory tests. The types of pharmacist prescribing conducted in Alberta are outlined in Figure 4.

Types of Pharmacist Prescribing

Adapting a Prescription			
ALL clinical pharmacists may:			
Alter the dose, formulation, or regimen*	Adapt for therapeutic substitution*	Renew a prescription for continuity of care	Prescribe in an emergency**
* For new prescriptions only			
** Only when it is not reasonably possible to see another prescriber and there is an immediate need for drug therapy			
Initial Access Prescribing			
Only clinical pharmacists with additional prescribing authorization may:			
Prescribe based on their assessment at initial point of access		Manage ongoing therapy (i.e., adapt a refill)	

Source: ⁽²⁴²⁾

Figure 4 Types of pharmacist prescribing in Alberta

9.3.3 Summary of settings in which pharmacist prescribing was practised

Pharmacist prescribers practised in both hospital and community settings. In California, pharmacists prescribed only in hospital settings. In these settings, where there was approval, pharmacist prescribers also prescribed controlled drugs including opioids. In Alberta, pharmacists in both community and hospital settings had prescribing authorisation but their scope of practice did not include controlled drugs. These pharmacist prescribers had the authorisation to initiate, cease or modify medications that were within their practice expertise.

9.4 Facilitators of pharmacist prescribing

In this section, I will describe a range of factors that facilitated the establishment and maintenance of pharmacist prescriber roles in hospital as well as community sectors. Most of the facilitators that I identified applied to both hospital and community settings; these included patient response to pharmacist prescribers, pharmacist educational opportunities,

inter-professional relationships and access to shared electronic health records. I have noted other facilitators which were exclusive to community pharmacy settings: these were the implementation of a private consulting area and the regulation of the pharmacy technician role as a profession.

9.4.1 Facilitators in hospital and community settings

9.4.1.1 Patient response and feedback about pharmacist prescribers

Pharmacist prescriber roles continued to be supported within institutions reportedly due to positive patient responses and improved health care outcomes. Key informants reported benefits including: reduced emergency room visits for medication access or follow-up care, and improved patient convenience and understanding of medication or disease states. Other reported benefits included a reduction in the physicians' workload, as well as positive patient outcomes and reports. Patients of a US health maintenance organisation freely accessed pharmacist services as these costs were already inclusive in their insurance plan. These patients reportedly perceived that pharmacists with prescriptive authority provided added health care value for their existing insurance premiums.

The fact that feedback from patients was so positive suggests that the model had enabled pharmacists to build good therapeutic relationships with their patients, which is also consistent with patient-centred practices.

9.4.1.2 Training, education and quality assurance for pharmacist prescribers

In both California and Alberta, pharmacists completed a comprehensive university program and were required to meet ongoing educational requirements to maintain their practice. After registration, the completion of further clinical education, or a pharmacy residency^u, was optional in both locations. In California, all graduate pharmacists were required to complete undergraduate college, followed by a four-year doctorate degree,

^u Residency involves registered pharmacists completing clinical rotations in 6-8 week blocks for one or two years.

Doctor of Pharmacy (Pharm.D).^v As a result, standard entry for graduate Californian pharmacists into practice required the completion of a minimum of six years of university and Pharm.D qualification. In contrast, standard entry for Albertan pharmacist practice was through completion of a five-year Bachelor of Science in Pharmacy degree, BSc (Pharm); the postgraduate one-year Pharm.D program was optional. Additionally, registered pharmacists in both locations had the option of completing a one- or two-year residency which allowed licensed pharmacists to gain further clinical experience. All pharmacists maintained their registration to practise through completion of ongoing professional development activities as outlined by their registration body.

The focus group pharmacists (in Chapter 8) had indicated that additional training and education for co-prescribers would be necessary, but this was not the case in all the study tour locations that I visited. Key informants in both locations emphasised that a pharmacist prescriber demonstrated prescribing and clinical competency in practice rather than through coursework completion. No formal or mandatory course was required for pharmacist prescribers in Alberta or California. Nonetheless, all pharmacists were expected to confine their prescribing to scenarios where they had adequate understanding of the patient, the condition being treated and the medication being prescribed. Key informants said that postgraduate clinical qualifications were highly advantageous, but not mandatory, for pharmacists to prescribe. They also believed that additional learning opportunities through a Pharm.D qualification, or pharmacy residency clinical rotations, nurtured clinical skills' advancement. These learning opportunities enabled clinical pharmacists to work alongside physicians and nurses to collaborate on prescriptive and patient care decisions.

In Alberta, all licensed pharmacists were authorised to adapt prescriptions without the requirement of additional training beyond their existing qualification. Prescription adaptation describes the modification of a prescribed dose or formulation or medication provision for therapy continuation or emergency access. However, they were required to obtain additional prescribing authorisation (APA) from the Alberta College of Pharmacists

^v The PharmD program is a clinical doctorate degree which provides extensive education in clinical pharmacy practice with a wide range of interdisciplinary staff. A PharmD qualification differs from a PhD qualification which is obtained by research.

to initiate medications (for any conditions within their area of expertise). Additionally, Albertan pharmacists who were authorised to order laboratory tests were required to complete a course and to be available for contact 24 hours a day to discuss the results. Physicians were notified of prescription adaptations and initiations that resulted from pharmacist-led patient assessments.

Albertan pharmacists gained additional prescribing authorisation (APA) through the approval of an application and professional portfolio. These approved pharmacists could initiate medications for any condition provided it was within their scope of expertise. Eligible pharmacists required a minimum of two years' full-time equivalent (FTE) experience with direct patient contact. They submitted a comprehensive application which included three sample care plans to demonstrate their ability to meet key prescribing activities and indicators. Following submission and assessment of the application, approved pharmacists were granted additional prescribing authorisation (APA) by the provincial registration body.

In California, the hospitals had adopted an organisational approach to pharmacist prescriber standards. Key informants believed that it was advantageous to have an organisational approach to practice standards rather than a jurisdictional approach. This allowed the organisation to tailor and initiate services in response to local patient needs with minimal red tape. As a result, hospital practice standards for prescriber competencies, rather than a state or national approach, were reported. I understood the benefits from this approach, but also noted that there was the possibility of pharmacist-prescribing practice standards varying between Californian hospitals due to different organisational expectations or skill sets.

I observed a range of quality assurance systems on my study tour. In the US, hospitals reportedly were responsible for reviewing and monitoring practices within their hospital. These hospitals monitored key performance outcomes which included the tracking of patient laboratory results and progress as well as telephone calls to monitor practitioner activities. Other hospitals conducted random audits which were easily completed due to the electronic trail for all practitioners. Complaints or concerns about pharmacist practices were reviewed by hospitals and/or the pharmacy registration body. The Albertan pharmacy registration body reported nil complaints in relation to pharmacist prescriber practices as of

June 2012. Instead, some families and physicians had questioned why pharmacists had not renewed prescriptions when they were aware that a pharmacist could. I was unable to locate data on complaints about Californian pharmacist prescribing practices.

9.4.1.3 Inter-professional relationships

A crucial factor in the successful establishment and implementation of pharmacist prescriber roles were the relationships that pharmacist prescribers had with other health professionals. Key informants emphasised that the interpersonal skills required to develop positive rapport could not be taught in a course or articulated within an academic paper. When asked about the reasons for their success, they believed that a pharmacist's demonstration of added value to the health care team was contingent on a physician's support. At one Californian university, initial relationships with medical students were established through shared pharmacology and anatomy classes and hospital placements. These contacts enabled initial dialogue and rapport-building opportunities between early career health professionals and encouraged effective inter-professional working relationships later on.

I observed pharmacist prescribers working in interdisciplinary teams to manage patient cases. Clinical pharmacists with prescriptive authority practised in clinical teams which consisted of between two and four interdisciplinary members. I visited two practice settings where a nurse and pharmacist worked in tandem, sitting side by side to conduct patient assessments and collaborate on treatment decisions. In other teams, members also included a physician or dietician. After the establishment of a patient's diagnosis, clinical team members worked together to provide ongoing patient management and care. Pharmacists, nurses and physicians who issued prescriptions routinely collaborated with other interdisciplinary team members about these decisions. For example, interdisciplinary team members considered and discussed patient assessment and relevant laboratory or clinical findings. This process provided different clinical perspectives within the team, and a mutual understanding of why decisions were made.

A pharmacist prescriber's role in one Californian hospital was reportedly actively promoted by physicians in the same organisation. The pharmacist's consultation office was

co-located in the physicians' suite. Physicians also informed new patients through a welcome letter that a pharmacist would contact them on the organisation's behalf. This arrangement enabled patients to directly book in for one-on-one pharmacist consultations without the distractions that might occur in a retail environment and provided more opportunities for patients to interact with the clinical pharmacist.

9.4.1.4 Shared electronic health records

As previously defined (in Chapter 3), continuous relationships can refer to record continuity with the patient's medical information available to all providers caring for them. Shared electronic records enable the pharmacist to provide this continuity of care as they have access to all of the available medical information. I noted that a common feature for all pharmacist prescribers irrespective of their location was their access to shared electronic health records. These arrangements enabled real-time documentation of all patient care decisions regardless of the practitioner's discipline. Pharmacists also communicated electronically with other practitioners to keep others informed and to collaborate on decision making. Electronic communication also allowed pharmacist prescribers to function autonomously, with indirect physician supervision.

In Alberta, the community pharmacist was able to share and access information with other health providers in the same jurisdiction. With patient consent, Albertan community pharmacists could order and access relevant patient laboratory results to make informed prescriptive decisions. These electronic health records collated patient information from multiple locations, including from public hospitals, physicians and community pharmacies and recorded patients' medication dispensing history from other pharmacies, laboratory results, known allergies, diagnostic imaging and other medical reports.

9.4.2 Facilitators in community settings

9.4.2.1 Private consulting area to conduct patient assessments

Privacy is an important aspect of PCC and a private consultation room in the pharmacy would provide a better environment for patient-centred interactions. A private integrated

consultation area in the community pharmacy was crucial in providing an appropriate environment for pharmacist prescribing. The private area also functioned to create a clear physical distinction between pharmacy retail and professional services. All licensed Albertan community pharmacies were required to have a semi-private or private consultation area. Patient discussions with the pharmacist were protected from being seen or heard by others in the pharmacy as the private area had visual and sound barriers. Pharmacist-led patient consultations, assessments and, in some cases, prescriptive activities were conducted in this private area. I was advised that this consultation area was also utilised for professional pharmacist services including the administration of medications by injection, and the monitoring of patient blood glucose levels, blood pressure and anticoagulation markers.

9.4.2.2 Pharmacy technician regulation

Pharmacists were able to dedicate greater amounts of time to patient-centred interactions as having a pharmacy technician could reduce a pharmacist's dispensary workload. Therefore, developing and regulating the pharmacy technician role could present a solution to concerns about excessive workload pressures for community pharmacists as a result of prescribing activities. I observed how pharmacy technicians were up-skilled to be able to dispense and check medications. In Alberta, pharmacy technicians were regulated by the Alberta College of Pharmacists. Pharmacy technicians, upon successful completion of either a two-year online or 10-month full-time course, were qualified to dispense and check medications. These regulatory changes increased the community pharmacist's availability to provide patient assessments and engage with other clinical activities.

9.4.3 Summary of facilitators of pharmacist prescribing

A range of factors were fundamental in facilitating the establishment of pharmacist prescribing roles in Alberta and California. Most of these facilitators applied to both hospital and community settings. Two crucial facilitators contributed to the evolution of prescribing roles by community pharmacists: the first was a private consulting area which

provided an appropriate environment to conduct patient assessments. The other crucial factor was the evolution of the pharmacy technician role in community pharmacies. This transferred almost all dispensary duties from the pharmacist to the technician and enabled the pharmacist to prioritise their time on patient care activities.

9.5 Challenges to pharmacist prescribing

In this section, I describe a range of challenges to the establishment and maintenance of pharmacist prescriber roles. All of the challenges that I identified applied to both hospital and community settings: these included professional resistance to pharmacist prescribing, and limited funding opportunities.

9.5.1 Challenges in hospital and community settings

9.5.1.1 Professional resistance to pharmacist prescribing

Professional resistance to pharmacist prescribing amongst both medical and pharmacy professionals was a barrier in some, but not all, cases. One rural physician was reportedly very supportive of the community pharmacist prescriber believing that she provided collegial support and serviced local community needs which was valuable when medical appointments were unavailable. In other cases, initial resistance from medical professionals reportedly eventually changed to a supportive or at least cooperative working relationship as physicians reportedly accepted the pharmacist prescriber role after they better understood what it involved. Other medical practitioners were reportedly far less supportive of pharmacist prescribing and a long-standing distant professional relationship resulted.

Key informants identified potential reasons why initial resistance from the medical profession was lower than expected or eventually subsided. One key informant explained that the nursing profession gained prescribing rights before pharmacists so suggested that the medical profession was more prepared to engage with the pharmacy profession on similar matters. Another pharmacist perceived that the medical profession regarded the

development of non-medical practitioner roles and pharmacist prescribing as inevitable. The reported working relationship between the medical and pharmacy registration bodies signalled to me that both professions were actively engaged in an open and cooperative manner.

A major facilitator in overcoming some medical professional resistance was the affiliation of the medical and pharmacy school at one university. An indication that the medical school recognised the value of and supported pharmacist advanced practice roles was through effective interdisciplinary academic and clinical relationships. Both faculties were affiliated with the same hospital and various academic staff also practised as hospital clinical pharmacists. Hospital pharmacists had collaborative clinical and/or research relationships with the medical staff within the same university. Key informants in hospital settings reported solid physician support of pharmacists prescribing as part of clinical duties. They explained that a long-standing collaborative working relationship between the pharmacy and medical faculties within the same university nurtured this supportive situation: numerous academic positions were held by advanced clinical hospital pharmacists.

Within the pharmacy profession, mixed responses to community pharmacist prescribers were described. Community pharmacist prescribers reportedly received regular referrals from other pharmacies in their local area, but they also were the subject of complaints from their professional peers. Peer discouragement and professional internal resistance was perceived to originate from pharmacists who were content with the profession's focus on technical or dispensary duties. Key informants speculated that peer discouragement resulted from other colleagues feeling intimidated by those who had gained prescribing privileges.

9.5.1.2 Funding models for pharmacist prescribers

Throughout the study tour, it was clear that funding for pharmacist prescribing roles was an ongoing challenge at a number of practice sites. Funding challenges were addressed through four main sources: a salaried job, an agreement to exchange services without the

transfer of money, government funding to compensate for the time required to conduct patient assessments or other grants.

Pharmacist prescribers were salaried and allocated specific job classifications in hospital settings. This arrangement supported the concept of improving a health system's overall capacity and financial efficiency. The funding base for such positions was either hospital or provincial health services. When I asked about how funding for these positions was secured, pharmacist prescribers responded that the hospital supported these roles after they had demonstrated added value to patient care and the health care team. Hospital pharmacists with prescribing privileges were not reimbursed at the same level as medical practitioners: rather, they were reimbursed at a salaried job classification level for the patient consultation services provided (not for the action of prescribing).

In Alberta, an agreement between the university and hospital enabled an exchange of staff clinical services without formal transfer of funds. This agreement enabled hospital clinicians to teach within university programs and academic staff to practise at clinics without any payment between the two organisations. Various hospital clinics involved academic university staff members and both organisations benefited through the exchange of clinical practice, teaching and learning. These agreements facilitated shared practice and knowledge between practitioners and academic teaching staff which, in turn, supported the ongoing development of prescribing skills within the profession.

Community pharmacies received some financial support to conduct patient assessments and this remunerated them for professional activities other than dispensing medications, including prescribing. Alberta had a funding model for patient assessments conducted at community pharmacies which was provincially funded. Key informants reported that a pro-active approach by pharmacist associations and the results from pharmacist prescribing trials assisted in finalising funding negotiations. Since 1 July 2012, Albertan community pharmacies have been eligible for a C\$20 per patient per day remuneration for the provision of assessments relating to prescription adaption or extension. Consultations for the initiation of medication therapy are remunerated at C\$25 per patient per day.

Many Albertan key informants emphasised that it was pharmacist-led patient assessment that was remunerated, not the act of pharmacist prescribing. Community

pharmacist prescribers did not directly receive this remuneration: rather, it was received by the community pharmacy proprietor or corporation. They were salaried in the same manner as other pharmacists who did not provide this service. Prior to funding approval, pharmacist assessments provided within the first five years were not remunerated and consumers paid a direct pharmacy fee.

Other alternative approaches to funding were also reported on the study tour. In one case, a health innovation grant funded the establishment of an anticoagulation clinic within the hospital. Other remuneration schemes for Albertan community pharmacists permitted them to conduct comprehensive annual care or medication plans for eligible patients. These schemes, when applicable, reimbursed pharmacists for patient assessments and follow-up activities. An additional premium was claimed if the pharmacist undertaking the assessment had additional prescribing rights.

9.5.2 Summary of challenges to pharmacist prescribing

Political and financial challenges have presented major hurdles in the development of pharmacist prescribing. Some pharmacist prescribers encountered direct resistance from some members of the medical and pharmacy professions which may or may not have subsided with time. Funding challenges were ongoing but had been partly addressed through employer salary agreements, organisational exchange of services, government funding or other grants.

9.6 Chapter summary

In this chapter, I have described a range of strategies used in Alberta and California to address the barriers and challenges to pharmacist prescribing that I identified in earlier chapters. Pharmacist prescribing roles were facilitated by patient feedback, access to shared electronic patient health records with internal and external health providers, and various educational/clinical opportunities. Additionally, modifications to a community pharmacy's work environment, changes to staff roles and funding strategies enhanced the pharmacist's ability to undertake prescribing.

Chapter 10 Discussion of thesis findings

In this discussion chapter, I will draw on and examine areas of commonality between my findings across the previous chapters. There are three key themes which recur across Chapters 5 to 9 (see Table 22). These themes are: pharmacist co-prescribing and patient-centred care (PCC), pharmacist co-prescriber training and education requirements, and the impact of pharmacist personal traits. I will conclude this chapter with a short discussion on two practical insights that relate to the feasibility of pharmacist co-prescribing which I gained from the study tour. These are: professional indemnity insurance for prescribing practitioners and concerns about the perceived conflict of interest for community pharmacist prescribers.

Table 22 Discussion themes which recur across findings in Chapters 5 to 9

Discussion themes	Sub-themes
Pharmacist co-prescribing and patient-centred care	Continuity of care Access to treatment Patient participation in decision making Communication Respect/privacy
Pharmacist co-prescriber training and education requirements	
The impact of personal pharmacist traits	

10.1 Pharmacist co-prescribing and patient-centred care

In this section, I will explore the connection between my thesis findings about pharmacist co-prescribing and patient-centred care (PCC). In Chapter 3, I defined the five aspects of PCC for the purposes of this thesis. In this section, I discuss how my findings about pharmacist co-prescribing can deliver improvements to continuity of care, better access to treatment, patient participation in decision making, communication and privacy/respect. Under the existing model of OST practice, pharmacy practice delivers a prescription-focused approach to health care. The current model of pharmacy care for OST

patients appears to focus on activities related to the prescription directions, and refers patients back to the doctor if, for some reason, these directions cannot be fulfilled. In contrast, my findings indicate that co-prescribing is more closely aligned with the patient-centred care (PCC) approach.

10.1.1 Continuity of care

10.1.1.1 Continuity of service provision

Community pharmacists already develop therapeutic relationships with OST patients from their role in supervised dosing. A finding from across my studies was that pharmacist co-prescribing could further enhance the continuity of service provision. This involves two aspects: first, being cared for by one person (as opposed to seeing many different clinic doctors); and, second, the expanded scope of practice that would follow from co-prescribing which would see the pharmacist take responsibility for more aspects of the patient's care (holistic care).

Community pharmacists already play an important role in the care of OST patients under the current model of care. My findings and the literature describe how a meaningful relationship between pharmacist and patient can already occur. Pharmacists are already viewed as an important professional gatekeeper to controlled substances⁽¹¹⁾ due to their responsibility in the supply and record maintenance of S8 medications. Moreover, as OST patients have more contact with their pharmacist than with any other professional under the current dosing arrangements, pharmacists may already have more experience working with OST patients than would be the case with locum doctors.⁽²⁴³⁾ I found that a meaningful patient-pharmacist relationship which develops from regular pharmacy attendance is consistent with existing literature. My study extends the findings of earlier research⁽²⁴⁴⁾ which reported that a positive relationship between pharmacists and patients developed as a result of almost daily interaction. Luger et al. also concluded that, as pharmacists have an almost daily opportunity to develop rapport with patients, this provides them with the chance to become more involved with patient care.⁽²⁴⁵⁾

Continuity of care is partly about being cared for by one person and OST patients indicated that the community pharmacist could fulfil this role due to the long-term relationships formed through regular pharmacy attendance. Australian community pharmacists, like ambulatory care pharmacists^w abroad, are well positioned to be able to establish long-term relationships with patients. A survey of Albertan hospital pharmacists' perceptions on additional prescribing authorisation⁽²⁴⁶⁾ showed that ambulatory care pharmacists were more likely to seek prescribing authority as they see patients independently of a doctor and are able to develop long-term relationship with patients. As a result, ambulatory care pharmacists were better positioned to provide follow-up care, drug therapy monitoring and titration of medication dosages.⁽²⁴⁶⁾ These findings indicate that the development of long-term and consistent therapeutic patient–provider relationships are important in providing continuity of care. As the community pharmacist is positioned to provide continuity of care, they are better suited for the co-prescribing role.

My findings support the contention that co-prescribing would lead to an expanded scope of practice for community pharmacists. A pharmacist who is also a co-prescriber has an enhanced ability, in comparison to their current role, to respond to patient needs. Thus, co-prescribing can expand the therapeutic relationship which already exists between a pharmacist and an OST patient. A pharmacist co-prescriber is required to take greater responsibility for the whole patient than under a prescription-focused approach and this may strengthen their ability to provide more holistic and continuous care to OST patients.

10.1.1.2 Record continuity and electronic prescribing

Electronic prescribing has been highlighted as crucial in shifting the pharmacy profession's focus from the supply of products to patient-centred care (PCC).⁽²⁴⁷⁾ In general, record continuity ensures that the patient's medical information is available to all providers involved in their care: this can be enhanced with the implementation of shared electronic records as an aspect of co-prescribing.

^w Ambulatory care pharmacists see patients in a clinic office to manage chronic disease states.

If a community pharmacist had shared access to electronic patient health records, this would help to ensure record continuity and enhanced patient care. The focus group pharmacists welcomed the idea of having a better understanding of the patient's background and of the reasons why certain treatment decisions were made. They recommended further exploration of a secure internet-based program for pharmacists to communicate information, not just prescription details, with doctors. They also suggested that shared access to eHealth records could improve communication between health practitioners and better enable them to make more informed treatment decisions. All pharmacist prescribers who I visited on the study tour had access to some form of shared electronic health record and this facilitated information sharing with doctors. Additionally, in one setting, OST doctors also had access to patients' pharmacy attendance records via shared electronic patient records.

10.1.2 Access to treatment

Patients could have increased access to treatment in a co-prescriber model through decreasing the unmet demand for OST. Patients and pharmacists predicted that co-prescribing offered the possibility of increased treatment vacancies if the workload for doctors could be reduced. Increased OST vacancies would assist in meeting unmet demands and increasing access.

Accessing a co-prescriber at a community pharmacy would offer patients enhanced treatment access as it would be more convenient. The patients in my study had identified that the community pharmacy was a convenient location for them to receive both their prescription and treatment. The study tour also demonstrated that pharmacist prescribing offered improved convenience for patients in both hospital and community settings. Although the Australian literature has almost exclusively supported pharmacist prescribing in hospital settings only, it was clear from the study tour that co-prescribing would also improve medication accessibility and patient convenience in community settings. In general, OST patients have easier access to community pharmacies than to hospitals. Therefore, a pharmacist prescriber has a greater potential to deliver patient-centred health care to OST patients if located in a community setting rather than in a hospital setting.

10.1.2.1 Pharmacy layout

One of the key aspects of my findings which recurred across patient interviews, pharmacist focus groups and my study tour concerned the physical pharmacy layout. The layout of a health service provider's facilities impacts on a patient's service access owing to its influence on the level of privacy afforded during patient-provider interactions. If co-prescribing can offer patients (who value privacy) a better experience of privacy during pharmacy consultations, patients are more likely to access it. In this section, I will discuss my findings on patient views of privacy, and some of the factors that require consideration should a private area be implemented in Australian community pharmacies.

I found that patients and pharmacists had different approaches and perceptions to ensuring pharmacy privacy. Both patients and pharmacists valued privacy and identified how pharmacy layout influenced privacy experiences, but they had different views on how it was ideally achieved. Most patients viewed being treated like all other pharmacy customers, or at least not being treated as 'different to everyone else', was a means to ensuring privacy. For some patients, pharmacy layout was less important than being treated the same as other customers as being treated 'differently' eroded their sense of themselves as human beings. Being treated 'differently' included having to enter through a different pharmacy entrance to other customers, or being made to queue outside the pharmacy. In contrast, pharmacists did not identify privacy as a concern when patients were queuing for pharmacy entry. Rather, pharmacists preferred to have a dosing area, 'different' to where other customers enter to ensure privacy for patients. They also believed that a private consulting environment was required for a co-prescriber to perform their duties.

Ensuring adequate privacy for all patients with one specific pharmacy layout will be a challenge, given the range of patient views about what constitutes privacy. Different patients perceive, interact and experience the same layout differently. If, however, the important thing is that patients feel they are treated with respect and not made to feel different from others, Albertan community pharmacies, which had a pharmacy consultation area able to be utilised for all customers, could be less likely to result in a perceived treatment difference. This would fulfil both the need for privacy for those

patients who do not want to be seen and allow OST patients to be treated like all other customers.

My findings from my patient interviews on pharmacy privacy are not dissimilar to the literature about patient satisfaction with OST. Patient satisfaction with privacy provision in pharmacies was mixed in my study and in other studies. My findings about privacy echo a UK study⁽²⁴⁸⁾, where patient views ranged from feeling embarrassed that other customers could witness medication administration, to not caring at all. Another UK study⁽²⁴⁵⁾, as in my study, found that dosing in a separate or quiet area of the pharmacy did not necessarily reassure patients of privacy when interacting with pharmacists.

The physical layout of the pharmacy was not the only influence on patient perceptions of privacy. As previously discussed, patients' perceptions of adequate privacy were influenced by the nature and quality of their interactions with the pharmacist. However, the pharmacists in my focus groups were not necessarily aware of how their interactions impacted on patients' perceptions of privacy. In Chapter 8, pharmacists correlated patient privacy only with appropriate pharmacy set-up. It is possible that pharmacists did not discuss privacy protection for patients when entering or queuing outside the pharmacy because the traditional prescription-focused approach has meant that these other aspects of care have not been considered. This also supports the notion that a co-prescribing model is more aligned with patient-centred care.

In summary, there are a range of reasons why co-prescribing would increase access to services. Firstly, patients could have increased access to treatment if introducing co-prescribers reduced the workload for doctors which, in turn, could enable doctors to take on more patients. Secondly, having access to a pharmacist co-prescriber at a community pharmacy would offer patients enhanced convenience as they are already regularly attending the pharmacy. Lastly, if the pharmacist co-prescriber could offer patients (who value privacy) either via an enhanced provider service or pharmacy structural changes a greater experience of privacy, patients would probably then be more inclined to access the service.

10.1.3 Patient participation in decision making

Patient-centred interactions can be enhanced with pharmacist co-prescribing due to increased patient participation in the decision-making process. The patients who I interviewed predicted a greater sense of involvement and autonomy under a co-prescribing model. They welcomed co-prescribing if it allowed them to be involved with treatment decision making. Greater patient involvement seemed to be more possible as the pharmacist was more accessible and there were already good relationships that had developed from supervised dosing.

Pharmacists also noted that patients seemed more encouraged and motivated when they were able to actively contribute to their own treatment progress: for example, this occurred when patients requested a dosage reduction and were able to remain stable after making this decision.

It is possible that co-prescribing could help more patients to become or remain more stable and therefore transition to the types of patients for whom co-prescribing would be suitable. However, neither the interviewed patients nor the focus group pharmacists believed that everyone would be a suitable candidate for pharmacist co-prescribing. If individuals wish to intentionally misuse medications, their behaviours are unlikely to alter regardless of the pharmacist's role. Moreover, some interviewed patients worried that co-prescribing might have adverse effects on existing pharmacist relationships due to the changes in power dynamics acquired from the new role. Although some patients did raise these concerns, on balance they considered that co-prescribing would result in more autonomy.

10.1.4 Communication

I have previously discussed how eHealth records could enhance communication between practitioners. Patients believed that co-prescribing could be a catalyst for practitioners to better communicate with each other about treatment decisions. Similarly, pharmacists predicted an enhanced professional working relationship with doctors from co-prescribing as they would be more actively involved with the decision-making process rather than just following prescription directions. On the study tour, I also noted that health

practitioners involved with patient care were actively engaged with each other through discussions and electronic communication modes which reflected a more collaborative approach to care. Thus, if eHealth records were implemented as part of co-prescribing, there would be improvements in the communication between doctors, pharmacists and patients about treatment matters if they were working in a collaborative manner.

Although patients and pharmacists predicted that communication between practitioners could improve with the implementation of pharmacist co-prescribing, it is also possible that the opposite could occur. There is the possibility of conflicted decision making, fragmented patient care or increased opportunities for manipulation. These circumstances could be further exacerbated if patients were managed by multiple pharmacists or if there were inadequate internal communication processes within a pharmacy. However, if pre-determined guidelines and practices were established with the assistance of shared electronic records, these concerns could be effectively managed.

10.1.5 Respect/privacy

Patient-centred care (PCC) is ultimately about responding to patients' own concerns about their health and lives, not imposing things on them. The patients' views on privacy showed that different patients may want to receive pharmacy services or may experience pharmacy layout in different ways. The philosophy of PCC could guide practitioners on how to better respect patients' privacy needs through physical infrastructure changes or by increasing the quality of their interactions.

10.2 Pharmacist co-prescriber training and education requirements

In all of the findings chapters in my thesis, pharmacist training and education requirements were raised in response to pharmacist co-prescribing. In this section, I discuss the similarities and differences and the opinions between my findings and the literature about mandatory postgraduate education for pharmacist prescribers. I will then compare the different international approaches to ascertaining prescriber competency.

Lastly, I will discuss elements of a pharmacist co-prescriber education program that policy makers should consider if it were a mandatory requirement in the future.

The interviewed patients, the pharmacist focus group participants and study tour key informants differed with regard to their views on the need for compulsory additional pharmacist co-prescriber training. Although most interviewed patients (in Chapter 6) believed that a pharmacist's existing qualification was sufficient, pharmacists (in Chapter 8) overwhelmingly disagreed with this view. All focus group pharmacists who supported co-prescribing would welcome the completion of additional training to fulfil this role. In contrast, some interviewed patients believed that pharmacists already had sufficient knowledge and training about medicines to be authorised co-prescribers. Moreover, on the study tour, it was evident that pharmacist prescribers had not all completed mandatory postgraduate education: rather, some had learnt clinical skills on the job or been mentored by colleagues.

Other Australian studies, as with my thesis findings, have indicated support by some pharmacists for the pursuit of prescribing rights^(138, 141, 249), but not all pharmacists believed that everyone in the profession was suitable and that additional training was essential. My focus group findings are similar to the limited Australian literature about pharmacist prescribing within other health contexts. A questionnaire and focus group discussion with Australian hospital pharmacists in NSW⁽¹⁴¹⁾ found support for prescribing privileges amongst participants, consistent with my thesis findings. However, I found, as did other studies^(138, 249), that pharmacists supported a dependent prescribing model pending the provision of further training and support.

Internationally, a range of training and education formats for pharmacist prescribers are currently delivered. These differences show that the completion of postgraduate education for pharmacist prescribers does not always demonstrate longer-term prescribing competency in clinical settings. A formal university postgraduate course is required for pharmacist prescribers in the UK and NZ, but not in Canada or the US.

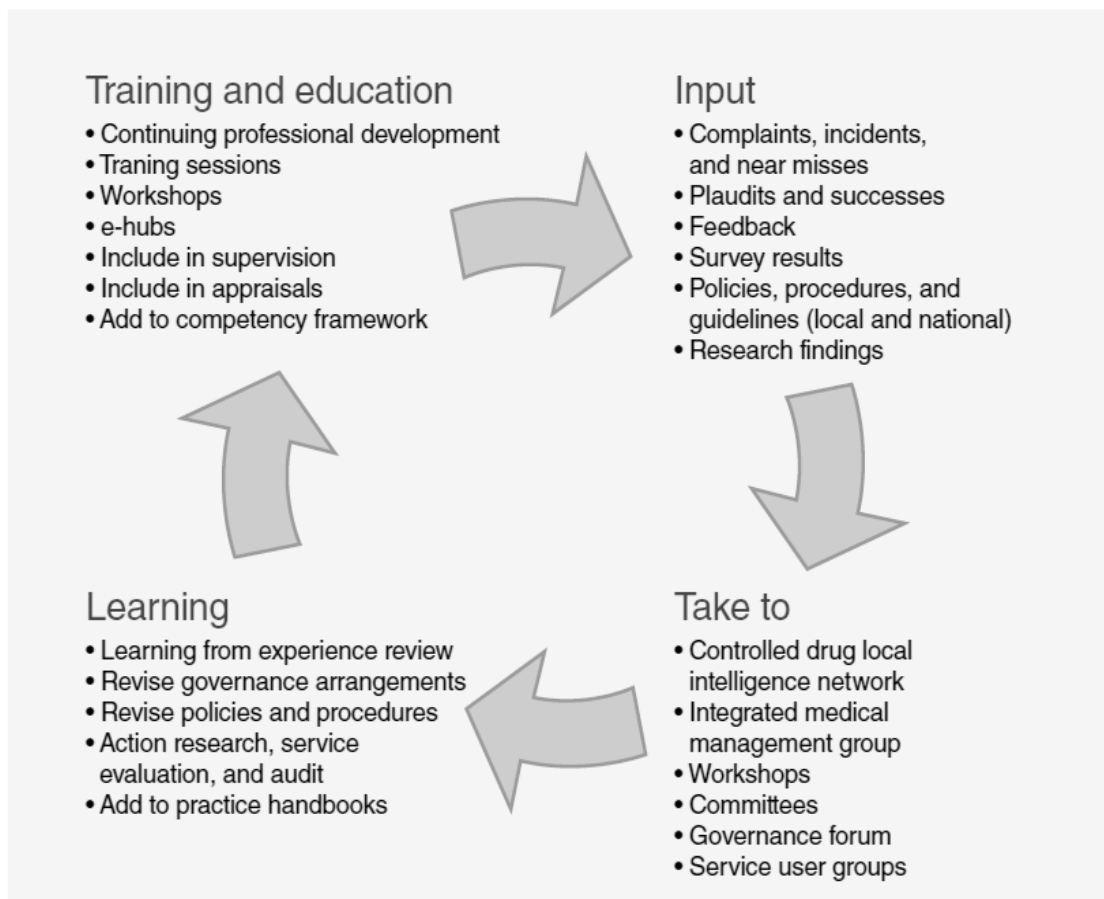
Mandatory training for pharmacist co-prescribers offers benefits, but these requirements also present other practical limitations. Mandatory training can offer standardised key learning objectives and greater regulation of practices. However, it is

possible that pharmacists may be deterred from participating in training programs if they are too lengthy, too demanding or of high cost. Therefore, mandatory but intensive training for co-prescribers could act as obstacles to the uptake of pharmacist co-prescribing. Moreover, the successful development of two established pharmacist prescribing models internationally which have different educational requirements provides evidence that either approach could potentially be successful in Australia.

The literature suggests that potential education programs for pharmacist prescribers in a number of formats are worthy of consideration. Leach recommended developing a training program for pharmacist OST prescribers that is both theoretical and practical, using online as well as self-directed learning. He also suggested that pharmacist OST prescribers be required to spend a specific number of days at a local drug and alcohol specialist service.⁽¹³²⁾ A model for continuing quality improvement for prescribing education has been previously described in the literature.⁽¹⁰⁰⁾ Turner's model encompasses training and education, input, learning and feedback to other stakeholders (see Figure 5 below). If training becomes compulsory for pharmacist co-prescribers, these factors will require consideration in the broader context of policy implementation and monitoring.

In addition to Turner's model, the NPS^x (National Prescribing Service) Prescribing Competencies Framework and specialist staff at drug and alcohol clinics are other potential sources to consult in the design of a training program for potential pharmacist co-prescribers for OST. The structure and content of a potential co-prescriber educational program could be guided by available resources and service providers. The NPS has developed a Prescribing Competencies Framework in response to the increasing number of professions that can, or are pursuing, prescribing rights. This framework is designed to be relevant to all autonomous prescribers and potentially could be used to guide the evolution of future training programs for pharmacist co-prescribers of OST.⁽¹⁶³⁾ Other organisations that could play a potential role in education for pharmacist co-prescribers of OST include DASSA, other government bodies or universities.

^x The NPS is an independent organisation which is funded by the Department of Health and Ageing. It supports quality use of medicines which involves safe, wise and judicious prescribing and dispensing, and appropriate medical test referrals. It provides health professionals and consumers with access to information to encourage effective prescribing and medicinal use.⁽²⁵⁰⁾



Source: ⁽¹⁰⁰⁾

Figure 5 Model for continuing quality improvement for prescribing education

10.3 The impact of pharmacist's personal traits

The third consistent finding across this thesis was the influence of a pharmacist's personal traits on their willingness and capacity to be (or become) an effective prescriber. In Chapter 7, I showed that a patient's impression of their interactions with the pharmacist influenced their perception of and sensitivity to privacy. A positive and respectful relationship between a patient and pharmacist could reduce a patient's sensitivity about privacy. This was particularly exemplified by one interviewed patient who felt less embarrassed when being dosed at the front pharmacy counter because she felt valued and encouraged by the pharmacist. The feeling of being treated with respect and just like other pharmacy consumers seemed to be a strategy to alleviate privacy concerns for some OST patients.

Findings from the focus groups and study tour indicated that a pharmacist's confidence in their ability to become a co-prescriber was influenced by personal attributes. These personal attributes appeared to be more influential than years of experience or the completion of postgraduate education. Both recent graduates and an experienced pharmacist cited reservations about their confidence in autonomously authorising dose amendments or prescription changes without an agreed management plan. The former could have lacked experience, and the latter appeared reluctant to step out of their established dispensary role. However, other recent graduates and more experienced pharmacists were willing to co-prescribe if adequate training and an appropriate space were provided.

My findings about the possible relationship between personality traits and successful pharmacist prescribers are echoed in the broader literature about pharmacist characteristics. Pharmacists have been regarded as being a risk-averse profession^(53, 251), and their personal traits could be barriers to them ultimately becoming prescribers. The pharmacy profession's move away from compounding traditional extemporaneous products to dispensing pre-made pharmaceutical products is believed to explain why modern-day pharmacists are risk averse.⁽⁵³⁾ Rosenthal, Austin and Tsuyuki⁽²⁵¹⁾ described obtaining prescriptive authority as a "risk to the status quo of pharmacy practice". A pharmacist prescriber must take responsibility for patient outcomes, rather than forwarding recommendations to doctors with the possibility that their suggestions would be implemented.⁽²⁵¹⁾ It is possible that the traditional hierarchical relationship between a pharmacist and a doctor^(164,252) does not nurture initiative or leaders. Rather, it may encourage development of the pharmacy default position of "referring back to the doctor". This long-established fall-back position could act as a disincentive to becoming a leader or changing professional behaviours. Rosenthal, Austin and Tsuyuki⁽²⁵¹⁾ questioned whether pharmacists themselves were the ultimate barrier to professional change. They claimed that pharmacists in general lack confidence, have a fear of new responsibilities and are risk averse. In contrast, a pharmacist prescriber (or co-prescriber in my study) must use clinical judgment, undertake new responsibilities and do so with reasonable confidence. Thus, they argue that, due to these personality attributes, the majority of pharmacists have not been successful in advancing long-term practice changes.⁽²⁵¹⁾

Understanding the influence of such personality traits within members of a profession could aid the design of educational approaches to maximise the effectiveness of a pharmacist co-prescriber. Personality traits affect a practitioner's preferred learning style, and their approach to solving problems and human interactions. If the pharmacy profession's collective personality characteristics are a contributing factor to its limited practice, then this could be addressed by the application of particular teaching approaches to existing professional members. Additionally, selecting specific types of entry graduates could aid in overcoming these personality barriers to facilitate change in future generations. This concept is similar to the process applied to select desired personality traits within undergraduate medical⁽²⁵³⁾ and dental⁽²⁵⁴⁾ applicants.

Personal traits and opinions of individual pharmacists with regards to their acceptance of the policy proposal could be explained by a number of factors. Gender and experience conceivably influenced a participant's support of either independent or dependent pharmacist prescribing. It appeared that, regardless of years of experience, male pharmacists were more confident in taking an assertive role such as that of an independent prescriber. Additionally, prior participant experience with ordering tests and pharmacy ownership might account for their differing opinions. Seven of the focus group participants indicated that they held pharmacy ownership and this may have also influenced their views. Lastly, a belief in the diversification of pharmacy profession roles was another reason for support of pharmacist prescribing.

10.4 Practical insights about pharmacist prescribing gained on the study tour

In this section, I will briefly discuss two practical insights related to the feasibility of pharmacist co-prescribing which I gained on my study tour. These two aspects are not common themes throughout all of my thesis findings, but they are important as they have consistently been stated as barriers to co-prescribing in the literature. First, I will discuss professional indemnity insurance for prescribing practitioners and then how Alberta has addressed concerns about the perceived conflict of interest for community pharmacist prescribers.

10.4.1 Professional indemnity insurance for pharmacist prescribers

The international literature has predicted that pharmacist prescribing will increase professional and legal liabilities. Australian pharmacists wishing to be co-prescribers will inevitably be challenged with the same concerns about professional indemnity insurance as have been dealt with by their international counterparts. Pharmacists have been warned that they will face increased and new professional and legal responsibilities for prescribing.⁽⁵³⁾ Additionally, an Albertan survey⁽²⁴⁶⁾ found that several factors impacted on Albertan hospital pharmacists who did not have additional prescribing authorisation (APA) and who had never applied: one factor was the increased responsibility and liability associated with APA. Thus, potential increased liability had been one of the reasons for the slow adoption of prescribing authority by hospital pharmacists in the Canadian province.

Given this background, I expected the focus group participants to be concerned that becoming a co-prescriber would increase the risk of litigation. One focus group pharmacist did cite reservations about being a co-prescriber for OST owing to the heightened sense of responsibility when prescribing opioids. However, none of the focus group participants directly identified increased professional liability for pharmacists or intentional misuse of prescribing privileges by pharmacist prescribers.

In a similar way, prior to the study tour, I had understood that the prevalence of litigation in the USA was higher than in Australia: I therefore anticipated that the cost of professional indemnity insurance for a pharmacist prescriber would be correspondingly high. Contrary to my original perception, the reported cost of professional indemnity insurance in the USA was similar to the cost for Australian pharmacists. One Californian mental health pharmacist prescriber reported an annual indemnity fee of US\$130 per year. He explained that pharmacists, even those with prescribing authority, were perceived to be at low risk of litigious action. Similarly, in Alberta the requirement for professional liability coverage, regardless of their prescribing authorities, was the same for all registered pharmacists. Thus, although I had expected professional insurance costs to be a barrier to pharmacist prescribing, this was not the case.

The risks associated with prescribing for any profession cannot be eliminated with certainty, but they can be minimised. Irrespective of which profession prescribes medications, in reality, any practitioner's prescriptive decision will carry some degree of risk. In the context of pharmacist co-prescribing for OST patients in SA, strategies to minimise risks need to be further defined. These strategies could include solo medical practitioner management of OST patients during periods of greater risk, such as at the time of treatment initiation, or for unstable or complex cases. Additionally, other strategies to reduce risk include clinical governance through the maintenance of competency from ongoing continuing professional development and audits.⁽²⁵⁵⁾

10.4.2 Perceived conflict of interest for community pharmacist prescribers

I was aware that the main argument against community pharmacist prescribing in Australia is the perceived conflict of interest due to competing commercial interests and was keen to discuss this topic further on the study tour. The literature reports that medical practitioners have major concerns about the extension of prescribing rights to community pharmacists⁽²⁵⁶⁾ due to the perceived 'shopkeeper' image^(160,161) and perceived conflict between the roles of a pharmacy as a business and as a health care provider.^(160,161)

Despite these concerns, other health professions in Australia already have dual prescribing and supply roles. Nurse prescribers in acute admission departments can administer intravenous (IV) fluids to patients thereby reducing the time delay in waiting for a medical practitioner. In such a situation, the patient's risk of dehydration or electrolyte instability is reduced.⁽²⁵⁷⁾ An ophthalmologist can perform optical surgical procedures, and prescribe and supply patients with a range of medications including antibiotic, anti-inflammatory and lubricating eye drops. The ophthalmologist can own their surgery, and prescribe and supply patients with eye drops as there are clear benefits for patient care in their dual role. In all cases, patients who consult with a health professional consent to the assessment, medication or service that is provided.

My study tour key informants used their awareness of these other health professions to point out that a wide range of health professionals, and not just pharmacists, recommend health services or products that could also financially benefit them. They also explained

that it was a health practitioner's responsibility to abide by a professional code of ethics and make decisions in a patient's best interest. Moreover, in Alberta, these concerns had been addressed by appropriate governance and regulation. The Albertan pharmacy regulatory body recommended that the roles of dispensing and prescribing be kept separate where possible for quality assurance; however, they also acknowledged that this would not be feasible in all cases such as in rural settings.

10.5 Study limitations

There were two key limitations to my research. First, there was the lack of input from the medical profession. Due to the large amount of data that was already collected, it was not feasible to collect further data from GPs or addiction specialists. Therefore, future research investigating the views of GPs and addiction specialists is recommended. Second, the lack of rural participants in the patient interviews and pharmacist focus group interviews was another limitation of the study. Although I did not interview rural patients, issues of privacy are likely to be exacerbated in small communities where there are fewer strangers. It is therefore possible that rural patients would have reported greater concerns about privacy than what were reported in the interviewed sample. In addition, it is likely that having more rural patients in the study would have increased the emphasis on the benefits of the co-prescribing model even more.

There were also a number of study limitations related to the specific studies which I will outline in the next sections.

10.5.1 Limitations of patient interviews

One limitation of my interviews with patients was that participants were recruited at one of four state government drug and alcohol clinics. Therefore, the sample represents only a small proportion of the state's OST patient population. Patients at other government clinics or in private practices could have held different views. In addition, I did not consider it ethical to approach people for an interview if they were likely to be distressed or experiencing physical withdrawal symptoms. As a result of these ethical concerns, it

was not possible to include the experiences of patients who were not able to enter into treatment, withdrew from treatment before 12 months or were on a waiting list. It is thus possible that my study did not reveal the full range of patient opinions about pharmacist co-prescribing for OST.

The reason why interviewed patients expressed that they had a more consistent relationship with their pharmacist compared to their doctor could be explained by the study recruitment location at the clinic. All except one patient in this study were consulting with government clinic doctors at the time of the interview. Clinic doctors are regularly rotated (every 3, 6 or 12 months), which explains why medical practitioner continuity was not assured. For patients who had been in the clinic service for more than 12 months, the experience of rotating clinic doctors is presumably exacerbated. This roster could also explain why interviewed patients reported more consistent relationships with pharmacists compared with clinic doctors. It also accounts for why patients did not feel that they received continuity of treatment care from the clinic's medical practitioners. Furthermore, clinic doctors could find it more difficult to identify changes in patient behaviour or drug misuse patterns due to their inconsistent relationships with patients.

Patients are presumably able to nominate consultation with one doctor in private practice; therefore, the sense of inconsistent doctor relationships might not be as prevalent for patients being treated by doctors outside of the clinic. Private patients possibly have differing views about relationships with their doctor compared to the participating clinic patients in my study. These differing views about treatment continuity or practitioner relationships could, in turn, also influence the level of patient support for the policy proposal. Most of the patients interviewed (13 out of 14) were being treated by a clinic doctor at the time of the interview; however, five of them had previously received OST from a private prescriber. Thus, a total of six interviewed patients had experiences with both private prescribers and clinic OST doctors. A comparison in patient experiences with doctors in a community or clinic setting was not specifically discussed during the interview, but in hindsight this would have been valuable.

Another factor that may have impacted on the interview data is my background. I am a pharmacist, although I have no clinical relationship with the patients approached for an

interview. A discussion on how my personal background and experiences shaped the conduct of this research was previously described in the reflexivity section in 0.

10.5.2 Limitations of focus group interviews

My focus group interviews also had some limitations. By the time I reached the third focus group, there were no new themes emerging. However, it is possible that participation of pharmacists in more remote rural areas could have yielded additional themes. In addition due to time restraints, the research did not also seek an official viewpoint from pharmacy professional bodies.

The focus group participant recruitment process could also have contributed to the overall supportive responses to pharmacist co-prescribing as a proposal. Individuals who supported or favoured the proposal may have been more inclined to respond to my study invitation (self-selection bias). Non-respondent pharmacists were possibly not interested in, or were unsupportive of, the policy proposal. Conceivably, non-respondents might have had a less optimistic view, or strongly opposed the policy proposal. However, I facilitated the interviews in a manner which encouraged a range of views to be heard.

10.5.3 Limitations of the study tour

I did not explore the perspectives of other stakeholders affected by pharmacist prescribing in my study tour. Pharmacist prescribing directly impacts on patient care, so patient perspectives and experiences would have been valuable. In addition, the exploration of attitudes of interdisciplinary colleagues directly working with pharmacist prescribers could have offered a broader account of co-prescribing. Thus, in future research, these perspectives could provide a richer account of the impact of pharmacist prescribing on the health care system.

The pharmacist prescribers visited on the study tour did not prescribe OST. Therefore their experiences in prescribing different medicines and for a different patient group might mean that they are not comparable to the proposed policy of pharmacists' prescribing for OST clients in SA.

The perspectives I gained from the study tour could reflect the views of an elite minority of pharmacists. My key informants' views may have been more positive and optimistic, reflecting the experience of a minority of the pharmacy profession who had overcome the political, financial and practical challenges to take on new challenges outside of traditional roles and become successful prescribers in the jurisdictions that I visited. Although these are positive traits, possibly the profession's majority are less motivated or willing to change practice beyond their already established roles.

My background could also have influenced and impacted on the key informants and practice sites I visited on the study tour. As an international researcher, it is likely that I was directed to key informants and practice sites that were regarded by locals as exceptional examples of practice. As I was only referred to best practice sites, I possibly may not have gained a thorough understanding of the challenges, limitations and failures of pharmacist prescribers.

10.6 Chapter summary

In this chapter, I have examined areas of commonality between my findings and discussed three key themes which recurred across Chapters 5 to 9. Firstly, pharmacist co-prescribing for OST shifts pharmacy practice from the traditional prescription-focused approach more towards patient-centred care (PCC). The reason is that it can offer patients a greater sense of continuity of care, enhanced access to treatment and participation in the decision-making process. In addition, communication, respect and privacy can be enhanced. Secondly, I discussed the different approach to pharmacist co-prescriber training and education requirements that were suggested by patients, pharmacists and key informants on the study tour. The third consistent finding across this thesis was the influence of a pharmacist's personal traits on their willingness and capacity to be (or become) an effective prescriber. I then addressed the previously identified concerns in the literature about professional liability and perceived conflict of interest for community pharmacist prescribers by offering practical insights as to how these concerns were addressed in an international setting. Lastly, I discussed my research and study limitations. In the next and final chapter I will provide concluding remarks and future directions in response to these findings.

Chapter 11 Conclusion and future directions

The aim of this thesis was to explore the potential implementation of pharmacist collaborative prescribing (co-prescribing) with medical practitioners for OST patients from the perspective of pharmacists and patients. My thesis research questions were:

- 1: What are patients' experiences with the existing model of care for OST, including their experience of privacy in the pharmacy?
- 2: What views do patients have about doctors and pharmacists co-prescribing for OST?
- 3: What views do pharmacists hold on co-prescribing with doctors for OST?
- 4: What are the facilitators and barriers to the implementation of pharmacist prescribing in the US and Canada?

Through my interviews with patients, focus groups with pharmacists and study tour, I found that:

1: Interviewed patients reported challenges and inconsistencies with the delivery of OST services under the existing model of care. This included variable experiences in access to treatment initiation, variable monitoring of patients and being treated by different clinic doctors. Privacy was important for nearly all of the patients, but mixed responses were given on how best to achieve it. It may be difficult for pharmacies to maintain privacy to the satisfaction of all patients because different people perceive the same layout differently.

2: Patients identified benefits of pharmacist co-prescribing that were aligned with PCC: these included convenient access to services, improved monitoring of patients and enhanced relationships with the health professionals involved with their care. Despite these benefits, pharmacist co-prescribing was not regarded as suitable for all cases, with stable patients viewed as ideal candidates.

3: Pharmacist focus group participants believed that co-prescribing for OST could be advantageous for all three stakeholder groups (patients, pharmacists and doctors). They also anticipated challenges to co-prescribing due to manipulative patient requests,

increased workload concerns, adequate pharmacy set-up and increased pharmacist responsibility.

4: Pharmacist prescriber roles in Alberta and California were facilitated by patient feedback, access to shared electronic patient health records and educational opportunities. Barriers to pharmacist prescribing were addressed through modifications to community pharmacy infrastructure, changes to the pharmacy technician role and funding.

Thus, this thesis has demonstrated that South Australian pharmacists could extend their existing scope of practice to co-prescribe for OST patients. In this final chapter, I will restate the arguments presented in each of my thesis chapters. I will then present five future directions for the development of pharmacist co-prescribing for OST in SA.

My research acknowledges that there are various challenges for pharmacist prescribing. However, the perspectives of the patients and pharmacists in my studies in conjunction with insights from Alberta and California can be used to formulate a strategy for collaborative prescribing for OST patients in SA. There is unlikely to be a unanimous consensus among all stakeholders about support of or objections to pharmacist co-prescribing for OST. But if health care is truly responsive to the needs of the patient, then health professionals will need to refine their skills and capacity⁽¹⁷¹⁾ to align treatment focus on patient-centred care (PCC).

11.1 Summary of thesis chapters

In this section, I will briefly summarise my thesis chapters and findings in chronological order from 0 to 10.

My thesis began with a description of opioid dependence and its harms for both individuals and the community. In 0, I provided an overview of the Australian health care system as well as OST. I also described how the demand for OST exceeds the interest and ability of medical practitioners to meet these needs. In Chapter 3, my literature review of pharmacist prescribing and OST demonstrated that pharmacy practice has traditionally been focused on the prescription or medication supply process, but is now moving towards a patient-centred care (PCC) approach. I also described the development of non-medical

prescribing in Australia and internationally, noting that pharmacist prescribing is more developed internationally than in Australia. In Chapter 4, I outlined the methodology and qualitative methods used for my multi-phase case study research and documented my own process of reflexivity.

In Chapter 5 I outlined three main themes which described patients' views about their experiences with the current model of OST care. Common to all of these themes was the notion of variability. First, patients had variable access to and experiences of treatment: some patients experienced easy initial access whereas others received delayed initial treatment access. The consequences of delayed access to treatment included continued drug use through criminal activities and doctor shopping. Second, patient monitoring by pharmacists was variable: in some cases, this led to opportunities for medication misuse. Third, patients' relationships with the health professionals involved with their care also varied. Patients felt that a meaningful relationship with pharmacists could develop from regular pharmacy dosing attendance, but such relationships were not always possible with the clinic doctor.

In Chapter 6, I showed that aspects of pharmacist collaborative prescribing (co-prescribing) for OST were aligned with elements of patient-centred care (PCC). The majority of patients interviewed supported pharmacist co-prescribing, but only for stable and long-term cases. First, patients welcomed more convenient access to services through a pharmacist co-prescriber. Second, they thought that pharmacists had a better understanding of a patient's overall progress than doctors and were better positioned to immediately respond. Third, patients anticipated changes to the roles and relationships that they had with doctors and pharmacists if co-prescribing were introduced. Patients proposed that a co-prescriber should be able to authorise prescription continuation and dosage amendments at the pharmacy. They also believed that a medical practitioner's continued involvement, particularly for treatment initiation, was important.

I presented the findings on patients' perceptions of privacy in the pharmacy in Chapter 7, focusing initially on those patients who did not have any privacy concerns. I then discussed how patients who were concerned about privacy responded to three different pharmacy layouts: dosing at the front counter, dosing in a separate room and dosing in a screened or partitioned area inside the pharmacy were explored. The key finding from

Chapter 7 was that patients in general wanted to be treated like everyone else in the pharmacy. Another key finding was that meaningful patient interactions with the pharmacist reduced their sensitivity to privacy when attending the pharmacy.

I presented my findings from the focus group interviews with pharmacists in Chapter 8. Pharmacist focus group participants were cautiously supportive of co-prescribing for OST patients, but anticipated serious challenges to its feasibility. First, most pharmacists were clearly more comfortable with a dependent rather than an independent prescribing model, and few participants supported independent prescribing. Their support was conditional on diagnosis and initiation of treatment by a doctor, appropriate pharmacist training and a private area inside the pharmacy. In this chapter, I also presented focus group participants' responses with respect to the benefits, barriers and facilitators to co-prescribing according to their impact on three stakeholder groups (patients, pharmacists and doctors). Focus group participants expected serious challenges to the implementation of pharmacist co-prescribing, including medical profession resistance. Additionally, not everyone wanted to be a co-prescriber owing to concerns about increased workload, responsibility or being manipulated by opportunistic patients.

In Chapter 9, I presented my study tour insights about pharmacist prescribing in Alberta and California. These insights suggested solutions to the anticipated challenges to co-prescribing that were identified in previous chapters. In the study tour sites that I visited, it was reported that pharmacist prescribers improved the human and economic aspects of services delivered to patients. Firstly, I focused on the facilitators of pharmacist prescribing, which included patient feedback, training and education opportunities, inter-professional relations and access to shared electronic patient health records between health providers. In community pharmacy settings, additional facilitators were an integrated private consulting area and the diversification of the pharmacy technician role: these gave the pharmacist sufficient time and an environment in which to conduct patient assessments. Secondly, I identified two challenges that key informants associated with the implementation of pharmacist prescribing: professional resistance and funding limitations. In each case, I described ways in which these challenges could be addressed.

In Chapter 10, I examined the common themes that resonated from all of my thesis findings (Chapters 5 to 9). The three key themes which recurred across Chapters 5 to 9 (see

Table 22) were: pharmacist co-prescribing and patient-centred care; pharmacist co-prescriber training and education requirements; and the impact of pharmacist personal traits. I concluded that pharmacist co-prescribing for OST patients offers a model of care that is more aligned with patient-centred care in comparison to the existing model of care. The chapter then concluded with a discussion on the limitations of my research.

11.2 Future directions

In this section, I will outline future directions to provide a policy perspective on the findings. Based on my thesis findings, there are five major factors to be considered in the implementation of pharmacist co-prescribing for OST. Firstly, I will outline how trends within the Australian pharmacy workforce will influence the capacity of the profession to fulfil pharmacist co-prescribing. I will then discuss how pharmacy layout and shared electronic health records are fundamental facilitators to pharmacist prescribing. Lastly, the topics of funding and future consultation with other stakeholders will be discussed.

11.2.1 Australian pharmacy workforce

The Australian pharmacy workforce's rapid growth over the last three decades is predicted to provide the profession with spare capacity to extend practice beyond traditional roles, including into co-prescribing. It is evident that the profession has an abundance of pharmacist graduates, and that this trend is highly likely to continue in the future. Owing to the reported financial benefits gained from large numbers of students, pharmacy schools are unlikely to voluntarily reduce enrolment numbers.⁽²¹⁾ Furthermore, the total number of pharmacy schools in Australia increased from 5 to 16 between 1998 and 2009⁽²¹⁾, and additional schools have opened since then.

The Australian pharmacy profession also faces challenges from competitive retail activity and is therefore motivated to improve professional services, including consumer privacy. Such challenges include reductions in the price of PBS medicines and growth in discount pharmacy models.⁽²³⁾ In light of such challenges, the profession seriously needs to consider how it can enhance consumers' experiences with professional pharmacist

services. However, improvement and expansion of professional community pharmacist services are likely to be difficult if their obligations for consumer privacy during face-to-face exchanges cannot be assured due to the physical layout. One way to enhance pharmacist interactions is to actively seek changes that will provide adequate privacy to the satisfaction of all consumers.

For pharmacist prescribing to be feasible, the evolution of the role of the pharmacy technician similar to that of their international counterparts also warrants consideration. Expanding the scope of a pharmacy technician's role increases a community pharmacist's time and availability to deliver clinical or cognitive services. The pharmacy technician role requires serious review if community pharmacist co-prescribing is to be developed in the future. Expanding the role of pharmacy technicians, similar to their roles in other countries, can increase the time that community pharmacists have available to provide direct patient consultations.

11.2.2 Pharmacy layout

A consultation room inside Australian pharmacies for all face-to-face consultations, including, but not exclusive to, supervised OST dosing, is one possible solution to enhance privacy provisions. By normalising the use of a pharmacy consultation room for all pharmacy consumers, the perception of privacy protection by OST patients may be increased.

An integrated area inside Australian pharmacies could be the ideal balance to address privacy issues for OST patients, as well as for other pharmacy customers. An investigation should be undertaken into whether consultation rooms inside Australian pharmacies for utilisation by all customers could better meet obligations in relation to privacy provisions. If such a room also functioned as a consultation area for all private interactions, not solely as an OST dosing room, then all consumers could enter through the pharmacy front entrance without any perceived stigma in being associated with a particular type of condition. I imagine that sensitive discussions around mental health issues, the emergency contraceptive pill or vaginal candidiasis could also be conducted in this consultation room. If this room were simultaneously used as a dosing area, then it would be difficult to

associate its use in a pharmacy with a person's condition purely from whether they were entering the room.

Changes to pharmacy layout will create challenges, in terms of both feasibility and implementation. Limited physical space in pharmacies and monetary considerations are likely barriers to the implementation of a private and integrated consultation room. A community pharmacy usually has open floor plans and an adjoining retail section which is the source of additional financial revenue. Given that pharmacy space is limited, this retail section could inadvertently act as a physical and/or financial competitor for professional consultation space. Potential financial losses could consequentially result if retail stock is removed to create space for a consultation room. Additionally, not all pharmacies have sufficient space to establish a consultation room and there are financial costs involved in building a consultation room. Therefore, a recommendation to implement consultation rooms inside Australian pharmacies for utilisation by all customers, although ideal, might not be economically feasible.

Changing a pharmacy's physical infrastructure requires monetary expenditure, and who will fund this or how this will be funded remains unanswered. Albrecht et al.⁽²⁵⁸⁾ suggested that a potential solution was the funding of financial costs associated with infrastructural change. Similarly, the UK government has provided financial support to establish private consultation rooms in community pharmacies.⁽⁶⁸⁾ If changes to pharmacy infrastructure are implemented, discussions between governments and proprietors about funding arrangements through the Community Pharmacy Agreement^y or Health Workforce Australia^z could provide some solutions.

If a consultation room or specific layout is not viable, improving pharmacist relationships with patients is an interim measure. The pharmacy layout itself could be less important to the perception of privacy than how patients interact and their relationship with the pharmacist. Although the establishment of a meaningful relationship between a

^yThe Community Pharmacy Agreement is a five-year agreement between the Australian government and the Pharmacy Guild of Australia. The agreement provides pharmacies with funding for dispensing PBS medicines, providing programs/services and for arrangements with pharmaceutical wholesalers.

^z Health Workforce Australia (HWA) aims to deliver a national approach to health workforce reform.

pharmacist and patients may already naturally occur, further attention to enhancing such relationships may assist in reducing a patient's sensitivity about privacy.

11.2.3 Shared electronic health records

To enhance the efficiency and mode of communication between doctors and pharmacists, shared eHealth records and electronic prescription exchange services for OST patients should be implemented widely. These emerging developments in health informatics have enormous potential to change the manner of inter-professional communication.

Recent development of eHealth records (previously known as the Personally Controlled Electronic Health Record system) in Australia has increased the possibility of developments towards shared electronic records. The Federal government launched the personally controlled electronic health (eHealth) record in 2012. This online system is designed to enhance patient safety, improve health care delivery, and reduce waste and duplication.⁽²⁵⁹⁾ Consumers must provide their consent to participate in eHealth records and can also decide the level of access of a health care organisation to their eHealth record.⁽²⁵⁹⁾ The uptake of eHealth records by health providers is still in its early phases, but this is expected to increase in coming years. Since July 2013, 271 community pharmacies in Australia have registered with the eHealth record system, but it is anticipated that eventually all pharmacies will have access to it.⁽²⁶⁰⁾

Recent developments with electronic prescription exchange services could also aid in the development of pharmacist co-prescribing. At present, Australian electronic prescription exchange services are run in parallel with the traditional paper prescription system.⁽²⁶⁰⁾ Provided both practitioners are registered to use the electronic prescription exchange program, data from the electronic prescription go to a central store and then can be downloaded by the pharmacy.⁽²⁶¹⁾ Electronic prescription exchange services can increase patient safety because they reduce human errors from misreading prescription instructions and create a communication bridge between the doctor and the pharmacist.^(260, 262) Other predicted benefits include a reduction in the number of pharmacist phone calls to doctors seeking clarification or on administrative matters, thus making the remaining inter-

professional interactions more meaningful.⁽²⁴⁷⁾ These services also increase the efficiency with which the supply of medicines and PBS claims can be completed.⁽²⁶⁰⁾

11.2.4 Funding models

Australian community pharmacies are privately operated: thus, without a means to remunerate pharmacy proprietors and pharmacist employees, the policy is unlikely to receive support, or be financially viable for implementation. My study and previous literature have identified financial remuneration as a barrier to advanced pharmacist practice roles in the profession. Thus, funding for pharmacist prescriber roles is crucial to consider its feasibility in Australian settings. Establishing alternative funding sources, aside from patient co-payments, warrants investigation for the policy to be financially viable for pharmacies to take part in the longer term. OST patients already receive subsidised prescriptive services through Medicare, generally with no out-of-pocket cost when consulting their doctor. Patients are therefore unlikely to support a co-payment system to access a pharmacist co-prescriber. Drawing on the Albertan remuneration model, collective negotiation with the government should be considered seeking the provision of funds for patient assessments for prescribing within a community pharmacy setting. In particular, funding mechanisms to incentivise confidential patient consultations over a sustained period with a specific pharmacist may enhance the feasibility⁽²⁶³⁾ of pharmacist co-prescribing for OST.

11.2.5 Future consultations with a wider range of stakeholders

To formulate more specific details on the functionality and scope of a potential pharmacist co-prescriber model, more extensive consultations with a broader range of stakeholders is important. In particular, consultation with stakeholders in remote and very remote areas could contribute additional and alternative perspectives to my findings. Extensive discussions with a range of medical stakeholders was beyond the scope of my thesis but is recommended in the future to better understand the implications of pharmacist co-prescribing. In particular, addiction specialist views on this policy proposal are yet to be explored. Future consultations with a wider range of stakeholders would contribute in the

development of protocols to minimise any identified drawbacks and maximise the potential benefits.

The management of dosage adjustment and treatment continuation by pharmacist co-prescribers requires further consultation with a wider range of stakeholders. Interviewed patients suggested numerous potential extended roles for community pharmacists, which I believe, with appropriate governance, could be enabled with further investigation. With patient consent, an experienced community pharmacist could authorise short-term treatment continuation and dose reductions (within a safe range and rate) when appropriate. As previously mentioned, deliberation on the aspects of educational requirements and governance of such a proposal will require attention.

11.3 Concluding remarks

The patients and community pharmacists who participated in my research indicated acceptance of and encouragement for the development of pharmacist co-prescribing for OST. Their reasons resonated with an increased emphasis on the delivery of patient-centred health care in pharmacy. However, developments will be required to change the role of pharmacy technicians, pharmacy infrastructure and shared electronic patient records to maximise delivery of patient-centred care (PCC). The scope of the pharmacist co-prescriber model remains open for further discussion with a wider range of stakeholders. Nevertheless, pharmacist co-prescribing for OST patients offers an alternative and an extension to existing harm reduction programs.

Appendices

Appendix 1. Poster advertisement to recruit patients

This page is intentionally left blank. Refer to the following page for the poster advertisement to recruit patients.

**ARE YOU CURRENTLY
STABLE ON
METHADONE, SUBUTEX
OR SUBOXONE?**

If so, we are interested in hearing your views about how a pharmacist could provide greater care for clients.

If you are interested or want to find out more about this study, please come and speak to **Phi** (researcher) at the **Methadone Desk**.

**Participation in this study is voluntary.
You will be reimbursed for your time and travel costs.**

Appendix 2. Data analysis of patient interviews on the policy proposal

At the first step of the framework approach, I read and re-read the transcripts whilst simultaneously listening to the audio recordings. This was to familiarise myself with the data and assist with the identification of the key ideas and recurrent themes.^(212, 214) Prior to coding, I had already identified and anticipated that some codes might arise in the data. The codes that I had anticipated prior to commencement of coding are listed below.

Table 23 Anticipated codes from patient interviews 10 March 2011

Anticipated codes
Potential problems with the idea
Finding a doctor
Support for the idea
Costs
Travel time to access services
Ideal prescriber qualities

Throughout the familiarisation process, additional codes arose and were added to the list of existing codes. All codes were refined by referring back to the raw data and field notes to develop a thematic framework. After coding all 14 interviews for the first time, I established main themes which related to numerous sub-topics. The themes were refined (numerous times) into a thematic index after discussion with my supervisor, re-listening to and re-reading the transcripts. This step involved logical, intuitive thinking and making judgments about the meaning, relevance and importance of issues.⁽²¹²⁾

Table 24 Thematic index from patient interviews on 24 May 2011

Main theme	Code
Potential problems with the idea	Abuse of the system
	Negative pharmacist attitudes
	Not suitable for all patients
	Pharmacist has too much power
	Impact on pharmacists
	Abuse of pharmacist by patients
	Threat to cut patient off
Finding a doctor	For those who can't find a prescriber
	Consequences of waiting to see doctor
	Difficulty in finding a prescriber
	Waiting time to see doctor
	Reasonable wait time perceived
	Easy to find a doctor
	Waiting list
	Private prescriber reluctance
Support for the idea	Pharmacist's extra roles
	Additional training for pharmacist
	Urine tests
	Privacy concerns
	No privacy concerns
	Help to get off the program
	Pharmacist already helps me
	I see pharmacist more than doctor
	Pharmacist needs full medical history
	Location of pharmacist prescriber
	Regular pharmacist ideally
	Doctor, not pharmacist, should do some things
	Visits back to doctor
	Could enhance communication
	Treatment initiation by doctor
	Doctor located at pharmacy
	Pharmacist views need to be considered
	Selected people only suited for this
	Smaller pharmacy only suited
	Reduce visits to doctor
	Pharmacist prescriber qualities
	Save time or money

Main theme	Code	
Support for the idea (cont.)	Sharing of information between practitioners	
Costs	Costs of pharmacy dosing	
	Different pharmacy costs	
	Cost is reasonable	
	Costs to see doctor	
	Struggling financially already	
	New model cost	
	Travel time to access services	Travel time to see existing doctor
	The clinic easy to get to	
	Travel time to see pharmacy	
	Difficult to find pharmacy	
	Ideal prescriber qualities	Ideal characteristics of a prescriber
		Plan to get them off the program
		Ideal location of doctor
		Ideal waiting time
Not unreasonable to expect more than one visit		
Ideal cost to see doctor		
Appreciation of health professionals involved with care		Appreciation of doctor
		Pharmacist no different to doctor
	Appreciation of pharmacist role	
	Frustration of current system	Issues with the clinic
	Lack of communication between clinic and pharmacy	
	Private prescriber's different prescribing patterns to the clinic	
	Different doctor each time	
	Stigma associated with attending clinic	
	Patients abusing system	
	OST used as back-up	
	Pharmacy concerns	Waiting line
	Privacy	
	Description of illness	Wants to get off the program
	Problem across all people	
	Stabilisation period	Distress of stabilisation
	Understands why withdrawal is necessary	

Following the establishment of the thematic index, charts were constructed to identify links between categories and to group them thematically. I then referred to field notes and associations of themes to interpret and explain the findings.

Data coding occurred after the completion and transcription of every two interviews to monitor for data saturation. Analysis was carried out simultaneously with data collection and recruitment continued until data saturation was reached. To double-check that data saturation had occurred after the fourteenth interview, I listened to the audio recording of all 14 interviews again to identify when each code first emerged. Then, the total number of new codes in each interview were tallied and plotted on a graph. I continued to recruit for new participants and conduct interviews until data saturation was ascertained. Data saturation was reached after 14 face-to-face interviews had been conducted with eight males and six females.

Table 25 Monitoring of codes after each interview for data saturation

Interview no.	Number of new codes emerged
C1	22
C2	9
C3	4
C4	9
C5	6
C6	19
C7	8
C8	4
C9	4
C10	6
C11	0
C12	0
C13	0
C14	0

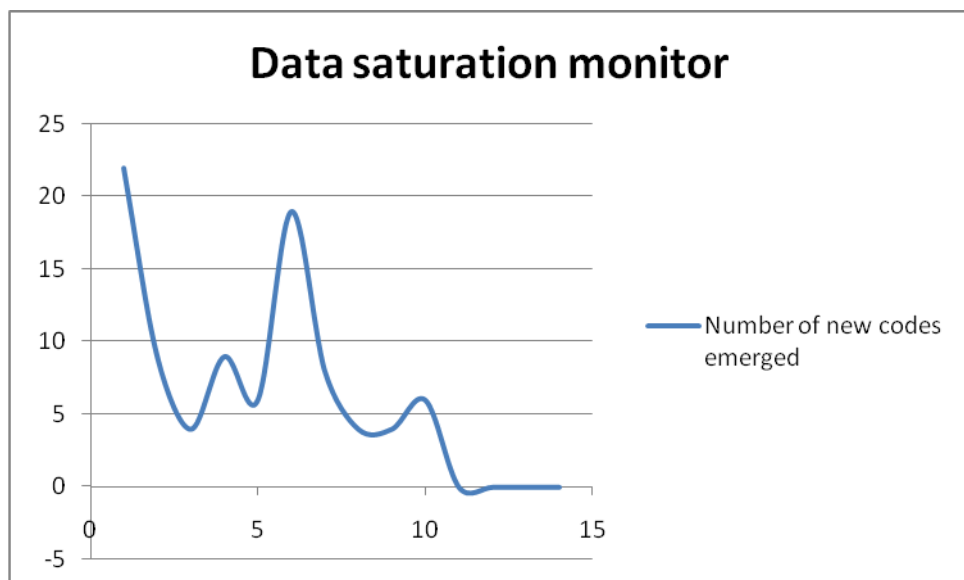


Figure 6 Data saturation monitor

Following the confirmation of data saturation, the thematic index was colour coded and charted as below.

Table 26 Thematic charts created from patient interview transcripts on 13 Sep 2011

Experiences in being a user starting OST	
Description of illness	
Desire to get off the program	
Effect of drug use on life	
Loss of friendship through drug use	
Need to get away from people	
Problem across all people	
Finding a doctor	
Difficulty in finding a prescriber	
Easy to find a doctor	<i>Cheaper, easier access these days Effort equates to ease Luck Referral easy compared to decades ago Why easier 20 or so years ago</i>
For those who can't find a prescriber	
Private prescriber reluctance & attitudes	<i>Services not advertised</i>
Referral from prison	<i>Stigma against taking prison patients</i>
Referral onto the program	
Tried detox first	
Waiting list to see doctor	
Waiting time to get appointment	<i>Reasonable waiting time perceived Reasonable waiting time not perceived</i>
Travel time to access services	
Travel time to see existing doctor	<i>DASSA easy to get to</i>
Travel time to see pharmacy	<i>Difficult to find pharmacy</i>
Stabilisation period	
Distress of stabilisation	
Relationship with health professionals	
Appreciation of health professionals involved with care	
Appreciation of doctor	
Appreciation of pharmacist role	
Pharmacist no different to doctor	
Ideal prescriber qualities	
Appointments available	
Ideal cost to see doctor	
Ideal location of doctor	
Ideal waiting time	<i>Expect more than one visit to prove their addiction Waiting list ok</i>
Plan to get them off the program	

Patient concerns about current treatment model	
Negatives of existing system	
Abuse of the program	
Frustration of current system	
Issues with clinic	<i>Different doctor each time Lack of communication with clinic & pharmacy Stigma associated with coming here Threat to cut you off</i>
Negative people met at the pharmacy	
Pharmacy-specific issues	
Private prescriber practice concerns	<i>Private prescribers more lenient</i>
Waiting time at pharmacy	
Costs of accessing treatment	
Costs of pharmacy dosing	<i>Cost is reasonable Different pharmacy costs</i>
Costs to see doctor	
New model cost	
Struggling financially already	
Privacy and confidentiality	
Why it is not a concern	
Why it is a concern	
Collaborative prescribing model details	
Concerns with the collaborative model	
Abuse of the system	
Doctor not pharmacist prescriber should do	
Impact on pharmacists	
Not suitable for all patients	
Pharmacist too much power over patient	
Benefits, facilitators of the collaborative model	
Patient sees pharmacist more than doctor	
Complaints or back-up mechanism for resolving disputes	
Could enhance communication	
Doctor located at pharmacy	
Initiating treatment by doctor	
Location, characteristics of pharmacist	
Pharmacist can help to get off the program	
Reduction in doctor visits	
Requirement to still see doctor	
Save time or money	

Pharmacist extended roles	
Additional training for pharmacist	
Continue script on same dose	
Counselling	
Dose changes during stabilisation	
Feedback from pharmacist to doctor	
Increase dose	
Reduce dose	
To get off the program	
Urine tests	

The main themes and sub-themes from the above charts were used to draft the results. I did not include all themes in the final results as they were not as relevant to the research questions of this thesis. The themes that were not included were: the stabilisation period, support for Suboxone® and illicit drug concerns. Throughout the chapter revision process, the themes were again refined and eventually finalised as presented in the results section.

Appendix 3. Evolution of the research question

A summary outline is provided below of how the first two research questions evolved through the data analysis phase.

Original research question 1: What are patients' experiences with the existing model?

Major theme	Sub-theme
Variable patient experiences in starting OST	Ease of initial treatment access Engagement with other activities during waiting time Expectations for treatment access
Concerns with current model of treatment	Consistent relationship with doctors Misuse of medication Drug contacts met at the pharmacy Pharmacy fees Privacy at the pharmacy (explored in greater depth in 0)

Original research question 2: From the patient's perspective, how could pharmacist co-prescribing impact on the delivery of opioid substitution treatment (OST)?

Major theme	Sub-theme
Benefits of the co-prescriber model	Relationship with community pharmacist Accessibility to a community pharmacist Improved communication Reduced cost and number of visits to the doctor
Barriers to a co-prescriber model	Manipulation of the system Impact on pharmacists Preferred medical practitioner roles Pharmacist power over patient
Co-prescriber pharmacist extended roles	Continue, amend or reduce dose Additional training for a pharmacist Future guidelines or a trial

Relationships between themes were charted to find associations between themes or possible explanations for findings. This enabled me to find associations and explanations

for the findings.^(215,216) The following table outlines how I used charts to find links between themes.

	Relationship analysis between themes		
Part 1: What are clients' experiences with the existing model?	1&2 Yes. A delay in access to treatment results in continued drug use or criminal activities	2&9 No 2&10 No 3&4 No	5&7 No 5&8 No
Major theme: Variable client experiences in starting OST	1&3 Will be compared further by client typology (see...)	3&5 Possibly yes. Individuals who intend to misuse treatment may want faster access to it for opportunistic reasons	5&9 Possibly yes. If the regular pharmacist is not providing adequate supervision, clients may be able to continue misusing their medication
1 Ease of initial treatment access	1&4 No	3&6 No	5&10 No
2 Engagement with other activities during waiting time	1&5 Yes. Treatment may be accessed with intent to misuse, or continue to be misused after treatment initiation	3&7 No	6&7 No
3 Expectations for treatment access	1&6 No	3&8 No	6&8 Yes. Drug contacts may be met outside the pharmacy or in the que
Concerns with current model of treatment	1&7 No	3&9 No	6&9 No
4 Consistent relationship with doctors	1&8 No	3&10 No	6&10 No
5 Misuse of medication	1&9 No	4&5 Possibly yes. An inconsistent relationship with doctors may contribute to reduced ability to provide ongoing care, making it harder to detect misuse activities	7&8 Possibly yes. Higher pharmacy fees may be charged by those pharmacies who have invested in additional physical infrastructure
6 Drug contacts met at the pharmacy	1&10 Although community pharmacist is accessible, clients can not be referred to a pharmacy without doctor.	4&6 No	7&9 No
7 Pharmacy fees	2&3 Yes. Consequences for waiting list are engagement with other activities to relief withdrawal, or fund for D use	4&7 No	7&10 No
8 Privacy at the pharmacy	2&4 No	4&8 no	8&9 Possibly yes. Some pharmacists may be more discreet than others in their dealings with clients
Pharmacy experiences	2&5 N6	4&9 Yes. Consistent relationship with the pharmacist is easier than with clinic doctors, which is clients support the proposal	8&10 Yes. Although a pharmacist is more assesible, client interactions with them may be less discreet than at a GP practice
9 Consistent relationship with community pharmacist	2&6 Yes. Other people on waiting list may loiter outside pharmacy to obtain drugs	4&10 Yes. Access to pharamcist is reported as easier than doctors because no appointment is usually required	9&10 Yes. These two reasons are the main reasons for clients support of the policy proposal
10 Access to a community pharmacist	2&8 No	5&6 Yes. Clients may meet drug contacts at the pharmacy who aid with the misuse of medications	

Part 2: How could pharmacist co-prescribing impact on the delivery of OST?	11&12 Yes. Co-prescribing may worsen communication if either practitioner does not inform the other party	12&18 Co-prescriber needs to be actively informing doctor of their actions otherwise this could in fact reduce communication between practitioners	14&20 Trial may enable a better understanding of the likelihood of potential manipulative behaviour which results from this policy proposal
Benefits of the co-prescriber model	11&13 Yes. If a pharmacist can meet some prescriptive needs, then the onflow effect may be reduced doctor visits	12&19 Training may need to address adequate communication between practitioners to prevent accidentally miscommunication	15&16 Clients understood that a pharmacist could not replace the role of a doctor
11 Flexible and convenient treatment	11 &14 Yes. If prescriptive requests are viewed as easier to access, this may increase opportunistic behaviour	12&20 Trial or guidelines may need to address communication modes between practitioners	15&17 Greater pharmacist responsibility may change their relations and power with a client
12 Improved communication between practitioners	11&15 Yes. There will be greater responsibility for a co-prescriber pharmacists from increased client requests	13&14 Reduced visits to the doctor may increase opportunity to manipulate the system	15&18 Increase medico-legal risk potential for pharmacists
13 Reduced cost and number of visits to the doctor	11&16 Yes. Although clients desire flexibility, there are some roles they definitely want to keep exclusive to a Dr]	13&15 Yes. Reduced contact with doctor may increase clients contact with pharmacist.	15&19 Pharmacists will require additional training for the additional responsibility that they undertake
Limitations of a co-prescriber model	11&17 Yes. Co-prescribing will chance the pharmacists relationship and perceived power over a client	13&16 Continued support for doctor to be involved with client care even though they might have less contact with them	15&20 Trial may enable better evaluation of impact on pharmacists
14 Manipulation of the system	11& 18 Yes. Treatment flexibility would be aided if a pharmacist could carry out these extended roles	13&17 Yes greater pharmacist responsibility may increase clients perceived power over them	16&17 Doctors continued involvement may lessen clients fear of pharmacists power over client. But doctor already has this power
15 Impact on pharmacists	11&19 No	13&18 Yes. Pharmacist co-prescriber undertaking these roles will reduce client visits to doctor	16&18 Clients wanted regular doctor involvement even with a co-prescriber
16 Preferred medical practitioner roles	11&20 Yes. To ensure co-prescribing is workable, a trial or guidelines may be needed to see if it produces benefits or can work	13&19 No	16&19 Pharmacist is not a substitute for a doctor. They will need some form of training to undertake extra roles
17 Pharmacist power over client	12&13 Co-prescribing may not improve communication from a Drs perspective if they see clients less or if the pharmacist doesn't communicate adequately	13&20 No	16&20 Future consultation should definitely involve doctors as well
Co-prescriber pharmacist extended roles	12&14 Improved communication may reduce opportunistic manipulative behaviour	14&15 Yes. Clients manipulative behaviour may have medico legal risks for pharmacists	17&18 If pharmacist can undertake co-prescribing, clients may perceive this as having greater power over them
18 Continue, amend or reduce dose	12&15 Greater responsibility will impact on pharmacists work load	14&16 Doctors continued involvement may help to prevent manipulative behaviour	17&19 No
19 Additional training for a pharmacist	12&16 No	14&17 Pharmacist co-prescriber may have more authority to exert/provide feedback which may affect the clients long term treatment	17&20 Future trial to explore the impact on power changes between pharmacist and client relations from co-prescribing
20 Future guidelines or a trial	12&17 Yes communication between practitioners may tighten examination on clients who are manipulating the system	14&19 Training may need to cover how to pick up, prevent client manipulative behaviour	18&19 Training required for co-prescriber to amend and continue prescriptions
			19&20 Trial should incorporate pharmacist training

After the above steps, the first two research questions were refined to:

Final research question 1: What are patients' experiences with the existing model of care for OST, including their experience of privacy in the pharmacy?

Final research question 2: What views do patients have about doctors and pharmacists co-prescribing for OST?

Appendix 4. Data access agreement

This page is intentionally left blank. Refer to the following pages for the signed data access agreement.

DATA ACCESS AGREEMENT made this *22RD* day of *MARCH* 2011

BETWEEN:

(1) **ADELAIDE HEALTH SERVICE INC** incorporated pursuant to the *Health Care Act 2008* (SA) ("**Adelaide Health Service**") c/- its business unit, Drug and Alcohol Services South Australia, at 161 Greenhill Road, Parkside SA 5063

-AND-

(2) **THE UNIVERSITY OF ADELAIDE**, (ABN 61 249 878 937) North Terrace, Adelaide, 5005 in the State of South Australia ("**University**")

-AND-

(3) **PHUONG-PHI LE** of 10 Pulteney Street Adelaide ("**Student**")

BACKGROUND:

- A. Phuong-Phi Le is a student of the University of Adelaide completing a PhD through the Discipline of Public Health, School of Population Health and Clinical Practice, Faculty of Health Sciences supervised by Associate Professor John Moss.
- B. Phuong-Phi Le has assigned her Intellectual Property to the University by signing a Student Project Participation Agreement.
- C. As part of the requirements of the PhD Phuong-Phi Le will complete a research project titled "Collaborative prescribing of the opioid substitution treatment program in South Australia" ("the Research").
- D. In order to undertake the Research Phuong-Phi Le and the University require and have sought consent to access and use the data as more fully detailed in Schedule 1 ("**Health Data**") held by Drug and Alcohol Services South Australia ("DASSA") at SA Health and to access relevant clients and staff members of DASSA to assist with obtaining information and create data to complete the Research.
- E. This Agreement is to provide, subject to the following conditions, data and information and access to clients and staff of DASSA to the designated parties.

NOW IT IS HEREBY AGREED as follows:

1. This Agreement shall commence on 1 January 2011 and expire on or before 1 December 2015 when it is anticipated that the Research will be completed, unless otherwise terminated in accordance with this Agreement.
2. SA Health agrees to provide Phuong-Phi Le and the University access to the premises of Eastern DASSA for the purpose of conducting interviews from its clients and staff. Interviews will be in accordance with ethical approval (from both SA Health and the University of Adelaide) and from the Health Data sets detailed in Schedule 1 and when accessing the premises of Eastern DASSA the Student and University will comply with any policies, guidelines and directions of DASSA.
3. The Health Data are provided for the purpose of use in the Research and for publication purposes by the Student and the University. For clarity neither the Student nor the University will attempt to re-identify any de-identified Health Data provided by DASSA. SA Health further acknowledges that the Student will require the results of the Research, in whole or in part, to be included and published as part of the conferral of her degree and therefore the Student will not be inhibited as and when the Research is to be examined. Copyright in the thesis remains the property of the Student.
4. The Student will not begin the Research until ethics approval has been received from both the University of Adelaide and SA Health and a copy of such approvals are provided to SA Health.
5. SA Health is to be given acknowledgement in all reports, papers, activities and other published and presented medium of research results created as an outcome of the use of its data and access to its clients and staff.
6. Any use of other SA Health material provided to the Student including the use of copyright material will be acknowledged as set out in clause 5.
7. SA Health does not claim any interest right or entitlement to the intellectual property and outcomes arising from the Research in law or in equity, however ownership of all intellectual property rights in the Health Data remains with Adelaide Health Service and is not transferred or assigned merely by virtue of its use in the Research.
8. SA Health shall give access to its intellectual property in the data to the University and the Student as required for the proper conduct of the Research and shall give the University a perpetual royalty free license of SA Health intellectual property for the Student and the University's research, teaching and publication purposes.

9. The University will give Adelaide Health Service a non-exclusive, perpetual, irrevocable, fee free, royalty free licence to use the data generated by the Student for its internal government purposes, reporting and to assist with any policy decisions.
10. The Research outcomes and intellectual property arising from the Research shall be owned by the University, to deal with it as it deems fit.
11. It is the expectation and intention of the Student to publish at least three (3) papers arising from the Research in addition to her thesis. A copy of each paper and the Student's thesis shall be given to SA Health after first published, for SA Health use.
12. This Agreement does not limit the Student or the University's academic freedom and their rights to enter into public debate or criticism.
13. The University and Student will keep confidential any information that could potentially identify DASSA clients and staff in any dealings relating to this Agreement **EXCEPT** for any information which is already in the public domain or where the University and Student prove it to have been in their possession prior to any disclosure or information which is required by law or an order of any competent court or governmental authority to be disclosed.
14. Notwithstanding anything stated in this Agreement the Student and the University will:-
 - a. use personal information held or controlled by it in connection with this Agreement only for the purposes of fulfilling its obligations under this Agreement;
 - b. take all reasonable measures to ensure that personal information in its possession or control is protected against loss and unauthorised access, use, modification or disclosure;
 - c. comply with the Department of Health Code of Fair Information Practice.
15. The University and the Student are responsible for ensuring the Health Data is suitable for the Research and the University and the Student expressly agree that Adelaide Health Service does not make any representation or warranty to either the University or the Student as to the accuracy, completeness or suitability of the Health Data.
16. All publications by the University or the Student must include the following disclaimer "The opinions expressed in this work are those of the authors and may not reflect or represent the position or policy of the South Australian

Government”.

17. The University and the Student indemnify and will keep indemnified Adelaide Health Service (including its officers and employees) against any costs, expenses or liabilities whatsoever arising out of or in connection with the use by the University or the Student of the Health Data.
18. Nothing in this Agreement derogates from the powers of the Auditor-General under the Public Finance and Audit Act 1987 (South Australia).
19. The Parties must comply with the laws in force in South Australia in the course of performing this Agreement, including the Controlled Substances Act 1984 and the Freedom of Information Act 1991.
20. This Agreement may only be varied in writing and by agreement between the parties.
21. If a clause or part of a clause of this Agreement can be read in a way that makes it illegal, unenforceable or invalid, but can also be read in a way that makes it legal, enforceable and valid, it must be read in the latter way. If any clause or part of a clause is illegal, unenforceable or invalid, that clause or part is to be treated as removed from this Agreement, but the rest of the Agreement is not affected.
22. The parties shall in the first instance endeavor to resolve any disputes arising from this Agreement by mutual agreement through good faith discussions between the individuals involved. If the dispute is not resolved within 20 days then the dispute is to be referred in the first instance to the Chief Executive Officer of Adelaide Health Service and the Vice Chancellor of the University or their nominees, for the purposes of negotiating a resolution to the dispute (“Executives”). If the dispute could not be amicably settled by the Executives within a further forty (40) days the dispute shall be submitted to mediation by the Australian Commercial Disputes Centre (“ACDC”), in accordance with the ACDC mediation procedure and rules.
23. This Agreement will terminate either for breach by the University or the Student or by the mutual agreement of the parties, and if this Agreement is terminated by Adelaide Health Service the University and the Student will immediately cease using the Health Data and will delete or return all copies as directed by Adelaide Health Service.

ACKNOWLEDGEMENT AND ACCEPTANCE

The parties have caused this Agreement to be executed in triplicate by their duly authorised representatives as of the date first set forth below.

SIGNED on behalf of)
The University of Adelaide)

Name: Professor John Williams
Position: Acting Dean of Graduate Studies

SIGNED on behalf of)
SA Health)

Name:
Position:

SIGNED by Phuong-Phi Le)

Appendix 5. Deed of novation

This page is intentionally left blank. Refer to the following pages for the signed deed of novation.

Deed of Novation

Dated *10th November 2011*

**THE UNIVERSITY OF
ADELAIDE**, (ABN 61 249 878 937)
North Terrace, Adelaide, 5005 in the
State of South Australia
("University")

**THE MINISTER FOR MENTAL
HEALTH AND SUBSTANCE
ABUSE** a body corporate pursuant to
the Administrative Arrangements Act
1994 (SA) of ("Level 9, 11
Hindmarsh Square, Adelaide SA
5000)
("Minister")

PHUONG-PHI LE of 10 Pulteney
Street Adelaide ("Student")

Deed of Novation

Date:

Parties:

THE UNIVERSITY OF ADELAIDE (ABN 61 249 878 937) North Terrace, Adelaide, 5005 in the State of South Australia ("**University**")

THE MINISTER FOR MENTAL HEALTH AND SUBSTANCE ABUSE a body corporate pursuant to the Administrative Arrangements Act 1994 (SA) of ("Level 9, 11 Hindmarsh Square, Adelaide SA 5000") ("**Minister**")

PHUONG-PHI LE of 10 Pulteney Street Adelaide ("**Student**")

Recitals:

- A. An access of data agreement was entered into between the University the Student and the Adelaide Health Service ("**AHS**") that was incorporated pursuant to the *Health Care Act 2008* (SA) through one of its business units the Drug and Alcohol Services South Australia ("**DASSA**") on the 23 March 2011 ("**Agreement**").
- B. AHS by gazette of the Governor of South Australia was made defunct on 9 June 2011 and its activities were transferred to the Central Adelaide Local Health Network (CALHN). Now the CALHN has transferred some of the activities of DASSA, namely the Drugs of Dependence Unit ("**DDU**"), into the Pharmaceutical Services and Strategy Branch of SA Health. Both DASSA and the DDU though are part of the Ministers portfolio.
- C. In view of the change of name and separation of activities of DASSA and the DDU the parties wish to amend the Agreement so that the appropriate name change can occur and for the Student to be able to access the data from both DASSA and the DDU in terms of the Agreement already entered into.

1 Novation

Subject to the terms of this Deed the Minister is substituted for AHS under the Agreement as if the Minister had originally been a party to the Agreement instead of AHS.

The Minister is to be bound by the Agreement as it relates to AHS, and is to enjoy all the rights and benefits conferred on and perform all obligations imposed on AHS under the Agreement with effect from the Effective Date.

Each reference in the Agreement to AHS, SA Health or DASSA is to be read as if it were a reference to the Minister with effect from the Effective Date.

The Student and the University acknowledge and agree that as from the Effective Date they will each ensure that they will comply with the provisions of the Agreement.

2 General

2.1 Costs

Each party is to bear its own legal and other costs in connection with execution of this Deed.

2.2 Governing law

This Deed is governed by the law in force in the State of South Australian.

2.3 Representations and Warranties

Each party represents and warrants that:

- (a) it is duly incorporated, validly exists and has the capacity to sue or be sued in its own name;
- (b) this Deed is valid, binding and enforceable in accordance with its terms; and
- (c) all approvals required in relation to the execution, delivery and performance of this Deed have been obtained and are subsisting.

EXECUTED as a Deed

SIGNED for and on behalf of The)
University of Adelaide by)
 Professor Richard Russell AM)
Pro Vice-Chancellor (Research Operations))
)
 Name of representative (block letters))
 Signature of representative

in the presence of:

Signature of witness
 Name of witness (block letters)

SIGNED for and on behalf of The)
Minister for Mental Health and)
Substance Abuse)
)
 Name of representative (block letters))
 Signature of representative
 in the presence of:)
 Paul Broadbridge
 Deputy Director
 Procurement & Supply Chain Management
 Signature of witness)
 Name of witness (block letters))

SIGNED by Phuong-Phi Le

in the presence of:

Signature of witness

Name of witness (block letters)

Signature of Student

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Appendix 6. Pharmacist focus group pre-reading material

This page is intentionally left blank. Refer to the following pages for the pharmacist focus group pre-reading material.

This document provides participants with a summary of the various models of prescribing overseas. Please read this information before the focus group interview.

International models of prescribing

There are a number of pharmacist prescribing models practiced internationally with varying levels of prescriptive authority. The two broad categories of pharmacist prescribing models are independent and dependent prescribing. Independent prescribing permits the practitioner to prescribe without collaboration with a doctor. On the other hand, dependent prescribing models require varying degrees of consultation or supervision with a doctor. Examples of overseas models of practice are described in Table 1.

Table 1: International prescribing models (1-5)

Independent prescribing models	
Independent prescribing	Prescribing practitioner entirely responsible for patient assessment, diagnosis and clinical management
Formulary prescribing	Local formularies are agreed between participating medical practices and community pharmacies which permits pharmacists to prescribe within the formulary
Dependent prescribing models	
Supplementary prescribing	A voluntary partnership between an independent prescriber (e.g. doctor), and a supplementary prescriber (e.g. pharmacist) to implement an agreed clinical management plan (CMP) with the patient's agreement. The independent prescriber diagnoses and initiates treatment, whilst the supplementary prescriber monitors and continues treatment within the CMP.
Protocol prescribing	An independent prescriber delegates limited authority to a pharmacist. A formal agreement and written guideline describes the activities that the pharmacist must perform
Repeat prescribing	Pharmacists provide medication repeat services in clinics associated with medical centres for patients who require ongoing medications before their next physician appointment.

The differences between independent and dependent pharmacist prescriber roles are important points of distinction. In the UK, independent prescribing differs from supplementary prescribing in that the prescribing practitioner has sole responsibility for the patient's assessment, diagnosis and clinical management. With supplementary prescribing, the medical practitioner establishes the diagnosis and initiates treatment, whilst the supplementary prescriber (SP) monitors the patient, and prescribes further supplies of the medication within the Clinical Management Plan (CMP) (6). The key differences between independent and supplementary prescribing models are summarised in Table 2.

Table 2: The key differences between independent and supplementary prescribing in the UK (7)

Aspect	Supplementary prescribing	Independent prescribing
Diagnosis	Doctor responsible for diagnosis	Independent prescriber nurse or pharmacist responsible for diagnosis
Formulary	Can prescribe from entire National Formulary subject to competence and individual clinical management plan	Limited to specific formulary
Patient consent	Specific patient consent to Supplementary Prescriber required as a part of the CMP	No specific consent required

This focus group is a part of a PhD research project which will investigate options for a model of practice where a South Australian pharmacist may fill a role similar to that of a co-prescriber.

References

1. Bessel T, Nissen L, Marriot J, Emmerton L, Australian Government Department of Health and Ageing. *Improving Australians' Access to Prescription Medicines: Development of Pharmacy Practice Models. Final Report. 2005.*
2. Department of Health. *The non-medical prescribing programme. UK Department of Health; 2010 [cited 2010 15 May]; Available from: <http://webarchive.nationalarchives.gov.uk/+/www.dh.gov.uk/en/Healthcare/Medicinespharmacyandindustry/Prescriptions/TheNon-MedicalPrescribingProgramme/index.htm>.*
3. Royal Pharmaceutical Society of Great Britain. *Pharmacist prescribing. 2009 [cited 2010 15 May]; Available from: www.rpsgb.org/worldofpharmacy/currentdevelopmentsinpharmacy/pharmacistprescribing/index.html*
4. Bissell P, Cooper R, Guillaume L, Anderson C, Avery A, Hutchinson A, et al. *An evaluation of supplementary prescribing in nursing and pharmacy. 2008 [cited 2010 15 May]; Available from: www.shef.ac.uk/content/1/c6/09/11/83/Supplementary_prescribing.pdf*
5. Nissen L. *Destiny or dream? Dependent prescribing models for pharmacy. Australian Pharmacist. 2007 Feb;26(2):130-5.*
6. George J, Bond C, D M, Cleland J, Cunningham ITS, Diack HL, et al. *Experiential learning as a part of pharmacist supplementary prescribing training: feedback from trainees and their mentors. The Annals of Pharmacotherapy. June 2007;41:1031-8.*
7. Baird A. *Independent and supplementary prescribing and PGDs. Nurs Stand. 2005;19(51):51-6.*

Appendix 7. Data analysis of pharmacist focus group interviews

Prior to coding, I had already identified and anticipated that some codes might arise in the data. The codes that I had anticipated prior to commencement of coding are listed below.

Table 27 Anticipated codes prior to focus group interviews 15 May 2012

Anticipated codes
Potential problems with the idea
Reasons for support for the idea
Medical profession resistance

Throughout the familiarisation process, additional codes arose and were added to the list of existing codes. All codes were refined by referring back to the raw data and field notes to develop a thematic framework. After coding the three focus group interviews for the first time, I established main themes which related to numerous sub-topics.

Table 28 Thematic index from focus group transcripts on 23 May 2012

Main theme	Code	
Barriers to co-prescribing role	Approval and consent by doctors	
	Resistance or offence by doctors	
	Risk of no one taking responsibility	
	Set-up of pharmacy	
Facilitators to co-prescriber role	Communication with doctors	
	Legislation changes	
	Placement at clinic	
	Training	
Future directions	Trial SA model	
Grounds for reservations on co-prescriber role and why	Inadequate training for diagnosis	
	Pressure by patients	
	S8 drug is different to S3 drug	
	Used to dispensing role only	
Grounds for support of co-prescriber role and why	Existing practice experience	
	Formalisation of what is already practised	
	Getting away from (the clinic)	
	Ownership, motivation of patient	
	Reduce workload for doctor	
	Rotating roster of doctors at (the clinic)	
	Safety concerns from under-dosing	
	Stable, consistent relationship with pharmacist	
	Team approach	
	Potential extended roles	Decrease or taper dose
		Dependent prescriber
		Increase dose for stabilisation
Independent prescriber		
Order test		
Protocol management		
Script extension		
Take-away doses		
Urine tests		
Which patients are suitable		
Remuneration	Management plan	
	Medicare item no.	
	PBS claim	
	PPI	
	Separate consultation payment from dosing	

I refined the themes (numerous times) into a thematic index after discussion with my supervisors, re-listening and re-reading the transcripts. This step involved logical, intuitive thinking and making judgments about the meaning, relevance and importance of issues.⁽²¹²⁾

Table 29 Thematic index from focus group transcripts on 31 May 2012

Main theme	Code
Barriers and challenges to co-prescribing	Legislation changes
	Pharmacists not interested in OST
	Physical pharmacy set-up
Patient benefits	Professional boundary encroachment
	Getting away from the clinic
	Ownership, motivation of patient
	Public holiday flexibility
	Rural patients may benefit
Concerns on co-prescribing	Abuse of system by patients
	Might not solve problem
	Pharmacist competency
	Pharmacist safety and security
	Pharmacist workload
Facilitators to co-prescriber role	S8 drug is different to S3 drug
	Appointment system to see pharmacist
	Enhance communication/relationship with doctor
	Restricting or limiting scope of practice
	Training and maintenance of skills
Grounds for support of co-prescriber role and why	Trial in SA
	Consistent relationship with pharmacist
	Formalisation of existing practice
	Lack of existing prescribers and lack of interest in being new prescribers
	Pharmacist work satisfaction
	Pharmacy profession needs to expand role
	Public or community service
	Reduce workload for doctor
	Rotating roster of doctors at clinic
	Access to urine test results
Potential extended roles	Accredited pharmacist at multiple sites
	Decrease or taper dose
	Dependent prescriber
	Increase dose for stabilisation
	Independent prescriber including diagnosis
	Limited patients suitable
	Protocol management
	Script continuation
	Take-away dose amendment
	Remuneration and funding source
HMR or MUR remuneration model	
Management plan	
Medicare item no.	
PBS claim	
PPI	
Separate consultation payment from dosing	

Following the establishment of the thematic index, charts were constructed to identify links between categories and to group them thematically. I then referred to field notes and associations of themes to interpret and explain the findings. Then I reorganised the thematic index and charted it as below.

Table 30 Thematic charts from focus group transcripts on 4 June 2012

Facilitators and barriers to achieving co-prescribing	
Barriers and challenges to co-prescribing	
Legislation changes	<i>State vs. federal legislation</i>
Pharmacists not interested in OST	<i>Not all will be interested or willing to participate</i>
Physical pharmacy set-up	<i>Privacy and space for consultations</i>
Professional boundary encroachment	<i>AMA sure to resist suggestions, may feel threatened</i>
Remuneration and funding source	<i>Financial viability, sources of funding: HMR, MUR, Medicare item no., PBS claim, PPI, payment for management plan, payment for consultation. Must be separate to dosing charge</i>
Facilitators to co-prescriber role	
Appointment system to see pharmacist	<i>Patient group not reliable with appointments, solo practice makes one-to-one consultation not feasible</i>
Enhance communication or relationship with doctor	<i>Develops trust and a team approach, need real-time communication as faxes and calls get lost or can't always be tracked</i>
Restricting or limiting scope of practice	<i>Written agreement or protocol for guidance</i>
Training and maintenance of skills	<i>Same training as doctor, psychology, placement at clinic, pharmacology, withdrawal management, clinical support by pharmacist/ doctor, counselling. Questionnaire, short courses, online cases</i>
Trial in SA	<i>Trial to monitor and further evaluate</i>
Benefits and reasons for co-prescribing	
Patient benefits	
Patient involvement in treatment	<i>Motivation and sense of ownership on decision making</i>
Continuation of stable relationship	<i>Strengthened stable relationship with pharmacist</i>
Getting away from clinic	<i>Reduced contact with other drug users at the clinic</i>
Public holiday flexibility	<i>Long weekends: more flexibility if script expired</i>
Rural patients may benefit	<i>Reduced travel time to doctors in metro area for prescriptions</i>
Grounds for support of co-prescriber role and why	
Consistent relationship with pharmacist	<i>Stable, daily relationship. See pharmacist more than doctor especially if rotating doctor, provides continuation of care relationship</i>

Formalisation of existing practice	<i>Already doing dose reductions based on judgment, practice and experience</i>
Lack of existing prescribers and lack of interest in being new prescribers	<i>Problem is identified and needs to be solved</i>
Reduce workload for doctor	<i>Then more patients can access the program</i>
Re-professionalisation of pharmacy	<i>Increased work satisfaction, profession is stuck and needs to expand role, increased job opportunities</i>
Rotating roster of clinic doctors	<i>No stable or consistent relationship, no continuity in this relationship</i>
Potential functions and limitations of pharmacist co-prescribing	
Potential extended roles	
Access to urine test results	<i>To enable decision making based on all information</i>
Accredited pharmacist at multiple sites	<i>Contact between pharmacy and GP to clarify patient progress, give feedback, to overcome limitations of retail environment</i>
Decrease or taper dose	<i>Increased opportunity for patient to reach longer-term goals</i>
Dependent prescriber	<i>Most supported this and did not want to be involved with diagnosis</i>
Increase dose for stabilisation	<i>Only if within an agreed plan</i>
Independent prescriber including diagnosis	<i>Some would take this on if provided with proper training and practice environment</i>
Limited patients suitable	<i>Most thought stable patients were the ideal, but that could be perceived as discrimination</i>
Script continuation	<i>Short-term script continuation</i>
Take-away dose amendment	<i>For public holidays, reduce take-away doses if there is the need for greater supervision</i>
Concerns on co-prescribing	
Abuse of system by patients	<i>Opportunistic behaviour, intentional avoidance of doctors' appointments for urine tests, playing off practitioners to get what they want</i>
Might not solve problem	<i>Ultimately might not increase vacancies</i>
Pharmacist competency	<i>Inexperience, lack of judgment, desire for fall-back position of referral to doctor might not achieve anything</i>
Pharmacy security	<i>Safety of patients and pharmacist</i>
Pharmacist workload	<i>Pressure by patients for their requests, not enough time for consultations, competing PBS script and sales demands</i>
S8 drug is different to S3 drug	<i>More responsibility with opioid than other S3 drugs</i>

Appendix 8. Establishment of patient typologies

Typologies were used to better understand interviewed patients and why they had different experiences in accessing treatment. The two patient typologies were ‘easy access patients’ and ‘difficult access’ patients. Easy access typology patients believed that they worked really hard or that the system worked for them when accessing treatment. Difficult access typology patients were either in pain or believed that the system did not work for them. The process of establishing patient typologies is documented below.

Table 31 Quotations from easy access and difficult access typology patients about initial treatment access

	Belief of easy initial treatment access		Belief of difficult to access initial treatment
The system worked for me	<p><i>“I had tried that about five times [to detox] and because I was going back to the same situation, it took me a long time to realise, no, go and get on the program and see how that goes ...” (C9).</i></p> <p><i>“Yes, it was actually (easy to get an appointment to see a clinic doctor). I don't know whether that was because I had been in here, inpatients, or not. I don't know whether that was a factor, but yes, they were very, very good” (C9).</i></p>	I was in pain	<p><i>“I found when I first started it was a real pain, it was, because I went to see the doctor and then I had to go back three weeks later or something to get an appointment” (C1).</i></p> <p><i>“... the wait I had to go through because it was murder. That's what I was trying to do, I was still wanting to give up in a way. I just needed help to do it” (C1).</i></p>
	<p><i>“I was given a list of doctors ... [I] went through it and I phoned every practice and got through to the receptionist, and the receptionist would either say yes or no to, do they have a prescribing doctor there. If it was a yes, sorry, we're all full at the moment, sorry, see you later. Then I came across [doctor's name] and she had a spot, so that's when I first got onto the methadone” (C10).</i></p>		<p><i>“It took me a while for youse [the clinic] to actually take me on ... I came here very crook and [the receptionist] said to me – what am I going to today? ... I said, well, you're at work, where do you live, and that made her open her eyes up a bit ... I know the next day I was on the methadone program. I told them I was breaking into houses for a living, but you're at work so obviously you're not at home” (C14).</i></p>
	<p><i>“I rang up (the clinic) and asked for some prescribers in my area. They gave me some doctors that prescribed methadone and I rang them myself, and then asked if he would take me on and he did ... So that two months [waiting time] is still a long time to, you know, where you have to stay on the heroin otherwise you're crook in bed, aren't you?” (C13)</i></p>		
	<p><i>“If you're really fair dinkum about getting on a program you know you've got to ring up the operator and ask for the DDU number or something and then you pretty much can go from there, can't you? So I don't think availability is a problem, do you? I don't think so. I've never found it a problem in any state. They've always had a – even in (town) there was a bloody prescriber lo and behold. That one took a bit of finding, but I found one” (C7).</i></p>		

Table 32 Easy access and difficult access typology patient perceptions

The system worked for me	Belief of easy access typology patients	The system didn't work for me	Belief of difficult access typology patients
	<p><i>"I was actually taken to (name) hospital and they referred me to here – or not referred me, they actually rang up here and got me an appointment and so forth to come out and go onto the program. They put me into the in-patients I think it was for 10 days before, to start me on the program" (C2).</i></p>		<p><i>"We came down here [to South Australia] for medical reasons but we found it even harder down here than it was in [the previous state] to find a prescriber" (C3).</i></p>
<p><i>"... it was northern suburbs when I first started. There was a clinic out there, near the train station and that's how – it was pretty easy to get on" (C5).</i></p>	<p><i>"So I've come from [interstate] to South Australia ... that's probably my issue ... I couldn't find a private provider at that stage because I didn't have enough notice I'm coming over" (C4).</i></p>		
<p><i>"I was a drug dealer to start off with and I ended up in jail and I ended up getting on the methadone program through jail. Then when I got out, I had to be released on a stable program so they sent me straight to (the clinic)" (C6).</i></p>			
<p><i>"Yeah, we got a call from the original doctor that couldn't help us – who actually did help us really. He just said go see this doctor and so we drove there and we just sat in the waiting room and then he seen us. He prescribed us straight away" (C7).</i></p>			
<p><i>"At first I was referred here by a doctor. That was previous and then this time I just came to the centre, well the clinic, rather ... I was seen within a week" (C8).</i></p>			
<p><i>"I actually came in and did detox at (the clinic) and went on the program from there ... At the time it was six weeks [wait]" (C11).</i></p>			
<p><i>"I was in prison and the prison doctors organised all that for me. I just went to the doctor and said that I'm using drugs in here and I want to stop and they said, oh we'll put you on the methadone program and they sorted it out" (C12).</i></p>			

I then analysed the main themes according to the easy access and difficult access patient typologies. This was done to identify whether or not there were themes closely associated with one typology or another.

Table 33 Establishment of patient typologies

Part 1 themes	Easy access typology (C2,5,6,7,8,9,10,11,12,13)	Difficult access typology (C1,3,4,14)
Major theme: Variable patient experiences in starting OST		
Ease of initial treatment access	Already described	Already described
Engagement with other activities during waiting time	<p><i>“People talk about drugs and people want to buy drugs off you, you know what I mean? ... someone asked me if they could buy my dose off me. I won't do it. Never have and I never will. What am I supposed to have for the next day? Do you know what I mean?” (C5).</i></p> <p><i>“Before you get into the doctor you've got to keep using before you get on the pro – like you've got to keep using, you know, so obviously to get money you're doing crime more or less?” (C5).</i></p> <p><i>“... even if you want to get into outpatients to go to detox you have to wait on the waiting list, you know what I mean? Because it just takes too long. But in the meantime, you've got to keep, you've got to keep using otherwise you get sick, don't you?” (C5).</i></p> <p><i>“... I was probably one of the ones that used hang around the pharmacies, you know what I mean? Like looking for drugs, you know? Because you know you can get them from – or someone that can get them, you know? A lot of people do that. I haven't done that like since I've been on the program the first time, you know?” (C5).</i></p> <p><i>“[on a waiting list] ... They're got to find the money, don't they? They do crime, don't they? To get money to have another fix or whatever they call it, don't they? I've done it, so I had to do it for the first time I got on the program to go out and do crime to get money for another shot or whatever. Or hang around the chemists ...” (C5).</i></p> <p><i>“We have to go and buy morphine or heroin off the street. Turn morphine into heroin and you make home bakes – whatever – whatever it takes to be sick, we have to earn money” (C6).</i></p>	<p><i>“I went and used them again. I can't really remember. It was so long ago but I know I was using right up until I started the dosing and then the first dose I did – I don't think I even took the first dose because it wasn't strong enough to warrant so I think I used even then until my dose went up and then I started dosing properly and stopped using” (C1).</i></p> <p><i>“We hear from people all the time about how much trouble it is and just what's associated with finding a doctor ... Oh, they just get the drugs off the street. They just buy, beg, borrow or steal, most of them” (C3).</i></p> <p><i>“It seems to be easier to get it from the streets than it is to get it the right way, to see a doctor ... When they make it harder for the people to find a</i></p>

	<p><i>"... it starts off like a minor cold, then you get aches all over your body, you can't eat, you can't drink. By the third or fourth day you've got diarrhoea and you're being sick at the same time plus you can't hold nothing down and you've got a headache, hot and cold sweats, you can't sleep. There's heaps of different symptoms. Then you think you're right because you come good for an hour and then all of a sudden you'll crash again. It'll be – that'll just go on for weeks ... Well if you've got no choice: either you just lay there and be sick like that for a couple of days or weeks or whatever how long you feel like you're going to die rather than – you either get up when you've got to get up and do something or you lay there and be sick. It'll drive you to do anything if you've been through it before. You don't think of the consequences. All you're thinking of is trying to make yourself better [unclear]. You steal cars and do anything. Lie, cheat and steal to get it – whatever you've got to do" (C6).</i></p> <p><i>"Just sort of having to wait like for a week and then usually having to present with pretty bad withdrawal type symptoms and there's not many people willing to do that. 'Cause I mean if you can imagine your body full of boiling hot water and the fattest person you've ever seen sitting on every limb while someone's jabbing at your eyes or something with hot sticks at the same time, all at once. That's just the start of it. So if you can avoid that you will. You know what I mean. Sometimes you're not proud of it, but you will. I've done ridiculous things to stop from having that – which is a different story. But yeah, that's what I mean. It's just mainly the fear of withdrawal" (C7).</i></p> <p><i>"... you're a total mess and every day you've got to get up and you've got to chase that one more hit, that one more hit and that's not a life. It's not a life at all. I actually sold myself on the streets of [name] because I was never a thief" (C9).</i></p> <p><i>"What I actually did was I scored every day so that they knew that I need help and that I was a heroin user and that's what I had to do and that's what I did. Some people may be stronger; some people may be able to go cold turkey until they can get in and see a doctor. If they can do that, good on them, but I would say 90 percent wouldn't be able to do that" (C9).</i></p> <p><i>"Yes, I went out and I only had one \$50 deal every day and it only just held me, but I needed that otherwise I would've been shut down, I wouldn't have been able to have the strength to get on a bus to come here every day. So I did that, but I was also proving that I did have a problem as well and I still needed to use to have the energy to get here every day" (C9).</i></p> <p><i>"... because I had a \$300 a day habit. At one stage it was up to \$600 a day, so going from \$300 to \$50 deal every day, yes. I wasn't sleeping or anything but it just took the edge off" (C9).</i></p> <p><i>"I mean we even had people saying listen, I'm doing armed robberies, I'm doing this, I'm doing that and at that time you'd get the attitude, keep on doing what you're doing. Don't come back. If you came back here without a habit, you wouldn't get on the program. So even if you had such a piddly heroin habit of say \$50 a week but still it was causing an impact in your life, if it was so low you wouldn't get on a program because</i></p>	<p><i>substitution, I suppose you'd say, to getting drugs off the street or they can even get the drugs that they supply through (the clinic). You can even buy those on the street, the exact same drugs" (C3).</i></p>
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	<p><i>they'd think it's not worth it. Where nowadays any impact in your life, you can get on a program. You can go on a low dose but in those days if you didn't have what's classed as a decent habit, you would not get on a program” (C11).</i></p> <p><i>“They'll definitely be using in between that time until they do see a doctor but if people, if you want to get on it, you do wait, you will just be using in between that time” (C12).</i></p> <p><i>“It was very frustrating because I was at my wit's end. I was getting into – I was doing a lot of crime like I only ever did larcenies from shops and things like that, and I'd sell it for a third of the price and that would get me my heroin” (C13).</i></p> <p><i>“A lot of people lose interest and they won't even come back, do you know what I mean? ... They just go back, they just go and do what they're doing, you know what I mean? Crime and, you know, that's if they might really want to get on the program or they don't. Some people like to get on the program, like to have that as a back-up sort of thing, you know what I mean? Like they're still using but at least they, if they haven't got the money well at least they've got the methadone or Subutex® to stop you them from hanging, do you know what I mean?” (C5)</i></p>	
<p>Expectations for treatment access</p>	<p><i>“... if I was in that situation, I'd want to see a doctor straight away, you know? That's what I'd want. I wouldn't want to keep doing crime, do you know what I mean? Like so I'll end up in jail, do you know what I mean? Straight away, like as soon as you ring up you should be able to get an appointment to see someone” (C5).</i></p> <p><i>“I reckon it should take basically if you ask for help, within two days. Two to three days because before that – after that, you become desperate and you're willing to do anything. So if you are willing to get help and you ask for help you should be able to get it” (C6).</i></p> <p><i>“... because before I went to jail, I did try and get onto the program a few times and just – there was no way in hell I could get on – no chance in hell I could get on the program. I had to be taken to hospital from jail to be put on a program. I had to fit and everything. So it can be very hard for people. I know what people go around not getting on the program. I couldn't do it every day still – not the way I was doing it. It's either that or you just go doctor shopping with some other Medicare card and try and get morphine in the doctor's” (C6).</i></p> <p><i>“I reckon present that day. I reckon you should be sent away and at a reasonable time the next day – obviously not in the afternoon – in the morning, like 9:00 to 9:30, 10 o'clock at the latest sort of thing. If you're referred back the next morning still keen – obviously say you're showing a bit of commitment – do you know what I mean? It's not just a once off. You're sort of going off the bat. You've been there twice at least, you know what I mean? So you've shown a bit of commitment. Yeah, I reckon that would be ideal” (C7).</i></p>	<p><i>“I think if an addict comes in and sees the doctor he should be more or less treated straight away. Maybe put off for a day just to sort him out sort of thing but not the wait I had to go through because it was murder” (C1).</i></p> <p><i>“... within a couple of days. I wouldn't even say a week. I would put it down to just a couple of days because I have been stuck myself without it for two days” (C3).</i></p> <p><i>“It should be like going to a doctor really. You go to a doctor, you get assessed and you should get assessed for what you need ... I suppose, probably it should be that day that you get put on it because, as I said, it's not a comfortable waiting period. That time frame seems like forever for that person. That's what I mean. I know it's not easy</i></p>

<p><i>"I've heard from Sydney where people go to a doctor and they will do some heroin and they might have only had it for the first time but because their eyes are pinned and everything, the doctor will put them on a program. They can keep the methadone in their mouth and then just spit it out and sell it and they do that a lot in Sydney, I know that, that's a fact, they do it. So I don't think it should be easy for a person to get on the program because if they really, really want to get on the program, they will hang out for that week. They will prove that they have got an addiction. I think that's the best way to go. Okay, there's a long waiting list but tough titties; if you really, really want to do it, you will go through that, because what they go through every day to get their drugs, like to steal money and things like that is far worse than waiting a week or two weeks. So I think the waiting list is irrelevant, if they really want to do it, they will go through it and they'll do it the right way" (C9).</i></p> <p><i>"I really believe that because if they're serious about it they will wait and they will do the right thing. There's so many that will waste the resource's time and they're not ready and they go and use every day but they'll still go to the chemist and take their dose, but they'll use on top of it. That's ridiculous because it is wasting the resources of the government and I don't like that at all ... So I believe two weeks, that's fine" (C9).</i></p> <p><i>"... and I don't think two weeks out of your life is anything, really, if you really, really want to help yourself, two weeks is not a long time to wait. Even if it was three weeks, it's not a long time to wait" (C9).</i></p> <p><i>"A day, two days max. Because if someone's in trouble they're not – they're either going – in that waiting time, they've got to sustain their level of opiates in their body, and the only way they're going to do that is by any means possible – by that I mean crime" (C10).</i></p> <p><i>"I think the quicker the better. Because when a person makes that decision, they usually haven't just made it. It's taken them – oh I'll manage, I'll manage, I'll do it, I won't. I will bother, I won't. So they go through a process themselves of arguing in their head, yes I will, no I won't ..." (C11).</i></p> <p><i>"It felt a bit like they didn't really care, because he knew that I'd still maintain taking the heroin until I got on the methadone. So that, in itself, who knows, I could've got the wrong, I could've got a bad batch or something and OD'd and died or something. Yeah, so the waiting period, I don't think you should have to wait. I think you should – like, if you're asking for help, you should be able to get it more or less straight away" (C13).</i></p> <p><i>"Otherwise they'll go out and use heroin and if they're on heroin they probably won't even make the appointment because they're feeling good and then tomorrow they'll say I wish I went to the appointment, because they're hanging out again and they've got to go out and do another job to get their heroin" (C13).</i></p> <p><i>"Whereas I think, you come here and they send you away. You can't get on the program the day you come. Now I think you should be able to because if you get sent away, they're just going back on heroin. What if that person dies tomorrow? How would you feel, that you sent that person away? I know I'd feel terrible"</i></p>	<p><i>to get onto, so I look at the other side as I put my shoe on the other foot, you know ... As I said, the doctors have got to make sure that you're not lying and everything as well. It makes it a bit hard. As I said, you've got to get assessed properly. It makes it difficult" (C4).</i></p> <p><i>"Probably the ideal thing would be, as I said, straight away, but realistically probably a day to two days, up to three, maybe longer" (C4).</i></p> <p><i>"... when somebody asks for help, you need to give it to them that day, not three days later" (C14).</i></p> <p><i>"Immediately. These people, right, that ask for help, they've hit rock bottom. If you don't give it to them then you're going to lose them. They are going to go to your house or somebody else's house just like you and break in. That's why when they say, look, I'm really sick, I need help now, I'm not saying give them the money for smack but give them some Maxolon, give them a cup of tea, a cuddle, whatever, whatever it takes just to get them through that little bit (C14).</i></p>
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Concerns with current model of treatment		
Consistent relationship with doctors	<p><i>“The pharmacist was basically monitoring me and I think they’re more than qualified to know when people they see every day are sick or not. When you see the doctor once every two to three months and here you see a different doctor every time, just about. That’s the problem with ideas is that you see different doctors and they’ve all got different ideas about the way that you should be treated” (C6).</i></p> <p><i>“I think that once you see a doctor you should see the one doctor and not just be palmed off to whatever – I know it’s hard because of the way things are, but it’s hard for us to be able to talk to different doctors all the time too, you know? They don’t really get to know where our situation’s at. They’re just basically reading off a book. Nothing against doctors that work here but it’s pretty hard to be a good doctor if you don’t know the patient. That’s basically all there is to say about the doctors here” (C6).</i></p> <p><i>“... why I’ve always stayed with [the state clinic] is I’m very grateful that I do have a really good doctor here. Other doctors that I’ve seen here have been brilliant; they’ve always been really good” (C9).</i></p> <p><i>“So I’m quite happy just plodding along as I am and I prefer to speak here with a doctor that knows what I’m about than going to an outside doctor that might not be drug-friendly. At least they’re drug-friendly here” (C11).</i></p> <p><i>“... like I said but quite often you’ve got doctors that don’t stay around too long especially here. One minute they’re here and the next minute they’ve gone. I think they’re only here for a short length of time. So that needs a bit of stability because then the patients never know who to contact, who to see, who to speak to” (C11).</i></p>	
Misuse of medication	<p><i>A lot of people do sell it, you know? People selling powdered methadone, it sells for a dollar a ml, \$2 a ml. If you want to sell it, if you want to sell it well they’ll pay whatever really if they want it. If they’re sick and they’ve got the money and they can’t afford any other drug, they will buy it for anything, you know? (C5)</i></p> <p><i>“A lot of people use the programs as a crutch, so if they can’t get drugs for that day they know that they can go to their chemist and they can get their dose. Then the next day, especially if they get a payday they can go and use the drugs” (C9).</i></p> <p><i>“They’ll go and get their dose but then they’ll have a hit on top of it. Then if they have take-aways and they’re in the position where they have money to go and score, a lot of them will go and score but they’ll sell their take-aways” (C9).</i></p> <p><i>“My husband and myself go to the same chemist and over the years we’ve seen people spit it back into the cup and things like that, or spit it into a little container. We tell them that they’ve done it because I feel that</i></p>	

	<p><i>person isn't there for help; they're there to use that as a back-up for when they can't get their drugs and that is widespread. It is a common fact that it does happen” (C9).</i></p> <p><i>“I would just dry my tongue out till it was really dry, and get six milligrams of Subutex® and just go and blast it. You know put it straight into a syringe and have it. There are people that take their methadone now, and there are people that take their Suboxone® now and sell it” (C10).</i></p>	
Drug contacts met at the pharmacy	<p><i>“Because at the pharmacy there's not nice people, you know there's people with a box of Kapanol next to me – 100 milligrams Kapanol which is the one I love. So I'm trying to hit him up for Kapanol, and, yeah, we formed a relationship and so I had easy access to Kapanol purely through the chemist [laughs]. See this is where stuff – this is stuff that could be useful for your study. That was a really bad relationship because I was on 300 caps a day for ages. Because he was on four a day, but was only taking one; something like that and had saved up a hundred or something like that in his cupboard. So he was giving me a free one every time I injected him because he could not get a vein. So he would give me a free cap if I injected him, which I did every time. So he'd give – three times, so he'd give me three caps to inject him three times. That was a really bad – that was when I was down to 1.2 milligrams of Subutex®, and so that relationship through the chemist completely fucked me up” (C10).</i></p> <p><i>“My only other concern about the chemist is the fact that, for example, on a Sunday morning because they open late, every patient is there at 11 o'clock on the dot wanting their dose. So therefore they interact, so therefore there becomes a circle of drug users: what are you on, how much are you on; what are you on, how much are you on; are you on that are you, how long have you been on that; can you get any of this? That interaction can be detrimental to the patient; it has been in my case” (C10).</i></p> <p><i>“They tend to group and meet at the same time which is also not good for them either. They find that they finish up wanting to score or score because people are talking about, oh there's some brilliant gear, there's this, there's this, there's this and that's not good for them either” (C11).</i></p> <p><i>Then they'll be there waiting, oh you get your take-aways today don't you want to sell us something? No. Oh yes, then they swear at you and call you all the names under the sun” (C5.)</i></p>	
Pharmacy fees	<p><i>“That's another thing. Every pharmacy charges different. That's what I don't understand, do you know what I mean? Like where I am, I pay \$64 a fortnight. Someone else at my chemist gets exactly the same as what I do and she pays \$50, you know what I mean? What's the, because she's been there longer than me, that's what I don't understand, you know? Or I can go up the road and get it for \$40 a fortnight, you know what I mean? I just pick my travel, you know? But I don't know why we go to West Terrace or it's \$5 a day or \$6 or \$6.50 because you've got take-away, you know? It's stupid” (C5).</i></p> <p><i>“A lot of people whinge about the cost. It costs me \$50 a fortnight, but I'm two weeks in front – two weeks and two days – and as soon as I get my pension, I pay the chemist because it's like as soon as I pay the</i></p>	<p><i>“Everyone knows that they get it for free. There's a lot of paperwork behind it. But if you look at it – like people go, this guy's spent \$100, \$200 on drugs, like what's \$4 a dose for methadone, seriously. No, I think that it should – people still should have to pay for it because they've got to bear in mind –</i></p>

	<p><i>chemist I pay my rent. Then I know I've got a roof over my head, so they have to learn to prioritise and a lot of them I notice go in and they pay daily. That's ridiculous. Why do that; why not do what I do and then you haven't got the worry of, oh I haven't got money for my dose today, they might not dose me. It's just ridiculous" (C9).</i></p> <p><i>"... it's just that I do see a lot of the abuse of the system and people like me, we don't like it. There's a lot of us out there who just don't like it at all and also the fact that they whinge about the payment. That's ridiculous when they'll go out and spend \$200 on one hit. I just don't agree with that at all and I agree that they should be made to pay on their payday" (C9).</i></p> <p><i>"I mean \$50 a fortnight is fairly cheap. That's what I'm paying, but there are people paying more, there are people paying less. There are chemists out there that don't charge a thing; I've come across one that didn't charge anything at all because it's free to them, it's just the dispensing fee. That's something that I think should be worked on" (C10).</i></p> <p><i>"The cost of the methadone program can be alright depending on the pharmacies. There's no set price for a pharmacy" (C11).</i></p> <p><i>"Now, I can't see why it should be a bit cheaper. The pharmacist is taking, it's their job to do it but I think they're charging way too much because I don't think it costs them a lot of money. I think the government helps that. They're just charging for their services, which is, it takes two seconds. Yeah, so I think it's a bit expensive but compared to heroin it's not, is it? If people can find \$100 or \$200 a day, they can find that" (C13).</i></p>	<p><i>I've whinged about – do you know what I mean? I can see – I've whinged about not being – paying for it before, but then you think about it, you can spend that much money on drugs, so what's \$4 a dose, you know, to save your life. Seriously" (C4).</i></p> <p><i>"Some chemists are \$4 a dose and some are up to \$7 a dose which is a vast range, I think. I think maybe it should be like set at a certain price. As I said, one month I was paying \$30 at Marion. I'm playing \$25 at Clayton – Croydon. It's different. When I went to midnight pharmacy I was paying \$6 a dose. I think in that respect they need to actually put one price on it, either \$4 or \$5 a dose or whatever, X amount per week, but make it one and then make it probably right out like Australia-wide, so then it's no different anywhere" (C4).</i></p>
<p>Privacy at the pharmacy</p>	<p><i>"The rest of the customers don't have to witness some of the riff raff that do go through there. I'm not saying that there's not some bad people out there who are on it and I don't agree with the way some people carry on about it when they're hanging out or whatever the case is and people like yourself who don't use drugs and all that sort of thing. I don't think they should have to witness that because that would just put them off going to that pharmacy then" (C2).</i></p> <p><i>"I'm pretty comfortable with talking to my pharmacist about pretty much anything. They pull you to the side and have a little talk to you in their little corner so that not everybody's listening and hearing" (C2).</i></p> <p><i>"The pharmacy [name] has got the best set-up, because it's got the little door at the back and it's totally separate from the chemist, well it is but it isn't. That's ideally the best set-up that I've seen" (C2).</i></p> <p><i>"There's a line-up at that time of the morning, do you know what I mean? Even like Northern, that one at Elizabeth is exactly the same. You've got to line up, they only let one person through the door and when people are walking through the shopping centre, they're looking at you, you know what I mean? The police are driving past all the time. It's not, I don't like it" (C5).</i></p>	

"I know West Terrace have got that one where you go down and sit, you know what I mean, not standing. It's still not very private and people can see you from out the back. It's not very, you know [private], because people look at you. When they're giving you a couple of stuff and you've got to sign for it and drink it and then you leave or you get your take-aways. People look at you funny. Same as when you're in Elizabeth lined up. They're, look at all them drug addicts and that, you know? Some of us might be, but at least we're trying to get back, you know? They don't give us a second chance, if you know what I mean? I might be a drug addict but it doesn't mean we're all the same, really. Or some people are doing it for the right reason and some are not. Some are just doing it for a back-up for when they've got no money" (C5).

"You know, like normal people that come and get their prescriptions filled or come and get nappies or whatever they want from the chemist. Sometimes it gets embarrassing, you know? Especially if you see them up the shop, like at the shopping centre. They point at you, he's the bloke who's on methadone or drugs, you know? I've had that happen to me. Look at that, he's that bloke who was lined up at the chemist getting his methadone, you know?" (C5)

"Not really because I'm on the program openly and willingly you know? If anyone asks me, I don't care about privacy rules. If anyone asks me I tell them. I know what I'm doing. I don't see how it'd be any different. People see you sitting out the front of here and they know what you're doing. If you're going sitting out in front of the chemist, it'd be less of a privacy [you know] because you could be there for anything, whereas if you're here you're here for that – or the detox. So yeah I reckon the private way – I don't see our privacy would be affected at all" (C6).

"They're all confidential anyway. That's silly. That's just being a bit silly I think isn't it? It's all confidential anyway, anyway. How would it be any different to the privacy involved now than then – really if you think about it?" (C7)

"Chemists are discreet and there's no reason why them and their staff should not know your background. There's no reason why they should not know, because they have to know the person who is coming into their shop every day" (C9).

"I think with the privacy part, that's quite silly. You go to the chemist, they get to know you as a person anyway so why shouldn't they know your medical background and why shouldn't they know anything else that is known about you? I don't have a problem with that at all and I don't think it should be a problem. If people want to be secretive then that rings alarm bells for me, they must be hiding something. Do you get where I'm coming from?" (C9)

"I mean as it is now, even the simple fact that people are going to chemists. A lot of them line up at a certain time of the day whether it's first thing in the morning and they still talk drugs and everything else. It's not a good environment a lot of the times. It works out that there's no confidentiality on whose on a program and stuff like that" (C11).

	<p><i>“Well the simple fact is when people are lining up, everybody knows each other so you've got people going to shops in your area and stuff like that. When people are waiting, and methadone people are always taken to one side or they've got a different door that they've got to go in or they stand at a window and they've got to wait their time, people know they're methadone people” (C11).</i></p> <p><i>“So people are looking at you all the time and you're looked down at from the outside. There's no – people need to have what's the best time for you to come up, so there's no groupings and stuff like that. People go in and be a bit more – alright when you're going for a prescription. You go in, you give your prescription and you walk out. You're not all lined up waiting for your methadone and stuff like that” (C11).</i></p> <p><i>“Not really, privacy doesn't really bother me as much as some people. If you told this to other people, it wouldn't really bother me. Some people are more – like to be more private than that but I haven't really got many, much concerns at all” (C12).</i></p> <p><i>“Maybe in the front counter would be a bit of a problem but in a closed room I don't see why there would be worries about privacy in there in like a private dosing room. Ours has got a, you go round the side and there's a wall there and no one can see what you're doing in there or anything like that. It's not closed up but just that no one can see you and that's fine with me” (C12).</i></p> <p><i>“Yeah in front of the shop like just where normal people get their prescriptions, I'd rather go round the side or hidden or something like that. It wouldn't bother me if it was from the front but it's better at the side or hidden or something like that” (C12).</i></p>	
Pharmacy experiences		
Relationship with community pharmacist	<p><i>“... because they see you regularly whereas the doctors doesn't. I think yes they do have a bit more understanding of the person. So, in that way, I think they can make a bit better judgment” (C2).</i></p> <p><i>“... in that respect, pharmacists should get a bit more credit than what they're given. They do know a lot more because they're dealing with the medications as well as the symptoms, whereas the doctors are more only dealing with the symptoms and what they can give you to fix it” (C2).</i></p> <p><i>“The doctor says, what's wrong with you, okay take this, see you later sort of thing. The pharmacist, you take the script to them and they'll say, okay what's that for? You tell them, oh yes okay, is that the best and do you know how to use it? Doctors don't even tell you that half the time, but they don't get enough acknowledgement for that, the pharmacists” (C2).</i></p> <p><i>“... you have to the same pharmacist regularly. At [pharmacy name], they have pretty much a different pharmacist every day and that I don't agree with because you can't get or that pharmacist can't get into knowing very well. If you're only seeing them once a week, it's pretty hard for them to get to know you and</i></p>	<p><i>“... you see, because the pharmacist sees them, I'll say, every day or even every second day. It's still a lot more one on one than what the doctor would – the doctor's 15 or 20 minutes – and I reckon they'd hear a lot of stories and garbage, yeah” (C3).</i></p> <p><i>“... the pharmacist sees you more than what the doctor does anyway” (C4).</i></p>

	<p><i>judge – well not judge – but work with you for the best for you sort of thing” (C2).</i></p> <p><i>“I feel that’d be a hell of a lot better because your pharmacist you see every day and they know you personally and know when you’re angry, know when you’re not angry, you know? They know your personal life a bit more – better than the doctor can because he’s too busy. I’ve got enough trust in my pharmacist that I know that they would prescribe me properly because I’ve been with them for so long. I would actually prefer it if they would prescribe me” (C6).</i></p> <p><i>“I reckon that’d be the best thing. I reckon it’d be a lot better system than what we’ve got today. As I said we see – we come in here and see a doctor but we see a different doctor every time. So they don’t really know us whereas our chemist does know us personally. I think have got a lot better judgment – they could call a better judgment call” (C6).</i></p> <p><i>“She’s great to work with, my pharmacist, and you don’t find a lot of pharmacists like that. Because she always asks me, and she praises me, which is the best thing a pharmacist could do, because it is quite embarrassing to go in there and people look at you drinking this thing and they’re wondering what you’re doing and that. But my pharmacist has been great. She praises me all the time, saying [patient C13], you’re doing really well and that to me, gives me a lift and helps me to keep going” (C13).</i></p>	
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Table 34 Analysis of the main themes according to the easy access and difficult access patient typologies

Part 2 themes	Easy access typology (C2,5,6,7,8,9,10,11,12,13)	Difficult access typology (C1,3,4,14)
Benefits of the co-prescriber model		
Flexibility and convenience to treatment	<p><i>“Personally I think it's not a bad idea at all, because sometimes it's hard to get back to the doctor for a follow-up script or so forth. Then if you can't get a script or your script say runs out on the 10th and you can't get a doctor until the 16th, you've got to come out and get an interim for that time. If it was done like you're saying, the pharmacist could just follow it on and you wouldn't have to worry about following up that script all the time. I think it would save a lot of time and a lot of hassle and a lot of money” (C2).</i></p> <p><i>“... it would be great for a pharmacist to be able to say, oh [patient C7], your script's coming up soon. Would you like me to extend it for you? Rather than having to only have that one option of the doctor or no dose sort of thing” (C7).</i></p> <p><i>“Yeah, bloody oath. It would be excellent. It would be so much easier” (C7).</i></p> <p><i>“I think it's a good idea. I hope you do it – about the pharmacy being able to prescribe. I think it just makes sense as long as they just be a bit cautious with it ... But yeah, I don't know. It would be a shame for a few idiots to wreck it for everyone” (C7).</i></p> <p><i>“I reckon the pharmacist should definitely be able to continue your script. Stop having to go backwards and forwards. It's a lot easier, saves time, yeah much easier. The pharmacist knows a lot about you anyway because you're in there every day. She knows what's going on sort of thing so it would be better if you didn't have to go back to your doctor all the time ... Yes, I reckon that would be a good model. I reckon it would be better than it is now” (C12).</i></p> <p><i>“Easier compared to the current model, yeah, not as much time wasting. If it doesn't take a long time to see a pharmacist as well. I</i></p>	<p><i>“It sounds like a good idea if you could just go to the pharmacy or a specific pharmacy and organise it through the pharmacy would be quite a good idea. I think it would be a good idea rather than running back to the doctor to the pharmacy to and fro all the time. If the pharmacist could prescribe or – I'm not saying – I still suppose you'll have to go and find a doctor to get on it but yeah. I feel it would be easier that way” (C1).</i></p>

	<p><i>like this model if it doesn't take longer than it is already, like you might want to see the – renew your script, it's not going to take a few weeks before you can do it, yeah" (C12).</i></p>	
<p>Improved monitoring of patients</p>	<p><i>"For the pharmacist and the doctor to work together, I think that's good because the pharmacist is seeing you every day, and how you're coping, and also if you're going in there stoned or things like that, you know what I mean. I think that's a very good idea" (C13).</i></p> <p><i>"They can see that you're doing okay because you're seeing the pharmacist more than what you do the doctor. So they know more about you, do you know what I mean? ... More about you, your ways each and every day. Your eyes, they can tell if you're stoned or anything like that, more so than a doctor here because they don't see you often enough, whereas your pharmacist does. Now, your pharmacist would know if you've walked in there stoned because they see you straight every day and then one day you go in there stoned, well I think that's, your pharmacist has got every right to say no, I don't think you should be dosed today, or come back this afternoon and I'll see how you look then" (C13).</i></p>	<p><i>"Oh I think that's a good idea because I think the pharmacist gets to know more about the person by seeing them even every other day, even if they only go every second day. They're having a lot more contact and seeing them in different stages. Yeah, I think the pharmacist has a lot better idea of how the person is handling or is – well, they see them whether they're coming in there drugged off their heads" (C3).</i></p> <p><i>"The pharmacist sees that patient every day or whatever days, you know, so they've got – you know that person, so you get to see them, see what they're like and see if they've been on any drugs or any different kind of drugs, you're going to notice that straight away. It's just like your best friends. Well, not your best friend, do you know what I mean? Somebody that you see or go to school with every day, if something's different, of course you're going to notice it. So your pharmacist, I think, should have an impact on it" (C4).</i></p> <p><i>"... because some do abuse the system, which I think they know usually. But as long as, because the pharmacist has got to see you, he sees you mostly every day anyway and he'd know if you're stoned or not by looking at you, you know what I mean? So he'd know if you'd been using probably as well, you know what I mean? So they know the signs. So the pharmacy, if they didn't want to dose you, well they wouldn't dose you – you'd have to go and see your doctor about it really. But I wouldn't mind, I reckon it would be alright. But you'd have to see your doctor, you know, I see my doctor every three months, you know? (C5)</i></p> <p><i>"Like, well if the pharmacist knows there's something wrong, he could say, well you have to go to your doctor or something like that. Or, you know, because I know some pharmacists do keep an eye on their patients very closely because they know some people still keep using and they come in off their face and that. By law, it's something – they're not really allowed to dose them, are they? So for patients like that, well it wouldn't work, you know what I mean? Like they'd have to come and see a doctor, you know, some of them haven't got – they don't want to get off. They've got no intentions of getting off heroin or whatever or pills or whatever they're on – they've got no intentions of getting off it, you know what I</i></p>

		<p><i>mean? So I'd give it a go, but it's up to the, you know, every individual I suppose or everyone's got a different case" (C5).</i></p> <p><i>"I think the pharmacist and the person that's involved, the pharmacist needs to know everything, as I mentioned earlier to you. I think the pharmacist is a big part of that because you're dealing with that person every day, or you know, if you don't get the take-aways, so the pharmacist has every right. So I think that's a very good idea. As I said, the pharmacist actually gets to see you more than the doctor would. They get to see you on a daily basis and get to see that you're still doing okay" (C4).</i></p>
<p>Improved communication between practitioners</p>		<p><i>"It's probably communication, I think, between the providers. As I said earlier, there's communication between my pharmacist and either my worker or whoever was meant to give that information to my pharmacist. They didn't get the right information, which then in turn they couldn't give me, which was frustrating for them and for me. As I said to you earlier, I think they've got every right to – well, I personally think they have got every right to know. I'm their patient. They see me every day" (C4).</i></p> <p><i>"There's a lot of lack of communication between them. I'm not sure why. I really don't understand why. If they had that communication there, I think they would have a lot better interaction with work, do you know what I mean? They wouldn't have arguments over the phone, whereas they do. They wouldn't have them late faxes" (C4).</i></p> <p><i>"I think it would be a lot better. As I said, it would have stopped an argument over the phone with my pharmacist. Then the other day, there would have – even the fax that came through, that was misconstrued to the pharmacist. He didn't understand that either. I think it would be very good and it would be very good for me as well because then it wouldn't make me get frustrated in there like the pharmacist did as well. So it would work a lot better" (C4).</i></p> <p><i>"They should be communicating together anyway and knowing what they're both doing. There should be notes" (C4).</i></p> <p><i>"I think that's a really good idea what we've just spoken about. Pharmacists I think, as I said, need to know. They know a lot about you anyway, but like the more they know about you, the more interaction they have with the doctor, I think will be a lot better. I think will be a lot better for the patient and a lot better for the pharmacists, actually. They</i></p>

		<i>probably wouldn't get as frustrated either" (C4).</i>
Reduced cost and number of visits to the doctor	<p><i>"I really do think it'd be a good idea if the pharmacist had that sort of power to continue your script and because it would save a lot on the cost of seeing doctors" (C6).</i></p> <p><i>"... if everything was fine in your life and things were working well, and your goal ultimately would be to get off the stuff, it would be helpful instead of having to make an appointment, travel to the doctor just for one ml maybe: one or two milligrams, make an appointment, get another script, cost the government more etc., then go back to your pharmacist, give him the script, okay I'll take you down two mls. Whereas, yeah, if a chemist was – but they've also got to be educated on the pros and cons and whatever's, yeah. I do think it is a good suggestion. But as far as up goes [dose increases], I don't know" (C10).</i></p>	
Barriers to a co-prescriber model		
Manipulation of the system	<p><i>I don't think that's a good idea really because a lot of people abuse the system. As I said, 50 percent plus would abuse the system and they wouldn't – I've been around a while, you know what I mean? So I've been on the heroin for 23 years so I've been around the traps. A lot of people do abuse – I used to be one of them myself. I used to be on the – when I first got on the program, I used to abuse it and methadone was the back-up, you know, that stopped me from hanging. Stopped me from doing crime, you know, so I didn't have to go and get money. I don't think it would work, no" (C5).</i></p> <p><i>"It might work for me, you know what I mean? But it wouldn't work for everybody, like, they'd abuse it" (C5).</i></p> <p><i>"Obviously you might look fine to the pharmacist then. But then half an hour after you've had your dose and plus you've asked him to increase it as well. You get a half an hour up the road when it's pumping through you, unbeknownst to him you're bloody on the nod scratching your nose going, ha ha ha got him. Then by the next morning, you're looking alright again, aren't you?" (C7)</i></p> <p><i>"Just only because I can see definitely that being abused, like 100</i></p>	<p><i>"I'm thinking of people trying to rort the system here and I think if they did do that the people would find a way to really – you know, to rort the system. That's all I can say. They'd find it easy some way or other. I don't know how they're going to do it but they would ... Yeah, people who aren't genuine sort of thing would probably find it easier to get the drug than people that need it more or the people that actually need it, yeah" (C1).</i></p>

	<p><i>percent definitely. A lot of people would abuse it. Yeah, that's about all" (C7).</i></p>	
<p>Impact on pharmacists</p>	<p><i>The pharmacy would have to have a say too I suppose because it is his shop and that. I don't know if they'd want a doctor in there and if they've got the availability of the room, you know? They'd have to build another room, especially at my pharmacy, you know what I mean? They'd have to build another – probably wouldn't work at my pharmacy but maybe with bigger ones it would. I don't know" (C5).</i></p> <p><i>"... a lot of people it's unsafe, you know, like for the patients. They feel intimidated, you know what I mean?" (C5)</i></p> <p><i>"It would be good to have a bit of security there, especially if that was the only dosing place you could go, like if that was the only one I could go to, you know" (C5).</i></p> <p><i>"The only worry would be like the extra workload of the pharmacist, whether they'd be compensated for that. I'm not sure. Well if they're prescribing, then they ought to be paid for the prescribing and also being qualified to do so ..." (C8).</i></p> <p><i>"But ideally it would be lovely that the pharmacist would be able to do that. Yes. It's just my major concern is people getting upset ... Especially at the pharmacy, as there are medications already there. So yes. I mean here, it's a lot stricter. Everything's under lock and key. Whereas at the pharmacist, it isn't. I mean it's not like you can just – they still are behind the counter. But medications probably are under lock and key. I don't particularly know. They are behind the counter. But you do hear of chemists being robbed and it's not very nice, especially if someone gets stabbed. I've worked at not a pharmacy, but a shop, and that has happened to a pharmacist. It's just not really very nice. That does – that would go like anyway. But it's just the risk of, yes, violence towards the doctor or a pharmacist really. So I think maybe with like security would be – there'd be some form of security unfortunately" (C8).</i></p> <p><i>"Well, it does put a lot of actual pressure on the pharmacist, because then you have to just – at the moment, I am on a stable dose. But I could ask the doctor to – I can reduce it at the pharmacist. But I can't</i></p>	

	<p><i>exactly ask them until I have permission from the doctor and then I can ask them. Hmm. I don't know. I'd say yes, but yes also that is extra workload. Also, yes, training as well" (C8).</i></p> <p><i>"They can't expect to be everything, a counsellor, a doctor, a chemist all the time to a patient. So you need a few simple answers not too much to be put on the chemist either. Otherwise you're going to burn them out with everybody's concerns" (C11).</i></p>	
<p>Preferred medical practitioner roles</p>	<p><i>"Increasing or decreasing, yes I think the doctor should do that, because a pharmacist doesn't have the full medical history of the patient. I think, like I said before with the scripts running out and that, the pharmacist should be able to continue on until you do get a script of whatever like that. As for increasing it or decreasing it or whatever, I don't agree with that, no" (C2).</i></p> <p><i>"I don't agree they should be able to because they don't know the full background of the person. Some people if they decrease it could make them have fits and so forth. Some of the pharmacists wouldn't know that, they're not close enough to the patient or to the person to know that ... If they were aware of the whole history and so forth and they knew the person reasonably, they weren't just a new person on the block, yes I believe that would be alright" (C2).</i></p> <p><i>"Up your medication – change the level on your dose. I reckon that should be left to the doctors. Like I was saying if you're on the stable dose, I reckon they should be able to – instead of being able to come in and get just the same script again and again, the pharmacist should just be able to ring a doctor and just get a continuation" (C6).</i></p> <p><i>"Obviously they wouldn't let a pharmacist start if the person wasn't stable, 'cause then it would be a bit silly wouldn't it? It wouldn't really work I don't think ... Just like, obviously you wouldn't want someone going straight – to not seeing the doctor for the first few months before he was – you know it sort of takes a few months for a patient or a user to be stabilised if he's being legitimate. Do you know what I mean? Best case scenario. It took me a year, but a few months – three months say. If you were legitimate, not new to them ra-ra-ra, you'd be stabilised. Then it would be okay just for the pharmacist to on go your</i></p>	<p><i>"I wouldn't be happy if he decided you didn't need enough – or I think it's more or less up to the doctor to take you off it or to reduce you" (C1).</i></p> <p><i>"I think the original treatment or medication should start with the doctor; it should definitely start with the doctor. I mean, like I say, I think pharmacists are pretty well off as far as knowing how somebody should seem if they're sick from X or Y, whatever the situation may be. I think the pharmacist has, probably, a lot better idea of how somebody's treatment is affecting them or not affecting them" (C3).</i></p>

	<p><i>treatment I reckon” (C7).</i></p> <p><i>“No, I think a doctor most definitely [should initiate treatment]. It comes down to a doctor and a doctor who is well versed in that field that really knows what they're doing, because users are very, very manipulative people. They're extremely manipulative. It's sad but it's so true and most of them believe their own lies. I did, yes I was once like that you know” (C9).</i></p> <p><i>“I don't think pharmacists should be allowed to initiate such a thing because people could die” (C10).</i></p> <p><i>“Yeah, going up on dose and maybe choosing or varying from different medications. Like methadone might work for some people better than Subutex® or something like that. A pharmacist shouldn't be able to make that decision” (C10).</i></p> <p><i>“[about initiation] ... there's a lot of work involved in starting somebody on and getting to all the information and stuff. It's a lot of time out that a pharmacist – time to take on something like that because they've got to get a lot of information, write it up and photos and stuff like that. I think it might be too much for a pharmacist to take on” (C11).</i></p> <p><i>[Why prefer doctor only to increase dose]</i></p> <p><i>“Because the doctors, they [the pharmacist] don't know your health as much and the doctor knows more about your health I suppose. They're more, they know a bit more about methadone, the pharmacist just dispenses it, they know how it can affect you more, a doctor, and how much to put it up, how low to put it down, at what speed ... Because increasing the dose is, can affect a person a lot more, can get sick on it, a pharmacist may increase you too quickly, you just don't know. The doctor would know better. Reducing slowly should be fine” (C12).</i></p> <p><i>[Why prefer doctors to stabilise patient]</i></p> <p><i>“For new people who had just come onto the methadone program, change their dose up and down a lot ... Yeah or when they've only, if they've been on them a few months, I reckon the pharmacist shouldn't</i></p>	
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	<p><i>be able to change it, I reckon the doctor should be the only person who changes that” (C12).</i></p> <p><i>“Because a doctor has been trained more in methadone use and that. It’s a more important time when they’re coming onto the methadone, during stabilisation especially, different people react differently to methadone” (C12).</i></p>	
<p>Pharmacist’s power over patient</p>	<p><i>“Some people are scared that their chemist has got too much power over them. That’s probably what it is. If they go off at the chemist, they’ve got no option, they’ll get cut off. That’s probably where the – they’d rather have the doctor up higher than the chemist. So if they do make a mistake at the chemist, they can always still get it. That’d be only one problem I’d see with that whole thing. If you had a personal conflict with the chemist and he was dosing you. If they refused to dose you what would you do? ... So there’d have to be some sort of fall-back otherwise there’d be chemists get – personal conflicts with you I suppose” (C6).</i></p> <p><i>“If they cut you off what happens? Like I said if you’ve got a personal conflict with them and they cut you off because they’ve got all the power over your script what happens then? I just don’t reckon one person should have that much power. That’s why I reckon the doctor should be the only one that should be able to write – up and down your dose or whatever – should be allowed to play with it” (C6).</i></p> <p><i>“... as long as they’re not going to play God because he’s angry that day or something and has the power to not dose me or something ‘cause he’s angry or something – I don’t know. But I suppose they could do that anyway couldn’t they – because they could refuse you your dose if they wanted” (C7).</i></p> <p><i>“I think it’s a fabulous idea but you find in areas like this, doctors come and go very quickly. So it needs to be monitored quite well because some pharmacists are quite – are not good people. Ninety five percent are but you’ve got five percent that are really not there for the interest of the patient at the time, do you know what I mean? I think the voice of the people needs to be listened to so if they make a complaint or anything like that – in fact, they don’t make complaints</i></p>	

	<p><i>because they think they'll never be listened to. I think that, as long as it's two people that are following what's going on and if there's any issues raised or too many people getting cut off from programs because of the pharmacist or he wants to pick his patients and stuff like that, then that needs looking at. Otherwise I think it's a fabulous idea. I do, I like it" (C11).</i></p> <p><i>"On their own, I don't think they should be able to just cut people off, off methadone, more so with people with children, small children or children. I think that needs collaboration so the cutting off of patients by a pharmacist, I don't think that's right. I think that needs to be spoken to and behaviours looked at or whatever's caused the problem needs looking at and needs to be brought things. So I think cutting off patients from their doses, I don't they should be allowed to do that" (C11).</i></p>	
Co-prescriber pharmacist extended roles		
<p>Continue, amend or reduce dose</p>	<p><i>"I reckon it'd be the best way for me to be dosed – definitely – because I've been on the same dose constantly for so long. Nothing's changed so – until recently when I changed it. So for them four years that I was on the same dose, it would have meant that I wouldn't have had to make the double visits from here back to the chemist every four weeks or whatever, if they could continue it on. But if you are being monitored no, I don't think it's a good idea ... Yeah if you're being stabilised, it's not a good idea because you don't know where you're at really. But after stabilisation yeah, I think it's very innovative" (C6).</i></p> <p><i>"... to have the option of the chemist to be able to do more – maybe able to extend your script and stuff like that. That'd be excellent because I mean sometimes you forget. Then all of a sudden your pharmacist will say, oh [patient C7], you've only got three more days on your script – you'd better go see your doctor. The all of a sudden you've got to organise – and he might be away or you just panic" (C7).</i></p> <p><i>"I think for the reasons I just said about people wanting to get stoned from being on it – for the wrong reasons – to increase, I think a doctor should have to – they should have to go to the doctor for that</i></p>	<p><i>"... getting back to the amount of time that you spend going to the pharmacy, especially if you're on a program like this. I mean, the pharmacist is well enough off to be able to say if, maybe, they should have it increased a small amount or even decreased if they think that ..." (C3).</i></p> <p><i>"I think if I was to come in and ask the pharmacist, okay I think I'm ready to go down on a dose and I can't see the doctor but the pharmacist is there and the pharmacist is still seeing me, as I said, he sees me on a regular basis more than what the doctor would. Okay [patient C4], yes I think you're okay to go down on a dose, yes I think you should. They haven't got that right at the moment actually. I think they should have that right" (C4).</i></p>

	<p><i>for obvious reasons. But definitely for the decrease, why not? I mean you can only have good intentions if you're trying to decrease obviously eh? I can't think of a scam or possible gain or illegitimate reason why you could get out, get something for decreasing. You know what I mean?" (C7)</i></p> <p><i>"Really just going reducing, you really I suppose could just ask and discuss that, like over the counter, because there usually is – there's a separate area where you do get dosed. So some are very private. Some, like they have a booth. Others have a totally separate area, like another building, like it's separate from the actual other chemist. Others, it's just another counter. So yes. Really for me I really wouldn't mind actually, talking to the pharmacist about that and reduction, yes. I would definitely be willing to do that, yes" (C8).</i></p> <p><i>"I suppose you might need to increase because you just are feeling uncomfortable on that dosage. But yes, I would have to say yes, to take the urine testing. Because otherwise what justification would the person have for asking for it to be raised, other than being uncomfortable, which would be why I would" (C8).</i></p> <p><i>"I think that is excellent, but there again lies with they have to give a sample. That urine sample must be given, because that's the only you're going to tell whether they're abusing the system or not ... Every time you come for your script review, you should give a urine [sample] and you should be made to give a urine [sample]" (C9).</i></p> <p><i>"... So it's not a problem for me to give urines [samples] and things like that because when they come back clean it makes you proud of yourself. You've got to have a bit of pride in yourself and knowing that yes, okay I might have been a down-and-outer but I'm doing a lot better now" (C9).</i></p> <p><i>"Yes it would probably work for me because I'm not interested in taking any drugs or anything. People like myself and other people who work really hard and they're getting their life together and they've proven themselves, yes that would be awesome, that would be really good. But the new people and the people who are a bit suspect, you would definitely have to have that thing where they could somehow test them, test their blood or test their urine to make sure</i></p>	
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	<p><i>that they are doing the right thing” (C9).</i></p> <p><i>“I think if they needed to increase the dose or decrease the dose; decreasing that would be okay but increasing, most definitely you'd have to see a doctor” (C9).</i></p> <p><i>“I think there should be a time when they see the doctor and maybe give a urine test – I don't know that there's any other way that they can actually test – but if it is only the urine way, maybe every three months just drop in and give a urine test at least. If they've been a very heavy user and they're only just starting off, maybe once a month to just call into [the clinic] or here and it only takes you a few minutes to give a urine test. That's a good back-up for the doctors to be reassured that they are helping that patient and that they're not aiding and abetting that patient ...” (C9).</i></p> <p><i>“But in the chemist being able to supply them and not get a prescription and things like that, I think that's awesome but I do believe that they should give a urine [sample] once a month. Then that ensures that they are not using other drugs, because they must be – the doctor and the chemist – must be informed of things like that if it's happening, because they can't help the person, they really can't” (C9).</i></p> <p><i>“The way my chemist has it, they've got a little cubicle where you go in and that's quite good and everything. I don't think they can discuss it there or they can always ring the chemist, look I'm thinking about reducing, but definitely I wouldn't give them the power to increase the dose. I definitely think they should go back to see a doctor for that” (C9).</i></p> <p><i>“I think it's a good idea, yes ... They'd never take you up. What I'm saying is if they could see that you're in a good spot and you wanted to go down, they'd be quite happy to take you down” (C10).</i></p> <p><i>“Well I believe that ... if your script runs out the pharmacist should continue it, regardless if he's got a script or not, because you may not be able to get into your doctor that week, and your script runs out mid-week. But continuation long term is another story in itself” (C10).</i></p> <p><i>“I think you could ask the pharmacist to make a reduction, etc., but</i></p>	
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	<p><i>you still need to go and consult with your doctor not necessarily extremely regularly but certainly regularly. Yeah, like, you don't have – well you shouldn't have to go and see your doctor to go down by a 0.4 of a milligram, 0.4 milligrams, you know, you should be able to just ask the chemist. Some of the chemists are pretty cluey, and they can either say, yes, or, I would like you to see your doctor first. So you could down and maybe then down again in two weeks' time; maybe they could have a certain level and then you have to go back and consult your doctor and tell them what you've done, but the doctor still needs to review it. Maybe not as regularly but still be in the loop” (C10).</i></p> <p><i>“I think if doctors are not available and the chemist can then extend, do you know what I mean? Or do it for the next three months or two months or whatever but to not put it fully on the chemist to have to have the whole say of everything. Because then that's not looking at the issues of a person” (C11).</i></p> <p><i>“If somebody wants to start decreasing or needs a slight increase, then I think that should be okayed but I think if it needs to keep going up and up and up and up, then I think they should go back to the doctor. Because some people just like to be way, way too high and it's not healthy for them. It's basic stabilisation, not there to be getting you whacked and so stoned that it's another issue altogether. I mean some people, their bodies need to be on a hundred, really super high and they seem to manage okay. Other people don't need that high but I think it needs to be looked at and not just put on the chemist to raise something too high and then if something goes amiss, it's the chemist's fault. So once again, yes to a small degree but not left in their hands to take all that on board” (C11).</i></p> <p><i>“Some people, the dose goes out of the body really quite quickly. If they do split doses they're not then withdrawing very first thing in the morning because they've had a morning and afternoon split. I've got not a problem with a pharmacist suggesting that. I think as long as it's for the wellbeing of the patient and there's no feedback or no comeback on the pharmacist then I think it's all good. That's not something that can really go amiss” (C11).</i></p>	
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	<p><i>“People who have been on it for a long time. New patients should have to go back to the doctor a lot more just in case things are going wrong. But people that have been on it for years, they’ve been on it for years, nothing’s been happening, they’re pretty stable, they’re not going up and down all the time, so I reckon instead of having to go to the doctor just to go through the pharmacist until you do want to go up and down and then maybe go back to the doctor” (C12).</i></p> <p><i>“I reckon it would be good to be able to like do this model I reckon, it would be good to just let the pharmacist renew your script, it would be a lot better than how it is, a lot more easier” (C12).</i></p>	
<p>Additional training for a pharmacist</p>	<p><i>“Yes, I think they should work a little bit more in with the doctors before doing that, before being allowed to alter doses or whatever you want to say and to take on your day-to-day care. But it would have to be not just a matter of training the pharmacists all together and then training the doctors, I think they'd have to train together to get to know how each other works and how they're going to get on. Like what's best for the pharmacist to do or should they leave it for the doctor? They wouldn't know those things unless they have had sort of had a bit of training together” (C2).</i></p> <p><i>“I don't think it should just be like somebody's just done their – a pharmacist degree – I mean a 23 year old just out of uni – I don't think it should be that. I think it should be a lead pharmacist or someone who's been trained ... – to know basically what everyone knows. When you look in someone's eyes when they're [pinned] – if you think they're going to OD or whatever else. I know it's a hard thing to pick – you can't pick it. But if you've got any – and how to bring people back – needle stick injuries – they need to know all that sort of stuff. Just all basic training like that they probably already have ...” (C6).</i></p> <p><i>“The training – I think basically to have some contact with the doctors that are doing it already, so that they gain knowledge of how to deal with patients ...” (C8).</i></p> <p><i>“If they need it, yeah. If it's needed and if they're not showing that they've been in the system and been doing what they've been doing for</i></p>	<p><i>“The pharmacist is just about like a doctor anyway, isn't he or her? Maybe I cut in a bit short there and cut you off but I thought to myself that the pharmacist was just as qualified as the doctor anyway. I don't know what made them different but one went on to medicine and one – I don't know. I don't know the difference between a doctor and a pharmacist” (C1).</i></p> <p><i>“I think the pharmacists would have as much knowledge and rapport with being involved with drugs. I mean, they understand, probably, more about what drugs do and don't do for people than – it's probably the wrong thing to say – than a doctor. Pharmacists, I think they have a lot more to remember than most doctors actually with the amount of – and there's all these new drugs being brought out” (C3).</i></p> <p><i>“They've got to have knowledge of that. Of course. That's what I mean. They've got to know – some chemists don't dose methadone because they haven't got the right to. They don't know about it. Whereas these pharmacists do, the ones that do give it out. So they have got knowledge of it already” (C4).</i></p> <p><i>“So it's the pharmacist who's not qualified to make them decisions, right, and these are decisions that affect our daily lives. One mistake by the pharmacist could potentially put our loved ones in danger” (C14).</i></p>

	<p><i>any length of time or it's a new pharmacist, then yes I think they should" (C11).</i></p>	
<p>Future guidelines or a trial</p>	<p><i>"I reckon it would certainly be worth a try. Like do an experiment with it, like a trial for six months or three months or something like that and put a certain amount of people on it, just to give it a trial and go from there" (C2).</i></p> <p><i>"Yes. I think then it really ought to be pretty strict guidelines, like just to protect the pharmacist, other patients and that's it" (C8).</i></p> <p><i>"Yeah, the only concern I'd have is that someone would get over-eager and want to drop down too quickly, so that's why I suggested that the chemist should only be allowed to do a certain amount, like maybe two drops ... No, individual reductions but, yeah, there should also be a limit depending on what drug you're on, whether it's methadone. Like if you're on a 100 you could drop 10 I suppose, but when you get down further, it would be increments of fives and then there needs to be a table drawn up, so the chemist can know what he can drop. But I believe – yes, so that's a biggie. Tables of what increments a pharmacist is able to do within reasonable tolerances and amounts and whatever's – whatever the person's on, but only twice in a given period of time" (C10.)</i></p> <p><i>"... as in as far as he can understand what he is able to decrease them by. You know some sort of chart, table, something like that which would be reasonable and for all the drugs. I think you know what I mean, you know, if you're on a high dose well, then you can drop this much, but if you're on a low dose, you can drop this much. So that he's got that resource available and no more than twice, and then you see your doctor and then come back and chat with me again" (C10).</i></p>	

Appendix 9. Analysis of patients' views on privacy

Patient views on privacy according to the pharmacy dosing area were analysed as outlined below.

Table 35 Patients' views on pharmacy privacy by dosing area

	Privacy respected	Privacy violated
Dosing at front counter	<p><i>"I'm pretty comfortable with talking to my pharmacist about pretty much anything. They pull you to the side and have a little talk to you in their little corner so that not everybody's listening and hearing" (C2).</i></p>	<p><i>"... because it is quite embarrassing to go in there and people look at you drinking this thing and they're wondering what you're doing and that. But my pharmacist has been great. She praises me all the time, saying [patient C13] you're doing really well and that to me, gives me a lift and helps me to keep going" (C13).</i></p> <p><i>"Where we are is at the front, at the bottom at the front of the shop, if you know what I mean. You've got a counter here and a counter there. That's the main counter of course with the tills. We sit down here and people are just right next to you. They know what you're doing of course, they know we're drug addicts, you know what I mean? They should have a bit private, like, they've got a section screened off for people when they weigh them – why can't they do that for like us and use that, you know? No one can see you, then you – if you can't see them when they're getting weighed, why can't they do it like that? It doesn't take much to put a screen in here" (C5).</i></p>
Dosing in separate room	<p><i>"The pharmacy [name] has got the best set-up, because it's got the little door at the back and it's totally separate from the chemist, well it is but it isn't. That's ideally the best set-up that I've seen" (C2).</i></p> <p><i>"Maybe in the front counter would be a bit of a problem but in a closed room I don't see why there would be worries about privacy in there in like a private dosing room. Ours has got a, you go round the side and there's a wall there and no one can see what you're doing in there or anything like that. It's not closed up but just that no one can see you and that's fine with me" (C12).</i></p> <p><i>"Yeah in front of the shop like just where normal people get their prescriptions, I'd rather go round the side or hidden or something like that. It wouldn't bother me if it was from the front but it's better at the side or hidden or something like that" (C12).</i></p>	<p><i>"There's a line-up at that time of the morning, do you know what I mean? Even like Northern, that one at (suburb name) is exactly the same. You've got to line up, they only let one person through the door and when people are walking through the shopping centre, they're looking at you, you know what I mean? The police are driving past all the time. It's not, I don't like it" (C5).</i></p> <p><i>"I know (pharmacy name) have got that one where you go down and sit, you know what I mean, not standing. It's still not very private and people can see you from out the back. It's not very, you know [private], because people look at you. When they're giving you a couple of stuff and you've got to sign for it and drink it and then you leave or you get your take-aways. People look at you funny. Same as when you're in (suburb name) lined up. They're, look at all them drug addicts and that, you know? Some of us might be, but at least we're trying to get back, you know? They don't give us a second chance, if you know what I mean? I might be a drug addict but it doesn't mean we're all the same, really. Or some people are doing it for the right reason and some are not" (C5).</i></p> <p><i>"You know, like normal people that come and get their prescriptions filled or come and get</i></p>

		<p><i>nappies or whatever they want from the chemist. Sometimes it gets embarrassing, you know? Especially if you see them up the shop, like at the shopping centre. They point at you, he's the bloke who's on methadone or drugs, you know? I've had that happen to me. Look at that, he's that bloke who was lined up at the chemist getting his methadone, you know?" (C5)</i></p> <p><i>"I mean as it is now, even the simple fact that people are going to chemists. A lot of them line up at a certain time of the day whether it's first thing in the morning and they still talk drugs and everything else. It's not a good environment a lot of the times. It works out that there's no confidentiality on whose on a program and stuff like that" (C11).</i></p> <p><i>"Well, the simple fact is when people are lining up, everybody knows each other so you've got people going to shops in your area and stuff like that. When people are waiting, and methadone people are always taken to one side or they've got a different door that they've got to go in or they stand at a window and they've got to wait their time, people know they're methadone people" (C11).</i></p> <p><i>"So people are looking at you all the time and you're looked down at from the outside. There's no – people need to have what's the best time for you to come up, so there's no groupings and stuff like that. People go in and be a bit more – alright when you're going for a prescription. You go in, you give your prescription and you walk out. You're not all lined up waiting for your methadone and stuff like that" (C11).</i></p>
<p>Dosing in a screened or portioned area inside the pharmacy</p>	<p><i>"They should have a bit private, like, they've got a section screened off for people when they weigh them – why can't they do that for like us and use that, you know? No one can see you, then you – if you can't see them when they're getting weighed, why can't they do it like that? It doesn't take much to put a screen in here" (C5).</i></p>	
<p>No concerns about privacy</p>		
<p><i>"Not really because I'm on the program openly and willingly you know? If anyone asks me I don't care about privacy rules. If anyone asks me, I tell them. I know what I'm doing. I don't see how it'd be any different. People see you sitting out the front of here and they know what you're doing. If you're going sitting out in front of the chemist, it'd be less of a privacy [you know] because you could be there for anything, whereas if you're here you're here for that – or the detox. So yeah, I reckon the private way – I don't see our privacy would be affected at all" (C6).</i></p> <p><i>"They're all confidential anyway. That's silly. That's just being a bit silly I think, isn't it? It's all confidential anyway. How would it be any different to the privacy involved now than then – really if you think about it?" (C7)</i></p> <p><i>"Chemists are discreet and there's no reason why them and their staff should not know your background. There's no reason why they should not know, because they have to know the person who is coming into their shop every day" (C9).</i></p> <p><i>"I think with the privacy part, that's quite silly. You go to the chemist, they get to know you as a person anyway so why shouldn't they know your medical background and why shouldn't they know anything else that is known about you? I don't have a problem with that at all and I don't think it should be a problem. If people want to be secretive then that rings alarm bells for me,</i></p>		

they must be hiding something. Do you get where I'm coming from?" (C9)

"Not really, privacy doesn't really bother me as much as some people. If you told this to other people, it wouldn't really bother me. Some people are more – like to be more private than that but I haven't really got many, much concerns at all" (C12).

Appendix 10. Analysis of patients' views on privacy by typology

Patients' views on privacy by typology were analysed as below.

Table 36 Patients' views on privacy by typology

Easy access typology (C2,5,6,7,8,9,10,11,12,13)	Difficult access typology (C1,3,4,14)
<p><i>“The rest of the customers don't have to witness some of the riff raff that do go through there. I'm not saying that there's not some bad people out there who are on it and I don't agree with the way some people carry on about it when they're hanging out or whatever the case is and people like yourself who don't use drugs and all that sort of thing. I don't think they should have to witness that because that would just put them off going to that pharmacy then” (C2.)</i></p> <p><i>“I'm pretty comfortable with talking to my pharmacist about pretty much anything. They pull you to the side and have a little talk to you in their little corner so that not everybody's listening and hearing” (C2).</i></p> <p><i>“The pharmacy (name) has got the best set-up, because it's got the little door at the back and it's totally separate from the chemist, well it is but it isn't. That's ideally the best set-up that I've seen” (C2).</i></p> <p><i>“There's a line-up at that time of the morning, do you know what I mean? Even like Northern, that one at (suburb name) is exactly the same. You've got to line up, they only let one person through the door and when people are walking through the shopping centre, they're looking at you, you know what I mean? The police are driving past all the time. It's not, I don't like it” (C5).</i></p> <p><i>“I know (pharmacy name) have got that one where you go down and sit, you know what I mean, not standing. It's still not very private and people can see you from out the back. It's not very, you know [private], because people look at you. When they're giving you a couple of stuff and you've got to sign for it and drink it and then you leave or you get your take-aways. People look at you funny. Same as when you're in (suburb name) lined up. They're, look at all them drug addicts and that, you know? Some of us might be, but at least we're trying to get back, you know? They don't give us a second chance, if you know what I mean? I might be a drug addict but it doesn't mean we're all the same, really. Or some people are doing it for the right reason and some are not. Some are just doing it for a back-up for when they've got no money (C5).</i></p> <p><i>“You know, like normal people that come and get their prescriptions filled or come and get nappies or whatever they want from the chemist. Sometimes it gets embarrassing, you know? Especially if you see them up the shop, like at the shopping centre. They point at you, he's the bloke who's on methadone or drugs, you know? I've had that happen to me. Look at that, he's that bloke who was lined up at the chemist getting his methadone, you know?” (C5)</i></p>	<p><i>Facilitator: “... would you have any concerns in terms of privacy?”</i></p> <p><i>“I wouldn't myself” (C1).</i></p> <p><i>“No, I don't think so. I think you can get as much privacy as you need. Usually the pharmacist will walk somewhere into the pharmacy where you can talk where there's not a lot of people around” (C3).</i></p> <p><i>“But the pharmacists, aren't they bound by law not to give out any information? ... It really wouldn't bother me because – it really wouldn't bother me. As I said, they're going to have knowledge of me anyway, so yes, I don't think it would really bother me” (C4).</i></p>

“Where we are is at the front, at the bottom at the front of the shop, if you know what I mean. You've got a counter here and a counter there. That's the main counter of course with the tills. We sit down here and people are just right next to you. They know what you're doing of course, they know we're drug addicts, you know what I mean? They should have a bit private, like, they've got a section screened off for people when they weigh them – why can't they do that for like us and use that, you know? No one can see you, then you – if you can't see them when they're getting weighed, why can't they do it like that? It doesn't take much to put a screen in here” (C5).

“Not really because I'm on the program openly and willingly you know? If anyone asks me, I don't care about privacy rules. If anyone asks me, I tell them. I know what I'm doing. I don't see how it'd be any different. People see you sitting out the front of here and they know what you're doing. If you're going sitting out in front of the chemist, it'd be less of a privacy [you know] because you could be there for anything, whereas if you're here you're here for that – or the detox. So yeah I reckon the private way – I don't see our privacy would be affected at all” (C6).

“They're all confidential anyway. That's silly. That's just being a bit silly I think isn't it? It's all confidential anyway. How would it be any different to the privacy involved now than then – really if you think about it?” (C7)

“Chemists are discreet and there's no reason why them and their staff should not know your background. There's no reason why they should not know, because they have to know the person who is coming into their shop every day” (C9).

“I think with the privacy part, that's quite silly. You go to the chemist, they get to know you as a person anyway so why shouldn't they know your medical background and why shouldn't they know anything else that is known about you? I don't have a problem with that at all and I don't think it should be a problem. If people want to be secretive then that rings alarm bells for me, they must be hiding something. Do you get where I'm coming from?” (C9)

“I mean as it is now, even the simple fact that people are going to chemists. A lot of them line up at a certain time of the day whether it's first thing in the morning and they still talk drugs and everything else. It's not a good environment a lot of the times. It works out that there's no confidentiality on whose on a program and stuff like that” (C11).

“Well, the simple fact is when people are lining up, everybody knows each other so you've got people going to shops in your area and stuff like that. When people are waiting, and methadone people are always taken to one side or they've got a different door that they've got to go in or they stand at a window and they've got to wait their time, people know they're methadone people” (C11).

“So people are looking at you all the time and you're looked down at from the outside. There's no – people need to have what's the best time for you to come up, so there's no groupings and stuff like that. People go in and be a bit more – alright when you're going for a prescription. You go in, you give your prescription and you walk out. You're not all lined up waiting for your methadone and stuff like that” (C11).

“Not really, privacy doesn’t really bother me as much as some people. If you told this to other people, it wouldn’t really bother me. Some people are more – like to be more private than that but I haven’t really got many concerns at all” (C12).

“Maybe in the front counter would be a bit of a problem but in a closed room, I don’t see why there would be worries about privacy in there in like a private dosing room. Ours has got a, you go round the side and there’s a wall there and no one can see what you’re doing in there or anything like that. It’s not closed up but just that no one can see you and that’s fine with me” (C12).

“Yeah, in front of the shop like just where normal people get their prescriptions, I’d rather go round the side or hidden or something like that. It wouldn’t bother me if it was from the front but it’s better at the side or hidden or something like that” (C12).

“... because it is quite embarrassing to go in there and people look at you drinking this thing and they’re wondering what you’re doing and that. But my pharmacist has been great. She praises me all the time, saying [patient C13], you’re doing really well and that to me, gives me a lift and helps me to keep going” (C13).

References

1. Doran CM. Economic evaluation of interventions to treat opiate dependence: A review of the evidence. *Pharmacoeconomics*. 2008;26(5):371-93.
2. Wodak A, McLeod L. The role of harm reduction in controlling HIV among injecting drug users. *AIDS*. 2008 Aug;22 (suppl 2):S81-S92.
3. World Health Organization, United Nations Office on Drugs and Crime, UNAIDS. Substitution maintenance therapy in the management of opioid dependence and HIV/AIDS prevention: position paper Geneva; 2004.
4. Hepatitis Australia. Hepatitis C: a summary. 2007 [cited 2010 Jul 12]. Available from: http://www.hepedu.org.au/factsheets/pdf/HepC_VirusSummary.pdf
5. Basu A, Paltiel D, Pollack H. Social costs of robbery and the cost-effectiveness of substance abuse treatment. *Health Econ*. 2008;17:927-46.
6. Mattick R, Digiusto E, Doran C, O'Brien S, Shanahan M, Kimber J, et al. National evaluation of pharmacotherapies for opioid dependence (NEPOD) Sydney: Commonwealth Department of Health and Ageing; 2004.
7. Australian Institute of Health and Welfare. Alcohol and Other Drug Treatment Services in Australia 2005-2006: Report on the National Minimum Data Set. Canberra; 2007.
8. Iversen J, Maher LA. Australian Needle and Syringe Program National Data Report 2008-2012: The Kirby Institute, University of New South Wales; 2013.
9. Centers for Disease Control and Prevention, Department of Health and Human Services. HIV incidence. Atlanta: Centres for Disease Control and Prevention; 2008 [cited 2010 Sep 14]. Available from: <http://www.cdc.gov/hiv/topics/surveillance/incidence.htm>
10. Ritter A, Chalmers J, Drug Policy Modelling Program, University of New South Wales. Polygon: The many sides to the Australian opioid pharmacotherapy maintenance system. New South Wales: Australian National Council on Drugs; 2009.
11. Babor T, Caulkins J, Edwards G, Fischer B, Foxcroft D, Humphreys K, et al. Drug policy and the public good. New York: Oxford University Press; 2010.
12. Roche A, Hotham E, Richmond R. The general practitioner's role in AOD issues: overcoming individual, professional and systemic barriers. *Drug Alcohol Rev*. 2002;21:223-30.
13. Longman C, Temple-Smith M, Gilchrist G, Lintzeris N. Reluctant to train, reluctant to prescribe: barriers to general practitioner prescribing of opioid substitution therapy. *Aust J Prim Health*. 2012.
14. McGillion J, Wanigaratne S, Feinmann C, Godden T, Byrne A. GPs' attitudes towards the treatment of drug misusers. *Br J Gen Pract*. 2000;50(454):385-6.
15. McKeown A, Matheson C, Bond C. A qualitative study of GPs' attitudes to drug misusers and drug misuse services in primary care. *Fam Pract Manag*. 2003;20(2):120-5.

16. Hotham E, Roche A, Skinner N, Dollman B. The general practitioner pharmacotherapy prescribing workforce: examining sustainability from a systems perspective. *Drug Alcohol Rev.* 2005(24):127-33.
17. Department of Health. Australia's health system – an overview. 2013 [cited 2013 Nov 20]. Available from: <http://www.doctorconnect.gov.au/internet/otd/publishing.nsf/Content/australiasHealthSystem>
18. Cipolle R, Strand L, Morley P. The Global Perspective: Australia. In: March G, editor. *Pharmaceutical Care Practice: The Patient Centred Approach to Medication Management* New York: McGrawHill; 2012. p. 445-59.
19. Commonwealth Department of Human Services, Australian Government. Pharmaceutical Benefits Scheme (PBS). 2013 [cited 2013 Oct 10]. Available from: <http://www.medicareaustralia.gov.au/provider/pbs/>
20. Australian Pharmacy Council. Welcome to the Australian Pharmacy Council. 2013 [cited 2013 Nov 20]. Available from: <http://pharmacycouncil.org.au/content/>
21. Human Capital Alliance. *Pharmacy Workforce Planning Study Literature Review: Funded by the Australian Government as part of the Fourth Community Pharmacy Agreement, managed by the Pharmacy Guild of Australia; 2008.*
22. Pharmaceutical Society of Australia. *Issues Paper on the Future of Pharmacy in Australia: Pharmaceutical Society of Australia 2010 May.*
23. Daniels A. Someone stole the crossroads. *Australian Pharmacist.* 2013;32(11):34-9.
24. Pharmaceutical Society of Australia. PSA challenges consumer coalition. *Australian Pharmacist.* 2013;32(10):7.
25. Waterman P. A future so bright you will have to wear shades. *Australian Pharmacist.* 2014;33(1):30-4.
26. Pharmacy Guild of Australia. *Australia's unique medication scheduling system.* Pharmacy Guild of Australia. Canberra 2009.
27. Australian Bureau of Statistics. 3235.0 - Population by Age and Sex, Regions of Australia, 2011. 2012 [cited 2013 Jan 14]. Available from: <http://www.abs.gov.au/ausstats/abs@.nsf/Products/3235.0~2011~Main+Features~Main+Features?OpenDocument>
28. Australian Institute of Health and Welfare. *National Opioid Pharmacotherapy Statistics Annual Data Collection: 2011 report.* Cat. no. HSE 121. Canberra: AIHW; 2012.
29. Chalmers J, Ritter A, Heffernan M, McDonnell G. *Modelling pharmacotherapy maintenance in Australia: exploring affordability, availability, accessibility and quality using system dynamics: University of New South Wales 2009.*
30. Hurley M. *Methadone and Buprenorphine Guidelines for Pharmacists in South Australia.* Adelaide: Drug and Alcohol Services South Australia; 2010.
31. Government of South Australia. *Drug and Alcohol Services South Australia.* 2012 [cited 2013 Oct 10]. Available from: <http://www.dassa.sa.gov.au/site/page.cfm>
32. Anderson G, *Drugs of Dependence Unit, Medicines and Technology Policy and Programs, Department for Health and Ageing, SA Health. Opioid Dependence Substitution Treatment programs.* Drug and Alcohol Services South Australia; 2010.

33. Drugs of Dependence Unit, Medicines and Technology Policy and Programs, Department of Health and Ageing, SA Health. MATOD Client Type VS Program Type. 2013.
34. Drugs of Dependence Unit, Medicines and Technology Policy and Programs, Department of Health and Ageing, SA Health. DDU Monthly Statistics. Opioid Pharmacotherapy Programs – Report Month June 2011; 2011.
35. SA Health. Medication-assisted treatment for opioid dependence – information and training 2013 [cited 2013 Nov 20]. Available from: <http://www.sahealth.sa.gov.au/wps/wcm/connect/public+content/sa+health+internet/development/dassa/medication-assisted+treatment+for+opioid+dependence+information+and+training#Training>
36. O’Neill S, Drugs of Dependence Unit, Medicines and Technology Policy and Programs, Department for Health and Ageing, SA Health. Suboxone Expansion Policy. 2014.
37. O’Neill S, Drugs of Dependence Unit, Medicines and Technology Policy and Programs, Department for Health and Ageing, SA Health. Drugs of Misuse Surveillance System 2014.
38. Drugs of Dependence Unit, Medicines and Technology Policy and Programs, Department for Health and Ageing, SA Health. DDU Monthly Statistics. Opioid Pharmacotherapy Programs - Report Month April 2011; 2011.
39. Australian Institute of Health and Welfare. National Opioid Pharmacotherapy Statistics Annual Data Collection 2012. Canberra: AIHW; 2013.
40. Australian National Council on Drugs. Medication-Assisted Treatment for Opioid Dependence (MATOD). 1st Canberra Roundtable Report. Canberra; 2012.
41. Healthcare Management Advisors. Funding Model Options for Dispensing of Pharmacotherapies for Opioid Dependence in Community Pharmacy. Final Report. Victoria, Australia: Healthcare Management Advisors Pty Ltd; 2007.
42. Commonwealth Department of Human Services and Health. Review of methadone treatment in Australia. Final Report; 1995.
43. Oxford University. Compact Oxford English Dictionary. UK: Oxford University Press; 2010 [cited 2010 Jun 9]. definition of prescribe. Available from: http://www.askoxford.com/concise_oed/prescribe?view=uk
44. Oxford University. Compact English Dictionary. Oxford University Press; 2010 [cited 2010 Oct 12]. definition of diagnosis. Available from: http://oxforddictionaries.com/view/entry/m_en_gb0222910#m_en_gb0222910
45. Coombes I, Reid C, McDougall D, Stowasser D, Duiguid M, Mitchell C. Pilot of a National Inpatient Medication Chart in Australia: improving prescribing safety and enabling prescribing training. *Br J Clin Pharmacol*. 2011;72(2):338-49.
46. Lum E, Mitchell C, Coombes I. The competent prescriber: 12 core competencies for safe prescribing. *Aust Prescr*. 2013;36(1):13-6.
47. Hammond RW, Schwartz AH, Campbell MJ, Remington TL, Chuck S, Blair MM, et al. ACCP position statement: collaborative drug therapy management by pharmacists. *Pharmacotherapy*. 2003;23(9):1210-25.
48. Hawkes N. Handing over the prescription pad. *BMJ*. 2009;339:4835.

49. Guillaume L, Cooper R, Avery A, Mitchell S, Ward P, Anderson C, et al. Supplementary prescribing by community and primary care pharmacists: an analysis of PACT data, 2004-2006. *J Clin Pharm Ther.* 2008 Feb;33(1):11-6.
50. George J, McCaig DJ, Bond CM, Cunningham IT, Diack HL, Watson AM, et al. Supplementary prescribing: early experiences of pharmacists in Great Britain. *Ann Pharmacother.* 2006 Oct;40(10):1843-50.
51. Cooper RJ, Anderson C, Avery T, Bissell P, Guillaume L, Hutchinson A, et al. Nurse and pharmacist supplementary prescribing in the UK - a thematic review of the literature. *Health Policy.* 2008 Mar;85(3):277-92.
52. Lewis C, Allen D. General prescribing principles. Supplementary prescribing: an overview. *Nurs Stand.* 2003 Sep;17(51):3-9.
53. Cox A, McDowell S. Changing roles, changing risks - The paradox of pharmacist prescribing. *Pharmaceutical Journal.* 2007 Jan;278(7434):46.
54. Szeinbach SL, Allen J, Barnes JH. Barriers to change in regulated channel environments: Pharmacists' prescribing. *Journal of Retailing.* 1998;74(4):569-88.
55. Gallagher J, O'Gara C, Sessay M, Luty J. Nurse prescribing in addiction services: client benefits. *Nurs Stand.* 2006 Aug;20(48):42-4.
56. George J, Bond C, McCraig D, Cleland J, Cunningham ITS, Diack HL, et al. Experiential learning as a part of pharmacist supplementary prescribing training: feedback from trainees and their mentors. *Ann Pharmacother.* June 2007;41:1031-8.
57. Bessel T, Nissen L, Marriot J, Emmerton L, Australian Government Department of Health and Ageing. Improving Australians' Access to Prescription Medicines: Development of Pharmacy Practice Models. Final Report; 2005.
58. Department of Health. The non-medical prescribing programme. UK Department of Health; 2010 [cited 2010 May 15]. Available from: <http://webarchive.nationalarchives.gov.uk/+/www.dh.gov.uk/en/Healthcare/Medicinespharmacyandindustry/Prescriptions/TheNon-MedicalPrescribingProgramme/index.htm>
59. Royal Pharmaceutical Society of Great Britain. Pharmacist prescribing. 2009 [cited 2010 May 15]. Available from: www.rpsgb.org/worldofpharmacy/currentdevelopmentsinpharmacy/pharmacistprescribing/index.html
60. Bissell P, Cooper R, Guillaume L, Anderson C, Avery A, Hutchinson A, et al. An evaluation of supplementary prescribing in nursing and pharmacy. 2008 [cited 2010 May 15]. Available from: www.shef.ac.uk/content/1/c6/09/11/83/Supplementary_prescribing.pdf
61. Nissen L. Destiny or dream? Dependent prescribing models for pharmacy. *Australian Pharmacist.* 2007 Feb;26(2):130-5.
62. Emmerton L, Marriott J, Bessell T, Nissen L, Dean L. Pharmacists and prescribing rights: review of international developments. *J Pharm Pharmaceut Sci.* 2005;8(2):217-25.
63. Roberts S, Gainsbrugh R. Medication therapy management and collaborative drug therapy management. *J Manag Care Pharm.* [letter]. 2010;16(1):67-9.
64. O'Connor SA, Desroches J. Should prescribing authority be shared with nonphysicians? Yes or no. *Can Fam Physician.* 2009 December;55(12):1176-81.

65. MacLeod-Glover N. An explanatory policy analysis of legislative change permitting pharmacists in Alberta, Canada, to prescribe. *Int J Pharm Pract*. 2011;19:70-8.
66. Darby D. Ontario the latest province to delve into prescribing rights for pharmacists. *Can Pharm J*. 2008 July/August;141(4):214.
67. Pharmacy Council of New Zealand. Pharmacist Prescribers. 2013 [cited 2013 Jul 16]. Available from:
http://www.pharmacycouncil.org.nz/cms_display.php?sn=232&st=1
68. Burton J. Setting up an asthma and allergy supplementary prescribing clinic within a community pharmacy in Scotland. *Pharmacy in Practice*. 2007;17(1):19-22.
69. Sutton J, Taylor DA, Dawson HE. Pharmacist prescribing in clozapine clinics. *Int J Pharm Pract*. 2010 June;18 (suppl 1):25.
70. Dole EJ, Murawski MM, Adolphe AB, Aragon FD, Hochstadt B. Provision of pain management by a pharmacist with prescribing authority. *Am J Health Syst Pharm*. 2007 Jan 64(1):85-9.
71. Young A, Pickles H, Boyle K, Thomas M, Rudall N, N G, et al. A career as...a supplementary prescriber. *Hospital Pharmacist*. 2006;Sep(13):289-90.
72. Choe HM, Kim J, Choi KE, Mueller B. Implementation of the first pharmacist-managed ambulatory care anticoagulation clinic in South Korea. *Am J Health Syst Pharm*. 2002 May;59:872-4.
73. Burton J. Pharmacist prescribing in the UK (a Scottish perspective). *Australian Pharmacist*. 2006 Jan;25(1):20-4.
74. Bradley E, Nolan P. Impact of nurse prescribing: a qualitative study. *J Adv Nurs*. 2007;59(2):120-8.
75. Watson F. Pharmacist prescribing clinics: challenges, achievements and tips. *Pharmaceutical Journal*. 2008 Sep;281(7519):308-9.
76. Thomas M, Motion M. Setting up supplementary prescribing clinics can be rewarding and exciting. *Pharmacy in Practice*. 2005 Sep 319-22.
77. Tonna AP, Stewart DC, West B, McCaig DJ. Exploring pharmacists' perceptions of the feasibility and value of pharmacist prescribing of antimicrobials in secondary care in Scotland. *Int J Pharm Pract*. 2010;18:312-9.
78. Nguyen NA, Bajorek BV. Pharmacist prescribing in warfarin therapy: Exploring clinical utility in the hospital setting. *Journal of Pharmacy Practice and Research*. 2008 Mar;38(1):35-9.
79. Bungard T, Ritchie B, Garg S, Tsuyuki RT. Sustained impact of anticoagulant control achieved in an anticoagulation management service after transfer of management to the primary care physician. *Pharmacotherapy*. 2012;32(2):112-9.
80. Bungard TJ, Gardner L, Archer SL, Hamilton P, Ritchie B, Tymchak W, et al. Evaluation of a pharmacist-managed anticoagulation clinic: Improving patient care. *Open Med*. 2009;3(1):16-21.
81. Bungard TJ, Smigorowsky MJ, Lalonde LD, Hogan T, Maier E, Archer SL. Cardiac EASE (Ensuring Access and Speedy Evaluation) – Design of a single point of entry and a multidisciplinary team to reduce waiting times in the Canadian health care system. *Healthc Manage Forum*. 2008:35-40.

82. Rochester CD, Leon N, Dombrowski R, Haines ST. Collaborative drug therapy management for initiating and adjusting insulin therapy in patients with type 2 diabetes mellitus. *Am J Health Syst Pharm*. 2010 Jan;67:42-8.
83. Cranor CW, Bunting BA, Christensen DB. The Asheville Project: Long-term clinical and economic outcomes of a community pharmacy diabetes care program. *J Am Pharm Assoc (Wash)*. 2003 Mar-Apr;43(2):173-84.
84. Poonawala Y, Kay S, Graham-Clarke E. An audit of supplementary prescribing practice in an intensive care unit shows pharmacists can reduce the prescribing workload safely. *Pharmacy in Practice*. 2007;17(7):238-42.
85. Shulman R, Jani Y. Comparison of supplementary prescribers' and doctors' compliance with guidelines for drug dosing in haemofiltration on an intensive care unit. *Pharm J*. 2005 April;274:492-3.
86. Cooper T, Taber D, Mazur J. Implementation of a collaborative drug therapy management service for inpatients receiving direct thrombin inhibitors. *Am J Health Syst Pharm*. 2009 Jul;66(14):1297-303.
87. Charrois TL, Newman SC, Senthilselvan A, Tsuyuki RT. Improving asthma control in the rural setting: The BREATHE Better Respiratory Education and Asthma Treatment in Hinton and Edson) study. *Can Pharm J*. 2006 July/August;139(4):44-50.
88. Smalley L. Patients' experience of pharmacist-led supplementary prescribing in primary care. *Pharm J*. 2006;May(276):567-9.
89. Moulds RFW. Drugs and poisons scheduling. *Australian Prescriber*. 1997;20(12-13).
90. Griffith R. Controlled drugs and the principle of double effect. *Br J Community Nurs*. 2007;11(8):352-7.
91. Drug Enforcement Administration (DEA). Drug Scheduling. 2010 [cited 2012 Aug 2]. Available from: <http://www.justice.gov/dea/pubs/scheduling.html>
92. Harniman B. Personal reflections on non-medical prescribing in substance misuse. *Nurse Prescribing*. 2007;5(5):211-3.
93. Harniman B. Supplementary prescribing in the substance misuse field. *Nurs Times*. Feb 2006;102(8):30-2.
94. Thompson D. Personal reflections of pharmacist independent prescribing. *Nurse Prescribing*. 2007;5(7):311-3.
95. Stenner K, Courtney M. A qualitative study on the impact of legislation on prescribing of controlled drugs by nurses. *Nurse Prescribing*. 2007;5(6):257-62.
96. Cowan DT, While A, Griffiths P. Use of strong opioids for non-cancer pain in the community: a case study. *Br J Community Nurs*. 2004;9(2):53-8.
97. Yap D. DEA grants prescriber numbers to certain Massachusetts pharmacists. *American Pharmacists Association*; 2011 [cited 2012 Mar 20]. Available from: http://www.pharmacist.com/AM/Template.cfm?Section=Health_Care_Reform&Template=/CM/ContentDisplay.cfm&ContentID=25693
98. Department of Health. Nurses, midwives and pharmacists now able to provide faster and more effective pain relief. 2012 [cited 2012 Apr 29]. Available from: <http://mediacentre.dh.gov.uk/2012/04/23/nurses-midwives-and-pharmacists-now-able-to-provide-faster-and-more-effective-pain-relief/>

99. Hemingway S, Ely V. Prescribing by Mental Health Nurses: The UK Perspective. *Perspect Psychiatr Care*. 2009;45(1):24-35.
100. Turner S, Roberts H, Andrews A. Introducing nurse prescribing in a substance misuse treatment service. *Nurse Prescribing*. 2012;10(11):561-6.
101. National Treatment Agency for Substance Misuse. Non-medical prescribing, patient group directions and minor ailment schemes in the treatment of drug misusers; 2007.
102. Flanagan M. Onwards and upwards: non-medical prescribing in substance misuse. National Substance Misuse Non-Medical Forum; 2013 [cited 2013 Dec 7]. Available from: <http://www.nmpsm.org/resource/onwards-and-upwards-non-medical-prescribing-in-substance-misuse/>
103. Sketris I. Extending prescribing privileges in Canada. *Can Pharm J*. 2009;142(1):17-9.
104. Stewart D. Pharmacist prescribing: A view from the UK. *Journal of Pharmacy Practice and Research*. 2009 March;39(1):7-10.
105. Department of Health. Supplementary prescribing by nurses and pharmacists within the NHS in England. A guide for implementation. London; 2003.
106. Latter S, Maben J, Myall M, Young A. Evaluating nurse prescribers' education and continuing professional development for independent prescribing practice: findings from a national survey in England. *Nurse Educ Today*. 2007;27:685-96.
107. Print A. Training pharmacists to become prescribers in New Zealand. Paper presented at: National Health Professional Prescribing Summit; 2012 Oct 20; Melbourne, Australia.
108. Pharmacist Prescribing Task Force. Prescribing by pharmacists: information paper (2009). *Calif J Health Promot*. 2010;63(3):267-74.
109. Hammond RW, Schwartz AH, Campbell MJ, Remington TL, Chuck S, Blair MM, et al. Collaborative drug therapy management by pharmacists-2003. *Pharmacotherapy*. 2003 Sep;23(9):1210-25.
110. Optometry Board of Australia. Guidelines for use of scheduled medicines. 2010 [cited 2012 Nov 19]. Available from: www.nursingmidwiferyboard.gov.au/Registration-and-Endorsement/Endorsements-Notations.aspx#EligibleMidwife
111. Australian Nursing & Midwifery Council. National Competency Standards for the Nurse Practitioner. Melbourne: Australian Nursing & Midwifery Council. 2006 [cited 2012 Nov 19]. Available from: www.nursingmidwiferyboard.gov.au/Codes-Guidelines-Statements/Codes-Guidelines.aspx#competencystandards
112. Nursing and Midwifery Board of Australia. Prescribing formulary for eligible midwives with a scheduled medicines endorsement. Melbourne: Nursing and Midwifery Board of Australia; 2011 [cited 2012 Nov 19]. Available from: www.nursingmidwiferyboard.gov.au/Registration-and-Endorsement/Endorsements-Notations.aspx#EligibleMidwife
113. Podiatry Board of Australia. Guidelines for Endorsement for Scheduled Medicines: Australian Health Practitioner Regulatory Agency; 2011.
114. Kay OC, Brien JAE. Pharmacist prescribing: Review of the literature. *Journal of Pharmacy Practice and Research*. 2004 Dec;34(4):300-4.

115. Khoo A, Bajorek BV. Extended roles for pharmacists in warfarin therapy: Identifying opportunities for pharmacist prescribing. *Journal of Pharmacy Practice and Research*. 2006 Sep;36(3):190-3.
116. Vracar D, Bajorek BV. Australian general practitioners' views on pharmacist prescribing. *Journal of Pharmacy Practice and Research*. 2008 June;38(2):96-102.
117. Teal S, Ricketts L, Belton A, Allsopp G, Silcock J, Wright DJ. How effective are pharmacists who work with medical practitioners? A study of interventions intended to influence prescribing. *Int J Pharm Pract*. 2002 Sep;10:185-90.
118. Westein MPD, Herings RMC, Leufkens HGM. Determinants of pharmacists' interventions linked to prescription processing. *Pharm World Sci*. 2001;23(3):98-101.
119. Bond CM, Fish A, Porteous TH, Reid JP, Scott A, Antonazzo E. A randomised controlled trial of the effects of note-based medication review by community pharmacists on prescribing of cardiovascular drugs in general practice. *Int J Pharm Pract*. 2007;15:35-46.
120. Saokaew S, Maphanta S, Thangsomboon P. Impact of pharmacist's interventions on cost and drug therapy in intensive care unit. *Pharmacy Practice*. 2009 Apr-Jun;7(2):81-7.
121. Weeks GR. Pharmacist Prescribing: Let's Have the Debate. *Journal of Pharmacy Practice and Research*. 2004 Mar;34(1):4-5.
122. Hobson RJ, Sewell GJ. Supplementary prescribing by pharmacists in England. *Am J Health Syst Pharm*. 2006;63(1):244-53.
123. Weiss MC, Sutton J. The changing nature of prescribing: pharmacists as prescribers and challenges to medical dominance. *Sociol Health Illn*. 2009 Apr;31(3):406-21.
124. Lloyd F, Hughes CM. Pharmacists' and mentors' views on the introduction of pharmacist supplementary prescribing: A qualitative evaluation of views and context. *Int J Pharm Pract*. 2007 Mar;15(1):31-7.
125. Philips Z, Whyne D, Parnham S, Slack R, Earwicker S. The role of community pharmacists in prescribing medication for the treatment of head lice. *J Public Health Med*. 2001;23(2):114-20.
126. Hassell K, Whittington Z, Cantrill J, Bates F, Rogers A, Noyce P. Managing demand: transfer of management of self limiting conditions from general practice to community pharmacies. *Br Med J*. 2001 July;323:146-7.
127. Soon JA, Levine M, Ensom MHH, Gardner JS, Edmondson HM, Fielding DW. The developing role of pharmacists in patient access to emergency contraception. *Disease Management and Health Outcomes*. 2002;10(10):601-11.
128. Gardner JS, Miller L, Downing DF, Le S, Blough D, Shotorbani S. Pharmacist prescribing of hormonal contraceptives: results of the Direct Access study. *J Am Pharm Assoc*. 2008 Mar-Apr;48(2):212-21; 5 p following 21.
129. Pharmacy Guild of Australia. Continued dispensing of PBS medications in defined circumstances. 2013 [cited 2013 Nov 26]. Available from: <http://www.5cpa.com.au/initiatives-programs/continued-dispensing>
130. Pharmaceutical Society of Australia. Guidelines for the Continued Dispensing of eligible prescribed medicines by pharmacists: Pharmaceutical Society of Australia; 2012.

131. Wheeler A, Crump K, Lee M, Li L, Patel A, Yang R, et al. Collaborative prescribing: A qualitative exploration of a role for pharmacists in mental health. *Res Social Adm Pharm.* 2012;8:179-92.
132. Leach N. Improving Access to Opioid Substitution Treatment. Auckland: The University of Auckland; 2012.
133. Marty S, Chair. Fourth meeting 18 December 2009 and fifth meeting 22 January 2010 of the Pharmacy Board of Australia. In: Pharmacy Board of Australia, Australian Health Practitioner Regulation Agency; 2010.
134. Hale AR, Stowasser DA, Coombes ID, Stokes J, Nissen L. An evaluation framework for non-medical prescribing research. *Aust Health Rev.* 2012;36:224-8.
135. Health Workforce Australia. Health Professionals Prescribing Pathway Project. 2012 [cited 2012 Sep 4]. Available from: <https://www.hwa.gov.au/work-programs/workforce-innovation-and-reform/health-professionals-prescribing-pathway-project>
136. Health Workforce Australia. Health Professionals Prescribing Pathway (HPPP) Project - Final Report; 2013.
137. Allinson Y. Prescribing must not blur the lines. *Australas J Pharm.* 2009;90(1071):30.
138. Hoti K, Sunderland B, Hughes J, Parsons R. An evaluation of Australian pharmacists' attitudes on expanding their prescribing role. *Pharm World Sci.* 2010.
139. Scahill S, Harrison J, Sheridan J. Pharmacy under the spotlight: New Zealand pharmacists' perceptions of current and future roles and the need for accreditation. *Int J Pharm Pract.* 2010;18:59-62.
140. Weeks GR, Marriott JL. Collaborative prescribing: Views of SHPA pharmacist members. *Journal of Pharmacy Practice and Research.* 2008 December;38(4):271-5.
141. Hanes CA, Bajorek BV. Pharmacist prescribing: views of Australian hospital pharmacists. *Journal of Pharmacy Practice and Research.* 2005 Sep;35(3):178-80.
142. deClifford J-M, Lam SS, Leung BK. Implementation and Acceptance of a Pharmacist-Initiated E-Script Transcription Service for Discharge Prescriptions. *Journal of Pharmacy Practice and Research.* 2009;39(4):286-9.
143. deClifford J-M, Lam SS, Leung BK. Evaluation of a Pharmacist-Initiated E-Script Transcription Service for Discharged Patients. *Journal of Pharmacy Practice and Research.* 2009;39(1):39-42.
144. deClifford J-M. The PETS Project. Paper presented at: Inspire 2012: Reshaping Australia's Health Workforce; 2012 Nov 13; Melbourne, Australia.
145. Driscoll S. Pain Management at Home Whilst on a Transitional Aged Care Program. Paper presented at: Optimising the Management of Pain; 2011 Aug 24; Melbourne, Australia.
146. Driscoll S. Lessons Learned & Gaps Filled. Paper presented at: National Health Professional Prescribing Summit; 2012 Oct 30; Melbourne.
147. Weeks GR, Marriot J, George J. Australian hospital pharmacists' experience of a UK non-medical prescribing course. *Journal of Pharmacy Practice and Research.* 2010;40(3):187-93.
148. Deering D, Sheridan J, Sellman J, Adamson S, Pooley S, Robertson R, et al. Consumer and treatment provider perspectives on reducing barriers to opioid

- substitution treatment and improving treatment attractiveness. *Addict Behav.* 2011 Jun;36 (6):636-42.
149. Al-Tayyib A, Koester S. Injection drug users' experience with and attitudes toward methadone clinics in Denver, CO. *J Subst Abuse Treat.* 2011 41(1):30-6.
 150. Kumar R, Rajwal M. Survey of client satisfaction with methadone maintenance programmes. *The Psychiatrist.* 2006;30:16-8.
 151. Stone E, Fletcher K. User views on supervised methadone consumption. *Addict Biol.* 2003;8:45-8.
 152. Stöver H. Barriers to opioid substitution treatment access, entry and retention: a survey of opioid users, patients in treatment, and treating and non-treating physicians. *Eur Addict Res.* 2011;17(1):44-54.
 153. Lea T, Sheridan J, Winstock A. Consumer satisfaction with opioid treatment services at community pharmacies in Australia. *Pharm World Sci.* 2008;30:940-6.
 154. Pérez de Los Cobos J, Trujols J, Valderrama J, Valero S, Puig T. Patient perspectives on methadone maintenance treatment in the Valencia Region: dose adjustment, participation in dosage regulation, and satisfaction with treatment. *Drug Alcohol Depend.* 2005;79(3):405-12.
 155. George J, McCaig DJ, Bond C, Cunningham IT, Diack HL, Stewart DC. Benefits and challenges of prescribing training and implementation: perceptions and early experiences of RPSGB prescribers. *Int J Pharm Pract.* 2007;15:23-30.
 156. Blenkinsopp A, Tann J, Evans A, Grime J. Opportunity or threat? General practitioner perceptions of pharmacist prescribing. *Int J Pharm Pract.* 2008 Feb;16(1):29-34.
 157. Cooper R, Guillaume L, Avery A, Anderson C, Bissell P, Hutchinson A, et al. The safety climate of pharmacist supplementary prescribing in England. *Int J Pharm Pract.* 2008;18 (suppl 1):21.
 158. Schindel TJ, Given LM. The pharmacist as prescriber: A discourse analysis of newspaper media in Canada. *Res Social Adm Pharm.* 2013;9 384-95.
 159. Pharmacy News. GPs slam Guild plan. *Pharmacy News*; 2008 [updated 31 July 2008; cited 2010 July 7]. Available from: <http://www.pharmacynews.com.au/news/latest-news/gps-slam-guild-plan>
 160. Rieck A, Pettigrew S. How physician and community pharmacist perceptions of the community pharmacist role in Australian primary care influence the quality of collaborative chronic disease management. *Qual Prim Care.* 2013;21:105-11.
 161. Hughes CM, McCann S. Perceived interprofessional barriers between community pharmacists and general practitioners: a qualitative assessment. *Br J Gen Pract.* 2003 Aug;53(493):600-6.
 162. Desroches J. Should prescribing authority be shared with nonphysicians?: no. *Canadian family physician Medecin de Famille Canadien.* 2009 Dec;55(12):1177-8, 80-81.
 163. National Prescribing Service (NPS). Better choices, Better health. Competencies required to prescribe medicines: putting quality use of medicines into practice. Sydney: National Prescribing Service Limited; 2012.

164. Cooper RJ, Bissell P, Ward P, Murphy E, Anderson C, Avery T, et al. Further challenges to medical dominance? The case of nurse and pharmacist supplementary prescribing. *Health (London)* 2012;16(2):115-33.
165. Al Hamarneh YN, Rosenthal M, McElnay JC, Tsuyuki RT. Pharmacists' perceptions of their professional role: Insights into hospital pharmacy culture. *Can J Hosp Pharm.* 2011;64(1):31-5.
166. de Oliveira DR, Shoemaker SJ. Achieving patient centeredness in pharmacy practice: Openness and the pharmacist's natural attitude. *J Am Pharm Assoc.* 2006;46(1):56-66.
167. Cipolle R, Strand L, Morley P. *Pharmaceutical Care Practice: The Patient Centered Approach to Medication Management* New York: McGraw-Hill; 2012.
168. Hepler C, Strand L. Opportunities and responsibilities in pharmaceutical care. *Am J Hosp Pharm.* 1990;47:533-43.
169. Robinson J, Callister L, Berry J, Dearing K. Patient-centered care and adherence: Definitions and applications to improve outcomes. *J Am Acad Nurse Pract.* 2008;20:600-7.
170. Chewing B, Sleath B. Medication decision-making and management: A client-centered model. *Soc Sci Med.* 1996 February 42(3): 389-98.
171. Australian Commission on Safety and Quality in Health Care (ACSQHC). *National Safety and Quality Health Service Standards.* Sydney: ACSQHC; 2011.
172. Kitson A, Marshall A, Bassett K, Zeitz K. What are the core elements of patient-centred care? A narrative review and synthesis of the literature from health policy, medicine and nursing. *J Adv Nurs.* 2013;69(1):4-15.
173. Tsuyuki R, Krass I. What is patient-centred care? *Can Pharm J.* 2013;146(4):177-80.
174. Luxford K, Piper D, Dunbar N, Poole N. Patient-centred care: improving quality and safety by focusing care: Australian Commission on Safety and Quality in Health Care; 2010 Nov 22.
175. Australian Commission on Safety and Quality in Health Care. *Australian Charter of Healthcare Rights 2013* [cited 2013 Oct 10]. Available from: <http://www.safetyandquality.gov.au/national-priorities/charter-of-healthcare-rights/>
176. National Health Service. *Creating a Patient-Led NHS: Delivering the NHS Improvement Plan.* Department of Health. London 2005.
177. US Department of Health and Human Services. *Personalized Health Care: Pioneers, Partnerships, Progress.* Washington: US Department of Health and Human Services; 2008.
178. World Health Organization. *The World Health Report 2000 Health Systems: Improving Performance.* Geneva: World Health Organization; 2000.
179. Blalock SJ. The theoretical basis for practice-relevant medication use research: Patient-centered/behavioral theories. *Res Social Adm Pharm.* 2011;7 317-29.
180. Harmon G, Lefante J, Krousel-Wood M. Overcoming barriers: the role of providers in improving patient adherence to antihypertensive medications. *Curr Opin Cardiol.* 2006 21(4):310-5.
181. Anderson E. Patient-centeredness: A new approach. *Nephrol News Issues.* 2001;16(12):80-2.

182. Howie J, Heaney D, Maxwell M. Quality, core values and the general practice consultation: Issues of definition, measurement and delivery. *Fam Pract.* 2004;21(458-468).
183. Maizes V, Rakel D, Niemiec C. Integrative medicine and patient-centered care: Institute of Medicine; 2009.
184. Capron A. Protection of research subjects: Do special rules apply in epidemiology? *J Clin Epidemiol.* 1991;44(Supplement 1):81-9.
185. DeCew J. Privacy. 2012 [cited 2013 Mar 15]. Available from: <http://plato.stanford.edu/archives/fall2012/entries/privacy>
186. Parent W. Privacy, Morality and the Law. *Philosophy and Public Affairs.* 1983;12:269-88.
187. Fried C. Privacy. *The Yale Law Journal.* 1968;77(482).
188. Allen A. Privacy and Medicine. 2011 [cited 2013 Mar 15]. Available from: <http://plato.stanford.edu/archives/spr2011/entries/privacy-medicine/>
189. Office of the Federal Privacy Commissioner. Health Information and the Privacy Act 1988. A short guide for the private health sector. Sydney: Office of the Federal Privacy Commissioner; 2001.
190. Pharmaceutical Society of Australia. Code of Ethics for Pharmacists; 2011.
191. Pharmacy Board of Australia, Australian Health Practitioner Regulatory Agency. Code of conduct for registered health practitioners. 2011 [cited 2013 Jul 4].
192. American Pharmacists Association. Code of Ethics for Pharmacists. 2012 [cited 2012 Feb 23]. Available from: <http://www.pharmacist.com/AM/Template.cfm?Section=Search1&template=/CM/HTMLDisplay.cfm&ContentID=2903>
193. Horsfield E, Sheridan J, Anderson C. What do community pharmacists think about undertaking screening and brief interventions with problem drinkers? Results of a qualitative study in New Zealand and England. *Int J Pharm Pract.* 2011;19:192-200.
194. Dhital R, Whittlesea C, Norman IJ, Milligan P. Community pharmacy service users' views and perceptions of alcohol screening and brief intervention. *Drug Alcohol Rev.* 2010;29:596-602.
195. Hobson RJ, Scott J, Sutton J. Pharmacists and nurses as independent prescribers: exploring the patient's perspective. *Family Practice—an international journal.* 2010;27:110-20.
196. Lawrie T, Matheson C, Bond CM, Roberts K. Pharmacy customers' views and experiences of using pharmacies which provide drug misuse services. *Drug Alcohol Rev.* 2004;23:195-202.
197. Owen D, Ristovski A. A Guide to Consumer Engagement: Tasmanian Alcohol, Tobacco and Other Drug Treatment Services; 2011.
198. Novotná G, Urbanoski KA, Rush BR. Client-centered design of residential addiction and mental health care facilities: staff perceptions of their work environment. *Qual Health Res.* 2011;21(11):1527-38.
199. Deering D, Horn J, Frampton CM. Clients' perceptions of opioid substitution treatment: An input to improving the quality of treatment. *Int J Mental Health Nurs.* 2012;21:330-9.

200. Korthuis T, Gregg J, Rogers W, McCarty D, Nicolaidis C, Boverman J. Patients' reasons for choosing office-based buprenorphine: preference for patient-centred care. *J Addict Med.* 2010;4(4):204-10.
201. Crawford S. Shouting through bullet-proof glass: Some reflections on pharmacotherapy provision in one Australian clinic. *Int J Drug Policy.* 2013;In press
202. Creswell JW, University of Nebraska-Lincoln. *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches.* California, United States of America: SAGE Publications; 2009.
203. Liamputtong P. *Qualitative Research Methods.* Third ed. Victoria: Oxford University Press; 2009.
204. Bryman A. *Social Research Methods.* Third ed: Oxford University Press; 2008.
205. Kuper A, Reeves S, Levinson W. An introduction to reading and appraising qualitative research. *Br Med J.* 2008;337:404-7.
206. Hedrick TE. The quantitative-qualitative debate: possibilities for integration. In: Reichardt C, Rallis S, editors. *The Qualitative-Quantitative Debate: New Perspectives.* San Francisco: Jossey-Bass Inc.; 1994. p. 45-53.
207. Reeves S, Albert M, Kuper A, Hodges B. Why use theories in qualitative research? *Br Med J.* 2008;337:631-4.
208. Rossman G, Rallis S. *Learning in the Field. An Introduction to Qualitative Research.* California: SAGE Publications; 2003.
209. Denzin N, Lincoln Y, editors. *Handbook of Qualitative Research.* 2nd ed.: Sage Publications; 2000.
210. Britten N. Qualitative interviews. In: Pope C, Mays N, editors. *Qualitative Research in Health Care.* Third ed. Massachusetts, USA: Blackwell Publishing; 2006. p. 12-20.
211. Doody O, Noonan M. Preparing and conducting interviews to collect data. *Nurse Researcher.* 2013;20(5):28-32.
212. Ritchie J, Lewis J, editors. *Qualitative Research Practice. A Guide for Social Science Students and Researchers.* London: SAGE Publications; 2003.
213. Australian Bureau of Statistics. Remoteness Structure. 2012 [cited 2012 Mar 13]. Available from: <http://www.abs.gov.au/websitedbs/D3310114.nsf/home/remoteness+structure>
214. Smith J, Firth J. Qualitative data analysis: the framework approach. *Nurse Researcher.* 2011;18(2):52-62.
215. Huberman AM, Miles MB. Qualitative data analysis for applied policy research. In: Ritchie J, Spencer L, editors. *The Qualitative Researcher's Companion.* London: Sage Publications; 2002. p. 305-30.
216. Pope C, Ziebland S, Mays N. Analysing qualitative data. *Br Med J.* 2000;320:114-6.
217. Pope C, Mays N. Quality in qualitative health research. In: Pope C, Mays N, editors. *Qualitative Research in Health Care.* Third ed. Massachusetts, USA: Blackwell Publishing; 2006. p. 82-101.
218. Kitinger J. Focus groups. In: Pope C, Mays N, editors. *Qualitative Research in Health Care.* Third ed. Massachusetts, USA: Blackwell Publishing; 2006. p. 21-31.

219. Huston S, Hobson E. Using focus groups to inform pharmacy research. *Res Social Adm Pharm.* 2008;4:186-20.
220. Department of Health and Ageing. Rural health workforce strategy. Canberra: Australian Government; 2011 [cited 2011 Nov 7]. Available from: <http://www.doctorconnect.gov.au/internet/otd/Publishing.nsf/Content/locator>
221. Jootun D, McGhee G, Marland G. Reflexivity: promoting rigor in qualitative research. *Nurs Stand.* 2009;23(23):42-6.
222. Creswell JW. *Qualitative inquiry & research design. Choosing among five approaches.* third ed. California: SAGE Publications; 2013.
223. Bulpitt H, Martin PJ. Who am I and what am I doing? Becoming a qualitative research interviewer. *Nurse Res.* 2010;17(3):7-16.
224. Abramowitz P, Shane R, Daigle L, Noonan K, Letendre D, Avery T. Pharmacist interdependent prescribing: a new model for optimizing patient outcomes. *Am J Health Syst Pharm.* 2012;69(22):1976-81.
225. Leslie K. Pharmacists in Ontario can give flu shots and renew non-narcotic prescriptions. *The Globe Mail*; 2012 [cited 2012 Dec 19]. Available from: <http://www.theglobeandmail.com/news/politics/pharmacists-in-ontario-can-give-flu-shots-and-renew-non-narcotic-prescriptions/article4598872/>
226. United States Census Bureau. Resident Population Data. 2012 [cited 2012 20 Nov]. Available from: <http://2010.census.gov/2010census/data/apportionment-dens-text.php>
227. Statistics Canada. Population by year, by province and territory 2012 [cited 2012 Nov 20]. Available from: <http://www.statcan.gc.ca/tables-tableaux/sum-som/101/cst01/demo02a-eng.htm>
228. Statistics Canada. Census profile. 2012 [cited 2012 Nov 20]. Available from: <http://www12.statcan.gc.ca/census-recensement/2011/dp-pd/prof/details/page.cfm?Lang=E&Geo1=CSD&Code1=4813012&Geo2=PR&Code2=48&Data=Count&SearchText=Alberta%20Beach&SearchType=Begins&SearchPR=01&B1=All&Custom=>
229. Australia Bureau of Statistics. South Australia. 2012 [cited 2012 Nov 20]. Available from: <http://www.abs.gov.au/ausstats/abs@.nsf/Previousproducts/3218.0Main%20Features72010-11?opendocument&tabname=Summary&prodno=3218.0&issue=2010-11&num=&view=>
230. Central Intelligence Agency. Physician density. 2012 [cited 2012 Nov 20]. Available from: https://www.cia.gov/library/publications/the-world-factbook/fields/print_2226.html
231. Australian Health Practitioner Regulatory Agency. Annual Report 2011/12: Australian Health Practitioner Regulation Agency; 2012.
232. Australian Bureau of Statistics. 3101.0 - Australian Demographic Statistics, Dec 2013 [cited 2013 Aug 6]. Available from: <http://www.abs.gov.au/ausstats/abs@.nsf/mf/3101.0>
233. Midwest Pharmacy Workforce Research Consortium. 2009 National Pharmacist Workforce Survey Executive Summary; 2010.
234. United States Census Bureau. Population estimates. 2010 [cited 2013 Aug 24]. Available from: http://www.census.gov/popest/data/historical/2000s/vintage_2009/

235. Canadian Institute for Health Information. Pharmacists in Canada, 2009. 2010 [cited 2013 Aug 2]. Available from: http://www.cihi.ca/CIHI-ext-portal/pdf/internet/INFO_PC_18NOV10_PDF_EN
236. Statistics Canada. Population by year, by province and territory 2012 [cited 2013 Aug 2]. Available from: <http://www.statcan.gc.ca/tables-tableaux/sum-som/l01/cst01/demo02a-eng.htm>
237. Rushforth H. Reflections on a study tour to explore history taking and physical assessment education. *Nurse Education in Practice* 2008;8(31-40).
238. Kitson AL. Approaches used to implement research findings into nursing practice: Report of a study tour to Australia and New Zealand. *Int J Nurs Pract.* 2001; 7:392-405.
239. Laragy C. Snapshot of flexible funding outcomes in four countries. *Health Soc Care Community.* 2010;18(2):129-38.
240. Smith JA, White AK, Richardson N, Robertson S, Ward M. The men's health policy contexts in Australia, the UK and Ireland: advancement or abandonment? *Crit Public Health.* 2009;19(3-4):427-40.
241. Valente TW, Pumpuang P. Identifying opinion leaders to promote behavior change. *Health Education & Behaviour.* 2007;34:881-96.
242. Alberta College of Pharmacists. What you need to know about...Pharmacist Prescribing. 2012.
243. Boenneken I, Gallagher J, Sessay M, O'Gara C, Luty J. Independent prescribing of CDs to addicts by pharmacists is long overdue. *Pharmaceutical Journal.* 2006 11 Feb;276(7387):164.
244. Anstice S, Strike C, Brands B. Supervised Methadone Consumption: Client Issues and Stigma. *Subst Use Misuse.* 2009;44:794-808.
245. Luger L, Bathia N, Alcorn R, Power R. Involvement of community pharmacists in the care of drug misusers: pharmacy-based supervision of methadone consumption. *Int J Drug Policy.* 2000;11:227-34.
246. Hutchison M, Lindblad A, Guirguis L, Cooney D, Rodway M. Survey of Alberta hospital pharmacists' perspectives on additional prescribing authorization. *Am J Health Syst Pharm.* 2012;69(22):1983-92.
247. Motulsky A, Winslade N, Tamblyn R, Sicotte C. The impact of electronic prescribing on the professionalisation of community pharmacists: a qualitative study of pharmacists' perceptions. *J Pharm Pharmaceut Sci.* 2010;11(1):131-46.
248. Matheson C. Privacy and stigma in the pharmacy: illicit drug users' perspectives and implications for pharmacy practice. *Pharm J.* 1998;260:639-41.
249. Kay OC, Bajorek BV, Brien JAE. Pharmacist prescribing activities - An electronic survey on the opinions of Australian pharmacists. *Journal of Pharmacy Practice and Research.* 2006 Sep;36(3):199-203.
250. National Prescribing Service (NPS). Our history. 2012 [cited 2013 Oct 10]. Available from: <http://www.nps.org.au/about-us>
251. Rosenthal M, Austin Z, Tsuyuki RT. Are pharmacists the ultimate barrier to pharmacy practice change? *Can Pharm J.* 2010;143(1):37-42.
252. Buerki RA. The public image of the American pharmacist in the popular press. *Pharmacy In History.* 1996;38(2):62-78.

253. Elliott S, Epstein J. Selecting the future doctors: the role of graduate medical programmes. *Intern Med J*. 2005;35 (3):174-7.
254. Ranney R, Wilson M, Bennett R. Evaluation of applicants to predoctoral dental education programs: review of the literature. *J Dent Educ*. 2005 69(10):1095-106.
255. Hobson R, Sewell G. Risks and concerns about supplementary prescribing: survey of primary and secondary care pharmacists. *Pharm World Sci*. 2006;28:76-90.
256. Hambleton S. Sticking to the script. *Australian Pharmacist*. 2012 Oct;31(10):771.
257. Fecher I, Knight J. A framework for independent prescribing of intravenous fluids. *Emerg Nurse*. 2012;20(7):30-4.
258. Albrecht LC, Roberts AS, Benrimoj CS, Williams KA, Chen TF, Aslani P. Cognitive pharmaceutical services: financial facilitators. *Australian Pharmacist*. 2006;25(10):809-15.
259. Commonwealth of Australia. Personally controlled electronic health (eHealth) record. 2012 [cited 2013 Jul 15]. Available from: <http://publiclearning.ehealth.gov.au/>
260. Trieu K. eHealth records will change how we deliver healthcare. *Australian Pharmacist*. 2013;32(11):32.
261. eRx Script Exchange. eRx Script Exchange. 2012 [cited 2013 Jun 4]. Available from: <http://www.ernx.com.au/support/faqs/>
262. McBride M. E-prescribing prevents errors. Ability offers vital communication link for physicians, pharmacists, and patients. *Med Econ*. 2012 Nov 10;89(21):61-2.
263. Gidman W, Ward P, McGregor L. Understanding public trust in services provided by community pharmacists relative to those provided by general practitioners: a qualitative study *BMJ Open*. 2012;2.