PATIENT ACCEPTABILITY OF THE PHYSIOTHERAPY FIRST CONTACT PRACTITIONER (FCP) ROLE IN PRIMARY CARE: A REALIST EVALUATION

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Abstract

Background: Approximately 30% of GP consultations are due to musculoskeletal disorders (MSKDs) which is significantly affecting workload. Physiotherapists are trained to assess, diagnose and treat MSKDs and could provide an alternative to GP consultation for Primary Care patients as First Contact Physiotherapists (FCPs).

Aim: Explore patient perceived acceptability of the FCP role using realist methods to understand what works for whom, how, why and in what circumstances.

Methods: Phase one consisted of a realist review which identified initial programme theories regarding the factors that influence acceptability of any Advanced Practitioner in a first point of contact role. Databases were searched to identify relevant literature and bespoke, theory-specific data extraction sheets were created and utilised. Data were analysed through identification of contexts, mechanisms and outcomes (CMOs) to formulate hypotheses related to role acceptability. Generated hypotheses were validated through consultation with key stakeholders including a Patient Partner and FCPs; realist methodology recommends reviews to be stakeholder-driven as it facilitates the inclusion of multiple perspectives and an 'expert framing'. Phase two of the project was a realist evaluation, a theory-driven method that tested the hypotheses generated in phase one using realist interviews. Two diverse GP practice case study sites were identified and interviews undertaken with: five patients per site (total patients n=10); Reception staff; GPs; FCPs; and Practice Managers (total staff n = 10). Interview data were analysed against the test theories through identification of CMOs, and new theory was formed.

Results: Thirty-eight qualitative, quantitative and mixed-methods studies relevant to theory were included for review. Theory areas identified in phase one included: 'Previous Experience of Condition Management'; 'Expectations of Condition Management'; 'Professional hierarchy'; 'Communication'; 'Accessibility'; 'Continuity of the Individual Practitioner'. Interview data in phase two supported all theory areas, except 'Continuity of the Individual Practitioner'. CMOs that were relevant to both sites included the need for patients to have more awareness and understanding of the FCP. However, different FCP models and differing contexts resulted in CMOs unique to individual Practice sites; for instance, the context of an older population in Practice A affected patient expectations of GP involvement.

Conclusion: Patients were predominantly accepting of the FCP role. Nevertheless, there was scope to increase acceptability to increase patients accessing the service and accessing it appropriately. The findings highlighted the individuality of Practices, as they differed in

their contexts and their implementation strategy. It is important to consider these contexts when implementing the FCP role in order to achieve the intended outcomes.

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Glossary of terms

Role terminology

Advanced Practitioner (AP)

An AP is an experienced, registered health and care practitioner who is able to deliver advanced clinical practice. This level of practice is characterised by a high degree of autonomy and complex decision-making. This is underpinned by a Master's level award or equivalent that encompasses the four pillars of clinical practice as outlined by National Health Service England (NHSE): leadership and management; education and research; demonstration of core capabilities; and area specific clinical competence (NHSE, 2017a).

Allied Health Professional (AHPs)

AHPs are professionally autonomous practitioners that encompass 14 different professions, including: Art Therapists; Drama therapists; Music therapists; Chiropodists/Podiatrists; Dietitians; Occupational Therapists; Operating Department Practitioners; Orthoptists; Osteopaths; Paramedics; Physiotherapists; Prosthetists and Orthotists; Radiographers; Speech and Language Therapists (NHS, 2019a).

Clinical Pharmacist

Highly qualified experts in medicines who are able to carry out structured medication reviews for patients with ongoing health problems, improve patient safety, outcomes and value through a person-centred approach (NHSE, 2019b).

Community Paramedics

Community Paramedics provide a bridge between the hospital and the community by offering specialised Primary Care services for patients with chronic diseases or difficulty accessing traditional healthcare services. Community Paramedics receive further training to their formative training, and generally have more specialist capabilities than regular duty paramedics (Blanchard *et al.*, 2019).

Extended Scope Practitioner (ESP)

Extended Scope Practitioners (ESP) have been defined as: 'Experienced clinical professionals who have developed their skills and knowledge in a defined area who are working beyond the usual scope of practice for the specific profession including undertaking tasks previously undertaken by other healthcare professionals. This is within a clinical governance framework' (Department of Health, 2006, p.54).

First Contact Practitioner (FCP)

A FCP is a physiotherapist who has expertise in musculoskeletal disorders, most likely with a Master's degree, and is working within Primary Care as a first-point-of-contact. The role of the FCP in Primary Care is to assess patients with soft tissue, muscle and joint pain and to decide on the most appropriate management pathway. The role is typically at a band 7/8 level, which are the higher NHS role bandings (Chartered Society of Physiotherapy, 2018a).

Nurse Practitioner (NP)

A NP is a registered nurse who has an expert knowledge base, complex decision-making skills and clinical competencies for expanded practice, the characteristics of which are shaped by the context and/or country in which s/he is credentialed to practice. A Master's degree is recommended for entry level (ICN, 2017).

Primary Care Practitioner (PCP)

The PCP role consists of qualified paramedics or nurses with Advanced Clinical Practice skills in minor injury and illness (NHS, 2018b). It has been suggested that PCPs would be able to identify which health care professionals the patients are best placed to see (Silverston, 2019).

Physician associates

A healthcare professional who works to the medical model with the attitudes, skills and knowledge base to deliver holistic care and treatment within the GP team under defined levels of supervision. They have direct contact with patients and support doctors in the management of patients (British Medical Association, 2017).

Social Prescribing Link Workers

Link workers take a holistic approach to people's health and wellbeing. They connect people to community groups and statutory services for practical and emotional support (NHSE, 2019c).

Realist terminology

Chains of Inference

Chains of inference are the connections across extracted data and themes (Rycroft-Malone *et al.*, 2012). There may be several similar variations of a theme; chains of inference connect them to form an overarching theme.

CMO configuration/programme theory

A realist evaluation attempts to trace back a programme's outcomes to its associated contexts and mechanisms in order to pinpoint the configuration of features needed to sustain a programme (Pawson and Tilley, 2004). The CMO configurations collectively constitute the programme theory – the theory of *how* the programme is expected to work.

Context

The context is fundamental to a mechanism being able to function, in order to achieve the outcome (Wong *et al.*, 2016). On a micro level, context may include: characteristics of the population; organisation; staffing; history; culture; beliefs and so on. Whilst on a macro level the context may include: the geographic and community setting; religious politics; and organisational setting, to name a few. In order to be classed as a context, the characteristics must be required to 'fire' the mechanism (or, equally may prevent intended mechanisms from firing) (Westhorp *et al.*, 2011).

Hypotheses

The hypotheses are synthesised statements of findings against which the previous stages of analysis could be presented (Rycroft-Malone *et al.*, 2012). The collection of similar themes and also chains of inferences led to the formation of hypotheses that may further explain how the Advanced Practitioner role works. The hypotheses developed the initial theory area framework.

Latent mechanism

Latent mechanisms are all those that are not active, however, could be revealed if the context was altered, reflecting the deeper layers of ontological depth (Jagosh, 2019; Lacoutur*e et al*., 2015).

Mechanism

The underlying processes, entities or social structures that –when operating in particular contexts –lead to outcomes (Astbury and Leeuw, 2010). Mechanisms have two essential components: mechanism resource and mechanism reasoning.

Mid-range theories

Mid-range theories relate to a social system but are not specific to the programme under evaluation; they are generic theories of human reasoning or activity that have relevance to the programme and therefore facilitate explaining the programme (Merton, 2013).

Outcome

Outcomes, also known as outcome-patterns, are the intended or unintended consequences of a programme (Pawson and Tilley, 2004).

Programme strategy

Mechanisms are not synonymous with strategies; e.g., a strategy may be an intended plan of action, whereas a mechanism involves how it is actually implemented (Jagosh *et al.*, 2015).

Resource mechanism

The resource is implemented into an existing context, in a way that enhances change in reasoning (Dalkin *et al.*, 2015).

Response mechanism

It is this reasoning that results in the behaviour of the stakeholders changing, and therefore leads to outcomes (Dalkin *et al.*, 2015).

Retroduction

Retroduction is concerned with asking the 'why?' – '*why* do things appear the way they do?' (Olsen, 2010); this process leads to the uncovering of causal mechanisms. Integral to retroductive theorising is that inquirers must go beyond exploring only the observable when reasoning. In order to theorise retroductively, insights, expertise, imaginative thinking, intelligence and common sense must all be adopted (The RAMESES II Project, 2017).

Rival programme theory

Interventions rarely run to plan; it is highly likely that the researcher will encounter rival conjectures about how a scheme might succeed or fail, entitled rival programme theory (Greenhalgh *et al.*, 2005a).

Theory area

The review began with initial broad ideas on how the Advanced Practitioner role works; these formed the theory areas that acted as a framework for the development of hypotheses.

Unintended outcomes

Unintended outcomes are unwanted effects that result from unintended mechanisms (Wong et al., 2016; Astbury and Leeuw, 2010; Pawson, 2006).

Unintended response mechanism

Unintended response mechanisms are generative mechanisms that have negative effects and thus cause unintended outcomes (Westhorp, 2014).

Primary Care terminology

Sustainability and Transformation Partnerships (STPs)

STPs aimed to run services in a more coordinated manner, addressing system-wide priorities and planning how to implement the Five Year Forward View (NHSE, 2019d, 2014). STPs are supported by six national health and care bodies: NHSE; NHS Improvement; the Care Quality Commission; HEE; Public Health England and the National Institute for Health and Care Excellence (NHSE, 2019d).

Integrated Care Systems (ICSs)

STPs have begun to be replaced by ICSs and the NHS Long Term Plan sets out the aim that they will replace all STPs by 2021. ICSs also create links with providers so that commissioners and NHS providers are taking shared responsibility for how they operate their collective resources, including budgets, for the benefit of local populations (NHS, 2019e; NHSE, 2018c).

Core Clinical Commissioning Groups (CCG)

In April 2013 CCGs replaced Primary Care trusts as the commissioners of most healthcare services funded by the NHS in England (The King's Fund, 2013).

Primary Care Networks (PCN)

Since 1 July 2019, a majority of GP practices in England have come together in approximately 1,300 geographical networks covering populations of approximately 30–50,000 patients. Most networks are geographically based and, between them, cover all practices within a CCG boundary. NHSE has significant ambitions for PCNs, with the expectation that they will deliver many of the commitments in the long-term plan and provide a wider range of services to patients (The King's Fund, 2019a).

Quality in qualitative studies terminology

Predictive validity

Predictive validity is a logical inference from which results of a measure share comparable results with an alternative measure taken at a different time. The higher the degree of

similarity in function (e.g. high correlation) between the two tests—the one in question and the alternative—the more predictive validity becomes established (Dilbeck, 2017).

Content Validity

The extent to which the items on a test are representative of the entire domain the test seeks to measure (Markus and Smith, 2010).

Other terminology

Multi-morbidity

The existence of two or more long-term conditions (Duffield *et al.,* 2017).

Co-Morbidity

Any additional health condition/s occurring at the same time in the same individual as a previously defined index condition (Duffield *et al.,* 2017).

Snowballing

Snowball sampling is a technique used to gather research participants through identification of an initial participant who then is able to offer an expanded network of other potential participants (Beck, Bryman and Liao, 2004).

Acronyms

AHP – Allied Health Professional

AP – Advanced Practitioner

CCG – Core Clinical Commissioning Group

CEO – Chief Executive Officer

CMO – Context, Mechanism, Outcome

COPD – Chronic Obstructive Pulmonary Disease

CSP – Chartered Society of Physiotherapy

ED – Emergency department

ESP – Extended Scope Practitioner

FCP – First Contact Practitioner

GP – General Practice

GPFV – General Practice Forward View

HCP – Health care professional

HEE – Health Education England

HRA – Health Research Authority

ICS – Integrated Care Systems

LBP – Lower back pain

MATS – Musculoskeletal Assessment and Treatment Service

MSKD – Musculoskeletal disorder

NHS – National Health Service

NHSE – National Health Service England

NP – Nurse Practitioner

PGD – Patient Group Direction

PCN – Primary Care Network

PCP – Primary Care Practitioner

REC – Research Ethics Committee

SLR - Systematic Literature Review

SPA – Single Point of Access

STP – Sustainability and Transformation Partnerships

UWE – University of the West of England

Table of contents

Table of figures

Figures

Tables

Structure of the Thesis

This thesis is comprised of 10 chapters. Within the introductory chapter there will be an overview of the Primary Care climate, including its pressures, the longstanding solutions to these problems, and new solutions, such as the First Contact Practitioner (FCP) role (see glossary). Chapter 2 outlines the theoretical methodology and methods that this study follows, elucidating the complexity of realist evaluation and explaining its qualitative methods. Chapter 3 focuses entirely on the realist review, concluding with hypotheses that form the framework for the realist evaluation. The method used in the realist evaluation is then described in Chapter 4, and the analysis of the two individual Practices in Chapter 5 and Chapter 6. The findings that are shared by both Practices are then detailed in Chapter 7, and the interpretation of these combined analyses is presented in Chapter 8. Chapter 9 includes a discussion of the findings and broader literature will be drawn upon. Finally, Chapter 10 will provide a discussion of the wider thesis, including the original contribution to the field, recommendations for future research, strengths and limitations of the research and an overall conclusion.

1 Chapter 1: Introduction

1.1 Primary Care pressures

The number of overall face-to-face Primary Care consultations grew by more than 15% between 2010/11 and 2014/15 (The King's Fund, 2016). There are multiple reasons for this increased demand. Firstly, the aging population has resulted in a 16% increase in Primary Care contacts of those aged over 85 (The King's Fund, 2016). As such, GPs are managing more patients with age-related conditions, often with time-consuming co-morbidities (Majeed, 2014). Secondly, the prevalence of musculoskeletal disorders (MSKDs) – which are muscular or joint conditions characterised by pain, loss of movement and function – have seen a global increase, accounting for 6.8% of disease burden in 2012, compared to 2.0% in 2004 (Chartered Society of Physiotherapy, 2018a; Murray *et al.*, 2012). The increase in MSKDs can in part be attributed to the aging population but also due to an increase in obesity, of which are both factors associated with musculoskeletal deterioration (NHS Digital, 2017; Roberts *et al.,* 2016; Collino *et al.,* 2014). Data frequently suggest that MSKDs account for up to 30% of GP contacts, although estimations vary between 12% to 33% (Goodwin and Hendrick, 2016; Jordan *et al.*, 2010; Savingy, 2009; Department of Health, 2006).

There are notable challenges associated with an appropriate workforce to support healthcare provision. Although the GP Forward View (NHSE, 2016a) set out clear aims of an additional 5,000 GPs in the workforce by 2020, figures highlight the number of full-time equivalent GPs to have decreased by 157 between December 2017 and March 2018 (NHS Digital, 2018). This is not a new development but reflects a pattern of fewer doctors entering into GP training, decreasing hours to part-time or taking early retirement (Fletcher *et al.*, 2017; Dale *et al.*, 2017, 2015). Reasons for GPs intending to leave practice include high levels of stress (48%) and working too many hours (34%) (Royal College of General Practitioners, 2018).

Alongside these pressures, it is suggested that patients are putting increasing demands on health care professionals (HCPs). The General Practice Forward View (GPFV) (2016) stated that there was a steady rise in patient expectations and a transference of pressure on to General Practice staff. A King's Fund project 'The Public and the NHS' questioned this assertion; they found that only 18% of patients felt that the NHS fell short of their expectations (The King's Fund, 2017b). Despite patient expectations being met, satisfaction with General Practice services was at an all-time-low at 63% (The King's Fund, 2019b). The

proportion who rated their overall experience of making a GP appointment as *'good'* decreased by 10% to 69% between 2012 and 2018 (The King's Fund, 2019b). Whilst patients were reportedly satisfied with the quality of care, free NHS access, the variety of services and treatments available and the attitudes and behaviour of NHS staff, dissatisfaction existed with long waiting times, staff shortages, a lack of funding and money being wasted (The King's Fund, 2019b). The King's Fund (2018) hypothesised that expectations were only achieved due to a downward shift in patient expectations overall. Patient expectations being met is not a measure of quality service, rather, it suggests the opposite - an acceptance of the minimum from the NHS.

1.2 Primary Care solutions

There have been active efforts to fill these Primary Care shortfalls. The GPFV promised a £3.5 million investment into multi-disciplinary training hubs in England to support the wider workforce within General Practice, including more Nurse Practitioners (NPs, see glossary), Physician Associates and Clinical Pharmacists (see glossary for role terminology). NHSE's rationale was that NPs have long been integral to GP Practice and that a wide variety of other HCPs were able to share the GP workload, and offer patients improved access to specialist care (NHSE, 2016a). The NP was established in 1990, following the first GP contract which highlighted that a proportion of Primary Care services could be effectively delivered by nurses (Wilson *et al.*, 2002). With training, NPs can autonomously receive patients with undiagnosed problems, make clinical decisions and instigate these decisions with a doctor accessible as required (Myers, Lenci and Sheldown, 1997). This role expansion has included immunisation and chronic disease management, telephone triaging and nurse-led walk in clinics (Campbell *et al.*, 2014; Desborough, Forrest and Parker, 201; Robinson, Beaton and White, 1993).

The evidence for nurses in Primary Care is highly supportive of the role. The role has demonstrated no significant differences in terms of patient health outcomes, including resolution of symptoms, and patient satisfaction is reportedly higher with NP management (Young *et al.*, 2016; Bonney, Magee and Pearson, 2014; Horrocks, Anderson and Salisbury, 2002; Kinnersley, 2002). It must be noted that NP consultation lengths are significantly longer; it may be this that is associated with the higher satisfaction rates rather than the consultation skills of nurses (Horrocks, Anderson and Salisbury, 2002). However, the NP role should not be seen as simply a 'substitution' of doctors. With widespread health knowledge and person-centred training, NPs are ideally positioned to redefine services away from medical diagnosis to focus toward a holistic package of care (Carryer and

Adams, 2017; Rosemann *et al.*, 2014). NPs have expertise and clinical skills that are being utilised and are now viewed as a vital part of the Practice team (NHSE, 2016a).

The GPFV recognised that other HCPs could offer their profession-specific specialities to Practice, resulting in an increasingly multi-disciplinary Primary Care workforce (NHSE, 2016a). For instance, since the 'NHSE Clinical Pharmacists in General Practice Programme' started in 2015, 1000 full-time equivalent Clinical Pharmacists (see glossary) began working in Practices nationally (NHSE, 2019b, 2016a). An evaluation found that the Clinical Pharmacist role resulted in more patients seeing the right person at the right time, improved patient satisfaction with their healthcare and reduced opioid use (Deeks, Kosari and Naunton, 2018). The Primary Care Practitioner (PCP, see glossary) is another emerging role, consisting of qualified paramedics or nurses with Advanced Clinical skills in minor injury and illness (NHS, 2018b). It has been suggested that PCPs would be able to identify which HCP the patients are best placed to see in a care navigation role. Thus, the GP's role would become similar to that of a Secondary Care Consultant, providing expert clinical input when indicated (Silverston, 2019).

1.3 Advanced Practitioner frameworks

Common to the new roles is the HCP working at a higher level from that achieved on initial registration. The growth of these roles has resulted in debate as to how the level of advanced practice should be defined, and what core capabilities are required (HEE, 2017). Frameworks are consistently being revised in order to attempt to define the role and boundaries of Advanced Practitioner (AP) roles (see glossary), including the FCP role (HEE and NHSE, 2018; NHSE, 2017a). Health Education England (HEE) and NHSE (2017) created a multi-professional framework setting out the necessary core capabilities of HCPs to act in an advanced role, which expand upon the four pillars of AP (see Figure 1.1).

APs are expected to practice at a Master's level, in other words, they should have the ability to make sound judgements for complex cases where there may be limited amounts of information and risk. They should be able to: work as part of, lead and manage, a multidisciplinary team; critically assess and address their own learning needs, as well as critically engage in research (HEE, 2017).

Figure 1.1 - Four pillars of AP from HEE (2017)

There must be consideration of the needs of the locality in order to ensure there is the correct configuration of the workforce supply. This requires articulation of the HCP's scope of practice and capability development (Health Education England, 2017). In the past, discussion has revolved around practitioners extending their scope of practice as Extended Scope Practitioners (ESPs, see glossary). A systematic literature review (SLR) highlighted a general consensus regarding what roles are considered an extension of scope, including: ordering/interpreting x-rays; prescribing; limited ordering of pathology tests; and specific injection tasks (Saxon, Gray and Iloprescu, 2014). There has been a recent shift from discussion of what extension of scope is required, to the 'capabilities' of the HCP. Frameworks clarify what HCPs should be capable of delivering to practice as an AP. Additionally, Frameworks recognise 'specialist capabilities'; the potential for further learning and professional development of skills or knowledge outside of core capabilities (HEE and NHSE, 2018; NHSE, 2017a). This change in terminology is reflective of the blurring of role boundaries in order to reduce the culture of skill ownership (see section 1.4) (King, et. al, 2015). The capability Frameworks recognise that additional skills may be required of the HCP to address the needs of the local population, for instance, injection therapy (HEE and NHSE, 2018; HEE, 2017). Instead of dictating necessary skills, the Framework sets out broad principles for delivering sustainable, consistent multi-professional teams and healthcare (HEE and NHSE, 2018).

1.4 Role boundaries and protectionism

Role boundaries have existed historically, and continue to occur for several reasons. Dixon-Woods, McNicol and Martin (2012) discussed how 'tribalism' – which is the clustering of

HCPs into their respective professional group – affected service changes. Tribalism can encourage the guarding of professional autonomy and protectionism in which professionals are concerned that APs may 'deskill' other HCPs through 'siphoning off' specialities (Moffatt, Goodwin and Hendrick, 2018; Dixon-Woods, McNicol and Martin, 2012; Segole, 2011;). A SLR of the AP nursing role in Primary Care demonstrated that despite working alongside NPs, GPs were on occasion unaware of the NP's scope of practice and found the role ill-defined (Jakimowicz, Williams and Stankiewicz, 2017). The SLR found that a majority of GPs were uncomfortable with NPs making diagnoses and with GPs losing control over treatment decisions. In Practices where GPs were micro-managing, NPs began to doubt their own clinical reasoning (Dixon-Woods, McNicol and Martin, 2012). However, tribalism could work in favour of changing role boundaries; for instance, rather than creating change through management which may appear coercive, change can be achieved through tapping into professional networks (Dixon-Woods, McNicol and Martin, 2012). Dixon-Woods, McNicol and Martin (2012) argued that service change vitally requires HCPs to work as a team, setting clear shared goals, agreed roles and responsibilities using universal language.

1.5 Facilitating new roles

There are multiple partnerships, networks and funding streams in place that are able to facilitate the development of these roles. The Government released a General Practice Access Fund across parts of England in 2013 and again in 2016 in order to facilitate Practices in achieving the GPFV's aims (NHSE, 2016a). The plans set out that by 2020 all patients should have improved access to General Practice services including routine appointments at evenings and weekends, alongside access to out of hours and Urgent Care services (NHSE, 2016a). In 2016, local councils and the NHS collaborated in order to form 44 Sustainability and Transformation Partnerships (STPs) across England (see glossary). STPs aimed to run services in a more coordinated manner, addressing system-wide priorities and planning how to implement the Five Year Forward View (NHSE, 2019c, 2014). STPs have begun to be replaced by Integrated Care Systems (ICSs, see glossary) which see more cohesive budget sharing, and the NHS Long Term Plan set out the aim that all STPs will be replaced by ICSs by 2021. ICSs also create links with providers so that commissioners and NHS providers are taking shared responsibility for how they operate their collective resources for the benefit of local populations (NHS, 2019e; NHSE, 2018c).

STPs/ICSs are encouraged to create Primary Care Networks (PCNs, see glossary) which aim to implement service improvements that require a system-wide effort. In order to take advantage of part of the £4.5 billion additional funding, STPs/ICSs were required to create

networks that covered populations of 30,000-50,000 patients before June 2019 (The King's Fund, 2019a). These PCNs should be able to pool resources in order to achieve targets set out by the NHS Long Term Plan (NHS, 2019e). For instance, PCNs may allow Practices to offer additional hours, and provide a broader range of Primary Care services (The King's Fund, 2019a). Funding will cover 70% of the cost of Clinical Pharmacists and 100% of social prescribing link workers by 2019/20. From 2020/21, the scheme will also include physician associates and FCPs, and then community paramedics by 2021/22 (see glossary for definitions for all role terminology).

1.6 Physiotherapists' capabilities

Well-placed to work in PCNs is the FCP role. In traditional healthcare systems, the first HCP to see the patient with a MSKD is the GP; to access the physiotherapist, patients require a GP referral (Foster, Hartvigsen and Croft, 2012). The patient may instead choose to access a physiotherapist directly, through self-funded private care. Alternatively, some Trusts provide direct access, in which a patient is able to self-refer to an NHS physiotherapist into Secondary Care without a GP referral (NHS, 2018d). An alternative to these models is accessing a FCP; a physiotherapist who provides first-contact-care for patients in Primary Care, without the need for prior GP input (see Figure 1.2) (Chartered Society of Physiotherapy, 2018a).

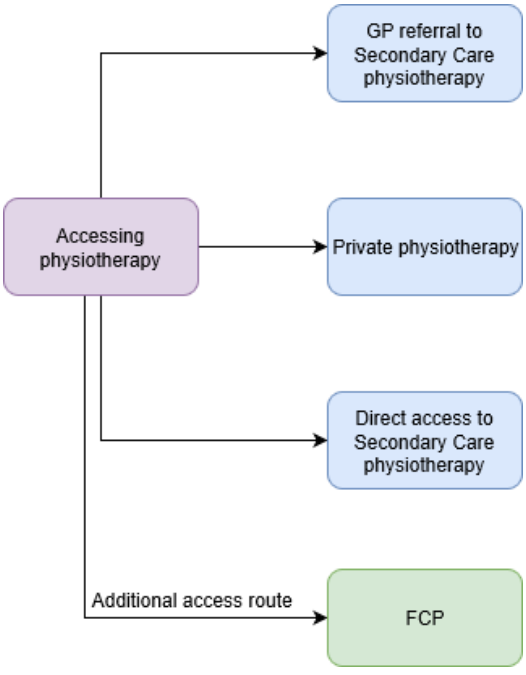


Figure 1.2 - Physiotherapy access

Over the last several decades it has become increasingly accepted that physiotherapists are able to practice autonomously in an AP role. The Chartered Society of Physiotherapy (CSP) extended the scope of physiotherapy to include intra-articular and intra-lesion injections for appropriately trained physiotherapists (Chartered Society of Physiotherapy Council, 1997). In 2005, physiotherapists were granted autonomy to practice as supplementary prescribers so that they may prescribe the drug they were administering (Chartered Society of Physiotherapy, 2018b). The role was further extended in 2012 when it was granted that physiotherapists who were appropriately trained and qualified may independently prescribe from a list of seven controlled drugs (Department of Health, 2012).

Before the Primary Care FCP role began, physiotherapists had already been working as first-point-of-contact in new environments such as emergency departments (EDs) and orthopaedic outpatient clinics with good outcomes (Taylor *et al.*, 2011; Pearse, Maclean and Ricketts, 2006; Belthur, Clegg and Strange, 2003; Daker-White *et al.*, 1999; Hockin and Banniser, 1994). The findings of three studies found that physiotherapists were able to manage between 85% and 93% of patients independently in an outpatient orthopaedic clinic, and clinic waiting times were reduced (Hockin and Banniser, 1994; Belthur, Clegg and Strange, 2003; Daker-White *et al.*, 1999). Taylor *et al.* (2011) highlighted that 77% of patients were satisfied with their physiotherapist management, and 85% strongly agreed that they were satisfied in a study by Pearse, Maclean and Ricketts (2006).

Evidence suggests that physiotherapists have a greater knowledge of MSKDs than doctors of all grades, with the exception of consultant orthopaedic surgeons (Childs *et al.*, 2007). Desmeules *et al.'s* (2012) SLR identified three studies that reported APs' diagnostic accuracy to be good and comparable to that of orthopaedic surgeons, and another study reported 'similar' accuracy. Since this SLR, AP frameworks have been greater developed, stipulating training requirements for capabilities (HEE and NHSE, 2018; HEE, 2017a). It may be postulated that, since the development of the AP framework, the knowledge of APs has increased, and therefore APs' and orthopaedic surgeons' knowledge may be greater than Desmeules *et al.*, (2012) SLR concluded.

FCPs may provide a partial solution to the Primary Care workforce crisis, and significantly improve patients' quality of life (Chartered Society of Physiotherapy, 2018a). FCPs fall within the umbrella term APs, as they have expertise (in MSKDs), frequently have a Master's degree, and have a high-degree of professional autonomy as they work within Primary Care as a first-point-of-contact. The role of the FCP in Primary Care is to assess

patients with connective tissue, muscle and joint pain and to decide on the most appropriate management pathway and it is typically at an NHS Band 7/8 level (Chartered Society of Physiotherapy, 2018a; NHSE, 2017a).

1.7 FCP impact on musculoskeletal management

MSKDs are the greatest contributor to persistent pain across the world for all ages (Tsang *et al.*, 2009). In adults, it is reported that the most common MSKD presentations in Primary Care are back, followed by knee and shoulder[1] (Jordan *et al.*, 2010). Due to the aging population, there has been an increase in age-associated MSKDs, for instance the proportion of the population with osteoarthritis increased by 64% between 1990 and 2010 (March *et al.*, 2014). In the older population, they were more likely to present to Primary Care with multiple MSKDs, and thus with greater debilitation (Jordan *et al.*, 2010). MSKDs also have a significant impact on adults of working age, creating an economic burden to the individual and society (Chartered Society of Physiotherapy, 2018a). Waiting for treatment can prolong the recovery process and may result in patients developing chronic conditions, which have significant impact on a person's physical, psychological and social wellbeing and are often time-consuming to treat (Sampalli *et al.*, 2015; Fine, 2011; Nordeman *et al.*, 2006; Wand *et al.*, 2004). The wide impact of MSKDs provides an argument for early access to MSKD experts; however, Secondary Care physiotherapy can be up to an 18-week-wait from GP/self-referral (NHS, 2016b). The aim of the FCP role is to see patients at the start of their care pathway, within two weeks of them accessing the Practice (Chartered Society of Physiotherapy, 2018a).

1.8 Safety of FCPs

A recurrent argument for GP-led care is the concern that other HCPs may miss serious pathology such as tumours or fractures (Foster, Hartvigsen and Croft, 2012; Greenhalgh and Selfe, 2006) . However, Ludvigsson and Enthoven (2012) found that out of 432 patients, physiotherapists were able to identify all serious pathologies. Holdsworth, Webster and McFadyen (2008) demonstrated that GPs were over 96% confident in physiotherapists accurately diagnosing and appropriately managing MSKDs, thus, concerns for missing pathology were not evident in this study. Nevertheless, this confidence appears to be dependent on the individual FCP. Moffatt, Goodwin and Hendrick (2018) recommended that GPs received more information on physiotherapists' training in order to trust the shifting role boundaries. The knowledge and attributes that FCPs required to

[1] Chest was a common code, however this pain was frequently not due to MSKDs.

safely practice as an FCP were evaluated (Langridge, 2019). FCPs felt it fundamental that physiotherapists in the role had knowledge of wider medical conditions to minimise the risk of serious pathology being missed, and to manage multi-morbidities (see glossary). In comparison to Secondary Care, the FCP was required to manage the patient's safety autonomously, in a shorter appointment time. It was perceived that only practitioners with significant experience had this wider breadth of knowledge and were able to manage time pressures (Langridge, 2019).

1.9 The FCP model

There is not one single FCP model, rather, there are a multitude of ways the model has evolved, varying from Practice-to-Practice. Differences include: the mode of accessing the ; the type of consultation – a virtual telephone assessment and/or a face-to-face; the number of appointments with the FCP; the length of the FCP consultations; the capabilities of the FCP; the FCP's banding; and the interventions the FCP is able to action (HEE and NHSE, 2018; Chartered Society of Physiotherapy, 2019b; 2018a).

Whether the practitioner was a first contact or not is dependent on the patient's care pathway (see Figure 1.3). The GP would be first contact in instances where patients access the GP for their MSKD but are then referred to the FCP by the GP. However, if the patient accessed the GP regarding a different issue and were then encouraged to access the FCP for a new MSKD, the FCP would be first contact for this presentation. The mode of accessing the FCP role varies between Practices. Patients may self-refer to the FCP via online bookings or contacting their Practice, alternatively, there may be a requirement for a telephone triage by a Receptionist prior to the FCP consultation (Chartered Society of Physiotherapy, 2019a, 2019b, 2019c). In other Practices there may be a full virtual assessment with a physiotherapist, similar to the 'PhysioDirect' model (Pearson *et al.*, 2016; Salisbury *et al.*, 2014; Mallett, Bakker and Burton, 2014). 'PhysioDirect' involves a telephone assessment of MSKD symptoms, with patients receiving a package of care that includes self-management advice and exercises, or patients are offered a face-to-face consultation for differential diagnosis (Pearson *et al.*, 2016). In the PhysioDirect model the physiotherapist is in a first contact role, however they are located in a physiotherapy department and not within the Practice; therefore, PhysioDirect is not the FCP model. The FCP may not necessarily be based in the patient's Practice if it is part of a PCN and if the FCP is co-located, this would require some patients to travel to neighbouring Practices (NHS, 2019e). This is the hub and spoke model, a model in which the business operates from a central hub, issuing commands to lower-level hubs (Gaille, 2015).

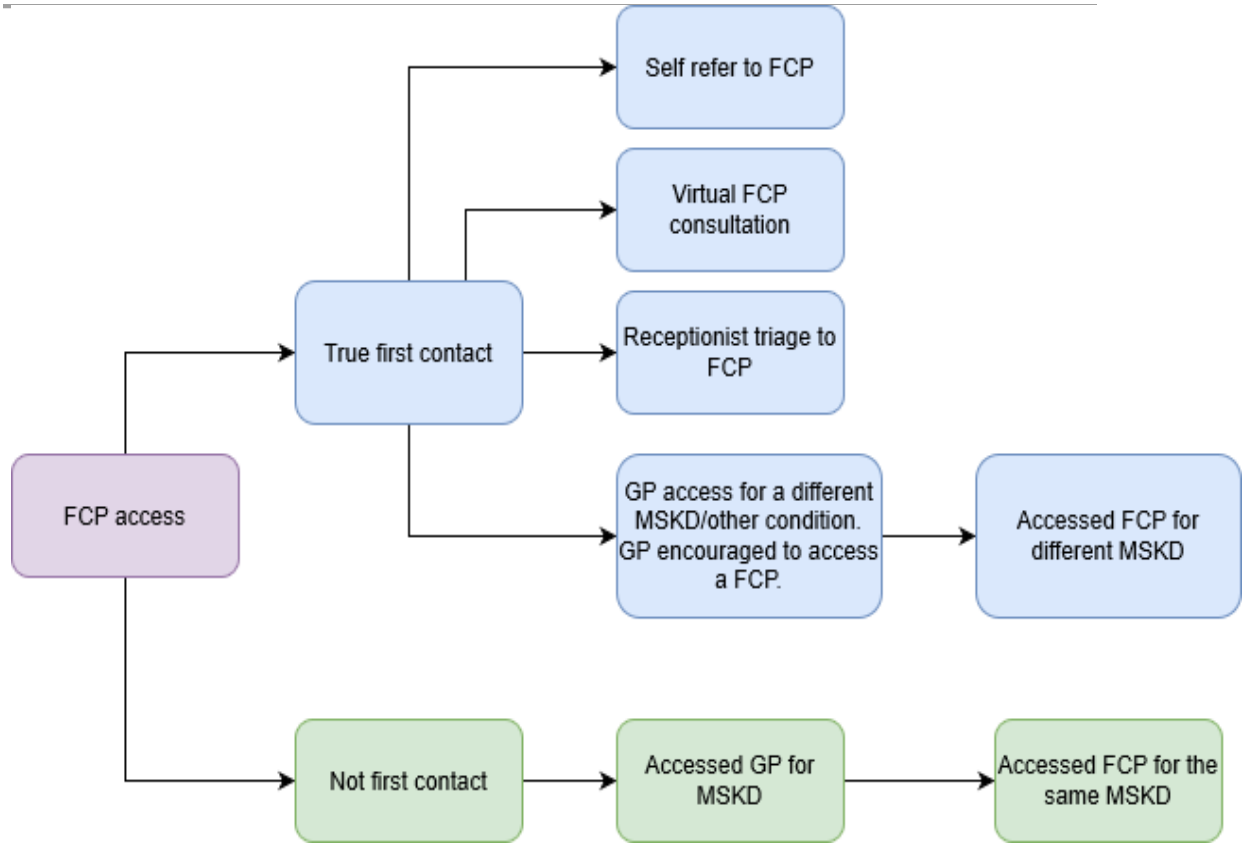


Figure 1.3 – Accessing FCP

The FCP Framework outlined capabilities required for the role to be delivered consistently across multi-professional teams. The application of this Framework has been supported by an E-learning programme which provides eight modules that take the learner through a range of Primary Care issues that are common in assessment, these include: what is Primary Care; identification of the ill and risk; mental health; complex decision making; public health; persistent pain; pharmacology and serious pathology (HEE, 2019). The Framework recognised also further training for additional FCP skills, resulting in variation in the capabilities of individual FCPs (HEE and NHSE, 2018). Skills such as injection therapy, ordering of diagnostic scans and prescribing are non-essential for the role unless highlighted by the Practice as being needed to meet the population requirements (NHSE, 2019f; HEE and NHSE, 2018).

There is an argument that the FCP would be able to 'unburden' GPs by taking some of their workload. However, GPs highlighted that patients may see GPs for other problems and discuss their MSKD as an *'add on'* (Goodwin and Hendrick, 2016). Despite this GP concern, evidence suggests that FCPs only need to refer a small percentage of patients back to the GP, ranging between 2% to 15% (Goodwin and Hendrick, 2016; Ludvigsson and Enthoven, 2012). This would suggest limited burdening of GPs.

1.10 FCP onward referral routes

If indicated, FCPs are able to refer patients to other HCPs or services. However, this is inconsistent across Practices due to variation in services available and the Core Clinical Commissioning Group's (CCG, see glossary) regulations on Primary Care staff accessing these services (Nicholson *et al.*, 2016; The King's Fund, 2013). For instance, FCPs with the training to order X-rays may be able to action this, or they may be required to defer to the GP. In other Practices it may be essential for the patient to see a GP for an X-ray referral, thus requiring two consultations (personal communication FCP 3, 2018). The key difference between these routes is the length of time the patient must wait in order to receive an X-ray, which is dependent on how accessible the GP is to the FCP, or the waiting times for a GP appointment.

FCPs are able to refer patients to a Musculoskeletal Assessment and Treatment Service (MATS)/Musculoskeletal Clinical Assessment and Treatment Service (MSK CATS)/Musculoskeletal Clinical Assessment Service (MCAS) (Roddy *et al.*, 2013; Sephton *et al.*, 2010). This service is a Single Point of Access (SPA) for referrals, as patients have access to a range of community-based HCPs for management of all aspects of their MSKD, including their triage, treatment and administrative tasks (Chartered Society of Physiotherapy, 2019d). If the FCP is unable to order the patient scans, this service is able to action this. FCPs may make referrals to Secondary Care for physiotherapy management – possibly with a request for injection therapy or pre-operative checks if indicated. Alternatively, FCPs may refer to Secondary Care for orthopaedic or rheumatology specialists (The Department of Health, 2006). Despite the differences in the route, fundamentally, the patient's care pathway can be streamlined by the FCP signposting them to the appropriate HCP or service.

1.11 FCP evidence

This section will introduce the national FCP evaluation; this will be presented individually due it being the largest of its kind and its evaluation of a variety of outcomes (NHSE, 2019f). Individual FCP outcomes will then be discussed, utilising the pilot evaluation's evidence as well as other sources.

1.11.1 National Health England's FCP pilot evaluation

NHSE's evaluation included 42 STPs/ICSs that introduced at least one FCP pilot, and it is collecting a variety of quantitative and qualitative data. Information on the services were collected via implementation pro-forma; this permitted various analyses from the viewpoints of GPs, FCPs and patients. However, at least one quarter of sites were delayed

in implementing the role, some sites were slow to submit data for the evaluation and there were varying quality of data. Consequently, phase 2 of the report only utilised the consultation data collected by six STPs. The engagement of STP/ICSs with data collection was steadily rising and is ongoing, however, Bishop (2019) presented an update of the evaluation's findings at Physiotherapy UK, the CSP's annual conference.

1.11.2 FCP versus GP referral rates

NHSE's FCP pilot evaluation highlighted that there was a significant reduction in referrals to orthopaedics by up to 21%, as well as a 41% reduction in referral to Secondary Care physiotherapy[2] (NHSE, 2019f). A smaller-scale evaluation of two Practices in Scotland also demonstrated an even greater reduction in referrals to orthopaedics from 1.1 to 0.7 patients per 1000, and 2.4 to 0.8 per 1000 (Downie *et al.*, 2019). The evaluation found that 84% of these orthopaedic referrals were deemed *'appropriate'*; other studies reported lower rates of 71% and 74%, however, these studies were AP physiotherapists who were not in a FCP role (Hussenbux *et al.*, 2015; Hattam, 2004).

NHSE found that FCPs referred patients for 10% fewer blood tests compared to the GP, and made no Orthotist referrals compared to 10% of GP MSKD attendances. However, there were significant variations between the pain referral rates by FCPs and GPs, with some large increases and large decreases across STPs and there was no change in rheumatology referrals (NHSE, 2019f). NHSE's (2019f) pilot also demonstrated that FCPs were referring less; they referred only 2% of patients for an MRI and 6% for an X-ray. Similar findings were demonstrated in an inner-city Practice, with FCPs only referring 6.4% of patients for diagnostic tests or for a Secondary Care opinion compared to 33% of GPs (Goodwin and Hendrick, 2016). The Scottish pilot evaluation demonstrated a slightly higher imaging referral rate of 9.2%; it was concluded that this rate was low, however, there were no comparisons with GP referral rates. Overall, evidence to date is in favour of low Secondary Care referrals by FCPs.

1.11.3 Cost benefit

Goodwin and Hendrick (2016) found that the FCP role resulted in significantly reduced costs compared to a GP at £84.26 versus £647.16 per patient. They attributed this in part to the reduced costs of fewer diagnostic tests, and the differences in salaries of GPs and FCPs (practising as a Band 7). However, these findings should be interpreted with caution as the 500 patients who accessed an FCP had no GP comparison group. Instead, an economic

[2] Outcome data for referral rate to physiotherapy was only available from one STP.

evaluation of 100 patients who had accessed a GP was retrospectively undertaken using data provided by various secondary sources. Consequently, it was not possible to carry out a cost-minimisation or cost-effectiveness analysis which compromised the economic evaluation (Goodwin and Hendrick, 2016). Other cost-savings that have been inferred (but not quantified) include reduced pharmaceutical costs, as the FCP pilot evaluation highlighted 12% fewer drug prescriptions for MSKDs than GPs. Instead, the FCPs offered the patient advice in 69% of cases, compared to only 4% of patients with MSKDs who accessed GPs (NHSE, 2019f).

NHS and HEE's cost calculator utilised available evidence to create an online calculator which is adjustable to local data. They claimed that when using baseline data in this calculator, the FCP role cost £54.11 per hour compared to £130.71 per hour for a GP (HEE, 2019). This tool should also be approached with caution, as through transferring outcomes from one Practice to another, it did not consider the complexity of Practice contextual factors. Predominantly the calculator's underpinning evidence is based upon the Goodwin and Hendrick (2016) study as well as evaluations of physiotherapy direct access from 12 years ago (Holdsworth, Webster and McFadyen, 2007; Jordan *et al.*, 2007). As highlighted earlier, the Primary Care climate is changing and, therefore, the evidence may be less applicable in 2019. Moreover, audits – which the researcher was unable to locate[3] – informed the calculator; resulting in questions of the robustness of the resource.

1.11.4 Patient satisfaction with the FCP role

There is limited evidence on patient satisfaction and acceptability of the FCP role. The evidence that is available suggests patients were more satisfied with the information on their MSKD and self-care when it was provided by a physiotherapist in a Primary Care clinic rather than a GP (Ludvigsson and Enthoven, 2012). Significantly more patients expressed complete confidence in the physiotherapist's ability to assess their disorder compared with patients in the GP group (Ludvigsson and Enthoven, 2012). NHSE's FCP evaluation (2019f) demonstrated 97% patients would be likely/highly likely to recommend the service to a friend or family, with a slight reduction to 96% from the updated data from Bishop (2019), and 99% of patients had complete confidence in the FCP's competence to assess their presentation (NHSE, 2019f). The Scottish FCP evaluation similarly demonstrated 97% of patients responding *'yes, definitely'* when asked if they had confidence in the FCP, with the

[3] Efforts were made to contact the CSP and HEE via email. The CSP were unable to provide the audits and HEE did not respond.

remaining 3% a *'yes'* (Downie *et al.*, 2019). This suggests at face value patient satisfaction with the role has increased since its infancy.

SLRs have focused on APs with specialist capabilities in all healthcare settings[4]. Although the reviews highlight a lack of robust evidence due to flaws in the observational designs and audits, they did conclude that the evidence available is supportive of the role, in being cost-effective and having positive patient outcomes and satisfaction (Thompson, Yoward, and Dawson 2016; Saxon, Gray and Oprescu, 2014; Stanhope *et al.*, 2012; Kersten *et al.*, 2007). A recent SLR by Thompson, Yoward and Dawson (2016) explored the role of AP physiotherapists working in musculoskeletal care (not Primary Care specific). It concluded that the literature did not provide an understanding of the mechanisms behind patient decision-making, and, without this, it was not possible to fully understand the role's impact (Thompson, Yoward and Dawson, 2016). In the absence of qualitative data that takes into consideration these mechanisms, there is limited understanding on the complexity of role acceptability.

NHSE's (2019f) FCP pilot evaluation has provided qualitative data and identified five key themes from interviews of GPs, FCPs and patients. Firstly, the theme of *'embeddedness'* highlighted how it took time for the FCP role to become embedded into the Practice's culture. *'Communication'* was the second theme and this had several components; *'promotion'*, *'record-systems'* and *'signposting'.* Promotion needed to be more effective and there had to be a consistent role title that referenced physiotherapy. For ease of ordering investigations and onward referrals, record systems need to be efficient. It is vital for Receptionists to receive signposting training as frontline staff. The third theme was '*patient understanding of FCP'*, which was variable. Patients who had experienced the role were highly satisfied with the FCP and their advanced skills. *'Contribution of FCP'* highlighted staff perceptions that the FCP could bring additional capacity through unburdening GPs. The final theme was *'reconceptualising physiotherapy*', which regarded the need for more consistent and collaborative service planning and implementation. This theme highlighted limited evidence of GP protectionism and FCPs were perceived as an opportunity for physiotherapists to develop alongside other professions NHSE (2019f). This data provides qualitative insights into aspects of the role that may be important, some of which overlap with previous discussion on the wider AP role, for instance, NP embeddedness in Practice and protectionism (see sections 1.2 and 1.4). However, as no

[4] SLRs used the outdated title 'ESP' for the role.

raw data is provided and patient and staff responses are not disaggregated, it is unclear as to which aspects were important to which group (see section 1.13 for further discussion on this evaluation's limitations).

1.12 Importance of patient acceptability

There is not one clear definition of acceptability of healthcare and health interventions, however the term is frequently used. It is vital to have a shared understanding of patient acceptability, as without such it is unclear how intervention developers can measure and assess it (Sekhon, Cartwright and Francis, 2017; Dyer, Owens and Robinson, 2016). Often acceptability is erroneously used as a synonym of patient satisfaction, however, it is a broader concept (Sekhon, Cartwright and Francis, 2017; Dyer, Owens and Robinson, 2016). Patient satisfaction is predominantly defined in terms of patient beliefs and expectations being met, whereas acceptability is a multi-faceted construct (Linder-Pelz, 1982; Pascoe, 1983; Dyer, Owens and Robinson, 2016; Sekhon, Cartwright and Francis, 2017).

Sekhon, Cartwright and Francis (2017) created a theoretical framework for the acceptability of healthcare interventions. They highlighted that despite the Medical Research Council stating that the acceptability of an intervention should be evaluated, they provided no guidance on how to undertake this (Moore *et al.*, 2015). In order to overcome the issues of consistently defining acceptability, they theorised this construct, suggesting it would lead to: a greater understanding of whether acceptability is a multi-component construct rather than just unitary; what these multiple components are, if they do exist; how acceptability may relate to other factors such as intervention engagement; and how it can be measured. They carried out an overview of 43 SLRs that explored acceptability, resulting in the formation of a theoretical framework of seven acceptability constructs (see Chapter 9: Discussion, p.275 for the full Framework). The study concluded that despite healthcare interventions claiming to have assessed acceptability, the research could be more robust. Sekhon, Cartwirght and Francis (2017) utilised a theoretical framework when developing both quantitative and qualitative measures of acceptability and recommended this method for future acceptability studies (Sekhon, Cartwright and Francis, 2017).

This newly created acceptability framework has been adopted by healthcare interventions in Primary Care (Kesten *et al.*, 2020; Murphy and Gardner, 2019). A study by Lavallée et al. (2019) did not utilise the Framework but instead compared the findings of their acceptability study to Sekhon, Cartwright and Francis' (2017) framework, and concluded that their findings were 'in line' with these acceptability constructs. Further, Murphy and

Gardner (2019) pilot tested the acceptability framework for a community pharmacy-based men's mental health programme. The study concluded that the framework was helpful in identifying aspects of the programme that were positive and others that may require redesign. However, the study found that the constructs of 'affective attitude' and 'perceived effectiveness' were coded more often than other constructs. These constructs consider how the individual felt about the intervention and their existing relationships with pharmacists prior to accessing the intervention, and also how effective they perceive the intervention to be. Murphy and Gardener (2019) highlighted that the high coding of these constructs may reflect a bias to overly positive views given the patients' pre-existing good relationships with pharmacists. Therefore, this pilot demonstrates utility of the framework for patients who already have a positive view of an intervention, but it might not capture those with negative pre-existing views and use of this tool for this patient group is needed. Despite extensive searching, no alternative healthcare intervention acceptability framework was found in the literature.

Satisfaction can only be assessed retrospectively, whereas acceptability has been sub-categorised into *'prospective*', '*concurrent'* and *'retrospective'* – how acceptable the intervention was perceived to be before, during and after participation in the intervention (Sekhon, Cartwright and Francis, 2017). An understanding of prospective acceptability is a key consideration in highlighting components of the intervention, which could be modified to increase acceptability and, subsequently, participation (Sekhon, Cartwright and Francis, 2017). Through asking patients whether they would recommend a service to others reflects a broader assessment that goes beyond simple satisfaction from one contact, as positive experiences over a longer period of time might result in patients recommending the service (Dyer, Owens and Robinson, 2016). Acceptability takes into consideration both cognitive and emotional responses to an intervention and how these may change throughout the stages of an intervention (Sekhon, Cartwright and Francis, 2017).

Acceptability is the foundation of any successful intervention. Ascertaining the patient's perspective is vital in the early evaluation of any new role aimed at improving patient care and when shifting traditional role boundaries (Kennedy, Robarts and Woodhouse, 2010). If an intervention is considered acceptable, patient adherence to treatment and improved clinical outcomes are more likely (Hommel *et al.*, 2013). When it was demonstrated that patient outcomes and experience were improved, staff were more engaged with improvement activities (The King's Fund, 2017a). All of these factors demonstrate the necessity of gaining an understanding of patient views and experiences of an intervention.

Acceptability is increasingly being seen as key in quality assessments (Dyer, Owens and Robinson, 2016). Quality is often divided up into two groups – numerical measurements which are typically assessed objectively; and quality, judged through subjective assessment of users' expectations in terms of their experiences, consumption and perceived value (Dyer, Owens and Robinson, 2016). There has been a shift away from objective measurements such as waiting times, instead focusing on patient experience (The King's Fund, 2017a). Central to quality improvement is the understanding that those closest to quality problems, such as frontline teams and patients, are frequently well-positioned to find solutions to them (The King's Fund, 2017a). Different stakeholders have different perceptions on what constitutes a desired outcome; the primary concern of managers is frequently cost-effectiveness, whilst service-users focus on care which is tailored to their needs, such as communication and access (Campbell and Tickle, 2013; Wensing, Grol and Smits, 1994). Accordingly, there is not one definition of quality of care, nevertheless, person-centred care is listed first as a fundamental standard by the Care Quality Commission (CQC) (Dyer, Owens and Robinson, 2016; Care Quality Commision, 2017). The description on the CQC's website for person-centred care also incorporates the importance of acceptability of treatment: *"You must have care or treatment that is tailored to you and meets your needs and preferences"* (Care Quality Commision, 2017).

1.13 Limitations of the current FCP evidence

The available FCP research is predominantly audit based and focuses on satisfaction rates (Chartered Society of Physiotherapy, 2019b, 2019c, 2017a, 2016a, 2016b, 2016c). Qualitative studies have only explored Practice staff's acceptability of the role or acceptability of the PhysioDirect model, and thus not specifically the FCP model (Moffat *et al.*, 2016; Pearson *et al.*, 2016). The FCP evaluation had a qualitative component in which two sites were selected for patient and staff interviews (NHSE, 2019f). Themes were identified, however, they were not disaggregated into staff and patient responses; but as highlighted previously, different stakeholders have differing perceptions on quality of care (Campbell and Tickle, 2013; Wensing, Grol and Smits, 1994). The FCP audits lacked detailed descriptions of the Practices' contexts, despite large variation including: FCP models; the differences in Practice demographic and staff numbers; and presence of PCNs or other partnerships (Chartered Society of Physiotherapy, 2019a, 2019b, 2017a, 2016b, 2016c, 2016a). It may be that these contextual factors underlie the processes behind patient acceptance of the FCP, thus they must be considered.

1.14 Position of the thesis

This thesis takes the position that contexts regarding the Practice or patient, and other contexts, are fundamental to the patient acceptability of the FCP role. The underpinning methodology of the thesis is realist evaluation, which explores how contexts are integral to both the process and outcome of patient acceptability (Pawson *et al.*, 2004). It aims to provide evidence on patient acceptability of the FCP role specifically, which is lacking to date. It will also provide staff data to gain an understanding of the model and the Practice resources that may not be observed by patients. These insights may demonstrate how patient acceptability of the FCP role could be further developed in order to meet patient needs.

Aim:

To explore the patient acceptability of the physiotherapy First Contact Practitioner role in Primary Care.

Objectives

1) To conduct a realist review exploring patient views on the Advanced Practitioner role in Primary Care.
2) To create multiple programme theories on what makes the AP role in Primary Care acceptable.
3) To establish the perspectives of Practice staff on the patient acceptability of the FCP role in Primary Care.
4) To establish patient understanding and acceptability of the FCP role from patients who have experienced the role.
5) To establish the contexts inherent to FCP role acceptability and how they influence underlying processes that result in outcomes.
6) To establish a theory on what makes the FCP role acceptable to patients.

2 Chapter 2: Theoretical methodology and theoretical methods

2.1 Chapter summary

This chapter will address the foundations of realist methods, focusing on realist evaluation and realist reviews. The theoretical methods of a realist inquiry will be outlined, with a focus on the qualitative methods which were utilised for this study. Theoretical underpinnings of methods used to maintain quality and rigour in qualitative studies will be explained. The research team involved in the study will then be introduced, as they influenced the project from the early stages of the realist review, through to the study's final stages. Finally, there will be discussion of alternative study designs that could have been utilised, and the rationale as to why the current methods were selected.

2.2 Ontology

Ontology is at the core of the researcher's understanding of knowledge, and it is a fundamental belief that knowledge acquisition is founded upon which guides how research is carried out (Pawson, Wong and Owen, 2011; Guba, 1990). At each end of the paradigm spectrum –taking polarised ontological stances – are constructivism and positivism. Positivists argue for a measurable single reality that can be observed, whilst constructivists claim that reality is interpreted by human minds and therefore, reality is always subjective (Westhorp, 2014).

Dominating much of the twentieth century were the ontological beliefs of positivism and its associated methods (Fleetwood, 2014). The term *'positivism'* was introduced by philosopher Claude-Henri Saint-Simon (1760-1825) to refer to a scientific approach to the world. Building upon this, Auguste Comte (1798–1857) argued that empirical methods of observation should be transferred into the realms of inquiry, such as sociology (Matthews, 2014). This inspired the formation of logical positivism, which argued for *'verifiability'*, according to which a statement or hypothesis with no apparent means of verification was judged to be meaningless (Frey, 2018). Popper (2002) expanded upon this in the 1960s with his falsification theory which stated that a theory could only be accepted if it was possible to disprove it (Phillips, 2004).

The 1980s saw a shift away from positivism to ideas of constructivism/interpretivism (Fleetwood, 2014). The ontological basis of these ideas were that the world could not exist without someone observing it, knowing about it, or socially constructing it (Fleetwood, 2014). Many of these ideas were based within the ontology of idealism, which claims that

reality only exists in the mind of the person theorising. This had great epistemological consequences, as it would mean that 'reality' could not exist independently without being constructed and thus 'objective' claims would be impossible (Fleetwood, 2014). This became an issue for social theorists who were keen to reject positivism and adopt the ideologies of constructivism or postmodernism. Thus, in the late 1970s/1980s there was a receptive audience for critical realism (Fleetwood, 2014).

Realism takes neither a positivist's ontology nor a constructivist's, but a middle ground through taking a post-positivist approach (Pawson, 2006). Realist 'philosophy' argues that both the material (e.g. human beings) and social worlds (e.g. the political system created by human beings) are 'real' ; therefore, it is possible to derive facts based on programmes and policies – a positivist stance (Westhorp, 2014). The constructivist thread of the realist philosophy is its recognition of knowledge being interpreted by humans and, consequently, the subjectivity of knowledge. Realism synthesises these two streams of thought with the principle of the recognised constraints of reality; that the interpretation of reality is restricted by reality itself (Westhorp, 2014). For instance, a patient discussing their experience of a prescribing physiotherapist is a subjective interpretation of that experience; nevertheless, it is reasonable to assume that by default they must have had physiotherapy contact and the physiotherapist must have had non-medical prescribing qualifications. Through taking a realist stance it is possible to work towards a closer understanding of the truth of that experience, but not a definitive truth.

One of the key characteristics of realism is its analysis of causation, which rejects the standard Humean *'successionist'* view of regular patterns - X causes Y (a positivist stance) (Hume, 1912; Harré and Madden, 1975; Bhaskaar 1975). Realism believes that reality is stratified into complex, interweaving and dynamic interactions, resulting in multiple layers of reality which will only ever be partially understood (Jagosh, 2019; Wong, 2013). This complexity is termed *'ontological depth'*, and can be understood through the metaphor of an iceberg (Jagosh, 2019). The small amount above the water is what is clearly evident – readily observable mechanisms (see glossary). Just beneath the water are underpinning mechanisms which are less evident and relatively challenging to measure. Whilst the bottom of the iceberg deep in the water is latent – it is not yet manifesting but it has potential to become active if the context changes (Jagosh, 2019). We can never comprehend all knowledge, because it is not possible to tease out all the influences and components of the desired outcome (Wong, 2013). This may appear to be a limitation of the realist approach; nevertheless, realism does not ask the reductionist question of: *"does*

this intervention work?" (Punton, Vogel and Lloyd, 2016). A realist knows there will be an abundance of answers to this question due to the individuality of every situation (Pawson and Tilley, 2004). There may be influences hidden or not present in one setting that are more apparent in another setting, but through the exploration of different settings, knowledge can gradually be increased (Wong *et al.*, 2013).

2.3 Epistemology

Ontology has implications for both how knowledge is generated, and what can be considered as knowledge, whilst epistemology is concerned with how we know what reality is (Wong, 2013; Westhorp *et al.*, 2011). Epistemology dictates methods used including sampling, data collection methods, and so on, and it is constrained by the fundamental ontological position. Realists argue that to understand the hard to observe evidence, for example people's beliefs, we must adopt a thought-process of *'retroduction'* – a realist method of theorising (see glossary) (Jagosh, 2019; Blaikie, 2004). Retroduction blends inductive and deductive reasoning through observing that X caused Y and explaining events; it is concerned with asking 'why do things appear the way they do?' (The RAMESES II Project, 2017; Olsen, 2010). Retroductive theorising goes beyond exploring only the observable when reasoning, rather, insights, expertise, imaginative thinking, intelligence and common sense must all be adopted to form theoretical claims (Jagosh, 2019; The RAMESES II Project, 2017). These claims may be presented, for example in a realist review, alternatively, they can be put under test via qualitative, quantitative or mixed-method studies.

Pietarinen and Bellucci (2014) cites Peirce's (1901) justification of retroduction in which he concluded that we have had an *'instinct'* for guessing correctly. Logic may suggest that retroduction lacks strong foundations, as common sense does not possess scientific rigour. However, retroduction does not claim to provide certainty, but provides a solution to a research problem (Blaikie, 2007). Peirce (1934) provided the metaphor of finding the right key for the lock; retroduction does not lead to certainty, the 'key' (assumption) will not immediately fit the lock, instead it will involve the testing of multiple 'keys' (assumptions). However, the retroductive researcher has a clearer idea of which keys to test to begin with. Retroduction can provide a line of enquiry for a research problem that may have otherwise been inaccessible by traditional methods of reasoning. Testing of the resultant theories will provide validation of retroduction as an approach (Blaikie, 2004).

2.4 Critical realism and empirical realism

There are two schools of thought that exist within the realist paradigm, critical realism and empirical realism. Their key division relates to their epistemological stance and how they understand the *'open-system'* nature of social explanations (Dalki*n et al*, 2015). The open-system recognises that there is not one uniform pattern of behaviour; cultural influences, institutional forces and the individual's own volition all impact upon behavioural regularities, and these contributing factors are ever-evolving (Pawson, 2006). The open-system in which social systems are situated within result in them being complex and unpredictable entities which may suggest that explanations are impossible (Pawson, 2006). Critical realists argue that although objects in the world (including social constructs) are real, our attempts at explaining the world are fallible (Scott, 2005). There will be an overabundance of explanatory possibilities, some of which will be mistaken, and it is the inquirer's job to be critical of the thinking that underpins explanations (Archer, 1998; Bhaskar, 2002). On the contrary, empirical realists argue that despite the AP role not working at that moment in time, the environment it is implemented into may change and the outcome may be affected (Williams, 2018; Carter and New, 2004; Pawson, 1989). They argue that social science can use empirical sciences' tools, such as hypothesis formulation (Pawson, 2006). The methodology used in this study is realist evaluation, which adopts an empirical realist's stance.

2.5 Realist evaluation

2.5.1 An overview of realist evaluation

Realist evaluation, previously named realistic evaluation, is not concerned with *"does this or doesn't this work?"*, but instead with *"what works for whom, how and under what circumstances"* (Pawson *et al.*, 2005, p.32). A realist evaluator does not assume that what works in one situation will work in another; instead, they explore why programmes worked/did not work in different contexts (see glossary) (Westhorp, 2014). As a theory-based method of evaluation, it adopts empirical methods, forming hypotheses (see glossary) on how programme activities are understood to cause outcomes (see glossary) – termed the *'programme theory'* (Westhorp, 2014). The programme theory is tested, utilising either (or both) qualitative and quantitative methods (Westhorp, 2014; Pawson and Tilley, 2004).

2.5.2 Key principles

Pawson and Tilley (2004) identified four key facets of the realist's perspective on how an intervention brings about change:

1. Programmes are theories
2. Programmes are embedded
3. Programmes are active
4. Programmes are open-systems

2.5.2.1 Programmes are theories

Programmes are inputted into social systems as a solution to the social system's problem. It may be theorised that the FCP role will reduce patient waiting times for an appointment (the programme theory) – leading to the introduction of FCPs across multiple Practices for a solution to waiting times (the problem). There are multiple theories to how a programme works, and the programme's effectiveness as a whole will depend on the combined effect of these theories (Pawson and Tilley, 2004).

2.5.2.2 Programmes are embedded

The theory underpinning realism is that programmes are active and embedded in a social reality that is integral to its success. Programme resources can promote change, but the impact this programme has is contingent on the social circumstances of that person (subjects' characteristics, their economic conditions, amongst others) (Pawson and Tilley, 2004). For instance, FCPs may be acceptable to patients who need self-management advice/exercises to return to work, whilst those not in employment may expect a greater level of practitioner input. A realist evaluation must decipher the multiple layers of social reality that make up a programme (Pawson and Tilley, 2004).

2.5.2.3 Programmes are active

For a programme to have its intended outcomes, active engagement from individuals who will be affected by the programme is usually required (Pawson and Tilley, 2004). For the role's success, patients must be aware of the FCP and actively engage with the role through self-referring. The implications of this are that participants' interpretations of a programme are integral to evaluating its outcomes (Pawson and Tilley, 2004).

2.5.2.4 Programmes are open-systems

Pawson and Tilley (2004) state that a programme's delivery is impacted by a range of factors, including political change, inter-programme and intra-programme interactions, practitioner learning, media coverage, amongst others. A realist evaluation underlines the

importance of the interaction between the intervention, and the environment that it is implemented into (Pawson and Tilley, 2004). The programme may actually change the conditions that were inherent to its original success; therefore, the programme must be reflexive, through translating the knowledge gained into minute adjustments to the programme (Pawson and Tilley, 2004). A common policymaker concern is that removing the GP gatekeeper role could result in an unsustainable influx of physiotherapy referrals. If realised, this would indicate acceptability of the FCP, however, the role's success would ultimately lead to failure through over-demand.

2.5.3 Contexts, mechanisms and outcomes

A fundamental principle of realism is that observational evidence (effects) alone cannot establish causal uniformities between variables (Dalkin *et al.*, 2015; Astbury and Leeuw, 2010). Exploring effects is what is known as the *'black box problem'*, and it is the evaluator's role to unpack the black box of complex interventions (Wong, 2013). For example, an FCP may have started injecting corticosteroids and, subsequently, the number of patients accessing the FCP role increased. Simply observing this does not identify what about the FCP injecting led to patients accessing the role. It may have been that the FCPs offered appointments quicker than GPs, or it may have been that the patients felt reassured by the FCP's style of communication or skill when injecting. *'White box evaluation'*, more commonly named theory-driven evaluation, attempts to unpack this black box, in order to identify the complex components that constitute an intervention (Astbury and Leeuw, 2010; Scriven, 1994). Realists argue that we need to make causal links between three realist evaluation concepts of 'context', 'mechanism' and 'outcome', known collectively as 'context-mechanism-outcome configuration', or 'CMO'. Exploration of the interacting concepts aims to unearth hidden causes that lie beneath desired outcomes (Pawson and Tilley, 2004):

Context + mechanism → outcome

2.5.3.1 Context

A programme does not operate in a vacuum, but is placed within a context; this context *'triggers'* the mechanism which leads to mechanisms *'firing off'* to create an outcome (Wong *et al.*, 2016). On a micro level, context may include: people's beliefs, expectations, and resources; staffing in the Practice; the workings of the Practice as a team and so on. On a macro level, the context may include the geographical setting of the Practice, cultural norms, and organisational setting (for instance partnerships in PCNs) to name a few (Westhorp *et al.*, 2011).

Programmes may work differently in different contexts and through different mechanisms, consequently a programme that works in one context may not achieve the same outcomes in another (Westhorp *et al.*, 2011). The potential issue with context sensitivity is a lack of transferability. For example, in Practice X there was outcome Y, but in Practice Z – which had a greater elderly population – it is questionable as to whether the findings of Practice X would be transferable. This issue is overcome by the ontology of realist evaluation; if there is reason to believe that in different contexts the same mechanism is causing the same outcome, then the findings of one setting are relevant to the other (Wong, 2013).

Contexts are not definite, they are constantly evolving and therefore, a programme that may not have worked in the past may in the future be able to achieve its desired outcome (Pawson and Tilley, 2004). This rationalises why one study may not indicate a theory which a subsequent study highlights; new programme theory can always be developed as contexts change. Equally, a change of context may prevent a mechanism from working, or fire off a competing mechanism that inhibits the original mechanism and stops the programme from achieving the desired outcome (Pawson and Tilley, 2004). For example, a Practice may have joined a PCN which had increased funding (context), which resulted in extended access hours including evening appointments which patients in employment found more convenient (mechanism). An intended outcome may have included a reduced wait for an appointment at a convenient time. Removal of the PCN funding could result in these hours being reduced and increased waiting times. Contextual knowledge is of the utmost importance to policymakers; successful programmes will be targeted at contexts which are most conducive to desired outcomes (Pawson and Tilley, 2004). It is vital that a realist evaluation collects data that are able to identify contexts that are relevant to the programme's outcomes (Wong *et al.*, 2016).

2.5.3.2 Mechanisms

Mechanisms can be defined as the underlying processes, entities or social structures that, when operating in particular contexts, lead to outcomes (Astbury and Leeuw, 2010). In the example regarding a FCP who could inject (see p.44), a suggested mechanism was the FCP's style of communication, which reassured patients and resulted in patients accessing the role (outcome). As mechanisms are underlying, they are often *'hidden'* and unobservable, therefore realist inquiries cannot rely purely on *'demi-regularities'* to explain outcomes (Astbury and Leeuw, 2010). Demi-regularities are the causal associations that are considered universal due to repeated observations (for example, gravity) (Dalkin *et al.*, 2015; Astbury and Leeuw, 2010).

It has been highlighted that mechanisms have erroneously been conflated with the programme activity (Astbury and Leeuw, 2010; Rogers, 2007; Weiss, 1997). As Weiss states: *"The mechanism of change is not the program service per se but the response that the activities generate"* (Weiss, 1997, p.46). Pawson and Tilley (2004) conceptualised mechanisms to describe how programme resources seek to change the stakeholder's reasoning. Several scholars have been more explicit than Pawson and Tilley (2004) in the breakdown of resource and reasoning. Westhorp (2011) states that programmes *'work'* by enabling participants to make different choices, and in order to sustain these choices requires a change in the participants reasoning – such as, values, beliefs or their logic – and/or the resources available to them – for example, skills or information. The combination of resource and reasoning is known as the programme mechanism, which allows programmes to have desired outcomes (Westhorp *et al.*, 2011). Dalkin *et al.* (2015) argued for the disaggregation of mechanisms into *'resource'* and *'response'* (see glossary), suggesting that this encourages researchers to equally consider both concepts, rather than focus their enquiry on one. Dalkin *et al.* (2015) re-ordered Pawson and Tilley's (2004) CMO formula to create a revised framework:

Mechanism (resources) + Context → Mechanism (reasoning) = Outcome

This framework proposes that resources are implemented into existing contexts, in a way that enhances change in reasoning. It is reasoning that results in changed behaviour (the response) of stakeholders, and leads to outcomes (Dalkin *et al.*, 2015). Placing context within the mechanism enables the researcher to clearly identify the role that context plays in triggering mechanisms, strengthening their understanding of how interventions work (Dalkin *et al.*, 2015). Owing to the arguments put forward on the conflation of concepts, this study will adopt the framework proposed by Dalkin and colleagues (see Figure 2.1).

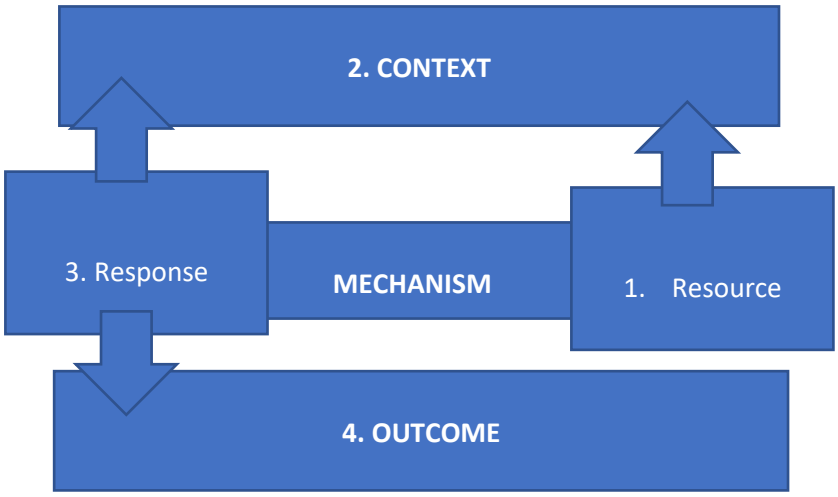


Figure 2.1 - CMO framework adapted from Dalkin et al. (2015)

This study adopts the term 'response' rather than 'reasoning', as it encompasses both the process of reasoning and the stakeholder's changed behaviour. Mechanisms can be further categorised into *'latent'* or *'unintended'* (Jagosh, 2019; Westhorp, 2014). Latent mechanisms (see glossary) are those that are not currently active, however, could be revealed if the context was altered, reflecting the deeper layers of ontological depth (Jagosh, 2019; Lacouture *et al.*, 2015). Unintended outcomes (see glossary) are where mechanisms are triggered that lead to unexpected or unanticipated effects (Wong *et al.*, 2016; Astbury and Leeuw, 2010; Pawson, 2006). Westhorp (2014) distinguished between the generative mechanisms of these outcomes as intended and unintended mechanisms (see glossary) – mechanisms that had positive or negative effects respectively.

2.5.3.3 Outcome

Outcomes are the intended or unintended, short, medium and long-term changes that result from a programme (Punton, Vogel and Lloyd, 2016). Outcomes are entirely contingent on their associated context and mechanism, any change in either will impact upon the outcome (Pawson and Tilley, 2004). Through exploring the complex interaction between contexts, mechanisms and outcomes, a realist evaluation looks beyond outcomes that simply state a pass/fail of an intervention, outcomes that are traditionally attributed to randomised controlled trials (Wong *et al.*, 2013; Pawson and Tilley, 2004). The intermediate outcomes (the transitional outcomes that come prior to the end outcome) are also of interest as they may open an insight that would otherwise be missed (Pawson and Tilley, 2004). Identifying only expected mechanisms would equally limit the programme understanding, as it would not be possible to say whether the anticipated outcomes were achieved (Westhorp, 2014).

Data must be collected about the relevant (or hypothesised to be) contexts, and when carrying out the analysis, outcome data and context can then be linked in order to explore associations (Westhorp, 2014). If it is theorised that outcomes for patient acceptability will be different for a population with chronic diseases compared to a population with acute diseases, then the outcomes will need to be disaggregated by the duration of the condition. It is suggested by some realists that quantitative data be collected for outcomes, as disaggregated analysis is easier to achieve with numerical data (Westhorp, 2014). Nonetheless, disaggregation of qualitative data can be achieved through separating the data from different subgroups, analysing the data and making a comparison (Westhorp, 2014).

2.5.3.4 Programme theory – context mechanism outcome configuration (CMO)

Realist evaluations attempt to pinpoint the configuration of features needed to sustain a programme. This results in the formation of context, mechanism, outcome (CMO) configurations, also named *'programme theory'* (Pawson and Tilley, 2004).

CMO configurations (see glossary) collectively constitute the programme theory – the theory of how the programme is expected to work. The realist evaluator begins with an initial, basic programme theory: *'If we do X then Y will happen because...'.* From here the programme theories are developed into hypotheses relating to the following:

1. For whom will this programme theory work and not work, and why?
2. In what contexts will this programme theory work and not work, and why?
3. What are the main mechanisms by which we expect this programme theory to work?
4. If this programme theory works, what outcomes will we see?

(Westhorp, 2014, p.10).

A list of disaggregated contexts, mechanisms and outcomes is produced. In the next stage, CMO configurations are produced through linkage: *"in this context, these mechanisms leading to 'x' outcomes; and in that context, those mechanisms leading to 'y' outcomes"* (Westhorp, 2014, p.10). The programme theories (now full CMO configurations) are tested via appropriate data collection method(s) and data analysis. The final programme theory is presented through the findings, which are linked to CMO configurations. The findings show how they supported, refuted and refined the programme theory (see Figure 2.2) (Wong *et al.*, 2016; Westhorp, 2014).

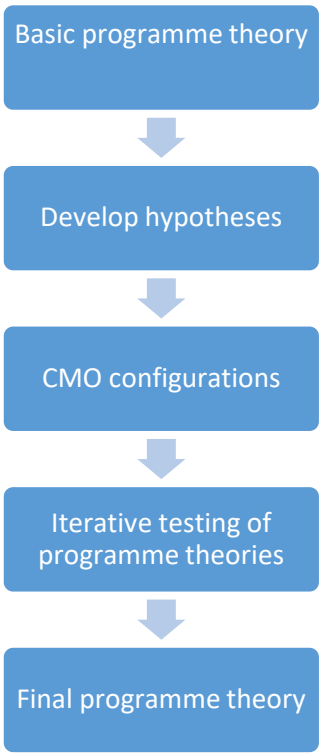


Figure 2.2 -Association between programme theory and CMOs

2.5.4 Rival theory

There is frequently debate in realist inquiries as to exactly how a theory works, and methods should allow a platform for this discussion (Pawson, 2006). Rival programme theories (see glossary) critique a theory and offer alternative explanations through adjudicating between different theories (Pawson, Wong and Owen, 2011).

2.6 Methods for realist evaluation

A realist evaluation is a *'logic of inquiry'* rather than a research method as such (Wong *et al.*, 2016; Pawson and Tilley, 2004, p.2). It is flexible in what types of data are collected – formative evaluations identify CMOs whilst they are still forming; summative evaluations analyse end CMOs; retrospective data can be collected through secondary data analysis (a review of the literature) (Pawson and Tilley, 2004). A realist evaluation does not discriminate between quantitative and qualitative evidence, in fact, a mixed-methods approach may be most conducive to explore both outcomes and their processes (Pawson and Tilley, 2004).

It is essential that a realist evaluation begins with a programme theory and the data collected must attempt to refine this theory (Pawson and Tilley, 2004). The programme theory is tested through the collection of data on contexts, mechanisms and outcomes that are hypothesised to be relevant to the success of the programme. Pawson and Tilley (2004) created a model demonstrating the principles of a realist evaluation methodology as a theory-testing cycle (see Figure 2.3). Instead of following a step-by-step method, a realist evalution should be transparent in its methods and demonstrate accordance with realist principles (Salter and Kothari, 2014).

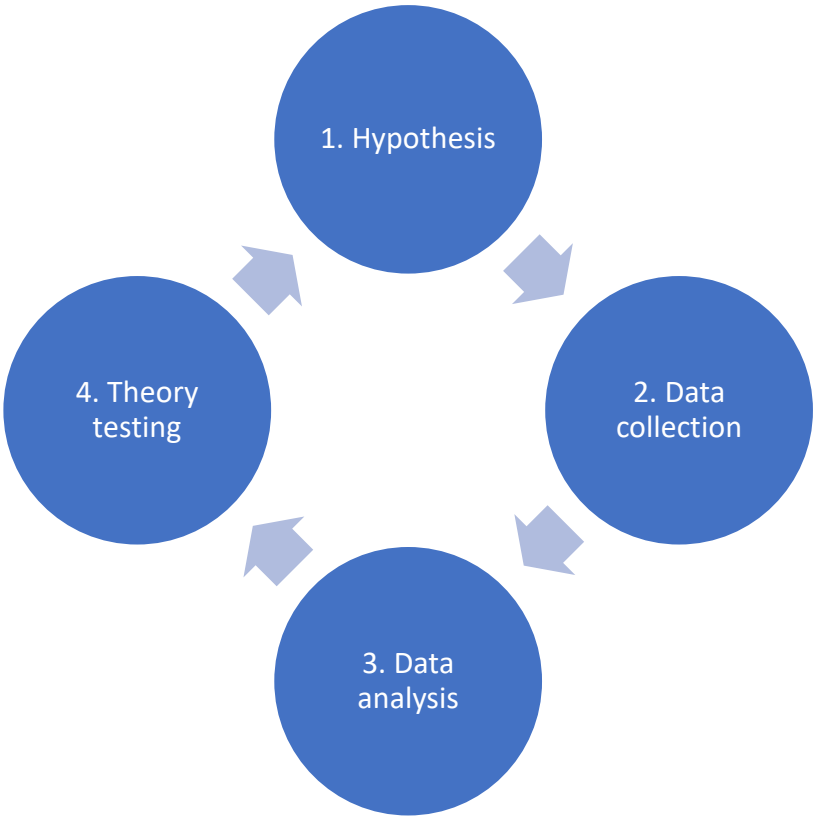


Figure 2.3 - Overview of realist evaluation methods (adapted from Pawson and Tilley, 2004)

2.6.1 Stage 1 – Establishment of the initial theory framework

The first stage is the initial creation of a theoretical framework; any relevant sources can be utilised, such as practitioners, creators of programmes, previous evaluations and literature. Different information can be collected from stakeholders including practitioners, researchers, policy makers, managers and programme designers; interviews of these stakeholders may be undertaken in order to develop a theory (Westhorp *et al.*, 2011; Pawson and Tilley, 2004).

2.6.1.1 Realist Review

A realist review, also named a realist synthesis, follows the ontological and epistemological position of empirical realism and can be undertaken prior to a realist evaluation (Pawson *et al.*, 2004). The realist review *'interrogates'* the available literature in order to unpack the mechanisms by which an intervention works or fails through intended mechanisms (Rycroft-Malone *et al.*, 2012, p.2; Pawson, 2006). CMOs are identified from all the relevant literature and they are then analysed in order to form programme theories. Rycroft Malone *et al.* (2012) stated that there should be a high-level of stakeholder involvement throughout a realist review in order to ensure Pawson *et al.*'s (2004) priniciples of *'official conjecture'* and *'expert framing'* are achieved (Pawson *et al.*, 2004, p.16). A realist review aims to develop and refine programme theory; therefore, its findings can be readily tested by a realist evaluation.

2.6.2 Stage 2 – Data collection

The next stage involves collecting data that will go on to test the previously formed hypotheses. The initial hypotheses will have highlighted particular resources that are likely to be important to the success of the programme and they may have proposed settings where these hypotheses are more likely to be observed (Pawson and Tilley, 2004). This information all acts as prompts the researcher must use as a basis for planning data collection.

2.6.2.1 Qualitative methods in realist inquiries

Qualitative research aims to understand social processes and provide detailed descriptions and analysis of the human experience (Marvasti, 2004). This is achieved through utilising methods that: put subjective experiences as the focus; describe the making of a social situation; go beyond these two approaches and instead explore unconscious aspects of a social phenomenon (Flick, 2014). Qualitative methods are appropriate for the aim of this study, which is to explore patient acceptability.

In all qualitative research there will be underlying assumptions based upon the theoretical position of the researcher. Predominantly, qualitative researchers adopt the constructivist paradigm, believing that the perception of the world is a social construction and there are multiple realities which can change over time and according to the context (Hansen, 2006; Guba and Lincoln, 1994). Not all qualitative research will take an entirely constructivist paradigm. Silverman (2011) states these assumptions must be acknowledged as it should not be assumed that researchers and participants will have a shared understanding of the methods of deriving facts and explaining them. Typical qualitative methods include those

that collect data in the form of talk, words, observations, visual images and documents (Hansen, 2006).

Pawson (2013) argues that qualitative methods are most conducive to the investigation of mechanisms through stakeholder reasoning and enables hypothesising of contexts and mechanisms. However, he states that CMOs cannot be formed entirely through *'anecdotal remarks'* of participants or *'wishful thinking'* of the evaluators. Quantitative methods can establish outcomes, providing they manifest in reality and are therefore observable (Westhorp, 2014; Pawson, 2013). Quantitative methods are also able to explore context; for example, it is easier to compare across population subgroups using quantitative data (Westhorp *et al.*, 2011). Any appropriate data collection method(s) can be utilised, such as focus groups, interviews, before and after measures (Pawson and Tilley, 2004). It may not always be possible for evaluations to adopt mixed-methods approaches. However, secondary sources can be utilised to facilitate hypothesis formation, for instance, data from routinely collected administrative data can support qualitative data (Manzano, 2016). The evaluator may use quantitative data from secondary sources in order to facilitate retroduction (The RAMESES II Project, 2017; Manzano, 2016). Thus, it is not essential that the evaluator collects primary quantitative data.

2.6.2.2 Realist Interviewing

This study collected data via interviews, a qualitative method which has been defined to be *"a face-to-face verbal exchange in which one person, the interviewer, attempts to elicit information or expressions of opinion or belief from another person or persons"* (Maccoby and Maccoby, 1954, p.449). It is beyond the scope of this thesis to discuss the myriad of qualitative interview methods and their different rationales. Interview methods' nuances include how the interview is formatted - structured, unstructured or semi-structured. This structure has an effect on: the interview topic guide; the ability of the interviewer to add or delete questions; probes used in the interview that may achieve elaboration or clarification, amongst other probing objectives (Silverman, 2011).

Pawson and Manzano-Santaella (2012) claim there is a "*new species of 'qualitative realism'"* (p.128). Rather than simply accessing interpretations, the realist interviewer is actively identifying causal processes (mechanisms) or relevant contexts. Pawson (1996) rejected structured and unstructured interviews and instead argued that realist interviewing is more explicit and systematic in its integration of theory into questioning. The application of these techniques appears to be variable and there is limited writing on

the strategy and methods of realist interviewing, key papers include Manzano (2016), Pawson and Tilley (1997) and Pawson (1996).

2.6.2.3 Sample Size

In all qualitative studies the sample size is a vital consideration of the quality of the research; it should provide depth and maximum opportunity for transferability of findings (Spencer *et al.*, 2003). Although estimation of sample size may be made, it is not possible to accurately anticipate the number of realist interviews needed. Firstly, the interview provides only fragments of evidence which the interviewer must explore in-depth via other sources, for instance, previously studied grey literature. Secondly, there are issues in estimating the sample size required as theory-testing is unpredictable, thus collecting evidence should only continue if it adds to/generates theories (Manzano, 2016). After undertaking several interviews, the interviewer's knowledge of the programme increases and a more precise sample number can be predicted. This technique is not completely novel, as it is akin to theoretical saturation which is traditionally adopted by Grounded Theory, and also by other qualitative approaches that have the end goal of developing a qualitatively derived theory (Morse, 2004; Glaser and Strauss, 1967). Theoretical saturation is when all potential relevant sources have been adequately explored, further data collection no longer yields novel information and data collection may stop (Patton, 2015).

A realist evaluation should always aim to collect a large amount of data, nevertheless, this does not necessitate a requirement for large participant sample. As Manzano (2016) states:

> *"Since the unit of analysis is not the person, but the events and processes around them, every unique programme participant uncovers a collection of micro events and processes, each of which can be explored in multiple ways to test theories."* (p.348).

A question that is aimed at testing a programme theory may reveal insights into other programme theories, or generate new theory areas (see glossary). Additionally, participants have their own characteristics such as type of condition, their age, religion and so on, that all result in different contexts which result in theories being tested in multiple ways. It is not essential for a realist evaluation to have a large sample size in order to test its theories adequately (Manzano, 2016).

A longitudinal qualitative study is preferential, such as repeating interviews with the same interviewees. The aim of this would be to further build upon the programme explanations due to the advancement of the interviewer's knowledge of the programme (Manzano,

2012). However, this is not always possible pragmatically, instead the interviewer may ask future interviewees additional questions, or revisit the literature (Manzano, 2016).

According to Pawson and Tilley (1997), stakeholders have different sensitivity to contexts, mechanisms and outcomes, with practitioners being more aware of what works (mechanisms) from observed success and failures. Consequently, the evaluator should work with a broad range of purposefully selected stakeholders to test their hypotheses (Pawson and Tilley, 1997). Differences in stakeholders' perspectives on the programme are unlikely to suggest some are 'right' and others 'wrong'. Instead, it is more probable that stakeholders were discussing the programme in relation to how it would work with different sub-sets of the target population (Westhorp, 2013).

2.6.2.4 Qualitative interviewing and the use of telephone interviewing

Successful qualitative interviews are frequently regarded as needing to be naturalistic, meaning the approach to studying things or people should be in their natural setting (Denzin and Lincoln, 2005). This results in more small talk, joking and non-verbal communication. This naturalness then results in the interviewee feeling more comfortable and more likely to express themselves openly (Shuy, 2003; Silverman, 2011). Shuy (1998) argued the case for an informal conversational style, sharing or giving up power, avoiding displays of knowledge and allowing the interviewee to self-generate topics. There is a great level of literature debating face-to-face and telephone interviews (Drabble *et al.*, 2017; Holt, 2010; Glogowska, Young and Lockyer, 2010; Novick, 2008; Stephens, 2007; Shuy, 2003). Frequently, telephone interviews are depicted as an inferior method of interviewing owing to the absence of visual cues which may be detrimental to the interviewer-interviewee rapport (Novick, 2008; Gillham, 2005; Rubin and Rubin, 2005). There are methods that can be adopted by the telephone interviewer to reduce the impact of non-verbal cues. For instance, a nodding of the head in a face-to-face interview can be replaced with verbal cues such as 'hmm', as reported by Holt (2010) and Stephens (2007). To build a rapport, the researcher may contact the participant using a prepared script ahead of the interview to state the importance of their contribution (Glogowska, Young, & Lockyer, 2010; Musselwhite, Cuff, Mcgregor, & King 2007). Drabble *et al.* (2017*)* highlighted the rapport-building strategy of active listening, which involves use of reflective and summary statements and follow-up questions tailored to the interviewee's response.

There are arguments for telephone interviews as not just 'second-best' to face-to-face interviews, but being advantageous. Pragmatically, the researcher must be able to get

participants to agree to take part, location may prevent participation if they perceive travel as inconvenient. Drabble *et al.* (2017) claimed that telephone interviews gave flexibility to interviewees in terms of scheduling interviews at a time that was convenient and being able to re-schedule easily. Cachia and Millward (2011) highlighted that interviewees in their study frequently organised interviews before they left the house for work or late at night. Telephone interviews have been highlighted to have the benefit of allowing the researcher to write down questions without feeling self-conscious or distracting the interviewee (Cachia and Millward, 2011; Sturges and Hanrahan, 2004). Complex theories are dicussed in realist interviews, telephone interviewing allows the researcher to write notes on emerging theory during the interview.

2.6.2.5 Topic guides and realist questioning

The topic guide of a realist interview revolves around programme theories and aims to explore the resources involved in a programme, and stakeholders' awareness and experiences of the programme, including their reasoning about specific propositions. The interviewer should also be responsive to emerging theory, through exploring unexpected, emerging CMOs (Manzano, 2016).

The interview should not be reduced to structured questions in which CMOs are presented to the interviewer to confirm/refute/refine, in doing so, the interviewer would be constructing meaning in a manner that is contrary to the method for which the theory was created (Manzano, 2016; Pawson, 1996). CMOs should be subtly integrated into questioning, in an accessible manner for the respondent so that they may be taught theory (Pawson, 1996). Pawson advocates a theory-driven method of interviewing – the *'teacher-learner cycle'* (Pawson, 1996). This method of interviewing begins with teaching the interviewee about the programme under test, so that the informed interviewee is able to teach the interviewer about components of the programme (Pawson and Tilley, 2004). The respondent goes from being a learner of theory, to a teacher of theory, as they contextualise theory into their own experiences to refine/refute or add to theory (Pawson, 1996).

Manzano (2016) proposes three phases of interview, underpinned by the principles of Pawson (1996) and Pawson and Tilley (1997): '*theory gleaning'*; *'theory refinement'*; and *'theory consolidation'* (see Figure 2.4). Manzano (2016) elucidates that there is no requirement for three rounds of interviews, the phases are only in place for the evaluator to understand how their knowledge evolves, and to assist their data collection. It is possible

for evaluators to progress through phase 1 and 2 in one interview, and to consolidate phase 3 with a different type of data, such as audit data (Manzano, 2016).

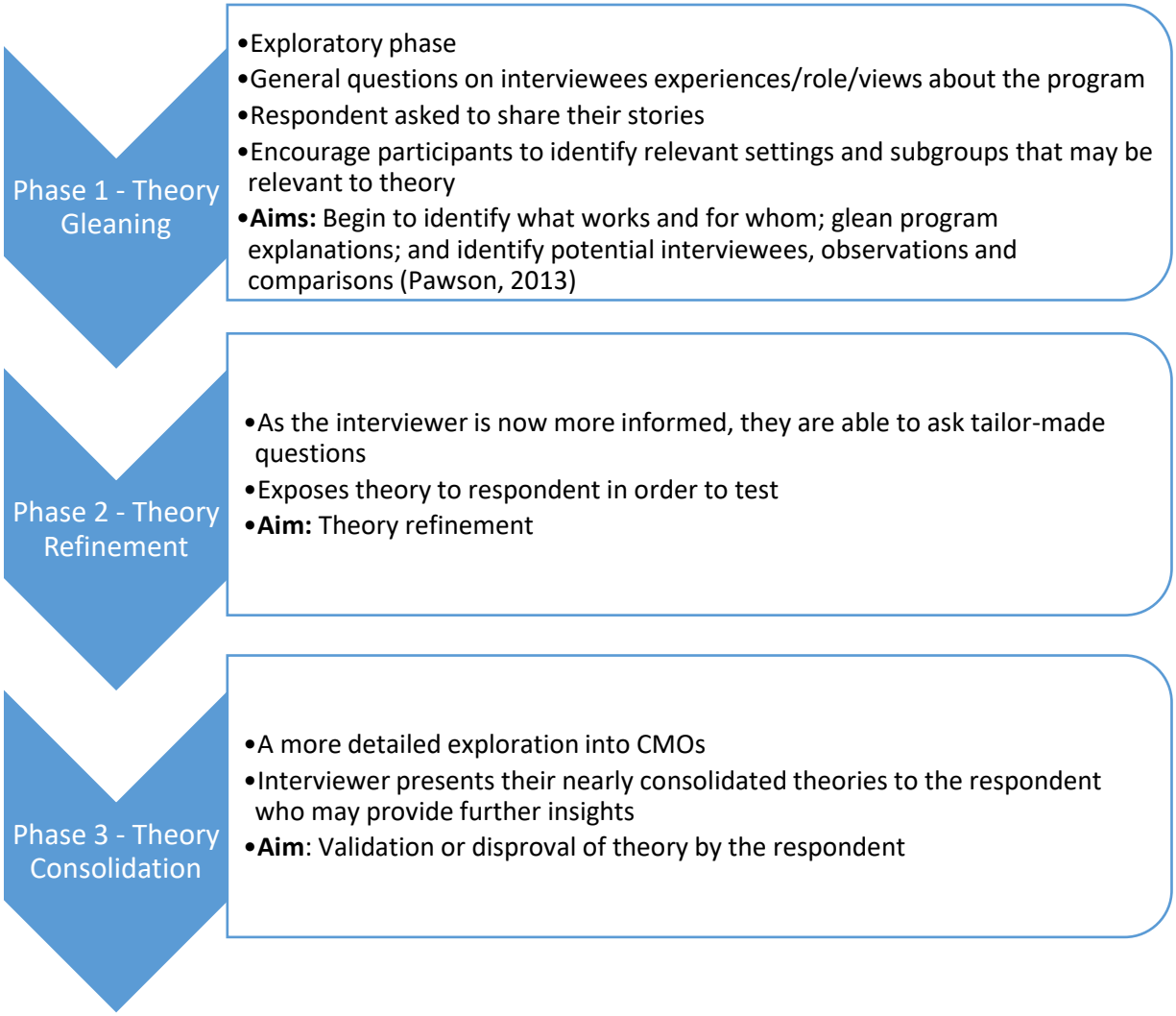


Figure 2.4 - Phases of realist interviewing (adapted from Manzano, 2012)

2.6.3 Stage 3 – Data analysis

2.6.3.1 Aims of a realist analysis

The purpose of the analysis stage is to see if the theory is able to explain the complex footprint of programme outcomes (Pawson and Tilley, 2004). There is no single way of carrying out data analysis, as it is contingent on the proposed hypotheses and type and availability of data. However, a key principle of analysis is the interrogation of hypotheses through subgroup comparisons; where did it work, where did it not work, who did it work for and who did it not work for (Pawson and Tilley, 2004).

When analysing data, it is essential that outcome data can be disaggregated from the relevant context, and that context is separate from the relevant mechanism (Dalkin *et al.*, 2015; Westhorp, 2014). For ease of reading and in-keeping with the traditional format, data collection and data analysis are presented as two distinct stages; however, in reality, they are carried out simultaneously. As there is no single way of analysing the data, several of the approaches will be discussed and critiqued.

2.6.3.2 Methods of analysis

NVivo is a computer software programme that is widely used in many qualitative studies to 'code' data (to theme words, sentences or entire sections) (QSR International, 2018). The aim of NVivo is to aid the researcher in: managing data and ideas; querying data; visualising data; and reporting from the data. The programme's efficiencies provide the researcher with more time to examine the meaning of the data (Bazeley and Jackson, 2013). The use of NVivo in realist evaluation as an analysis tool is underreported, nevertheless, it has been utilised in realist evaluations (Willis *et al.*, 2018; Doi, Jepson and Hardie, 2017; Maluka *et al.*, 2011).

Maluka *et al.* (2011) and Willis *et al.*, (2018) used NVivo to code data through content analysis (coding categories directly from the text data) and through coding in relation to CMOs. Both studies condensed similar codes into an overarching code, a method that is not dissimilar to the common qualitative method of thematic analysis (Braun and Clarke, 2006). The coding in both these studies was deductive in the sense that the coder was coding in a pre-determined framework, however, it was also inductive as codes were created from the raw data. The theory testing cycle demonstrates the iterative nature of realist evaluations and provides a framework that should be adopted during data collection and analysis (Pawson and Tilley, 2004). New theories can also emerge from the data as the cycle returns to 'hypothesising'. A hybrid inductive and deductive framework allows for both theory-testing and theory-development, key premises of a realist approach (Pawson, 2006).

A potential limitation of using NVivo for a realist inquiry is that through the disaggregation of contexts, mechanisms and outcomes, the analysis may lose the CMO configurations; Punton, Vogel and Lloyd (2016) highlight this to be a pitfall with many realist evaluators. Punton, Vogel and Lloyd (2016) presented a different method to analyse realist data; CMO configurations stayed intact by transferring them directly into a row on an Excel spreadsheet. Where a source was only able to provide part of a CMO configuration, for instance, suggesting a mechanism but not the context underpinning it, the cells were left

blank. A strength of this method is that even the gaps in configurations are more evident and could lead to a line of questioning in a future interview.

2.6.3.3 Challenges in realist analysis

Realist evaluators have highlighted challenges in distinguishing between contexts and mechanisms (Salter and Kothari, 2014; Rycroft-Malone *et al.*, 2010; Astbury and Leeuw, 2010; Rogers, 2007; Weiss, 1997). However, Bhaskar (1998) and Archer (1998) underlined that there may be multiple mechanisms operating simultaneously. The importance of CMOs is not the classification of contexts, mechanisms and outcomes, instead, their significance lies in their ability to help improve understanding of the programme (Byng, Norman and Redfern, 2005). Dalkin *et al.* (2015) proposed disaggregation of mechanisms which may offer more consistency when there are multiple evaluators, an important consideration owing to realist methods predominantly being carried out in large teams (Dalkin *et al.*, 2018; Punton, Vogel and Lloyd, 2016; McCormack *et al.*, 2013; Rycroft-Malone *et al.*, 2012). Jagosh (2019) argues that the potential ambiguity of contexts or resource mechanisms (see glossary) provides an opportunity for a clearer separation of intervention and their implementation contexts. Particular elements of context could be built into the programme theory in future iterations, and Jagosh (2019) states that this would help better predict the functioning of the intervention as it is scaled up and implemented in diverse contexts.

2.6.4 Stage 4 – assessment and interpretation of analysis

This stage aims to answer the question: *"Have the theories about how the programme worked been supported or refuted by the proceeding analysis?"* (Pawson and Tilley, 2004, p.11). This can be a challenging process, as often unexpected outcomes arise that may require reconsideration of hypotheses. It may be necessary for there to be further data collection and analysis in order to clarify these uncertain outcomes (Pawson and Tilley, 2004).

2.7 Rigour and quality in qualitative studies

2.7.1 Expertise in the project team: Stakeholders and Patient and Public Involvement

Throughout the stages of a realist evaluation, there should be consultation of key stakeholders. They have a fundamental role in establishing the initial theory framework and every stakeholder group will have their own individual insight into the programme (Westhorp *et al.*, 2011). Stakeholder involvement in the analytic process offers further insight that can aid theorising (The RAMESES II Project, 2017). According to Pawson *et al.*

(2004), stakeholders should also be involved in the validation and dissemination of findings. Patient and Public Involvement (PPI) may lead to more relevant results, improved recruitment and retention of patient participants, and truly translational findings (movement of scientific findings into useful clinical implications) (van der Scheer *et al.*, 2017; Sacristán *et al.*, 2016). The realist evaluator may co-opt relevant stakeholders such as patients or practitioners onto the project for regular consultation throughout the evaluation stages.

2.7.1.1 Study's expert team

Throughout the realist review process and the realist evaluation there was an active supervision team. Two were Professors at the University of the West of England, the first had expertise in MSKDs and the second had a nursing background and expertise in realist evaluations. The third supervisor was a physiotherapy senior lecturer and research fellow at the University of the West of England, alongside this she was practising clinically one-day-a-week.

Two FCPs and one Research Associate were co-opted onto the research team. The FCPs were clinical academics, combining lecturing four-days-a-week and one-day-a week practising in Primary Care. One FCP had the specialist capability of supplementary prescribing, however, she was not permitted to prescribe in the Practice setting; the other FCP did not have specialist capabilities. The Research Associate had undertaken her MSKD PhD at the University of the West of England, and had conducted an evaluation of the FCP model with members of the supervisory team. They were co-opted onto the supervisory team and offered advice and support throughout the project and are referred to collectively as FCP project members.

A Patient Partner was part of the research team, he was a retired man with Osteoarthritis; he had received treatment from a physiotherapist with specialist capabilities, but not from a FCP. This role had been acceptable to the patient, as he felt physiotherapists were most knowledgeable in MSKDs.

2.7.2 Validity in qualitative studies

Validity is often thought of a positivist concept, with dominance in quantitative research. These types of validity – such as internal/external validity or concurrent validity – are based upon experimental designs and thus hold little merit for qualitative designs (Hansen, 2006). If the qualitative data are fundamentally fallible constructions rather than 'objective' perceptions of phenomena, it would be impossible to make any validity judgements that

engage with real phenomena (Smith, 2008). It is for this reason that many argue that the quality of a study should be based only on measures appropriate to that particular study methodology (Grbich, 1998; Blaikie, 1991).

Lincoln and Guba (1989; 1985) reject the term *'validity'* and instead argue for *'trustworthiness'*. They provide a criteria for qualitative research based upon *"the assumption of multiple constructed realities"* (Lincoln and Guba, 1985, p. 295). Lincoln and Guba's (1989; 1985) attempts at providing procedural criteria has been heavily criticised, with others claiming there can be no procedures that will consistently yield sound data or true conclusions for qualitative findings (Philips, 1987). Instead, validity should be judged in accordance with the relative purposes and context of the particular research study (Brinberg,and McGrath, 1985).

Maxwell (1992) takes the approach that quantitative concepts of validity are not applicable; rather, qualitative research has its own concepts of validity. Maxwell (1992; 2012) adopts a realist approach to validity, inspired by Woolcot (1990) – the belief that understanding is a more important concept than validity for qualitative research. Maxwell (2012; 1992) suggests three types of validity, bespoke for qualitative research: *'descriptive validity'*; *'interpretative validity'*; and *'theoretical validity'.*

Descriptive validity is concerned with the accuracy of the researcher's rendering of a participant's account – was that said, did that happen, or has the researcher distorted the account (Maxwell, 2012). Going more in-depth into the meaning behind the account is interpretative validity, which is concerned with fully capturing the meaning those experiences had for the participants (Maxwell, 1992). 'Meaning' refers to cognition, affect, belief, evaluation and anything else that could be included in the participant's perspective. Unlike descriptive validity, which it can be validated through direct observation, interpretative phenomena are a matter of inference from the words and actions of participants. Participants may not always be cognisant of their thoughts or feelings, may inaccurately recall them, or distort them (Maxwell, 2012). This validity is universal to qualitative studies; nonetheless, it is even more profound in a realist study in which the constructions of participants are tested in order to understand the reality.

The final type of validity proposed by Maxwell (2012) was theoretical validity; the ability of the researcher to provide a theoretical interpretation that the participants could agree with. This type of validity recognises that the researcher has theoretical constructions that they come to the study with, or they develop during the study, which influence their

establishment of 'facts' (Maxwell, 2012). Theoretical validity is particularly pertinent in a realist evaluation due to the researcher having pre-conceived hypotheses which are then contextualised by the participant.

Imagine a hypothetical patient response when being interviewed about the FCP role:

"She just gave me exercises, which, to be honest, did nothing. I wish she'd just put her hands on my back and got out some of the knots."

The evaluation of the descriptive validity would be confirming that the treatment had been exercises. The researcher may have made inferences such as the participant having an expectation for a massage, and using language such as *"knots"* highlighting a patient perception of their problem being mechanical, perhaps caused bad posture. These are all interpretations of the participant's response rather than facts gained from their response and they are subject to interpretative validity. The researcher may have set out in data collection with a theory on patients with experience of private physiotherapy being more passive in their interventions and having expectations of *'hands-on'* treatment. The participant's response may have been related to this initial theory erroneously, therefore, it requires an evaluation of its theoretical validity.

2.7.3 Respondent validation

Respondent validation is a strategy used to increase the validity of qualitative findings (Sandelowski and Given, 2008). Respondent validation can also play a more vital role by establishing the degree of correspondence between the participant's views and the researcher's interpretation of their views (Mays and Pope, 2000). This aim of accurately portraying the experiences of participants is associated with realist qualitative research methods (Hansen, 2006). In the process, participants are asked whether the researcher has achieved descriptive, interpretative and theoretical validity (Maxwell, 2012).

Sandelowski and Given (2008) elucidate multiple methods that can be adopted for respondent validation, for instance, commenting on the accuracy of their interview summary. The process of respondent validation may be undertaken with all the participants or with a purposefully selected sample (Sandelowski and Given, 2008).

2.7.4 Triangulation of coding

Triangulation involves a multimethod approach to data collection and/or data analysis (Hansen, 2006). The fundamental principle is that phenomena are best understood when approached with a variety/combination of research methods (Rothbauer, 2008). It is beyond the scope of this thesis to discuss the numerous types of triangulation,

consequently, the focus will be investigator triangulation, a method utilised in this study. Investigator triangulation involves multiple researchers and can be achieved using several different methods; its aim is to provide additional insights in the process of making sense of the data through offering different perspectives and epistemological assumptions (Rothbauer, 2008).

The researchers may analyse data collectively or they may work independently and then re-group, revealing their coding or interpretations. However, the suggestion that it is a right or wrong is not in accordance with the qualitative ethos of "*existence of multiple views of equal validity"* (Hansen, 2006; Barbour, 2001, p.117). It is highly unlikely that any one researcher would interpret data the same as a different researcher. Armstrong *et al.* (1997) carried out a study which asked six different researchers to independently analyse focus group data, and all the researchers expressed themes differently (Armstrong *et al.*, 1997). If researchers are using triangulation as an aim to increase the validity of the study, they should be clear as to why they feel it is corresponds with their chosen methodology (Hansen, 2006). These arguments have resulted in many qualitative researchers reframing triangulation to be an alternative to validating procedures, rather than a procedure for validation itself.

2.7.5 Reflexivity

Reflexivity is another way a researcher can conduct rigorous qualitative research (Hansen, 2006). In qualitative research, reflexivity refers to the ability of a researcher to be self-aware and to critically reflect upon on how their own assumptions, positioning, background and behaviour impact on the research (Finlay and Gough, 2003). Reflexivity results in the researcher turning the *"lens back onto oneself to recognise and take responsibility or one's own situatedness within the researcher"* (Berger, 2015, p.220). The researcher will never be completely independent of the research; reflexivity recognises this lack of an objective stance and ensures that this is acknowledged (Berger, 2015; Hansen, 2006; Finlay and Gough, 2003). D'Cruz, Gillingham and Melendez (2007) highlighted that reflexivity is often blurred with other concepts such as *'reflectivity'*, *'reflection'* and '*critical reflection'*, despite there being nuances between the concepts. They highlight the key difference between reflexivity and the various forms of reflection to relate to timing (D'Cruz, Gillingham and Melendez, 2007). They cite the work of Schön (1983), which describes the distinction between *'reflection-on-action'* and *'reflection-in-action'*. The former is adopted when critically reflecting, whilst the latter is how the reflexive researcher operates. Rather than retrospectively reflecting, the reflexive researcher is constantly critically-reflecting and

questioning how their knowledge is created (D'Cruz, Gillingham and Melendez, 2007). Thus, reflexivity must be integral to the research, as opposed to a method completed at one point in the process.

2.7.5.1 Positionality and the 'insider-outsider'

The positionality of the researcher concerns whether the researcher is an insider who shares with the participants the characteristic, role, or experience under study; or if they are an outsider to the participants commonality (Dwyer, 2009). The expressed benefits of being an insider has included early rapport building and a sense of trust due to a shared-understanding of the culture and language (Burns *et al.*, 2012; Dwyer, 2009). Asselin (2003) highlighted issues of being an 'insider' to include limited exploration of subjects if the researcher assumes that they know the culture or have a shared understanding. To reduce the effect of the limitations, the researcher must: *"Facilitate familiarity whilst maintaining an analytical degree of distance"* (Burns *et al.,* 2012, p.59). Burns *et al.* (2012) highlighted the importance of ongoing reflexivity in order critically view their own subjective positioning in the research process.

2.8 Ethical considerations in qualitative studies

Informed consent is a central concept in ethical guidelines (Wiles, 2012; Silverman, 2011). It means that research participants have the right to know that they are being researched, the right to be informed about the nature of the research and the right to withdraw at any time (Ryen, 2004). Participants should be fully informed about the purpose of a study, using a detailed but non-technical account of the study's aims (Comstock, 2012; Silverman, 2011). Subjects must be entirely free in their decision to participate, thus there should be avoidance of an authoritarian figure coercing someone into participating (Comstock, 2012). Consent is a constant process, rather than a one-off action; participants should be able to withdraw from the research at any time, or stop the tape-recorder, without having to provide a reason (Wiles, 2012; Silverman, 2011; Ryen, 2004;). To honour participants' rights, the researcher must identify and minimise risk, protect their privacy and ensure any risk of psychological, professional or physical harm is proportionate and reasonable to the potential benefits of the research (Comstock, 2012).

Respondent validation is a method that holds much debate in the qualitative field and has potential ethical issues (Sandelowski and Given, 2008). Challenges that may arise include: what type of data or accounts the participant may actually validate; whether they are able to validate abstract statements that do not reflect their individual experiences (for instance, validating CMO configurations); the potential for participants to regret or forget

what they had said; or them feeling they should please the researcher through agreeing with their interpretation (Sandelowski and Given, 2008; Mays and Pope, 2000). A grey area arises if the participant disagrees with the interpretation as the researcher must then decide whether this refusal means they must abandon it, and if this abandonment serves the interest of knowledge (Sandelowski and Given, 2008). To overcome these issues, the researcher must be clear on the purpose and methods of the respondent validation; who will do the checking, what they will check and the influence this has on the outcome must all be transparent before commencing respondent validation (Sandelowski and Given, 2008).

2.9 Consideration of other methods and rationale for selected methods

The project's supervisory team considered another study design and method before deciding on a realist evaluation and realist interviews. A case study methodology was considered appropriate due to its exploration of complex inter-relationships that need to be considered as an entity (Yin, 2014). Each Practice would be a 'case' and its individual complexities would be analysed separately, which is important owing to the variation in Practice sizes, demographics, models, and other contextual factors that will affect Practice outcomes. Yin (2014) states that case study designs are relevant for research that aims to explain *how* or *why* some social phenomenon works or provide an in-depth description of the case's context. This aim is similar to that of a realist evaluation's aim to uncover *"what works for whom, how and under what circumstances"* (Pawson *et al.*, 2005, p.32). A case study design does not comprehensively make the connection between the how/why and the circumstance (the cases' context). A realist evaluation's design connects context, mechanisms and outcome; thus, the outcome can clearly be traced back to the particular context, rather than a context as one entity (Yin, 2014; Pawson and Tilley, 2004). In realist inquiries, context is subcategorised into the individual factors of the person (the principle of programmes as *'embedded'*) and the *'open-system'* principle underlines the influence of macro contexts on outcomes (Pawson and Tilley, 2004). As this study is an acceptability study, it is vital there is in-depth exploration of participant's contextual factors that influenced their personal acceptability. Chapter 1 highlighted the complexity of the macro contexts of the Primary Care environment and their influence on the strategy of the FCP role, and the role's implementation and success. The team perceived realist evaluation as most conducive to an in-depth exploration of the case study's specific contexts.

Focus groups were considered as an alternative method to interviewing. Focus groups are not simply *'group interviews'*, instead they are a group discussion in which *"the researcher*

is actively encouraging of, and is attentive to, the group interaction" (Barbour and Kitzinger, 1999, p.20). Focus groups have an exploratory focus; the team highlighted this as an advantage when little is known about the field, such as the limited patient understanding of the FCP role (Barbour, 2007). However, there were concerns that recruitment may be negatively affected if focus groups were utilised as all participants need to be at the same location simultaneously. The most common problem with focus group research are inadequate recruitment efforts (Kawamura and Morgan, 1998; Morgan, 1995). The theoretical advantages of telephone interviews that influenced the method's selection are outlined on p.54. The primary advantage that led to the adoption of telephone interviews was the flexibility they provided, as participants could select a time that was suitable for them without having to travel, which may decrease the study's burden; this may be particularly important for busy working schedules of clinicians.

2.10 Chapter summary

Realist evaluation is a theory-driven method of evaluation that has its roots in realism. Sitting between both constructivism and positivism, it upholds that there is a reality that can be known, and this reality is interpreted and constructed by human minds. Realism adopts a retroductive thought-process using insights, expertise, imaginative thinking, intelligence and common sense (The RAMESES II Project, 2017). Fundamentally, a realist evaluation aims to work *out "what works for whom, how and under what circumstances"* (Pawson *et al.*, 2005). To theorise with these principles in mind, a realist evaluation adopts three concepts 'context', 'mechanism' and 'outcome'; collectively, they form 'CMOs'/programme theory. Realist evaluation methods are inherently pragmatic, responding to the emerging hypotheses and adapting accordingly. The concept of validity in qualitative studies was discussed, and the methods of respondent validation, triangulation and reflexivity were explained. The ethical considerations of informed consent were outlined; these principles were fundamental to the undertaking of this study. Finally, a case study design and focus group method were considered as alternative methods.

3 Chapter 3: Patient views on the Advanced Practitioner (AP) role in Primary Care: A realist review

3.1 Rationale for a realist review

Traditional systematic literature reviews (SLRs) have been criticised for not considering the multi-faceted nature of interventions (Pawson *et al.*, 2005). SLRs focus only on what works and for whom, concluding with specific and inflexible findings. A realist review seeks to explain why an intervention works (or does not work), in what contexts, how, and in what circumstances (Rycroft-Malone *et al.*, 2012). It is well suited to complex interventions, such as healthcare and it is therefore highly appropriate for evaluating the patient views of the AP role, an intervention within the Primary Care setting (Rycroft-Malone et al., 2012).

3.2 Rationale for exploring Advanced Practitioner literature

The FCP role comes within the umbrella term AP, which encompasses other professions. NPs have become well-established in Practice and the role is supported by a range of evidence (p.22). NHSE (2016a) drew upon NPs as an example of HCPs reducing GP workload and offering specialist care, and stated that similar success could be seen with other HCPs in Practice. The FCP role has similarities with the NP role as they were both implemented into an environment of high GP workload, and FCPs offer their own specialities in MSKDs. There is limited evidence into the FCP role and the available evidence has limitations such as lack of contextual detail in audits which restricts the findings' transferability. The more established AP roles offer findings that may be transferable to other professions.

3.3 Aims and objectives of review

Aims:

1) Explore the literature on patient views of the AP role in Primary Care in order to determine the factors that influence acceptability.
2) To inform a future realist evaluation looking specifically at the physiotherapy FCP role in Primary Care.

Objectives:

1) Identify literature relevant to patient acceptability of the AP role.
2) Interrogate relevant literature using realist theory.
3) Establish hypotheses on what makes the AP role acceptable/ unacceptable to patients.
4) Establish the underlying contexts, mechanisms and outcomes of these hypotheses (see glossary).

5) Question theories regarding patient acceptability of the AP role.
6) Compare and interrogate rival theories for patient acceptability of the AP role.
7) Compare theories to current Primary Care practice.

3.4 Methods for review

Realist reviews have a fundamental structure, including the phases: defining the scope; searching for the literature; data extraction and appraisal; data analysis (see Figure 3.1) (Rycroft-Malone *et al.*, 2012).

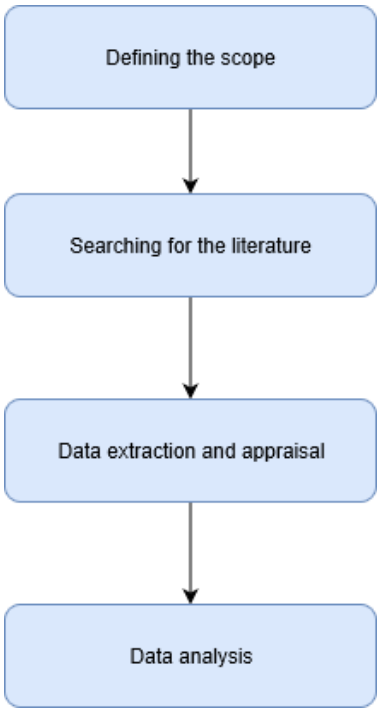


Figure 3.1 - Overview of the realist review

3.4.1 Defining the scope

Defining the scope of a realist review is a vital phase as it establishes the framework and structure for appraising the evidence (Pawson *et al.*, 2005). The reviewer adopts a primary research rather than a synthesis role as they gather information from multiple sources with the aim of creating programme theories, rather than simply synthesising data from secondary sources. This results in identification of key terms, concepts and mid-range theories (see glossary) that begin to provide an explanation of the area (Pawson *et al.*, 2005). Mid-range theories relate to a social system but are not specific to the programme under evaluation; they are generic theories of human reasoning or activity that have relevance to the programme and facilitate explanation of the programme (Merton, 2013).

Rycroft Malone *et al.* (2012) stated that there should be a high-level of stakeholder involvement throughout a realist review to ensure *'official conjecture'* and *'expert framing'*

of the problem (Pawson *et al.*, 2004, p.16). Therefore, the realist review framework should be developed in collaboration with key stakeholders. The expert team and the methods used to involve them are discussed on p.59.

Two FCPs, a research associate (involved in FCP research) and a Patient Partner were consulted. A broad search of sources was carried out (see Table 3.1 - Search strategy utilised) and the supervisory team, Patient Partner, and two practising FCPs all facilitated the process of defining the scope in order to establish a theory framework. A more rigorous and formal phase of systematic literature searching and extraction followed.

Information about the literature source was extracted into an Excel spreadsheet, including; the title; author(s); date; context, such as profession; key findings/conclusions. Themes were then identified from reviewing the spreadsheet information, they formed the basis of theories that may explain how the AP role works. An extensive list of potential theories was produced. Similar theories were categorised into overarching theory areas; resulting in four theory areas with sub-theories (see Appendix 1).

Population	Intervention	Setting	Outcome
Patient OR “service user”	"advanced practit*" OR "extended scope practit" OR "nurse practitioner" OR "practice nurse" OR "ESP" OR "First contact practitioner" OR "FCP" OR "nurse practitioner-led"	“Primary Care” or “General Practice”	views OR accept* OR understanding OR perceptions OR preferences OR expectations OR experience

Table 3.1 - Search strategy utilised

3.4.1.1 Methods for consultation of key stakeholders and an expert supervision team

The process of involving the FCP team members and Patient Partner were almost identical, however, the Patient Partner was provided with information in more accessible terms.

Prior to the meetings, the stakeholders were emailed an outline of the project (see Appendix 2 and Appendix). The stakeholders were provided with a flowchart of the initial theory areas, formed through evidence and expert opinion from the supervisory team (see Appendix 3).

The review began with initial broad ideas on how the AP role works; these formed what were known as the theory areas that acted as a framework for the development of hypotheses (Rycroft-Malone *et al.*, 2012). The hypotheses developed the initial theory area framework. Each theory area was discussed with the FCP stakeholders and Patient Partner to individually validate, amend, and potentailly create new theory areas and preliminary hypotheses as appropriate. The meetings concluded with the stakeholders agreeing to contemplate theory areas and hypotheses and contact the researcher if they had any changes to theory; they did not contact the researcher any further.

3.4.1.2 Theory development

Following on from the FCP team meeting, there was development of the theory framework (see Appendix 4 and Appendix 5). The updated flowchart was sent to the FCP team members and the supervisory team to corroborate understanding. No changes were made to the flowchart following the meeting with the Patient Partner.

The initial theories were then discussed in a team meeting that included all members of the supervisory team and the Patient Partner. Initial theories were discussed in-depth to ensure mutual agreement of the theories under investigation. This resulted in the development of a final theory framework that was circulated to the supervisory team, the Patient Partner and FCP team members for content validation (see glossary).

3.4.1.3 Initial theory areas

A total of seven initial theory areas were agreed which formed the theory area framework, these were:

- Theory area 1 - Patient's prior experience of condition management
- Theory area 2 - Patient's expectations of condition management
- Theory area 3 - Communication
- Theory area 4 - Continuity of the individual practitioner
- Theory area 5 - Practitioner's scope of practice
- Theory area 6 - Accessibility
- Theory area 7 - Promoting the role to patients

The titles of these theory areas differed initially, as they were subject to change as understanding of the theory areas progressed. Figure 3.2 provides an overview of the process which is then detailed.

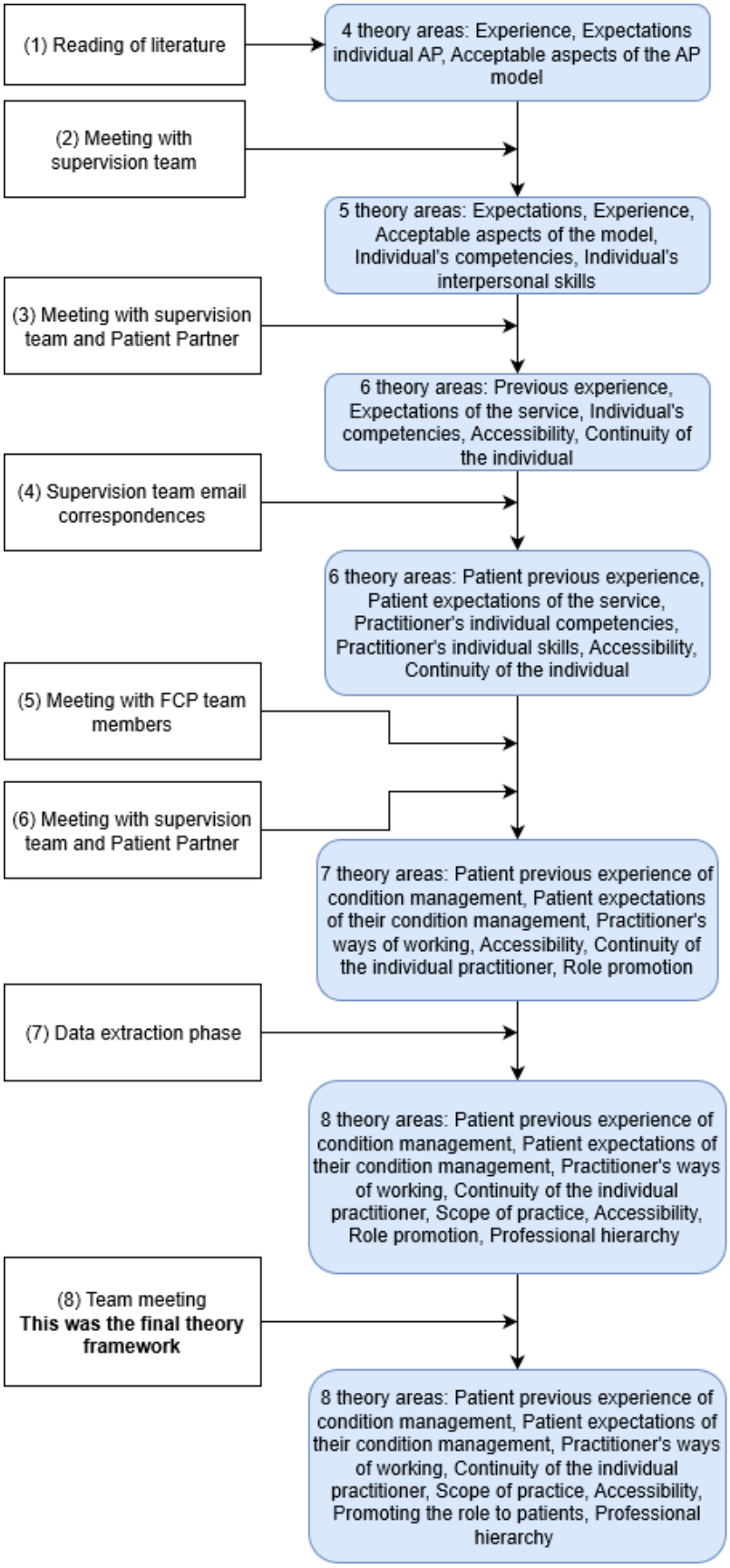


Figure 3.2 - Development of theory framework

Only initial 'digging through' the literature informed the first theory area framework (Rycroft-Malone et al., 2012, p.3). The databases searched included: The Allied and Complementary Medicine Database; CINHAL Plus; Medline; Pedro; The CSP's Evidence and Knowledge Discovery.

The supervision team highlighted that competencies and interpersonal skills are different and consequently, two distinct theory areas were created. Discussion with the supervision team and Patient Partner highlighted that 'Acceptable aspects of the model' covers multiple theory concepts; 'Access 'and 'Continuity' were different aspects. This meeting also highlighted that 'Expectations' was unclear as to whether this was expectations of the individual practitioner, or expectations of the service. Furthermore, the team perceived that the individual practitioner would fall within 'Competency' and 'Personal characteristics'. The theory area was therefore changed to 'Service expectations'.

Email correspondences with the supervision team highlighted that, without stating whose experience or whose expectations, the theories are open to interpretation. The theory areas were adapted to state that they related to patients.

A new theory area – 'Role Promotion' – developed from presenting theory ideas to the FCP team members.

A meeting with the supervision team and Patient Partner highlighted that 'Patient expectations of the service' was similar to 'Accessibility', and would not include evidence on how patients expected their MSKDs to be managed. 'Patient expectations of the service' was therefore replaced by 'Patient's expectations of their condition management'.

New theory area – 'Professional hierarchy' – developed at the data extraction phase. This was not purposefully searched for, rather, the theory area was highlighted through reading the literature related to the other seven theory areas.

The supervision team highlighted that 'Ways of working' related to communication only. The theory area title was therefore altered to 'Communication'. Role Promotion was felt to be misleading by the supervision team, it was suggested that it may have referred to the professional bandings of the AP roles. Theory area 7 was renamed 'Promoting the AP role to patients'. **This was the final theory area framework.**

3.5 Data extraction sheets

Realist reviews' data extraction sheets aim to embed the theoretical framework within them in order to provide a template to *'interrogate'* the papers (Rycroft-Malone *et al.*, 2012, p.6). These forms assist with sorting and annotation of primary source materials, however, there is not one standardised form, there are several in order to test the different theory areas under test (Greenhalgh *et al.*, 2005).

3.5.1 Piloting data extraction sheets

A specifically designed data extraction sheet based on Rycroft-Malone *et al.'s* (2012) was developed which collated information on each theory area with questions aimed at identifying contexts, mechanisms and outcomes. The initial extraction sheets were piloted by applying them to two journal articles from the 'Defining the scope' phase. A member of the supervisory team (NW) completed data extraction sheets for the same journal article, and the two sets of data extraction sheets were compared. There were minor discrepancies between the two reviewer's data extraction (see Appendix 6).

3.5.1.1 Data extraction sheets after amendments

So that theory could be inductively created, a box was created at the end of each data extraction sheet to document thought-processes that were not relevant to the initial theories, but may have contributed to the programme theory after further data extraction. The sheets were not altered hereafter (see Appendix 7).

3.6 Searching for the literature

A realist review utilises purposive searching for identifying proposed theories. An iterative search method is also adopted in a realist review; as the understanding of the programme grows, the search strategies develop (Pawson *et al.*, 2005). The decision had to be made as to when to end this search; after each search the question must be asked: *"does this add anything new to our understanding of the intervention and whether further searching is likely to add new knowledge"* (Pawson *et al.*, 2005, p.28).

Both purposive and iterative searching was adopted for this study (see Figure 3.3) (see Appendix 8 for search strategy).

The following databases were searched between 30th May 2017 to the 26th October 2017:

- The Allied and Complementary Medicine Database
- CINHAL Plus
- Medline
- PsycARTICLES

- PyscINFO
- PEDro
- The CSP's Evidence and Knowledge Discovery Search Service

The search terms, database, number of hits, and duplicates removed by the database were all recorded on an Excel spreadsheet.

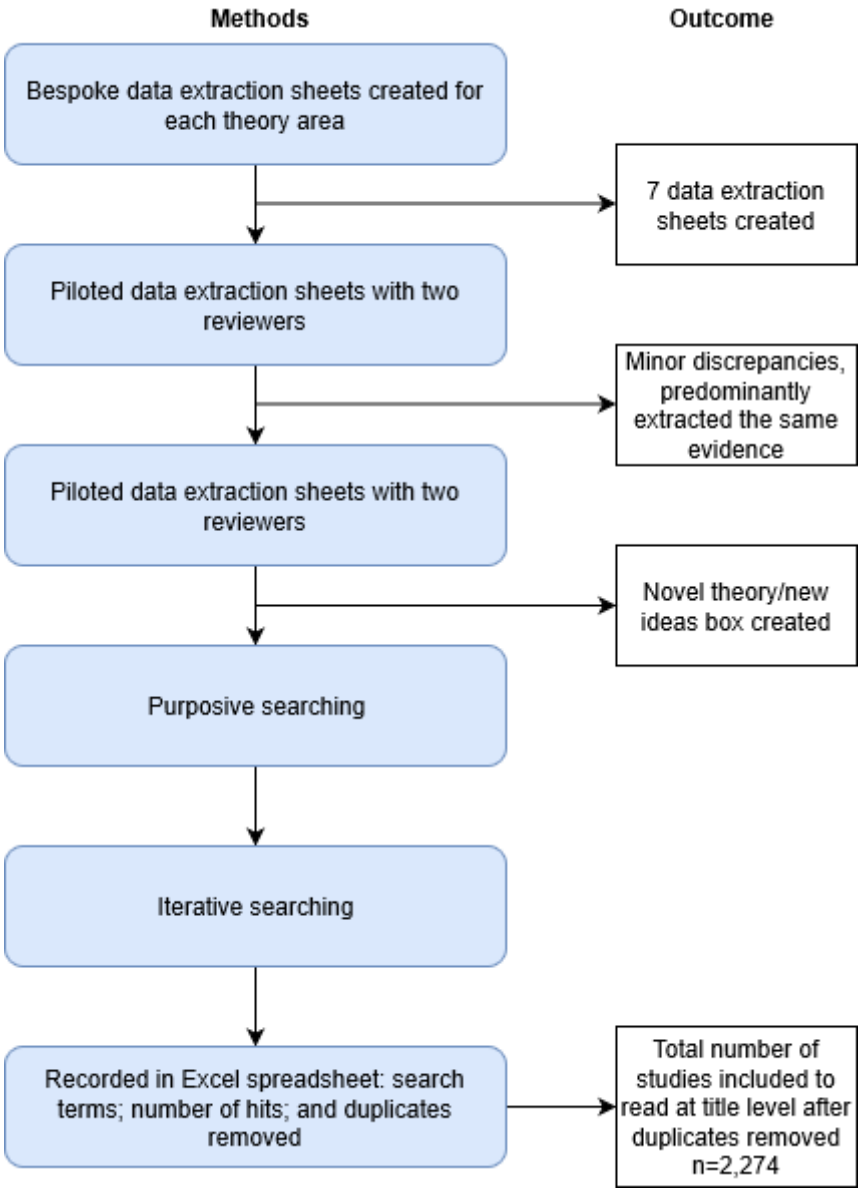


Figure 3.3 - Searching for the literature

3.6.1 Inclusion and exclusion criteria

Following the principles of Rycroft-Malone *et al.* (2012), sources were assessed on whether it was *'good and relevant enough'* to be included (p.6). This required a clear conclusion to be made, and it was not based on the study design, quality or any other pre-determined criteria (Rycroft-Malone *et al.*, 2012). Therefore, minimal exclusion criteria were used (see Figure 3.4) (Rycroft-Malone *et al.*, 2012; Pawson *et al.*, 2004). See Appendix 9 for process of screening for the literature.

Inclusion:

- 'Good and relevant enough' to theory.
- Any profession practising in an Advanced role in Primary Care (see glossary for role definitions).

Exclusion

- Not in a Primary Care setting.
- Secondary views on behalf of a patient, such as parents of paediatric patients, or carers of vulnerable patients (vulnerable adults classified by using the British Medical Association's definition.
- Does not contribute to any programme theories.
- Sources were not research based (using the broadest definition of research, i.e., demonstrating a systematic approach to inquiry).
- The AP was not first contact, i.e. the patients accessed the GP first for the new problem or the most recent incidence of a chronic problem. This also excludes the AP providing follow-up care.

Figure 3.4 – Inclusion and exclusion criteria

3.7 Data extraction and appraisal

Realist reviews identify theory and annotate literature during the process of data extraction. These ideas must be noted in their infancy even if they are undeveloped, as future sources may provide clarification (Pawson *et al.*, 2005).

The included literature was reviewed against its relevant theory area. For example, if it was part of the search for theory area 1 –'Patient's Prior Experience of Condition Management' – the literature would primarily be extracted into its relevant data extraction sheet. Extraction included direct transfer of phrases, sentences or sections relevant to the theory (see Figure 3.5).

Each theory was tested individually, rival theory areas were also identified alongside the primary theory the study was being tested against. In this situation, the study was applied

to the rival relevant theory area extraction sheets (see Appendix 10 for a full study list, the search(es) they originated from, and the theory areas they apply to).

For ease of analysis, each included article was printed and a cover sheet was attached for each study, detailing the studies': author(s); year of publication; design; sample; methods; key findings/conclusion.

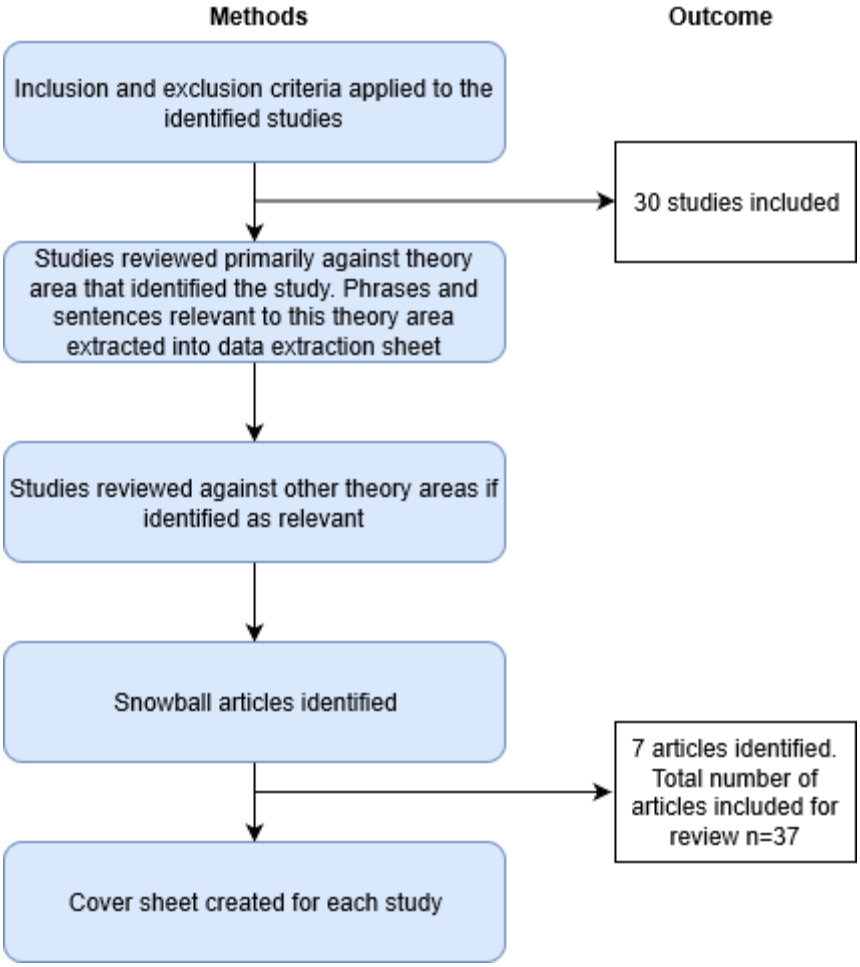


Figure 3.5 - Data extraction and appraisal

3.8 Data analysis

Previous literature provided little information on the process of literature synthesis, as highlighted by Rycroft-Malone (2012). She developed a more comprehensive framework, based on the principles of a realist evaluation which was utilised in this study's analysis. This consists of:

1. 'Organisation of extracted data into evidence tables
2. Theming by individual reviewers
3. Comparison of reviewers' themes for a specific article and formulation of chains of inference (see glossary) from the identified themes

4. Linking of the chains of inference, and tracking and linking of articles
5. Hypothesis formulation' (Rycroft-Malone *et al.*, 2012, p.7)

Step 1 – organisation of extracted data into evidence and analysis tables
Rycroft-Malone and colleagues' work (2012) condensed the evidence from data extraction sheets into one table. In this review, there was variation from this method. After discussions with realist experts within the supervision team and the Patient Partner, it was needed to be clearer *how* the evidence led to hypotheses formation. Transparency of data analysis was achieved through displaying data extraction and analysis simultaneously, side-by-side (see Appendix 11). Evidence of all relevant theory areas for a study was condensed into one table, alongside this evidence were: themes; chains of inference (see step 3); chains of inference articles (study number); and hypotheses (see glossary for terminology definitions).

Step 2 – theming
In Rycroft-Malone and colleague's work (2012), theming was undertaken by individual reviewers. In this review, themes were recorded using the same table used in step 1, by the lead researcher only, as she was primary reviewer undertaking the review for the attainment of her PhD. Themes were validated in team meeting discussions to ensure mutual understanding.

Step 3 – formulation of chains of inference from the identified themes
Chains of inference are the connections across extracted data and themes (Rycroft-Malone *et al.*, 2012). There may be several similar variations of a theme; chains of inference connect them to form an overarching theme. These chains of inference were recorded in the same table used in step 1 and 2.

Step 4 – linking of the chains of inference, and tracking the linking of articles
Chains of inference were then connected through identifying studies with same chains of inference. The study number was then recorded in order that the studies could be connected and traced back to one another.

Step 5 – hypothesis formulation
Hypothesis formation was achieved through identifying an accumulative picture of contexts, mechanisms and outcomes following on from data extraction of all 37 studies. The hypotheses are synthesised statements of findings against which the previous stages of analysis could be presented (Rycroft-Malone *et al.*, 2012).

Throughout this process a 'retroductive' way of thinking was adopted (The RAMESES II Project, 2017). To form theory, available evidence, hunches, common-sense and expertise of the supervisory team and Patient Partner were all utilised (The RAMESES II Project, 2017).

There were two iterations of creating hypotheses. Through discussion on the theories, the supervisory team and researcher condensed similar hypotheses in the first version. Hypotheses focusing on particular patient groups were removed, as they were too specific at a realist review stage. This resulted in the final set of hypotheses which have been tested in the project's evaluation.

3.9 Narrative

The narrative for the realist review was framed around the hypotheses formed (see section Figure 3.6). The Patient Partner and FCP team members were all provided with a final draft of the realist review in order to provide their perspective and for changes to be made if required. It was not necessary to make any amendments.

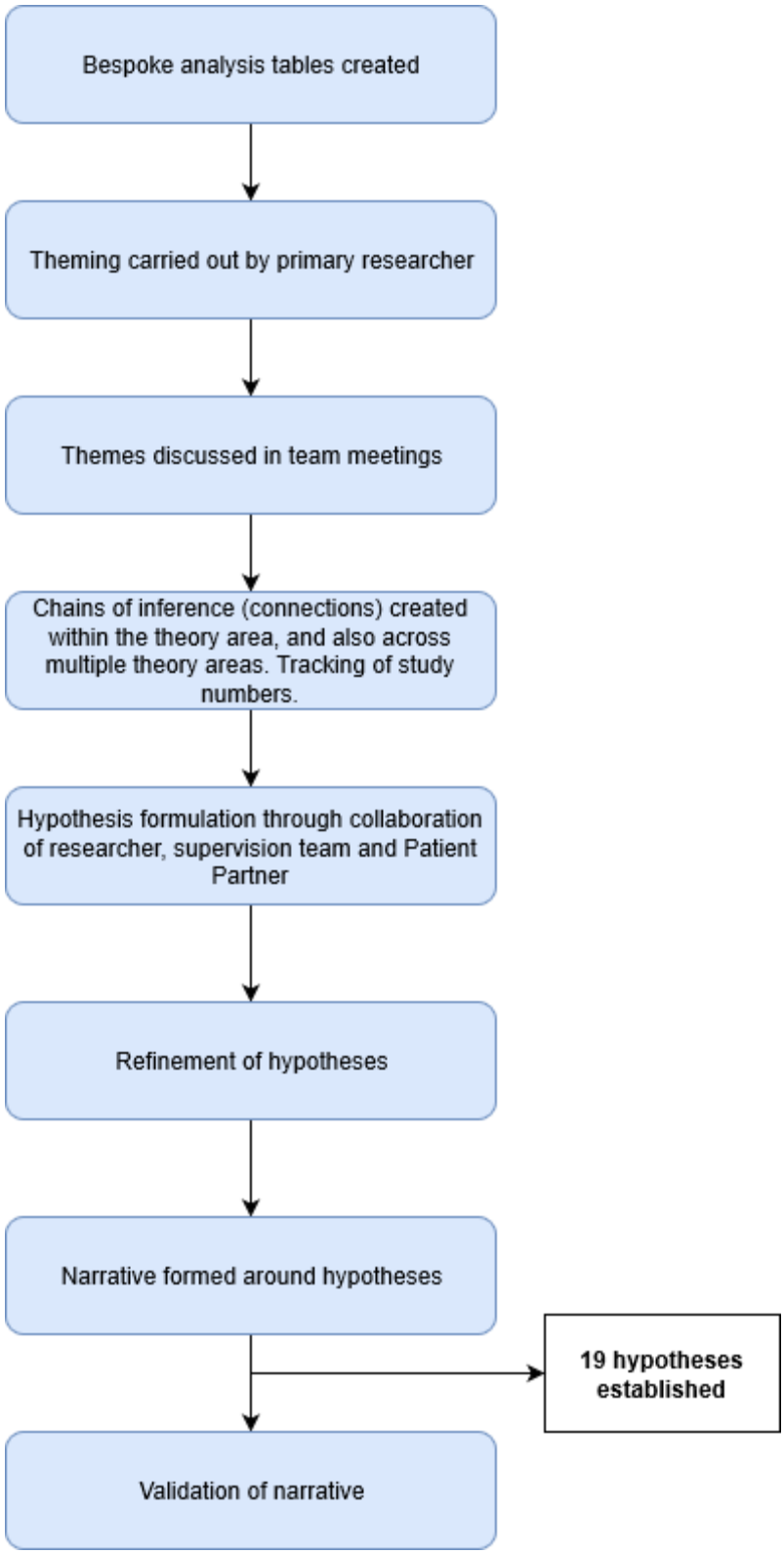


Figure 3.6 - Analytical process and forming of the narrative

3.10 Results

The initial seven theories identified in the scoping review were expanded through a systematic review of each theory area. This resulted in 19 hypotheses related to the acceptability of the AP role to patients Analysis of the data also lead to a new theory area – theory area 8, 'Professional hierarchy' (see

Figure 3.7).

A total of 37 articles were included in the review; five of these studies were a physiotherapy FCP role, the other 32 studies were various nursing roles, NPs and Health Visitors, or NPs and Physician Assistants, or NPs and Pharmacist Independent Prescribers. The roles were not differentiated in the theory formulation; in other words, the hypotheses formed were applicable to all the roles. This was due to the limited amount of evidence on some of the roles, and the aim of testing these hypotheses specifically for the physiotherapy FCP role in a future realist evaluation.

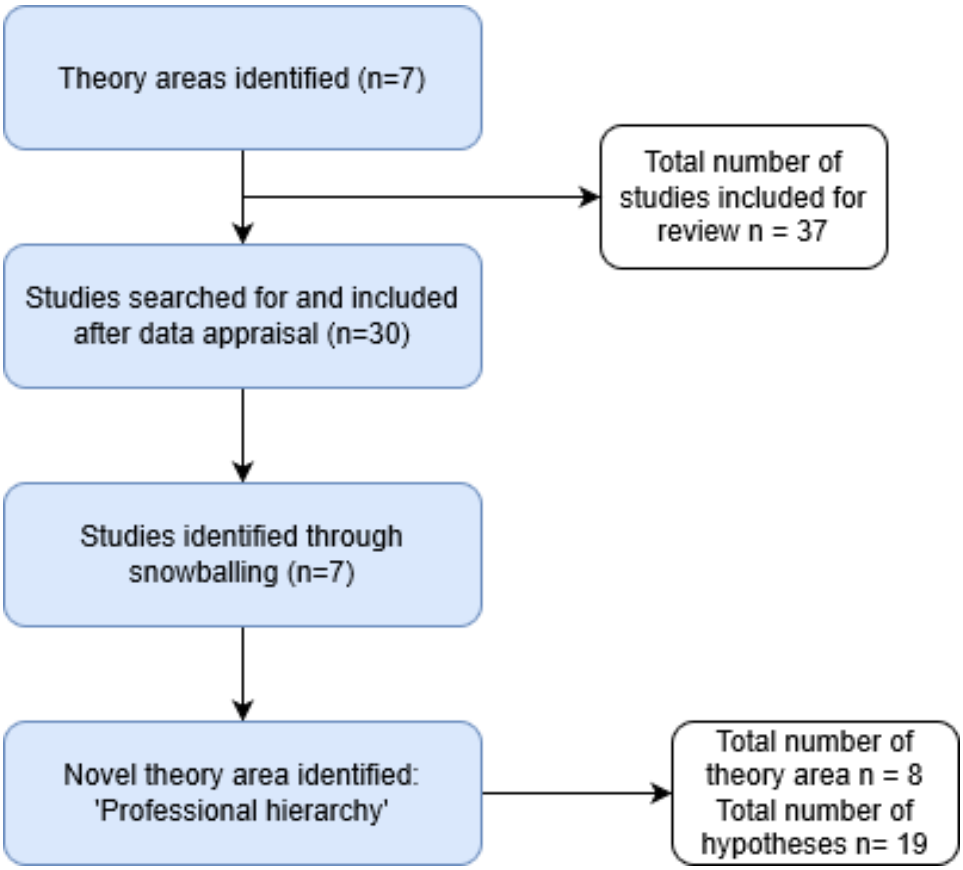


Figure 3.7 - Results from identified theory

3.10.1 Hypotheses for all theory areas

The findings of the review are broken down into the seven theory areas, which are the high-level theory, and within each theory area are hypotheses (sub-theories). These hypotheses are discussed in greater detail in sections 3.10.2 to 3.10.10. In these sections only one CMO diagram is presented for each theory area due to the constraints of the thesis word count. The CMO presented was selected due to it being one of the most well-formed CMOs with the greatest evidence. The remaining CMOs are presented in the appendices 14-20.

Theory Area 1 – Patient Prior Experience of Condition Management

(1) AP consultation can lead to the equivalent type of outcomes/ treatments as a GP consultation.
(2) Patient perceptions of GPs, formed from their previous GP consultations, will influence the patient acceptability of the AP role.
(3) Limited prior experience of an FCP decreases patient acceptability of the role.
(4) Previous experience of a prescribing AP increases patient acceptability of a prescribing AP in Primary Care.

Theory Area 2 – Patient Expectations of Condition Management

(5) Patient perceptions of 'serious' conditions affects acceptability of the AP consultation.
(6) Patients less accepting of the role if prescriptions are not checked by the GP.
(7) Lack of patient choice decreases patient acceptability of the AP role.
(8) Patients find the role more acceptable if they expect that an engagement with AP will provide indirect access to other services.

Theory Area 3 – Communication

(9) The AP's communication skills increases patient acceptability of the role.
(10) The role is more acceptable to patients when AP's are person-centred in their consultation style.
(11) The AP role is more acceptable to patients when the AP demonstrates a high-level of knowledge.

Theory Area 4 – Continuity of the individual Practitioner

(12) Having familiarity with the practitioner in the consultation increases patient acceptability of the AP role.

Theory Area 5 – Scope of Practice

(13) Role more acceptable if AP offers a service that is equivalent to the GP consultation.

Theory Area 6 - Accessibility

(14) Increased acceptability of the role if the service is more convenient to the patient.

(15) Longer consultation lengths increase patient acceptability of the AP role.

(16) A decrease in waiting times for services increases patient acceptability of the AP role.

Theory Area 7 – Promoting the AP Role to Patients

(17) Peer validation incfleunces patient acceptability of the AP role.

(18) A greater understanding of the AP role increases patient acceptability of the role.

Theory Area 8 – Professional Hierarchy

No hypotheses have been formed for this theory area. Rycroft-Malone *et al.* (2012) highlighted that in their review the inferences made for mechanisms were weak and they required further work. Owing to the limited amount of literature for this theory area (only three studies were included), it was felt that further work was needed to be able to make any inferences at all. Future studies could explore this theory area through exploring stakeholder experiences.

3.10.2 Theory Area 1 – Patient previous experience of condition management

A total of seven studies were included in the analysis of this theory area (see Appendix 12 for their overview).

The identified literature fell into two main categories:

(1) previous experience of a GP

(2) previous experience of an AP

Previous GP consultations were highlighted to influence patients' expected outcome from an AP consultation. These outcomes included: certain answers to questions (these questions and answers were not disclosed); recogniton of a serious illness; and an examination or a referral to another care provider (Redsell *et al.*, 2007). Previous experience of a GP prescribing resulted in some feeling the APs should prescribe in the same way as the GP (Bergman *et al.*, 2013). A CSP audit (2017) highlighted a patient having this expectation due to this experience; however, the patient was more satisfied with receiving exercises instead of painkillers. Both these studies demonstrate the impact of GP experience on patient expectations (Bergman *et al.*, 2013; Chartered Society of Physiotherapy, 2017a).

Patient perceptions of GPs in previous consultations may also affect patient views of the AP role (Gera*rd et al.*, 2014; Redsell *et al.*, 2007). Gerard *et al.* (2014) highlighted that patient experience of GPs paying them insufficient attention increased patient satisfaction with the AP. Coinciding with theory area 3 – 'Communication', the study found that patients were more satisfied with the AP's advice, compared to the advice provided by the GP.

Gerard *et al.* (2014) underlined the challenges and the unease patients face when evaluating a role they had not experienced. Adopting a retroductive thought-process, it can be hypothesised that as patients are more familiar with the GP role, they indirectly evaluate the AP role through their GP experiences.

Gerard *et al.* (2014) and Baldwin *et al.* (1996) highlighted the effect of limited experience of the AP role, which resulted in patients feeling uncomfortable with being assessed and treated by a physiotherapist (Baldwin *et al.*, 1996) and decreased their likelihood of accessing a prescribing NP (Gerard *et al.*, 2014). Similar findings were presented in the studies by Chapple *et al.* (2000) and Wasylkiw *et al.* (2009), however, the experiences in these studies were based upon the wider nursing role in Secondary Care prior to accessing an AP in Primary Care. In all four of these studies, patient acceptance of the role was contingent on their level of experience with the AP/wider nursing role.

The reverse demonstrated that an increased level of experience of the wider nursing profession increased patient acceptability of the AP role. Gerard *et al.* (2014) found that experience of nurses prescribing in Secondary Care resulted in patients being more likely to access a prescribing NP in Primary Care, than *'do nothing'*; however, patient preference for choice of professional remained with the GP. Wasylkiw, Gould and Johnstone's (2017) findings correspond with Gerard *et al.* (2014), highlighting that experience of nurses in a preventative role was associated with the likelihood of them seeking help from a NP in Primary Care. The setting within which the role was situated varied between the studies; Wasylkiw, Gould and Johnstone's (2017) study was undertaken in Canada, while Gerard *et al.*'s (2014) study was set in within a wide geographical area of the UK. It may be postulated that the impact that previous experience of a NP prescribing has on patients is transferable across contexts.

CMO configuration and hypotheses for theory area 1 – patient experience of condition management

The synthesis of the evidence has resulted in the formation of four hypotheses under the umbrella of 'Prior Experience of Condition Management' (see Figure 3.8 - Hypothesis 1 CMO, see Appendix 14 for remaining CMOs):

(1) AP consultation can lead to the equivalent type of outcomes/ treatments as a GP consultation.

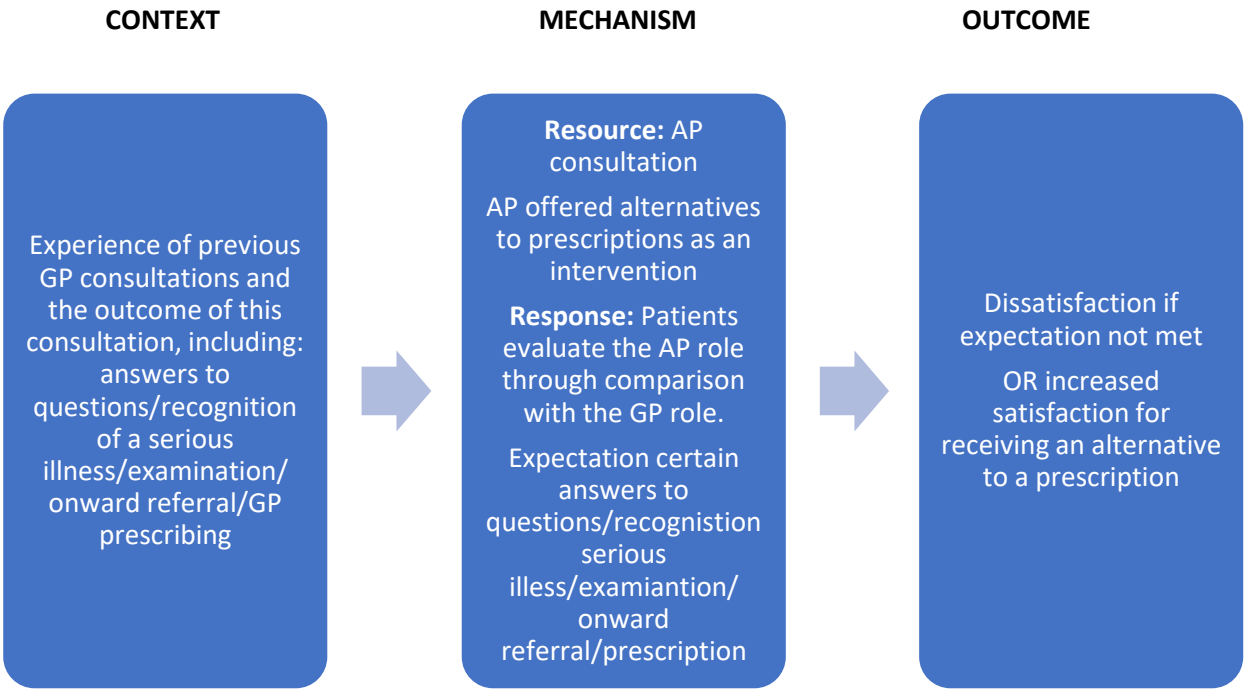


Figure 3.8 - Hypothesis 1 CMO

(2) Patient perceptions of GPs formed from previous GP consultations will influence the patient acceptability of the AP role.

(3) Limited prior experience of an AP decreases patient acceptability of the role.

(4) Previous experience of an AP prescribing increases patient acceptability of AP prescribing in Primary Care (see 'Prescribing as a theme', p.103).

3.10.3 Theory Area 2 - Patient expectations of condition management

A total of 14 studies support the theory area of patient (see Appendix 20 for their overview).

The literature covered three main themes:

1. perceived severity of condition
2. patient choice
3. maintaining the GP in the care pathway.

If a patient perceived their condition to be 'serious', patients were selective about who they wanted to diagnose their condition (Parker *et al.*, 2012; The EROS Project Team, 1999). Some patients expected the AP to consult with the GP regarding particular conditions (the type of condition was not stated; however this population had chronic diseases) (Young *et al.*, 2016), other patients expected a consultation with a GP for 'serious' conditions (Halcomb, Peters and Davies, 2013; Mahomed, John and Patterson, 2012; Parker *et al.*, 2012; Barratt, 2006; Caldow *et al.*, 2006; The EROS Project Team, 1999; Luker *et al.*, 1998; Myers, 1997). Patients felt that GPs had more in-depth knowledge and should diagnose what is considered *'serious incidents'* (Halcomb, Peters and Davies, 2013). Conditions that patients perceieved to be *'less serious'*, and were happy to consult an AP for included: respiratory conditions (Myers, 1997) such as chest or throat infections (Barratt, 2016); common colds, coughs and headaches (Caldow *et al.*, 2006); and ill-defined conditions and skin infections (Myers, 1997). Health events that were *'too serious'* to consult an AP on included potential surgical therapies; transcatheter interventions; and when decisions were required regarding intervention changes such as changing drug therapies (Maul *et al.*, 2015). The outcome of this expectation is highlighted in Holdsworth and Webster's (2004) study which demonstrated that patients who self-referred to an AP were more likely to have had their condition for a shorter duration, therefore, patients with more 'serious' conditions were less likely to access the AP role.

To have a perception of their severity of their condition, patients were self-triaging; this led to patients forming expectations of their care pathway, and it was evident in both a population with chronic diseases and acute conditions (Mahomed, John and Patterson, 2012; Myers, 1997). GPs recognising that the patient had a 'serious' illness in previous consultations (coinciding with theory area 'Patient Experience') resulted in patient preconceived expectations about the condition severity. If unacknowledged by the AP, this unmet expectation resulted in decreased patient satisfaction (Redsell *et al.*, 2007).

Patients wanted to retain the choice of accessing a GP when they preferred (Halcomb, Peters and Davies, 2013; Mahomed, John and Patterson, 2012). In some cases patients felt that an AP would be able to facilitate and expedite access to a GP and, therefore, they would be able to bypass a long appointment wait (relating to theory area 6 – 'Accessibility') (Fortin *et al.*, 2010; Luker *et al.*, 1998). Luker *et al.* (1998) demonstrated that patients who had serious conditions expected the AP to refer them to the GP, whilst Fortin *et al.* (2010) found that these patients expected the nursing appointment to be the first consultation, and that their follow-up would be with a GP (Fortin *et al.*, 2010).

Bergman *et al.* also demonstrated expectations of APs prescribing (refer to section 3.10.10 - Prescribing as a Theme).

CMO configuration and hypotheses for theory area 2 – patient expectations

Four hypotheses have been formed for 'Patient Expectations' (see Figure 3.9 – Hypothesis 5 CMO, and Appendix 15 for the remaining CMOs):

(5) Patient perceptions of 'serious' conditions affects the acceptability of the AP consultation.

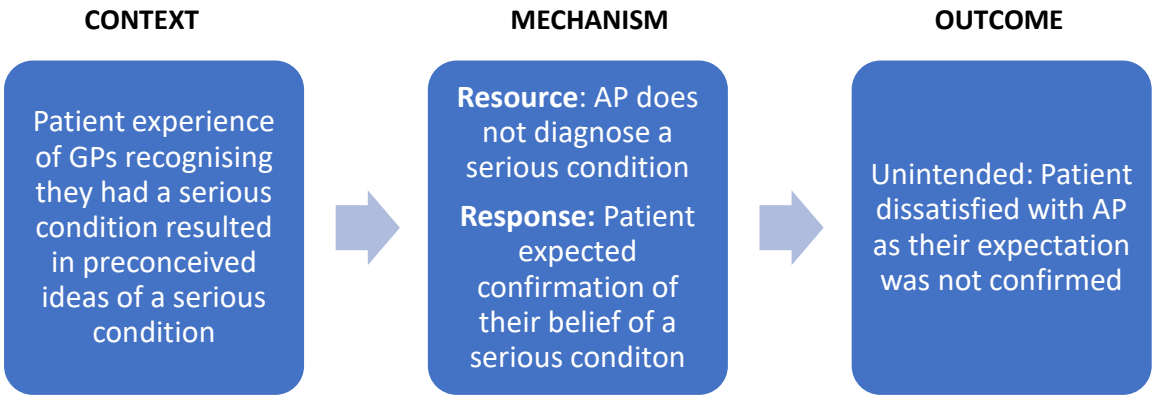


Figure 3.9 – Hypothesis 5

(6) Patients find the role more acceptable if they expect that an engagement with FCP will provide indirect access to other services.

(7) Patients less accepting of the role if prescriptions are not checked by the GP (see prescribing section).

(8) Lack of patient choice decreases patient acceptability of the AP role.

3.10.4 Theory Area 3 – Communication

Within the theory area, a total of 25 studies were included to review the impact the practitoner's style of communication had on patients, and the impact of the actual information the AP provided (see Appendix 21 for their overview).

Across 13 studies, a 'friendly' and a more conversational style of communication were highlighted to increase patient acceptance of the role. Barratt (2016) demonstrated patient preference for consultations in which APs were more discursive and interactive, compared to their previous experiences of one-sided GP consultations. Patients valued APs listening to, and discussing, their personal views on their condition (Gerard *et al.*, 2014; Chapple *et al.*, 2000). The act of APs listening to patients resulted in patients feeling that the AP had a genuine interest in the patient (Caldow *et al.*, 2006; Kernick *et al.*, 1999), patients felt valued (Halcomb, Peters and Davies, 2013) and that their consultation was more personalised (Young *et al.*, 2016). Patients were more likely to ask questions when the AP was friendly and, as a rapport built, they felt able to ask questions that they would not have shared with the GP (Dhalivaal, 2011; Redsell *et al.*, 2006).

As well as feeling that the AP was more thorough in their questioning than the GP (Perry, Thurston, Killey and Miller, 2005), patients valued the opportunity to ask questions (Maul *et al.*, 2014; Phillips and Brooks, 1998). Maul *et al.* (2014) demonstrated no difference in the ability to ask NP or GP questions, however Phililps *et al.* (1998) highlighted that patients found it easier to question a NP. The communication style resulted in patients perceiving the consultation to be more of a *'chat'* (Williams and Jones, 2006, p.192), therefore, patients felt more comfortable and at ease in the AP consultation than in a GP consultation (Halcomb, Peters and Davies, 2013; Mahomed, John and Patterson, 2012; The EROS Project Team, 1999). There was a suggestion patients found it easier to communicate with the AP rather than the GP (Myers, Lenci and Sheldon, 1997).

Patients found APs to be highly informative, and they valued this level of information (Tinelli et al., 2013; Perry, Thurston, Killey and Miller, 2005; Brooks *et al.*, 2001). Patients felt the APs explained: medications; the patient's condition; and follow-up advice (Webster *et al.,* 2008; Dhalivaal, 2007; Luker *et al.*, 1998; Reveley, 1998;). Patients perceived the APs to use language that they could clearly understand (Barratt, 2016), consequently, they felt reassured (Halcomb, Peters and Davies, 2013; The EROS Project Team., 1999) and preferred being educated by the AP rather than the GP (Langer, 1995).

Patients wanted to be involved in making decisions surrounding their care (Barratt, 2016; Young *et al.*, 2016; Mahomed, John and Patterson, 2012) and felt empowered when they were able to do so (Edwall and Danielson, 2008). APs were motivational in this partnership (Young *et al.*, 2016), but there was variation amongst patients as to whether they preferred a *'gentle'* of *'firmer'* approach (Mahomed, John and Patterson, 2012, p.2554). Young *et al.* (2016) and Mahomed, John and Patterson (2012) both studied a population with chronic diseases, who had long-term management that may have require this greater-level of motivational input (Young *et al.*, 2016; Mahomed, John and Patterson, 2012). AP person-centred consultations resulted in patients with chronic diseases feeling they were in a supportive relationship (Young *et al.*, 2016).

Alongside valuing how the AP communicated with them, patients were satisfied with what information they were providing. Namely, patients valued the holistic and practical advice and information provided by the AP (Barratt, 2016; Dhalivaal, 2007; Caldow *et al.*, 2006; Luker *et al.*, 1998); this was particularly valued by patients with long-term conditions (Dhalivaal, 2011). Patients felt that APs offered alternatives to medications which were the most common GP treatments, therefore they felt their intervention was more person-centred (Williams and Jones, 2006; Myers, lenci and Sheldon, 1997).

Patients felt that APs appeared very knowledgeable (Chartered Society of Physiotherapy, 2016b; Webster, *et al.,* 2008; Redsell *et al.*, 2006) were up-to-date on recent treatments, provided a *'mine of knowledge'* and acted as a filter for the patient's personal internet research (Williams and Jones, 2006, p121). APs displayed their knowledge via a thorough assessment and thorough provision of information (Chartered Society of Physiotherapy, 2016b; Dhalivaal, 2007; Redsell *et al.*, 2007). APs demonstrated their knowledge to patients through clear explanations (Halcomb, Peters and Davies, 2013). This resulted in patients having greater confidence in AP competencies and the quality of their care and subsequently, they had higher satisfaction of their consultation outcome (Chartered Society of Physiotherapy, 2016b; Dhalivaal, 2011; Redsell *et al*., 2006). This finding was consistent across the literature, except one participant in a study by Redsell *et al.* (2006); who felt that the AP's friendly style could lead to misdiagnosis. Although Shum *et al.* (2000) concluded that the style of consultation might have been the cause of higher patient satisfaction, this is not evidenced and can only be postulated.

CMO configuration and hypotheses for theory area 3 - Communication

From synthesising the literature for 'Communication', three hypotheses have been formed (hypothesis 11 is presented – see Figure 3.10; for the remaining CMOs see Appendix 15):

(9) The AP role is more acceptable to patients when the AP has an informal discussion with the patient.

(10) The role is more acceptable to patients when AP's are person-centred in their consultation style.

(11) The AP role is more acceptable to patients when the AP demonstrates a high-level of knowledge.

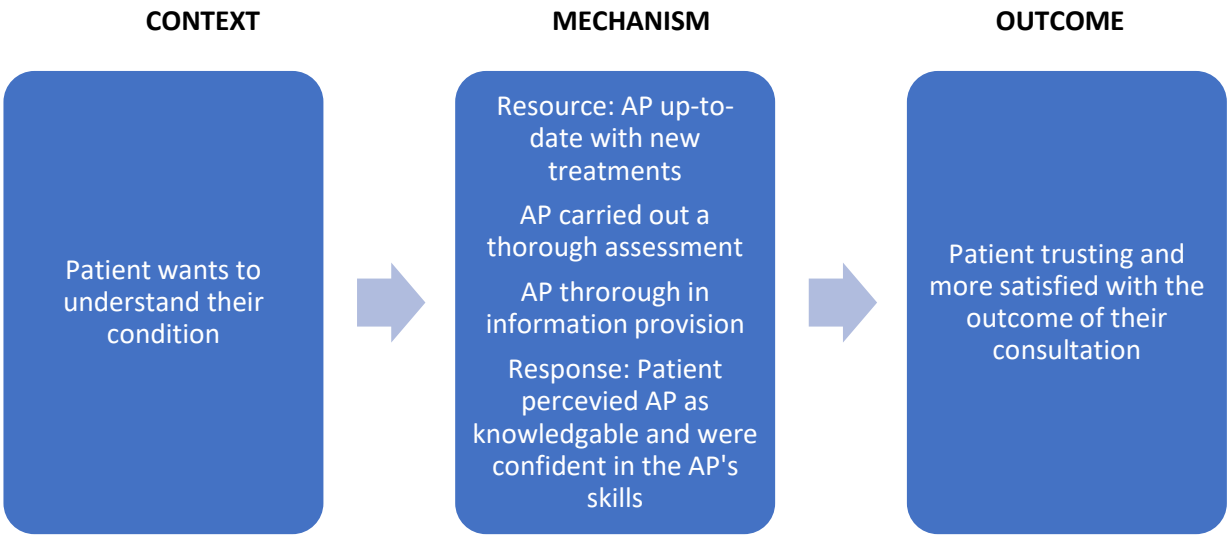


Figure 3.10 - Hypothesis 11 CMO

3.10.5 Theory Area 4 – Continuity of the individual practitioner

The importance of continuity with the individual practitioner was highlighted as significant to patients in a total of 13 studies (see Appendix 22 for their overview).

Desborough *et al.* (2016) recognised the importance of continuity of care, highlighting greater patient satisfaction when patients requested a particular nurse, and when accessing the nurse over six times. Studies often juxtaposed the AP service to the GP service; two studies demsontrated patient satisfaction with being able to build a long-term relationship with their GP (Fortin *et al.* 2010; Redsell *et al.*, 2006), but predominantly studies highlighted GPs' deficiencies in not offering appointments with the same individual (Bergman *et al.*, 2013; Williams and Jones, 2006; Chapple *et al.*, 2000). This was due to an increase of locum GPs, resulting in patients missing the GP continuity they had been used to (Chapple *et al.*, 2000). This theory area overlaps with theory area 1 – 'Patient Prior Experience of Conditon Management'. When patients had been able to build a long-term relationship with their GP, they expected that they could build a similar relationship with the AP (Fortin *et al.*, 2010). When there was a lack of AP continuity, findings demonstrated similar patient dissatisfaction with the role (Halcomb, Peters and Davies, 2013; Mahomed, John and Patterson, 2012; Phillips and Brooks, 1998). However, the majority of studies (n=10) demonstrated that APs were able to offer continued consultations with the individual. Bergman *et al.* (2013) concluded that patients associated the characteristic of continuity of care with APs.

Patients liked their name being recalled by the practitioner and preferred not having to repeat their medical history (Fortin *et al.*, 2010) (they were more confident and trusted an AP who knew their history) (Edwall and Danielson, 2008). Specific to a population with chronic diseases, continuity of the AP resulted in these patients feeling more confident in self-managing (Edwall and Danielson, 2008). Corresponding with theory area 3 'Communication' – patients considered continuity to increase person-centred interventions. Patients with chronic diseases particularly valued partnership working (Brooks *et al.*, 2001) and preferred goal setting when there was continuity of care, as they had a stronger sense of accountability (Mahomed, John and Patterson, 2012). The population with more acute conditions valued familiarity with the AP, as they felt more able to contribute in the consultation (Barratt, 2016; Luker *et al.*, 1998).

CMO configuration and hypothesis for theory area 4 – Continuity of the Individual Practitioner

One hypothesis for theory area 4 was formed, following on from the synthesis of literature relevant to the 'Continuity of the individual practitioner' (see Figure 3.11 for hypothesis 12 CMO, and Appendix 16 for another CMO relating to this hypothesis, with a different context):

(12) Having familiarity with the practitioner in the consultation increases patient acceptability of the AP role.

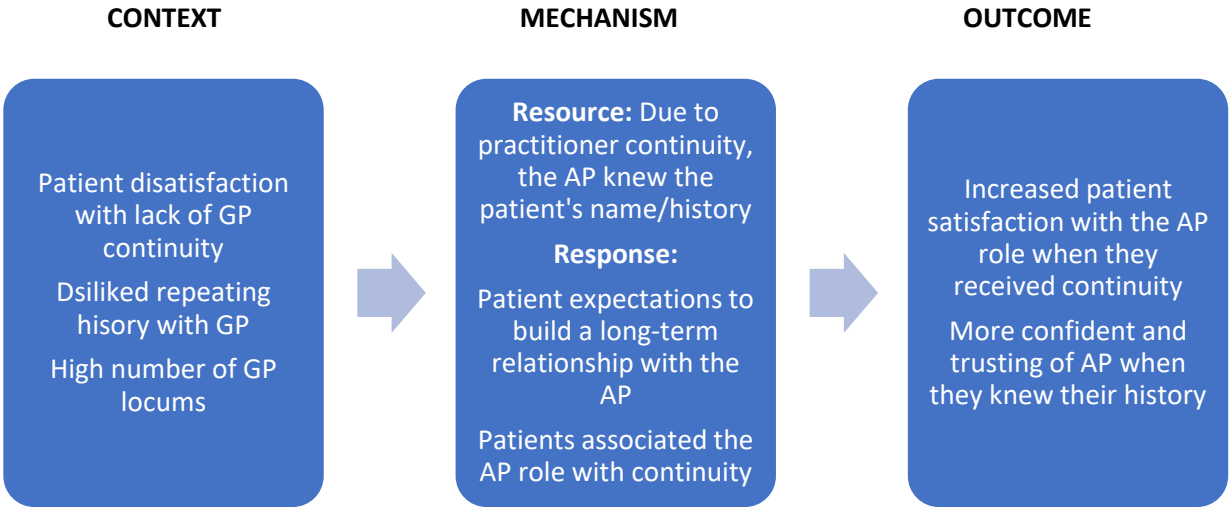


Figure 3.11- Hypothesis 12 CMO

3.10.6 Theory area 5 – Scope of practice

A further characteristic that influenced patient acceptance of the role was scope of practice. Across the studies, scope of practice was highlighted as the skills and competencies the practitioner was trained/qualified to administer. A total of 11 studies were included in the synthesis of this theory area (see Appendix 23 for their overview).

Prescribing was the most commonly cited competency across the literature for this theory area. There was a high-level of commonality with other theory areas, which were influenced by prescribing. As a result, the findings for prescribing as a theme are presented collectively, including all relevant theory areas (See 'Prescribing as a theme', p.103).

Some patients valued APs being able to carry out medical investigations (Par*ker et al*, 2012). Desborough *et al.*'s (2016) study highlighted that patients were more satisfied, and felt more enabled to manage their own health, when the AP had a greater level of scope of practice. An extended scope was not well received by all; other studies indicated that some patients perceived that APs should be limited to carrying out certain procedures (Fortin *et al.*, 2010; Caldow *et al.*, 2006). Fortin *et al.* (2010) highlighted that some patients considered APs to be assistants to doctors, carrying out orders only. A majority of study findings demonstrated a scale of acceptability of the AP's scope of practice. Coinciding with theory area 1 – 'Patient Prior Experience of Condition Management', some patients were uncomfortable with the AP scope of practice if they had limited experience of it or an associated role (Baldwin *et al.*, 1996), and they were consequently less likely to access an AP (Wasylkiw, Gould and Johnstone, 2017; Gerard *et al.*, 2014).

The way patients responded to the AP's scope of practice varied across patient groups. Parker *et al.* (2012) demonstrated that patients with chronic diseases were less accepting of APs interpreting diagnostic tests and writing new prescriptions; they also found women and older patients to be more accepting of a wider scope of practice, however, this finding is not present in any other studies. Webster *et al.* (2008) noted that self-referred patients were more confident in the AP's ability and had stronger positive attitudes about APs adopting autonomous behaviours compared with patients who were referred to the AP by the GP. Webster *et al.* (2008) did not explore what the differences between these three different groups were; therefore, no conclusions can be made regarding why there were different patient outcomes. A collective synthesis of studies for this theory area highlight that there was a lack of consistency regarding competencies and skills patients found acceptable.

CMO configuration and hypothesis for theory area 5 – Scope of practice

Synthesis for the literature on 'Scope of practice' resulted in the formation of one hypothesis:

Role more acceptable if AP offer a service that is equivalent to the GP consultation (see

Figure 3.12 - Hypothesis 13 CMO).

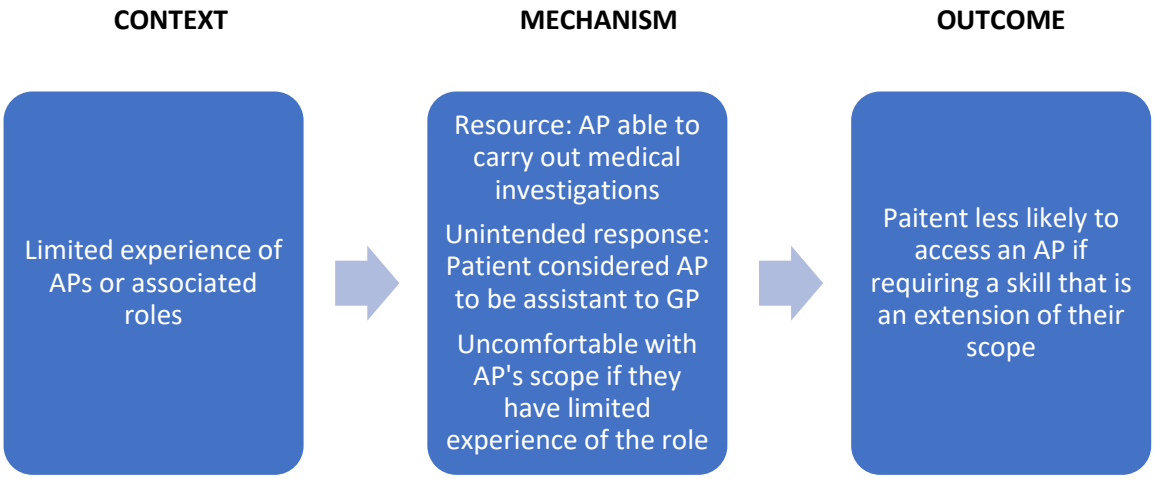


Figure 3.12 - Hypothesis 13 CMO

3.10.7 Theory area 6 – Accessibility

Accessibility relates to the quality of reaching the AP role or other services, and also the ease of obtaining these service (English Oxford Dictionaries, 2018). A total of 25 studies met this definition and were included) (see Appendix 24 for their overview).

A consistent theme across this theory area was that convenience of the AP appointment time increased the patient acceptability of the role. This convenience was demonstrated via three main concepts: on-the-spot prescriptions in one appointment; ease of making an appointment; and a reduced amount of time in the Practice.

Patients expressed a preference for being able to obtain an appointment with an AP more easily than a GP. A patient in Dhalivaal's (2007) study expressed this convenience in terms of not having to get out of bed early to make an appointment, and Caldow *et al.*'s (2006) findings mirrored this, highlighting that patients were more satisfied with arranging appointments for an AP than a GP. Baldwin *et al.* (1996) and Webster *et al.* (2008) demonstrated decreased satisfaction when appointment times were limtied to during office hours. Baldwin *et al.* (1996) found that patients wanted seven-day availability for all appointments. Furthermore, the waiting time duration while in the surgery was of importance for a patient with a chronic disease, as a reduced wait for an appointment saved their time (Williams and Jones, 2006).

There was an association between APs being able to prescribe and appointments being more convenient; this was due to patients being able to access prescriptions quicker, in fewer appointments (Bergman *et al.*, 2013; Tienlli *et al.*, 2013; Heale and Pilon, 2012; Dhalivaal, 2007; Caldow *et al.*, 2006; Williams and Jones, 2006; Brooks, Otway, Rashid, Kilty, Maggs, 2001; Kernick *et al.*, 1999) (see 'Prescribing as a theme', p.103). A similar finding was present in the Chartered Society of Physiotherapy (2016b) audit, which demonstrated patients were more satisfied with instant advice and not needing an onward physiotherapy referral. These studies demonstrate that patients may be more satisfied from an instant outcome.

Patients felt that GPs were too busy and, therefore, rushed the consultation (Barratt, 2016; Young *et al.*, 2016; Halcomb, Peters and Davies, 2013; Mahomed, John and Patterson, 2012), did not answer all their questions (Dhalivaal, 2011) and had insufficient time for adequate explanations (Luker *et al.*, 1998). This dissatisfaction with the GP appointment resulted in increased satisfaction with the AP as patients perceived that the AP had more available time for them in consultations (Williams and Jones, 2006).

Only two studies included findings on the actual length of AP consultations and how this impacted upon patient acceptability of the role (Desborough *et al.*, 2016; Roblin *et al.*, 2004). Desborough *et al.* (2016) found that satisfaction was higher and patients felt more enabled to manage their own health in consultations of 15 minutes or more than those whose consultations were from one-to-five minutes. Roblin *et al.* (2004) had similar findings; however, they found that a longer consultation length of up to 45 minutes resulted in higher patient satisfaction. In longer consultations, patients welcomed the time APs spent discussing their problems (Young *et al.*, 2016; Redsell *et al.* 2006; Williams and Jones, 2006), perceived APs to have the time to answer all their questions (Dhalivaal, 2011) and explain things clearly (Halcomb, Peters and Davies, 2013; Luker *et al.*, 1998; Reveley, 1998). These findings coincide with theory area 3 – 'Communication'. There are inconsistencies in whether patients felt they had an adequate amount of time with the AP. In a study by Webster *et al.* (2008), a patient reported that an AP rushed them, and their satisfaction was lower. However, a study by Wynne (2016) demonstrated patient satisfaction resulting from having a sufficient amount of time with the AP.

Several studies postulated that patients might have been more satisfied with the role as they perceived APs to make more time for them, rather than APs actually having more available time (Barratt, 2016; Redsell *et al.*, 2006). These studies highlighted that APs created the illusion of more time by allowing patients to ask their questions and discussing everyday issues. Shum *et al.* (2000) found that once consultation length was compensated for, patients were still more satisfied with AP appointments than GP appointments; they hypothesised that this was due to the practitioner's style of communication. However, two studies demonstrated that patients had no preference for the length of consultations (Gerard *et al.*, 2014; Tinell *et al.*, 2013), as such, there is a lack of consistency in the findings.

Patient dissatisfaction with increased GP waiting times resulting in an increased acceptability of AP consultations when there was a reduced wait (Young *et al.*, 2016; Bergman *et al.*, 2013; Halcomb, Peters and Davies, 2013; Heale and Pilon, 2012; Perry, Thurston, Killey and Miller, 2005; Kernick *et al.*, 1999; Reveley, 1998; Myers, Lenci and Sheldon, 1997; Langer, 1995). Bergman *et al.* (2013) found that patients associated increased availability with the AP role and patients felt calmer if they could access the AP when needed (Edwall and Danielson, 2008), and were reassured about their condition earlier.

Underpinning the patient acceptability of the AP role was the expectation that AP consultations could free up GP consultations for more 'serious' conditions (Young *et al.*, 2016; Brooks, *et al.*, 2001; Kernick *et al.*, 1999; Luker *et al.*, 1999) . This is supported by theory area 2 - the patient expectation that conditions they perceive as 'serious' will be diagnosed and treated by a GP.

CMO configuration and hypotheses for theory area 6 – Accessibility

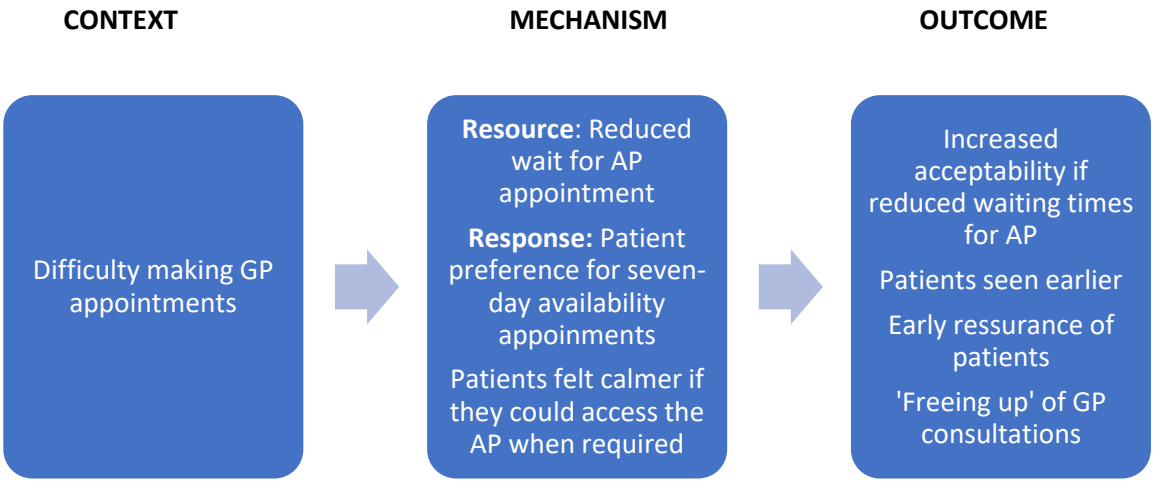
Synthesis of this theory area resulted in three hypotheses (see Figure 3.13 - Hypothesis 16 CMO and

Appendix 17 for the remaining CMOs):

(14) Increased acceptability of the role if the service is more convenient to the patient.

(15) Longer consultation lengths increase patient acceptability of the AP role.

(16) A decrease in waiting times for services increases patient acceptability of the AP role.



3.10.8 Theory area 7 – Promoting the role to patients

The final theory is the importance of promoting the AP role to patients. A total of 11 studies were included for synthesis in this theory (see Appendix 25 for their overview).

Several studies discussed this characteristic, although they highlighted the lack, and limited success of, promoting the role to patients (Wasylkiw, Gould and Johnstone, 2017; Barratt, 2016; Maul *et al.*, 2015; Caldow *et al.*, 2006; Reveley, 1998; Baldwin *et al.*, 1996). Findings suggest an insufficient patient understanding of the AP role and patients had concerns that introducing a self-referral role without public education could result in an influx of referrals and an increased demand (Webster *et al.*, 2008; Williams and Jones, 2006). The information that patients required to increase their understanding of the role included: the AP's qualifications (Reveley, 1998; Baldwin *et al.*, 1996) and training (Caldow *et al.*, 2006; Reveley, 1998;); how to access the role; what the role can offer and to whom (Webster *et al.*, 2008; Chapple *et al.*, 2000); and the AP's specialist skills (Caldow *et al.*, 2006; Chapple *et al.*, 2000). Patient education is also required on the team-based approach – explaining to patients that doctors and APs can all be involved in their care if necessary – however, the AP is capable of working autonomously in many instances (Maul *et al.*, 2015). Chapple *et al.* (2000) underlined that confusion occurred due to how the role was explained, as some patients mistook the AP to be a GP and forgot the clinic was AP-led on account of the suggestion that an AP was similar to a GP.

Studies explicitly stating the methods of how to promote the role to patients were limited, but methods included information leaflets, a website, a notice board indicating staff names and roles, and a photo gallery of staff (Barratt, 2016). Nonetheless, Barratt (2016) concluded that these methods had not been successful in achieving patient understanding of the role. Maul *et al.* (2015) set out potential strategies including: introducing the role via multimedia such as information leaflets; patient testimonials; and an introductory letter explaining the nature of the multi-disciplinary team. However, these methods were postulated by the study and not based on evidence from patient views. Baldwin *et al.*'s (1996) patient interviews demonstrated that they believed word-of-mouth would be an effective means to increase role understanding, and patients suggested asking church ministers to speak about the role and holding town meetings. It must be recognised that this study was undertaken in a mid-western state in the United States of America; this context decreases the transferability of the results to a diverse United Kingdom, with many religious denominations, and an increasingly secular population.

Maul *et al.* (2015) suggested that introductory letters could be effective, a hypothesis that is supported by Chapple *et al.* (2000), where a letter sent to patient homes resulted in some patients understanding the AP as a more extensively qualified member of the nursing team. Patients stated that they felt newspapers and posters in businesses would be an appropriate method to raise role awareness (Baldwin *et al.*, 1996). Several of these methods were implemented in two studies which demonstrated the most effective strategy to raise public awareness was word-of-mouth or local press (Webster *et al.*, 2008; Chapple *et al.*, 2000); poster displays were less effective (Webster et al, 2008). Webster *et al.* (2008) concluded that the success of these methods are reliant on patients having some contact with other healthcare services to gain information, as members of the public who rarely access healthcare providers may be unaware of the role. Webster *et al.* (2008) recommended utilising modern marketing strategies, although they did not elucidate what these strategies may be. Despite studies providing a limited amount of evidence on patient views of methods of role promotion, discussions with the project's Patient Partner have stressed that role promotion is an essential component of acceptability, in particular, the importance of peer validation.

Although there is a lack of formal strategy for promoting the role, findings do demonstrate that members of the Practice team may play a significant part (Chapple *et al.*, 2000; Cook *et al.*, 2014; Desborough *et al.*, 2016; Halcomb, Peters and Davies, 2013; Fortin *et al.*, 2010; Webster *et al.*, 2008). The role of the Practice Receptionist staff was particularly emphasised, with several studies demonstrating how they were currently working, or how they could potentially work. For instance, Receptionists were indicating to patients in one study that they were able to see an AP (Barratt, 2016) although they were not in another study (Halcomb, Peters and Davies, 2013). Desborough *et al.* (2016) concluded that Receptionists could have a positive effect on patient views of the AP role, by highlighting to patients that they are able to access the same individual AP (coinciding with theory area 4 – 'Continuity of the Individual Practitioner'). It should be highlighted that this conclusion is not based on patient data directly, but the claims are postulated by the study. Although patients did not discuss the Receptionist in promoting the AP role, they did discuss the GP raising role awareness (Maul *et al.*, 2015; Webster *et al.*, 2008). Several studies concluded that the GP and AP working collaboratively could ensure patient understanding of the role (Fortin *et al.*, 2010; Webster *et al.*, 2008).

CMO configuration and hypotheses for theory area 7 – Promoting the AP role to patients

A total of three hypotheses were formed for theory area 7 (see Figure 3.14 - Hypothesis 18 CMO and Appendix 18 for the remaining CMOs):

(17) Peer validation influences patient acceptability of the AP role.

(18) A greater understanding of the AP role increases patient acceptability of the role.

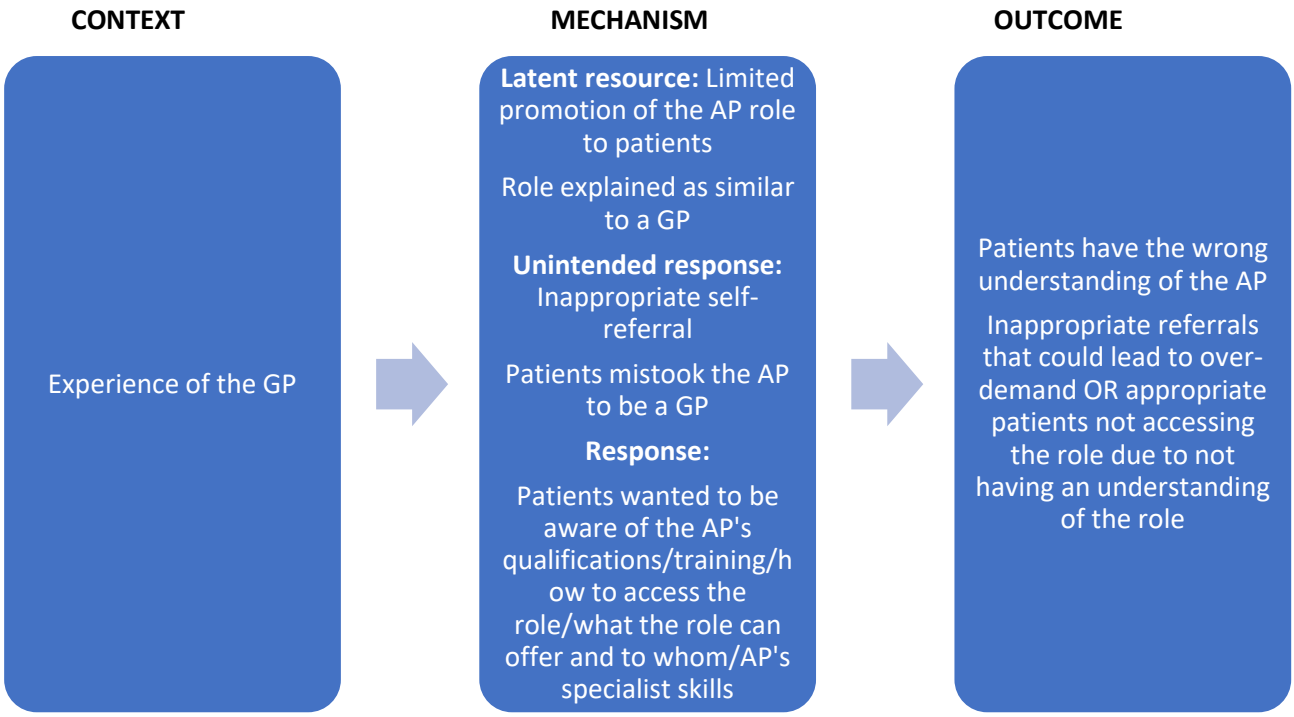


Figure 3.14 - Hypothesis 18 CMO

(19) GP practice staff validation increases patient acceptability of the AP role.

3.10.9 Novel Theory Area 8 – Professional hierarchy

The previous theory areas were purposively searched for and populated as a result of the initial scoping review. Whilst deductively searching out these theories, a new theory area emerged: 'Professional hierarchy'. As this theory area was not part of the theory framework and, therefore, not purposefully searched for, it is based upon three NP studies which highlighted the theory area (see Appendix 26 for their overview).

Findings demonstrated that when patients regarded the AP to have a high-level of knowledge, they occasionally forgot they were a nurse and mistook them for a doctor (Chapple *et al.*, 2000). Alternatively, patients undermined the AP's high-level of knowledge, for example, one patient stated: *"I know nurses have very good knowledge as well, but obviously there's a reason why a nurse is a nurse and a doctor is a doctor"* (Barratt, 2016 p.178). Corresponding with these findings, Redsell *et al.* (2006) concluded that patients had internalised the traditional roles and boundaries of Primary Care as a result of existing hierarchal boundaries between nurses and GPs in the practices studied. This undertone of hierarchy is highlighted in patients using terminology that they attributed to the GP, such as 'responsibility', 'authority' and 'expert' (Redsell *et al.*, 2006, p.176). This professional dominance may be detrimental to the patient acceptability of the AP role, however, currently there is limited evidence in this theory area and the hypothesis may evolve.

CMO configuration for theory area 8 – Professional hierarchy

There is insufficient data to form a hypothesis, however, an incomplete CMO can be formed (see Figure 3.15).

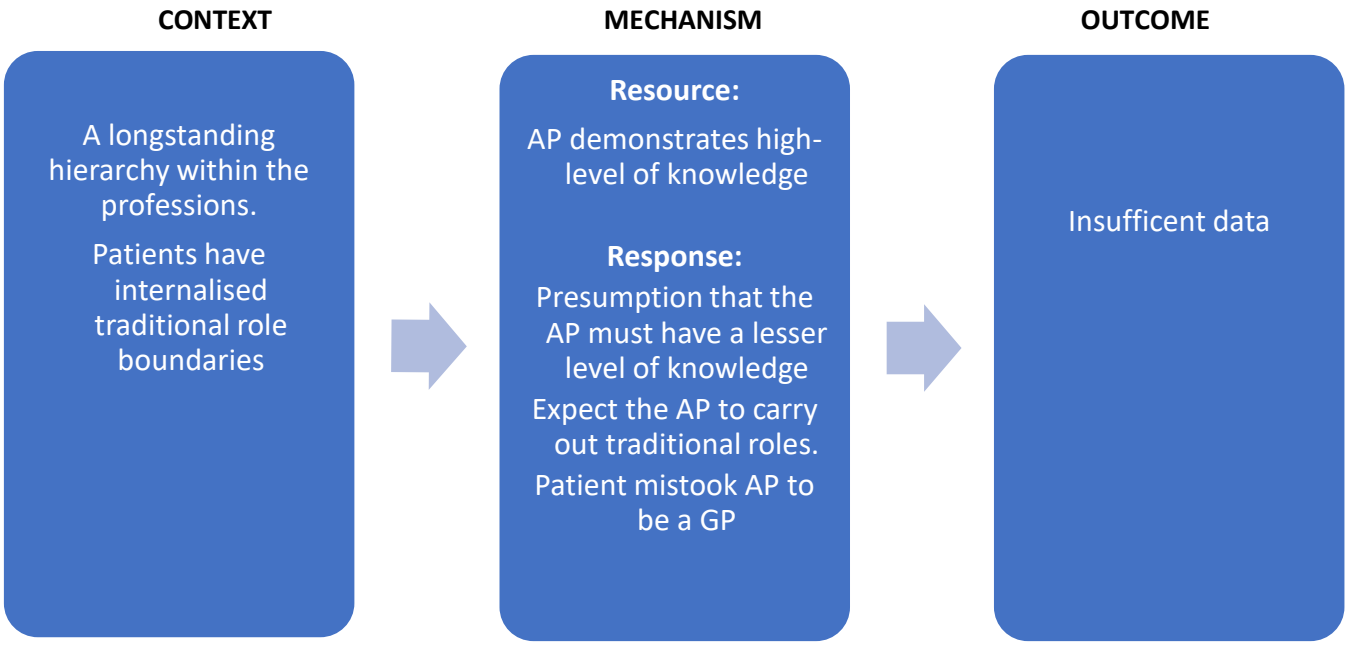


Figure 3.15 - Hierarchy CMO

3.10.10 Prescribing as a theme

Prescribing was a theme that was cited in 12 studies (see Appendix 27 for their overview). The theme was relevant to seven of eight theory areas, and the theme was frequently intertwined across theory areas (see Table 3.2 overleaf for clarity on which aspects of prescribing applied to which theory areas). One example of a CMO for the prescribing theme is provided (see Figure 3.16), see Appendix 19 for the remaining prescrbing CMOs.

Perceived severity of condition had an impact on patient expectations of AP prescribing. Patients expected APs to prescribe for simple problems (Brooks *et al.*, 2001), for instance, flu, antibiotics or inhalers (Caldow, *et al.*, 2006). Although patients were satisfied with the non-medical prescribing, there was still an expectation that the AP would discuss the prescription with a GP to reduce any risk (Bergman *et al.*, 2013). Parker *et al.*'s (2012) findings differed from the above, as patients only found it acceptable for GPs to initiate prescriptions, however, in this study the sample was a population with chronic diseases.

Several studies demonstrated that patients expected the AP to prescribe medication in the same way as their GP (Barratt, 2016; Bergman *et al.*, 2013; Redsell *et al.*, 2007). When the AP was able to prescribe, patients valued the ability to get their prescriptions when they wanted them (Brooks *et al.,* 2001) (Luker, 1998) and in only one appointment (Heale and Pilon, 2012; Dhalivaal, 2011; Williams and Jones, 2006). Conversely, when the AP was unable to prescribe, patients identified it as an issue that the AP required the GP's signature for their prescription (Kernick *et al.*, 1999). Patients liked that a prescribing AP did not require sign-off by a GP and, therefore, did not increase the patient's wait (Williams and Jones, 2006). Patients perceived receiving their prescription from an AP to be easier than a GP prescribing (Tinelli *et al.,* 2013; Dhalivaal, 2007; Brooks *et al.,* 2001). There was also the patient perception that a prescribing AP saves doctors' time (Bergman *et al.*, 2013).

Prescribing APs were more likely to provide explanations on how the patient could incorporate medicines into their routine, whereas GPs were more likely to inform the patient on the physiological effects of drugs (Tinelli *et al.,* 2013; Brooks, *et al.*, 2001). Moreover, patients perceived that the AP recalling them from a previous consultation resulted in prescribing that was more personal to the patient (Luker *et al.*, 1998). It may be that continuity of the individual is conducive to person-centred prescribing.

APs prescribing was not well received by all; several studies showed that patients were accepting of repeat prescription by APs, but less accepting for new prescriptions (Parker *et al.*, 2012; Caldow *et al.*, 2006). Some patients believed APs should be limited to prescribing *'simple things'* (Brooks *et al.* 2001, p.36), and that they may need to liaise with the GP regarding prescribing (Caldow *et al.*, 2006). Patients felt that APs should be limited in what they can prescribe due to their concerns regarding the AP's academic ability and qualifications (Dhalivaal, 2007; Caldow *et al.*, 2006). To increase patient acceptability of a prescribing AP, patients wanted to be aware of the AP's competencies and qualifications (Dhalivaal, 2007; Brooks *et al.* 2001, 1998).

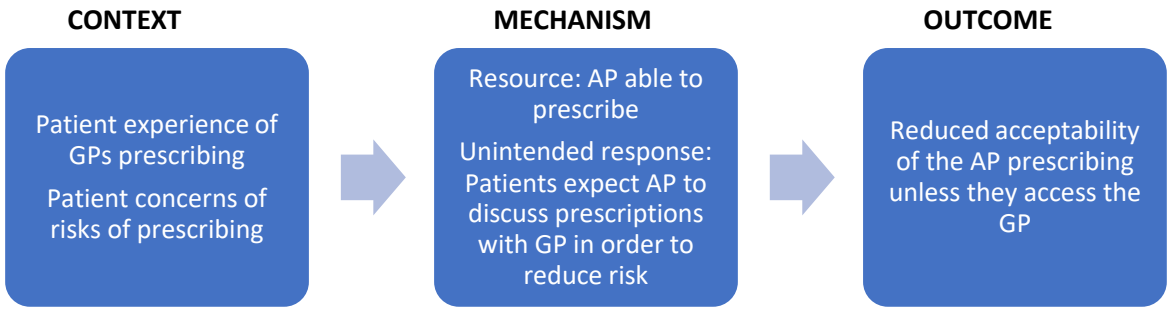


Figure 3.16 - Prescribing CMO

Table 3.2 - Prescribing across theory areas

<table>
<tr><th>Theory Area 1 Experience</th><th>Theory 2 Expectations</th><th>Theory 3 Communication</th><th>Theory 4 Continuity</th><th>Theory 5 Scope of Practice</th><th>Theory 6 Accessibility</th><th>Theory 7 Role Promotion</th></tr>
<tr><td rowspan="2">Limited experience of a prescribing AP decreases the likelihood of accessing a prescribing AP in Primary Care</td><td>Expectation APs initiate prescriptions only</td><td rowspan="2">Person-centred prescribing</td><td rowspan="2">Recalling the patient when the AP prescribed</td><td rowspan="5">AP prescribing increases the acceptability of the AP role for some patients</td><td rowspan="2">Patients valued the convenience of a prescribing AP</td><td rowspan="5">To increase acceptance of prescribing APs, patients want information on AP qualifications and training</td></tr>
<tr><td>Expectation APs prescribe for less severe conditions</td></tr>
<tr><td>Experience of a GP prescribing</td><td>Expectation APs discuss prescription with GP</td><td colspan="2" rowspan="3">AP recalling the patient resulted in prescribing being more personal to the patient</td></tr>
<tr><td colspan="2" rowspan="3">Expectation APs should prescribe due to experience of GPs prescribing</td><td>Patients valued the reduced wait for their prescription, as they could get an AP appointment sooner</td></tr>
<tr><td>Patients perceived APs prescribing saved GP’s time and AP’s time</td></tr>
<tr><td>Patients perceived that a prescribing AP saved the patient’s time</td></tr>
<tr><td colspan="7">Patients expected that APs should have their prescribing competencies limited to ‘simple things’ due to concerns of the AP’s academic ability (T2, T5 and T7)</td></tr>
</table>

Key: blue highlight – prescribing theme across two or more theory area

3.10.11 Theory area overlap

There was a high level of theory area overlap where themes in one theory area were also present in another theory area. The table below demonstrates these connections, highlighting 'Scope of practice' as having the most frequent overlaps (n=6) and 'Continuity' having the least (n=3) (see Table 3.3). Connections of the themes themselves are presented in Appendix 28 and theory overlap diagrams are presented in Appendix 29-Appendix 35).

Table 3.3 - Theory area overlap

Theory area and its total number of other theory area overlaps		**Overlap**						
		Experience	Expectation	Commui-cation	Continuity	Scope of practice	Accessibilit-y	Promotin-g the FCP role
Experience	5		×	×	×	×		
Expectations	4	×				×	×	×
Communicat-ion	4	×			×	×	×	×
Continuity	3	×		×		×		×
Scope of Practice	6	×	×	×	×		×	×
Accessibility	5		×	×		×		×
Promoting the role	4		×		×	×	×	

3.11 Discussion

The number of Advanced Practitioners in Primary Care is increasing, in response to the growing demand for services (NHSE, 2017a). The primary purpose of this review was to explore the literature on patient views of all HCPs in an AP role, in Primary Care. In line with realist principles, this review aimed to: identify and question theories regarding patient acceptability of the AP role; compare and interrogate rival theories; apply the theories to other relevant health settings; and compare theories to what is happening in Primary Care currently (Pawson *et al.*, 2005).

This section will discuss the significance of the review's findings, referring to other relevant literature, to provide insight into how patient acceptability of the AP role may be increased. When synthesising the theory areas, it became evident that many of the theory areas were interconnected, with themes that overlapped across several theory areas. The theory areas that were most connected to other theory areas are presented first. As there was a high level of overlap between the review and evaluation, there are occasions when the reader is signposted to read the evaluation's discussion. This reduced repetition and was necessary due to the thesis word-count constraints.

'Scope of practice' had the greatest number of overlaps, particularly the theme of 'Prescribing', which was present in seven theory areas and was therefore presented individually. The CSP states: *"Physiotherapy roles develop in response to local and national healthcare needs and service user preferences."* (Chartered Society of Physiotherapy, 2017, p.13). There must be a consideration of the infrastructure that is necessary to support advanced practice (see 'Ethicality', p.283 for discussion). In a debate around the future of the AP role, it was argued that only when it is understood what the demand for advanced practice is, will it then be possible to adopt a consistent approach to the service (Nadaf, 2018). This is reflected in the Multi-Professional Framework for Advanced Practitioners, in which broad principles for a consistent and sustainable approach to advanced practice are outlined; however, the Framework underlines that role development must match the local population's needs (NHSE, 2017a).

As the theory area 'Prior experience of condition management' highlighted, patient views on prescribing were shaped by their experience of GPs prescribing for their MSKD. However, wider evidence suggests that patients may be on medications inappropriately, and instead APs may have a role to play in de-prescribing (see 'Perceived Effectiveness', p.287 for discussion). Taking into consideration the inconsistency in this review's findings,

alongside the wider evidence, it cannot be stated that prescribing is a skill required by all APs. There needs to be an understanding of what Practice contexts would indicate prescribing to be a suitable capability for that Practice's AP.

The theory area 'Accessibility' underlines the consideration of whether the AP role will be able to meet patient expectations in the future. Waiting times for a consultation was a contributing factor towards patient acceptance of the role; increased demand from a new patient group could counteract this perceived advantage (for a discussion see 'Affective Attitude', p.276).

The review highlighted the importance of the individual patient's expectations in the theory area 'Patient expectations of condition management'; the most frequent theme being patient perception of a serious condition. The literature highlighted how severity of condition impacted upon: whom patients felt they should see (Halcomb, Peters and Davies, 2013; Mahomed, John and Patterson, 2012; Parker *et al.*, 2012; Barratt, 2005; Caldow *et al.*, 2006; The EROS Project Team., 1999; Luker *et al.*, 1998; Myers, 1997); patient expectations of the AP prescribing (theory area 5 – 'Scope of Practice'); their expectations of APs freeing up GP appointments for 'serious' conditions (theory area 6 – 'Accessibility') (Young *et al.*, 2016; Brooks, *et al.*, 2001; Kernick *et al.*, 1999; Luker *et al.*, 1998).

Findings demonstrated that inherent to many patient expectations were the influence of 'Prior patient experience of their condition management' – theory area 1 (Bergman *et al.*, 2013; Redsell *et al.*, 2007; Gerard *et al.*, 2014; Chapple *et al.*, 2000; Baldwin *et al.*, 1996; Wasylkiw, Gould and Johnstone, 2017; Chartered Society of Physiotherapy, 2017a). Patients frequently felt dissatisfied with their GPs due to, for instance, previous experiences of the GP not paying attention to the patient (theory area 3 – 'Communication') (Gerard *et al.*, 2014). The theory area 'Communication' hypothesises that dissatisfaction with GPs stems from patients' experience of a one-sided conversation with a GP who provided limited information, which can be offset by the more informative, and more person-centred AP (see communication section 3.10.4 for studies). The Five Year Forward View (FYFV) (NHSE, 2014) underlined that: *"many (but not all) people wish to be more informed and involved with their own care, challenging the traditional divide between patients and professionals"* (p.6). This review found that APs were informative, offered alternative treatments to prescribing, and discussed the patients' condition so that they could make an informed decision regarding their health.

Wider evidence exploring what matters to patients in musculoskeletal consultations demonstrated that patients valued person-centred consultations in which they were listened to, coinciding with this review's findings (Stenner, Palmer and Hammond, 2018). Stenner and Palmer (2017) concluded a finding not present in this review, that patients with MSKDs found it challenging to formulate questions and topics of importance. Practitioners must explain the patients' medical condition to them so that patients will be able to vocalise their concerns and have an active role in their care. Stenner and Palmer's (2017) findings highlight a potential context that influences communication outcomes – patient inability to tell the practitioner what is important to them. Nevertheless, this evidence is based in a Secondary Care setting; identical communication in a Primary Care setting does not necessarily indicate patient acceptance of the AP role.

The majority of theory areas were in agreement, but there were some inconsistent findings regarding 'Accessibility' and 'Communication'. It was unclear as to whether the length of the consultation or the way the FCP communicated was more important to the patient (see 'Ethicality', p.283 for discussion).

'Promoting the AP Role to Patients'– encompassed four other theory areas within its themes. The role of Receptionists in increasing patient understanding of the role was highlighted, in particular, how they can promote the advantages of the role such as receiving continuity of care (Barratt, 2016; Desborough *et al.*, 2016). However, research has shown that Receptionists had little time, information or training to prioritise patients as was expected of them (Hammond *et al.*, 2013) (see 'Affective Attitude', p.276).

'Continuity of the individual practitioner' highlighted the potential for APs to fill a GP continuity void. This review found patients had limited relationship continuity with the GP, which is supported by wider evidence, as between 2012 and 2017 there has been a decrease of GP continuity by 27.5% (Levene *et al.*, 2018). The expanding AP workforce offers alternative HCPs that patients may be able to access consistently.

The theory area that manifested as an undercurrent in the literature was 'Professional hierarchy', the idea that some professionals, namely GPs, are considered to be more superior in knowledge and skills due to their title. There is a vast amount of literature on hierarchy within healthcare teams (Braithwaite and Westbrook, 2005; Green *et al.*, 2017; Nugus *et al.*, 2010; Strauss *et al.*, 1963; Swinglehurst *et al.*, 2011). Strauss *et al.* (1963) argued for a *'negotiated order'* between professions; in the relatively structured environment of a workplace. There are role expectations placed upon new members of

staff through this negotiated order, and these constitute power over them, of which they may not be aware of (Strauss *et al.*, 1963). Nugus *et al.* (2010) explored negotiated order in healthcare and highlighted that Allied Health Professionals (AHPs) (see glossary) and nurses had attitudes that were suggesting that the doctor had the final clinical say. To improve inter-professional relationships, the environment had to allow staff to navigate which particular roles have maximum impact for patients (Nugus *et al.*, 2010). There is an argument that APs deserve respect and recognition for what they are doing (Nadaf, 2018). However, the FCP role has been implemented at a range of different NHS Bandings; CSP case studies in England have highlighted Band 7s in the role (Chartered Society of Physiotherapy, 2016b), but also Band 8as and 6s acting as a first contact in walk in centres (Chartered Society of Physiotherapy, 2016c). Since the case studies were undertaken, a publication from the CSP (2018) has provided guidance that FCPs should be Band 7 or 8s; this is to ensure the practitioner is able to demonstrate a high-level of independence, the ability to order examinations, and to refer on to specialist services. The CSP acknowledged that grading will be dependent on the individual's skill-mix (Chartered Society of Physiotherapy, 2018a).

The review's secondary purpose was to inform a realist evaluation, entitled: 'Patient acceptability of the physiotherapy First Contact Practitioner role in Primary Care: A realist evaluation'; which specifically explored the physiotherapy AP role. Research proposals for realist evaluations should include initial theories that have been informed by strategies such as realist reviews and expert panels (Manzano, 2016). Identification of contexts, mechanisms and outcomes from this realist review informed the realist evaluation's topic guides.

This review was inclusive of literature from all professions practising as an AP in Primary Care, this was essential due to: the limited amount of research into the physiotherapy role specifically; the greater level of literature on the more established NP role; and the multiple parallels between the nursing profession and physiotherapy profession that allow for transferability of findings. It is vital to understand the similarities and differences between physiotherapists and nurses for transference only of those findings with relevance to the physiotherapy AP role.

The similarities between the two professions begin with the evolution of the roles. From 1983 the nursing profession had a professional register in which qualifications were recognised (Thomas, 2016). Before 1987, being a member of the CSP accredited

practitioners as physiotherapists, this then changed and the qualification ceased to be recognised and was replaced by degree courses (CSP, 2017b). There was late recognition for both these professions as accredited degrees with rigorous training, education and assessment. In 1990, the first GP contract highlighted that a proportion of Primary Care services could be delivered by competent nurses (Wilson, Pearson and Hassey, 2002). Nurses were seen as potential to reduce cost, provide a solution to the national GP shortage and reduce GP workload (Wilson, Pearson and Hassey, 2002). The physiotherapy AP role in Primary Care developed after the NP role, due to a similar rationale. The demand on GPs continued to increase partly due to an increasingly aging population, the subsequent increase in chronic disease and MSKDs, and GPs leaving Practice due an overwhelming workload (Baird *et al.*, 2016; Government Office for Science, 2016). It was acknowledged that physiotherapists could reduce GP workload through managing MSKD patients (NHSE, 2014).

Owing to the similar development of both these roles, the findings from the NP role could be pertinent for the physiotherapy AP role, with the potential for the role to adopt the recommendations on raising role awareness. However, the foundation level of patient understanding might be much greater for the nursing role. For instance, there were 285,893 nurses practising in the NHS in 2017, compared to only 55,132 physiotherapists (UK registered in 2018, inclusive of physiotherapists practising outside of the NHS); as a result, a patient is more likely to come into contact with a nurse (HCPC, 2018; NHS Confederation, 2017). It is contextual differences between the professions such as these that may impact upon theory areas.

Nurses and physiotherapists have gradually been permitted the opportunity to increase their scope of practice. In 1999, NPs with appropriate training were able to undertake supplementary prescribing; this allowed them to prescribe certain medications providing that the patient had been assessed and provided with a Clinical Management Plan by an Independent Prescriber (Department of Health, 1999). In 2006, NPs were able to independently prescribe medications providing they had correct training and qualifications (Department of Health, 2005). Physiotherapists were not able to train as supplementary prescribers until 2005 – six years behind the nursing profession (Medicines and Healthcare products Regulatory Agency, 2005). In 2013 they were permitted to train as independent prescribers – seven years behind nurses already practising in this role (Department of Health, 2012). The similar skills the professions are capable of administering autonomously

results in the findings of theory area 5 – 'Scope of Practice' – being relevant across both AP nurses and physiotherapists.

The major discrepancy between physiotherapists and nurses practising these skills is that physiotherapists in a Primary Care role treat patients with MSKDs only, whereas nurses treat a range of medical conditions, and typically specialise in one area (Marsh and Dawes, 1995). The literature in theory area 2 – 'Patient Expectations of Condition Management' – highlighted what conditions patients considered *'too severe'* to be seen by an AP nurse (Maul *et al.*, 2015) (Barratt, 2016; Caldow *et al.*, 2006; Myers, 1997); however, there were no findings looking specifically at patient perceptions of severity of condition when accessing the physiotherapy AP role. Evidence exploring patients with multimorbidity and co-morbidities (see glossary) highlighted that MSKDs are frequently situated within a multimorbidity context (Duffield *et al.*, 2017). When MSKDs were included in the definition of multimorbidity, 58% of Primary Care patients met the classification, constituting 78% of GP consultations (Salisbury *et al.*, 2011). It can be postulated that the more conditions the patients have, the more likely they will consider their condition 'severe'. The evidence in this review regarding severity of condition was based entirely on the AP nursing role, who do not traditionally treat MSKDs. Patients with MSKDs – which are associated with a vast number of long-term conditions – may therefore perceive severity of condition to be even more pivotal in their acceptability of the physiotherapy AP role (whom are MSKD experts).

Both nurses and physiotherapists have a clear focus on educating patients and encouraging self-management; as many MSKDs are long-term conditions, and NP have a role in chronic disease management. The findings of theory area 3 – 'Communication' – demonstrated NPs predominantly providing education and a high-level of information to patients. This corresponds with the Framework for Nursing, Midwifery and Care Staff which states the professional commitment for: "*Empowering and supporting individuals to improve health and self-manage care"* (NHS, 2016c, p.33). The aim of the AP physiotherapy role accords with this literature; this aim is to: *"provide information & support that empowers an individual to make an informed choice & to exercise their autonomy"* (Chartered Society of Physiotherapy, 2016d, p.28). How NPs communicate with patients is relevant to the physiotherapy role, as they possess the same core values in the delivery of care.

A realist review's aim is to explore theories, and compare contradicting theories that disagree in order to refine the programme theory (Pawson *et al.*, 2005). It is of particular interest that theory areas predominantly agreed, and did not disagree, with one another.

This may suggest the strengthening of theory areas, through the supporting of one another. However, there is no known literature on the overlap of theory areas in realist inquiries.

3.12 Chapter Summary

This chapter has hypothesised what may be influencing patient views of the AP role resulting in role acceptability/unacceptability. A realist review was carried out to form these hypotheses and this chapter outlined the methods used. The initial theory areas and their relevant literature were presented, as well as the subsequent 19 hypotheses. The discussion section highlighted other literature that may facilitate understanding of the theory areas. The key divisions between the nursing AP role and the physiotherapy AP role were discussed. These professional differences were highlighted as superficial as the historical development and core values that underpin the professions are universal to both. Therefore, it is possible to transfer the findings of this review to a study exploring the physiotherapy role exclusively.

4 Chapter 4: Study methods

4.1 Chapter Introduction

The methods used in this study will be presented in this chapter following the framework for reporting qualitative studies, as outlined by Tong, Sainsbury and Craig (2007). It will be clearly stipulated when there were deviations in methods of Practice A and B, and differences between methods for staff and patient participants.

4.2 Ethics

Ethical approval was granted by Westminster NHS Research Ethics Committee on the 6th April 2018 (REC ID: 18/LO/0037) and Health Research Authority approval was received on the 10th April 2018 (IRAS ID: 239857) (see Appendix 36 and Appendix 37).

The University of the West of England ethical approval was granted on the 13th April 2018 (HAS.18.04.145) (see Appendix 38). Ethical considerations are discussed on p.120.

4.3 Research team and reflexivity

4.3.1 Personal characteristics

The researcher (LM) was an early career researcher undertaking the project to obtain a PhD, which she started in October 2016. She graduated in July 2016 from Northumbria University with a BSc (Hons) in Physiotherapy. Consequently, she came into the research with clinical placement experience but without physiotherapy Band 5 rotations.

4.3.2 Relationship with participants

Relationships with participants were formed ahead of the interview as the researcher contacted participants at the recruitment stage. Potential participants used reply slips to express initial interest in the research, the researcher then contacted participants by telephone and discussed the research. Alternatively, several patients met the researcher in clinic whilst she carried out recruitment. The participant was made aware of the researcher undertaking the research to improve the FCP service, and for the researcher's personal goal of obtaining a PhD. There were no biases or assumptions reported to the participant.

4.4 Theoretical framework

The theoretical framework underpinning the study was realist evaluation and qualitative realist interviews were utilised as the method of data collection (see p.64 for the rationale for this methodology and method).

4.5 Participant selection

4.5.1 Practice recruitment

Two Practices were recruited via two different routes. Practice A was in Somerset and Practice B was in West Yorkshire. Practice A was recruited via network links of a member of the research team who was able to introduce the researcher to one of the Practice Partners. The Practice Partner identified three GP Practices in that region who may have been appropriate to take part, provided Practices' contact details and consented to the researcher contacting them. The researcher provided Practices with a study protocol, leading to two Practices withdrawing interest, as they did not have the capacity to take part. The remaining Practice was identified as being appropriate, they expressed the capacity to take part and the Management Partner consented to the Practice's participation.

Practice B was recruited using an alternative method. The researcher contacted several CCGs via email, and made inquiries on Practices that had FCPs. The researcher then contacted appropriate Practices via email, outlined the research and invited them to consider participating. Alternatively, the CCG contacted Practices on the researcher's behalf and connected them via email correspondence. A CCG in West Yorkshire expressed an interest in the research and granted the project approval with the Research and Development department. The researcher discussed the research with the Chief Executive Officer (CEO) and she consented to the Practice's participation.

4.5.2 Sampling and Recruitment

Purposeful sampling was adopted to sample staff and patient participants; it aims to select information rich cases based on their ability to answer the research questions (Emmel, 2013). In purposeful sampling, theory is considered before data collection when selecting the sample, and not throughout data collection – as in theoretical sampling (Glaser and Strauss, 1967). Patton (2015) highlighted the pragmatism of purposeful sampling as a strategy that utilises available resources and operates within constraints. As there was only one primary researcher with time limitations, this pragmatic sampling method was adopted.

4.5.2.1 Staff recruitment

Recruitment of both patient and staff participants were conducted simultaneously. Several different methods were adopted to recruit participants. However, inherent to all methods was the circulating of staff or patient information booklets (see Appendix 39 and Appendix 40).

The booklet signposted staff to contact the Principal Investigator or speak to their Practice Manager if they were interested in participating. Staff participants were recruited via two methods: through the Practice Manager inviting them to participate through circulation of the staff information booklet via email; or through another member of staff, who had already been recruited, sharing the information booklet via email.

4.5.2.2 Staff participant selection criteria

In line with realist methodological underpinnings, a range of practitioners were recruited to gain different insights into the FCP role (Manzano, 2016). The following professionals were recruited in each Practice: a Medical Receptionist; the Management Partner; all practising FCPs; a General Practitioner.

4.5.2.3 Patient sample size

It was estimated that data saturation could be achieved with between 4-8 patient interviews per Practice site; thus, 8-16 between the Practices. This estimate was formed on the basis of the contexts identified in the realist review, including patients experiencing HCP roles, patient experience of continuity of HCPs and the type of condition – chronic or acute.

Traditional qualitative studies sample use the principle of theoretical saturation, ceasing data collection if no novel themes are arising (Patton, 2015). This study implemented this principle; however, it was based on theory saturation (see section p.53 for discussion on sampling strategies in realist evaluations).

4.5.2.4 Patient recruitment

Several recruitment strategies were adopted to gain patient participants. Method one involved FCPs disseminating patient information booklets at the end of consultations (recruiting participants who had experienced the FCP role). The second method was GP dissemination of patient information booklets at the end of consultations (recruiting participants who had not experienced the FCP role)[5]. Posters were placed in the reception area of the Practice, they invited patients to pick up a patient information booklet from reception[6] (see Appendix 41).

The booklet advised patients to contact the Principal Investigator by telephone. Alternatively, patients were provided with a pre-addressed envelope in which they could

[5] This method was adopted in Practice A only. It was decided that due to the low recruitment rates, particularly from GP recruitment, that this method was ineffective.
[6] This method was adopted in Practice A only as it was reported by a member of staff that they had not been placed in the waiting area as intended.

return an enclosed reply slip that consented to them being contacted by the Principal Investigator (see Appendix 42).

4.5.2.5 Amendment to patient recruitment strategy

The initial recruitment strategies alone had limited success. In Practice A only one patient was recruited via these methods, and no patients were recruited in Practice B. Consequently, the researcher made a non-substantial ethical amendment for a new recruitment method which was accepted 13th September 2018 (see Appendix 43). The researcher disseminated patient information booklets at the end of the patient consultations and briefly explained the research. It was stressed that the patient did not have to take part to avoid coercion.

4.5.3 Patient participant selection criteria

Participants were sampled first from Practice A and then Practice B. The protocol set out a plan to follow a sampling matrix in which certain factors were to be considered when selecting patient participants (see Table 4.1).

Table 4.1 - Sampling matrix

Age	**Practice A**		**Practice B**		**Gender**
	Contact	Non-contact	Contact	Non-contact	
<64	1-2	1-2	1-2	1-2	Male 4-8
>65	1-2	1-2	1-2	1-2	Female 4-8
Secondary Criteria					
MSK condition: acute, chronic Socio-economic status					

There were difficulties in patient recruitment and time constraints of the PhD process. Consequently, any patient was recruited providing that they were willing to take part and did not meet any of the exclusion criteria (see the limitations of this, p.300) (Ritchie and Lewis, 2003).

4.5.4 Patient participants inclusion criteria and exclusion criteria

Participants were invited to take part if they: at the time had, or in the past had, a MSKD; and were over 18 years old.

Participants were not able to take part if they: did not meet the inclusion criteria; were considered to be ‘vulnerable adults’; or did not speak English.

The study is on the FCP physiotherapy role specifically; the role's speciality is MSKDs and therefore there is a requirement for the patient to have had, or currently have, a MSKD. The study was focused on the adult population and not under 18s who have a different paediatric care pathway. Patients who fell within the British Medical Association (BMA) (2011) 'vulnerable adults' classification may have had difficulty in understanding the complex methodology of a realist evaluation; therefore, it was not appropriate for this patient group to be included. It would not have been possible to have non-English speakers participating in the study due to the limited resources of a PhD project, which is a recognised limitation (see p.300).

4.5.5 Patient exclusions

4.5.5.1 Practice A

Following the change of recruitment strategy, uptake of participants increased. Seven further patients from Practice A replied that they consented to be contacted by the researcher, resulting in a total of eight responses from this Practice. Due to the pragmatics of time-constraints caused by the slow recruitment, the team decided to only interview those who had experienced the FCP role.

The study's research questions included: What is the patient understanding of the FCP role before contact? What is the patient understanding of the FCP role after contact? What aspects of the FCP model are acceptable/ unacceptable to patients?

The first question had planned to be answered through interviewing those who had not experienced the role. However, this question could be answered retrospectively by those who had experienced the role. There are limitations involved in retrospective evaluation which are fully acknowledged (see the limitations of this, p.300). The study protocol had already set out plans to interview fewer patients who had not had contact with the FCP, as experience is a key component for patients to be able to evaluate a service (Campbell, Roland and Buetow, 2000). Richer data on what made the role acceptable/unacceptable was expected from those who had experienced the role.

Two of the patient replies were excluded on account of them never experiencing the FCP role. Patient 2 was screened as appropriate, however at the beginning of the interview it became evident that she had not experienced the role and she was excluded before the interview commenced (see Figure 4.1).

4.5.5.2 Practice B

Once the new recruitment strategy was in place, there were seven patient replies in total from Practice B. One patient agreed to participate, however, he had a busy work schedule and despite a gentle reminder from the researcher, he did not ring back to arrange the interview. Another patient was hard of hearing and had difficulty understanding the researcher in the recruitment phone call. As telephone interviews became the default data collection method due to patient recruitment issues hindering data collection, this patient was excluded on grounds of the limited time of the researcher to be able to travel. There were a total of five patients recruited in Practice B (see Figure 4.1).

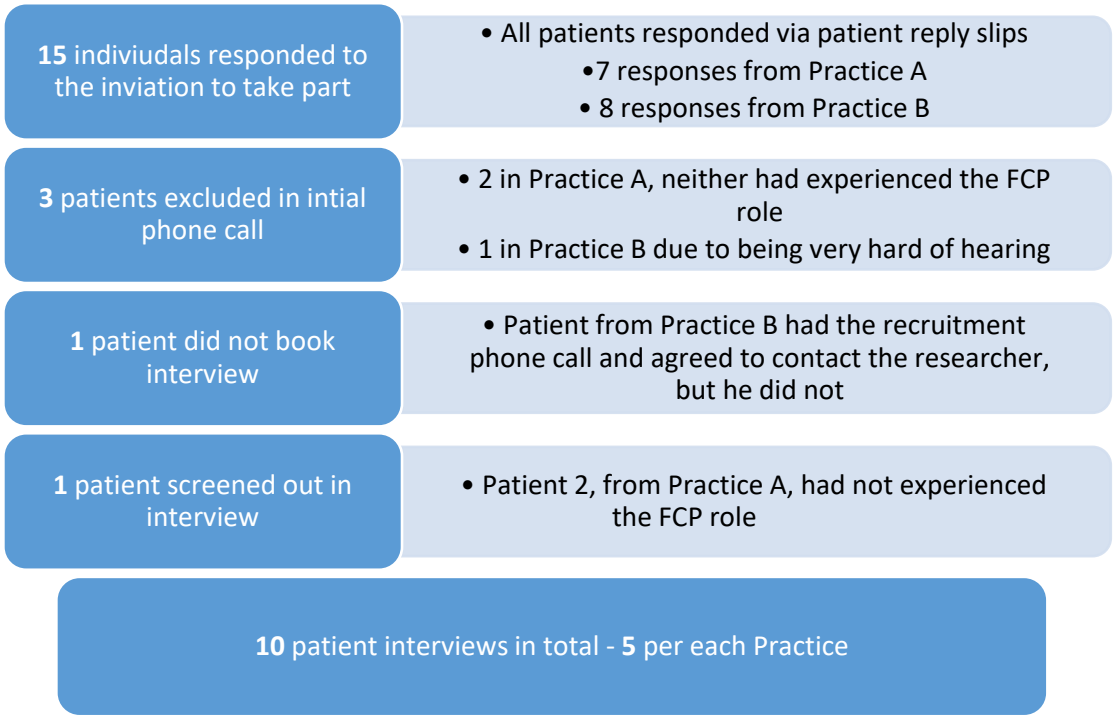


Figure 4.1 - selection process for both Practices

4.5.6 Non-participation

None of the members of staff or patients declined participation directly to the researcher. However, staff were approached by the Management Partner/Practice Manager and FCP 4 (Practice A/B respectively), thus the researcher would not have been aware of any non-participation. An unknown number of participants were invited to take part as there was no tracking of the number of leaflets that were disseminated by FCPs/taken from the waiting area. One patient did not follow through with booking an interview due to work commitments.

4.5.7 Informed consent

All participants were provided with a consent form in advance of the interview. As well as clarifying confidentiality and the right to withdraw, the consent form stated that the participant had read and understood the patient/staff information booklet (see Appendix 44/Appendix 45). The Patient Partner had validated the patient consent for its patient accessibility. A discussion before commencing the telephone interview reiterated the contents of the information booklet and invited the participant to ask any questions regarding the research. Verbal consent was gained at the beginning of each staff/patient interview and it was stressed that the participant may stop the interview at any point; this was recorded on an audio device. This ensured patient awareness of their right to withdraw at any point, a vital component of the process of gaining informed consent (Silverman, 2011; Ryen, 2004; Wiles, 2012). See p.63 for the 'Ethical considerations in qualitative studies' that underpinned this study.

4.5.7.1 Staff consent

Consent forms were circulated to staff by the researcher and the Practice Manager. Consent forms were returned to the researcher via email and saved in an encrypted OneDrive folder. Paper copies were printed, signed by the researcher and stored in a locked filling cabinet on UWE premises.

4.5.7.2 Patient consent

All patients (n=10) chose to contact the researcher via the reply slip, providing their name and contact number as initial consent of their interest in participation. The researcher contacted the potential participant to discuss the project in more detail and check their suitability for the study against the exclusion criteria. Patients were invited to ask the researcher questions that they may have about the research project. If the patient was interested in taking part, the researcher sent them a consent form via email. If they did not have access to e-mail/preferred a hard copy, they were posted a copy of the consent form and a pre-paid envelope.

4.5.8 Forming interview topic guides

Realist evaluations have a unique way of forming topic guides through testing of specific hypotheses. This study's topic guides were informed by a realist review carried out prior to the evaluation, received expert opinions from the supervision team and patient partner and had several iterations (see Figure 4.2).

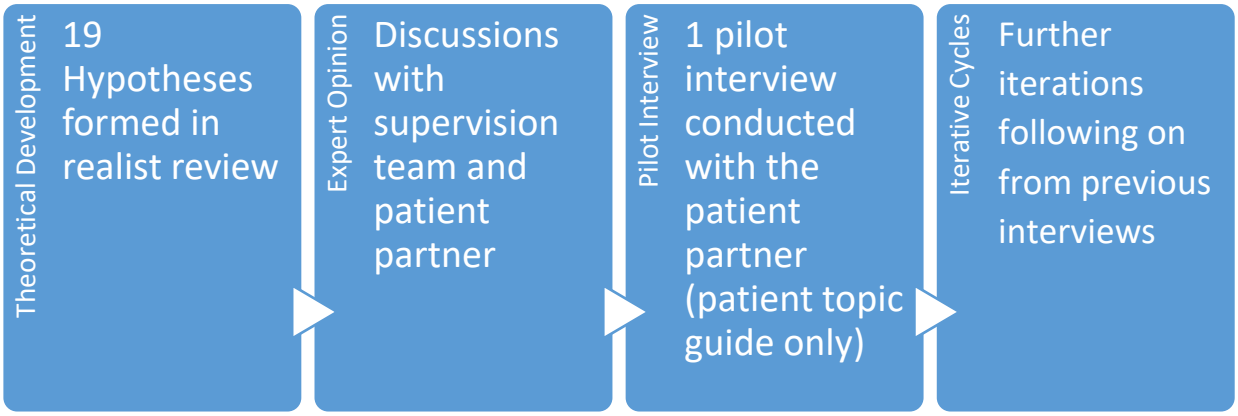


Figure 4.2 - Forming interview topic guides

4.5.8.1 Theoretical development

The interview topic guides were formed initially from the hypotheses (n=19) originating from the realist review. Hypotheses were condensed through reducing the number of questions, to the decrease the burden on the interviewee. The CMOs were integrated into questioning subtlety, in a way that would make sense to the respondent to teach them the theory (Pawson, 1996). For instance, rather than the topic guide stating *"is patient perceived severity of a condition a context?"* the question was more open: "*Have your patients with musculoskeletal disorders ever expressed not wanting to see a physiotherapist?*" The topic guide prompts for this question were: "*why do they not want to see a physiotherapist; perceived severity of condition; what conditions they consider serious."* Although the questions were in lay-person terminology, the theory was still under test.

4.5.8.2 Expert opinion

There were subtle changes to the questioning of staff topic guides. The hierarchy question was re-framed to prevent it being provocative (see Appendix 46 to Appendix 49). An introductory question regarding the participant's overview of the FCP role was added; this established the interviewee's basic understanding and opinion of the role from the offset and, as an open question, encouraged the interviewee to talk freely. The opportunity for interviewees to share their experiences is vital, as a realist interview aims to explore the stakeholders' awareness and experiences of the programme, including their reasoning

about specific propositions (Manzano, 2016). Moreover, open-ended questions allow interviewees to contextualise the theory as an experience (Pawson, 1996).

Following on from a supervision team meeting, the patient topic guide introductory section was altered through adding supplementary questions on experience of other HCPs. These questions were added with the intention of increasing the researcher's understanding of patient context that may be key foundations for mechanisms and outcomes. A broad question was added to the patient topic guide under the 'Previous experience of condition management' theory area: *"How do you feel about being able to see a physiotherapist in your GP Practice?"* The supervision team shortened lengthy questions for ease of patient understanding (see Appendix 50).

4.5.8.3 Pilot Interview

Roulston, DeMarris and Lewis (2003) advised carrying out pilot interviews for the purpose of self-reflection and critique. A pilot interview allows the researcher to prepare for challenges that they may face, which included: how they would respond to unexpected participant behaviour or disturbances during the interview; and test-running questions (Roulston, DeMarris and Lewis, 2003). A pilot interview with the Patient Partner resulted in some minor alterations of the topic guides. He highlighted that not all patients may be able to define a MSKD. The topic guide was altered to establish patient MSKD understanding at the beginning of the interview (see Appendix 51).

4.6 Interview setting

Nearly all patient and staff interviews were collected over the telephone[7]. Members of staff were in a quiet part of the Practice and patients were in their own homes. Due to the nature of telephone interviews, the researcher was not aware of any non-participants present in participants' place of interview. The researcher conducted all the interviews in her private office with no one else present in the room.

4.7 Data collection

4.7.1 Interview methods

The interview methods for patients and staff were near-identical. In all interviews there was an introduction which included:

- A reiteration of the information in the staff or patient booklet.

[7] The interview with Practice Manger 2 (Practice B) was carried out face-to-face as it was more convenient for her to arrange an approximate time of interview whilst the researcher waited in-Practice. Her interview was carried out in a private consultation room.

- An explanation that the participant was in control of the interview and could stop at any point.
- An invitation for the participant to ask any questions.

This introduction ensured participants were able to provide informed consent if they chose to continue. Interviews were recorded on an audio device and saved to an encrypted OneDrive folder and deleted off the device immediately after transference.

Throughout the interview, the researcher wrote down notes to inform further questioning on emerging theory or particular contexts, mechanisms or outcomes. As telephone interviews were the method of data collection, the researcher felt comfortable writing down questions and she did not distract the interviewee (Cachia and Millward, 2011; Sturges and Hanrahan, 2004). Notes were made after the interview as reflexive notes.

Interviews were not able to be repeated due to time constraints (see Strengths and limitations of the realist evaluation p.300).

The transcripts were not sent back to the participant for comment or correction.

4.7.1.1 Realist questioning

The interviews aimed to test theory, through the interviewee refining, confirming or refuting the theory framework, in line with realist interviewing literature (Pawson and Tilley, 1997). Open questions throughout the interviews encouraged patients to share their experiences at any point in the interview.

Differing from a traditional qualitative design, a realist evaluation is unique in its integration of theory into the questioning; this learner-teacher cycle was inherent to the line of questioning in the interviews (Pawson and Tilley, 2004). The methods used for interviewing followed the key principles from Manzano (2016): Theory Gleaning; Theory Refinement; and Theory Consolidation. These three stages influenced the thinking of the interviewer throughout the interview process, and thus shaped the questioning. The interviewer had a realist phrase sheet which they utilised as a formula for questioning (personal communication Jagosh, 2018) (see Appendix 52).

4.7.1.2 Refinement of topic guides: Iterative cycles

Interviews were transcribed by an independent transcriber. The researcher read transcripts ahead of the next interview or she carried out full coding of the transcript if there was sufficient time. The researcher annotated the transcript in NVivo; reflecting on questions that were poorly worded or misunderstood, and theory that needed to be explored in greater detail. These annotations were revised before the next interviews, and led to

adaptations of the topic guides. Revising the transcript is a method that can help the researcher improve their interview style; problems are easy to identify in a typed transcript (Morse and Field, 1996). See Appendix 53 for an iteration of the patient topic guide after analysis of Practice A's staff interviews. A majority of Practice A's data collection was carried out first[8], therefore, Practice B's topic guides were significantly influenced by the findings from Practice A.

4.7.2 Interview duration

Patient interviews were expected to last between 30 to 60 minutes and staff interviews were predicted to range from 15 to 30 minutes. Patient interviews were expected to be longer in length as more theories were related to patients.

4.8 Data analysis

Braun and Clarke (2006) state the importance of the researcher immersing themselves in the data so that they are familiar with the depth of the content. Although they stated transcribing is a useful process, they offer other approaches including repeated reading of the transcripts and reading the data in an active way through looking for meaning (Braun and Clarke, 2006). The researcher read the transcripts whilst listening to the audio and began to make annotations to actively engage with the data before coding.

A realist evaluation aims to test data against the initial programme theory (Pawson and Tilley, 2004). The analysis identified contexts, mechanisms and outcomes based on the initial programme theory identified in the realist review.

[8] Patient 4-6 were interviewed simultaneously with Practice B's data collection.

4.9 Analytical process

This section details how the analysis was carried out (see Figure 4.3); the succeeding section provides the rationale as to why triangulation and respondent validation was used in the process.

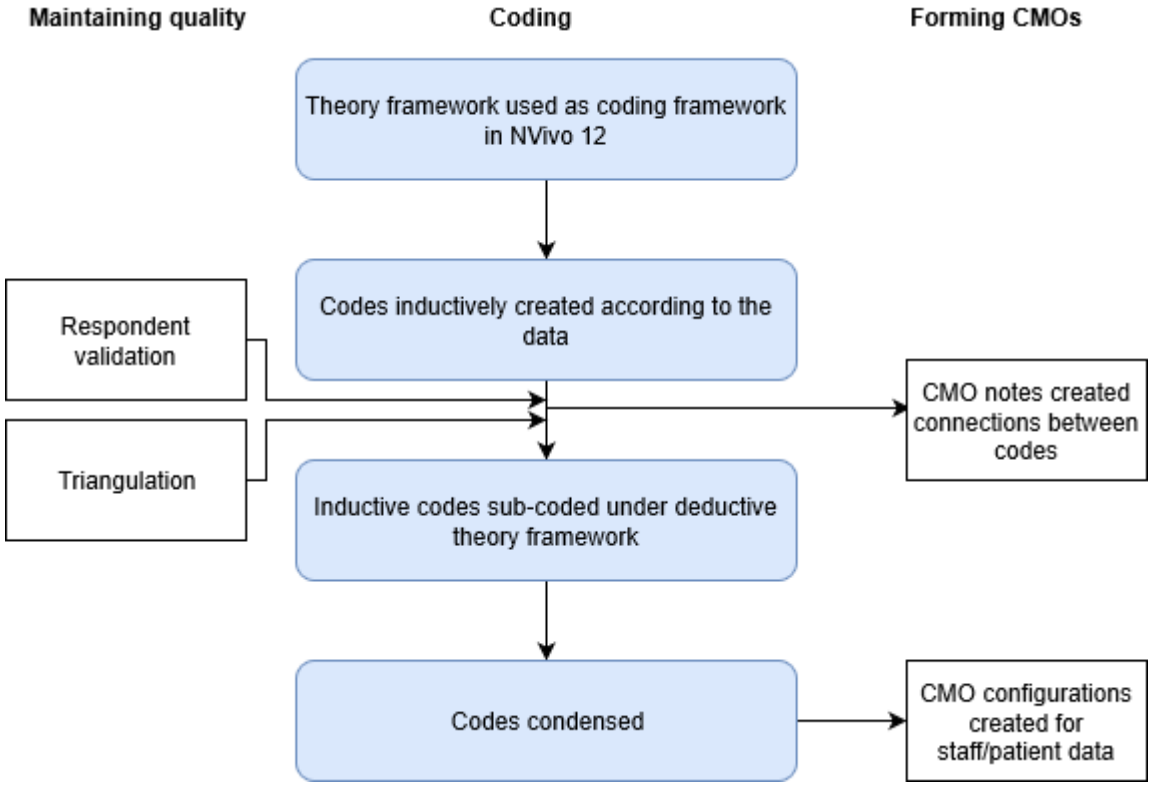


Figure 4.3- Overview of the analytical process

The transcripts were coded in a process similar to thematic analysis in the coding software NVivo 12 (Braun and Clarke, 2006). Coding was both inductive and deductive; the theory areas acted as a coding framework, in other words, there were eight coding categories (or nodes, as they are named in NVivo) to reflect the eight theory areas. Within these nodes there were sub-nodes of: 'context'; 'mechanism resource'; 'mechanism response'; and 'outcome'. Within the mechanism nodes, they were further broken down into 'latent mechanism' and 'unintended mechanism'. Outcomes were also broken down into 'unintended outcomes' (see Figure 4.4 – Example coding framework). The coding framework included 'Novel contexts', 'Novel mechanisms' and 'Novel outcomes' for new theory. There was also a node for 'Programme strategy' (see glossary) which are not synonymous with mechanisms, as they relate to intentional measures taken by programme implementers (Jagos*h et al*, 2011).

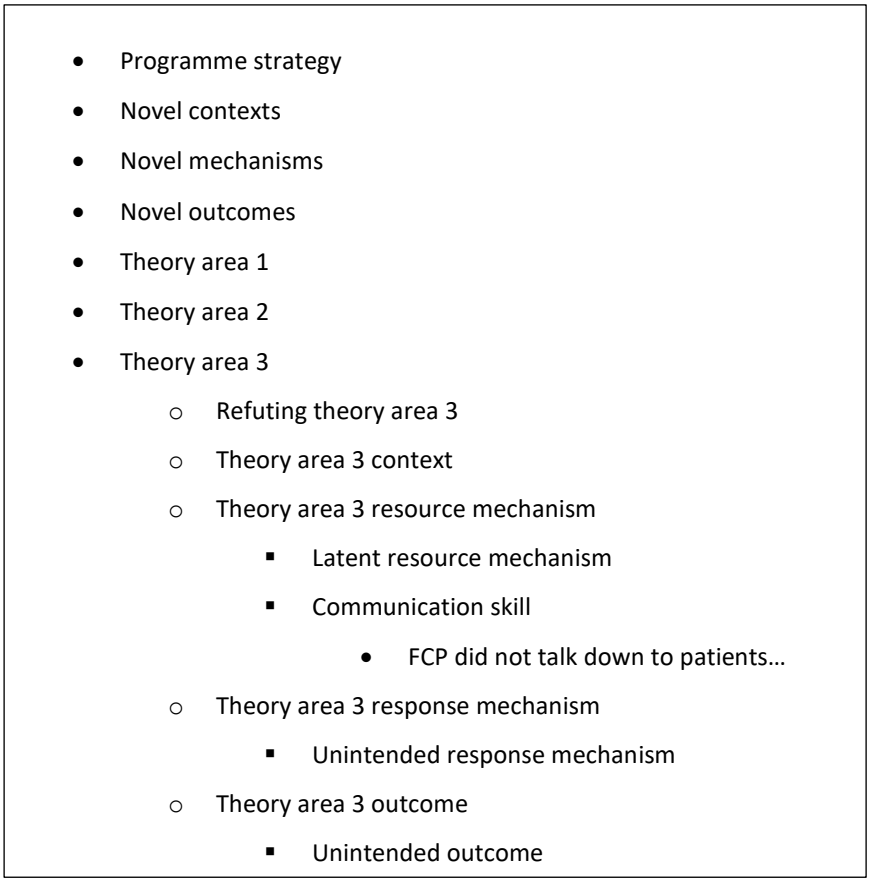


Figure 4.4 – Example coding framework

Phrases, sentences or entire paragraphs of the transcript data were then coded against this coding framework. New nodes were inductively created from the data; for instance, data regarding the FCP listening to the patient was coded deductively within resource mechanism for theory area 3 – 'Communication' – however, it also resulted in a new sub-node 'listening to the patient' (placed within the overarching theme of 'communication skill'). Further data could be coded into this node. This building of the coding framework reflects the iterative nature of a realist evaluation (Pawson and Tilley, 2004).

The coding framework could have been applied in two ways across the two Practice case study sites:

1. Cross-sectional 'code and retrieve' method.
2. In-situ, non-cross-sectional analysis (Mason, 2002).

In the former method, the researcher establishes a common system of categories that is applied across the whole data set (Mason, 2002). This method would have involved the inductive coding from the Practice being the framework for the second Practice. In the latter method, non-cross-sectional analysis data would be categorised separately as individual cases; this method was adopted for this study (Mason, 2002). The deductive

coding framework was adopted for both Practices; however, they were coded as two separate case studies. Practice A's inductive codes were not coded against Practice B's data, instead new codes were inductively created for Practice B. There were several key reasons this approach was utilised. Firstly, non-cross-sectional analysis allows the researcher to understand a complex process or narrative (Ritchie and Lewis, 2003). This complexity is applicable to a realist evaluation owing to multi-faceted CMO configurations. Secondly, Ritchie and Lewis (2003) rationalise that data should be non-cross-sectional when themes only appear in some parts of the data. Practices were located in geographically polar parts of England and they were practising with two different models for FCP access. As the context is an inherent necessity of mechanisms and outcomes, it was expected that there would be different CMO configurations (and therefore emerging themes) in each Practice and, consequently, the analysis should reflect this.

CMO notes for each interview were created simultaneously whilst coding, which connected the concepts of contexts, mechanisms and outcomes (see Appendix 55).

4.10 Triangulation of coding

Investigator triangulation of codes was undertaken; its aim is to allow for additional insights in the process of making sense of the data. There were two different methods adopted for Practice A and B, after encountering challenges in the initial method in Practice A.

4.10.1 Triangulation of coding for Practice A

In Practice A, the researcher provided two members of the research team different transcripts (two transcripts were reviewed by one reviewer, and one transcript was reviewed by the other reviewer) on NVivo, with the deductive theoretical framework. The second coders were asked to inductively code within that framework. In discussions, it was highlighted that although both the researcher and the secondary reviewers had coded the same data and placed it in the same theories, there were discrepancies between whether data was placed in context or mechanism. This is a common issue faced by realist evaluators (see p.58). Triangulation methods should be based upon methods suitable for the study's methodology (Hansen, 2006). This method of investigator triangulation was perceived as ineffective in offering insights for a realist inquiry.

4.10.2 Triangulation of coding in Practice B

In Practice B investigator triangulation was not adopted. The researcher sent two of the team members a coded NVivo document and asked them look at the coding for one

interview each. They were also provided with the supporting CMO notes for the particular transcript they were reviewing. The aim was not for them to disagree with concepts of contexts, mechanisms and outcomes. Rather, the aim was for the secondary reviewers to evaluate transparency of methods: whether they were able to identify how the researcher had coded; why they had coded the data in that way; and whether they, with their different perspectives, identified theory that the researcher had missed.

The only discrepancy that was unrelated to clarification of the researcher's meaning, was the theme of the patient perceiving Receptionists as unqualified to triage. The researcher had not identified this, and therefore added this insight to her analysis. She revisited interviews to ensure it had not been omitted previously – it had not.

4.11 Respondent validation

For respondent validation, interview participants were sent a summary of their interview, including the researcher's interpretations presented as descriptive theory in lay-person terminology.

The aim of respondent validation was to test interpretative, descriptive and theoretical validity (Maxwell, 2012). Consequently, participants were asked to highlight any potential discrepancies in the researcher's interpretation. In some cases, the researcher asked questions for clarification of meaning. On occasion, additional questions were asked to refine incomplete theory, where the researcher presented their theory; this aimed to test theoretical validity. The aim was not for the respondent to change their response, if they did attempt to do so, the researcher would have omitted this response from the analysis. On one occasion a patient participant stated they did not feel they had long enough in consultations with the GP, then in the respondent validation they changed this to they did have sufficient time. This was evidently not an incorrect interpretation but an alteration of a response and thus the researcher did not alter the data. The ethical challenges of respondent validation are discussed on p.63.

4.12 Condensing of codes

Codes were frequently repeated as similar codes were produced, consequently they were merged. Codes that had a similar theme, but were fundamentally different were placed under an overarching theme; this was the most common method of condensing codes. An example is provided by theory area 3 – resource mechanism – where some codes are put under the overarching theme of 'Communication skill' (see Figure 4.4*).* The researcher was cautious when refining codes to prevent the nodes from no longer corresponding with the

analyses' supporting CMO notes. Thus, similar language was used in merging of nodes, or the CMO notes were adapted to reflect changes. Refer to Appendix 54 for an example of an initial coding list and refined coding list.

4.13 Configuration of CMOs across the data

Coding resulted in CMO notes for each interviewee, with CMOs for all the theory areas in one document for each individual. To analyse the data and their CMOs collectively, the CMO notes needed combining. Therefore, the CMOs from each interviewee were divided up into a theory area specific document. All the interviews' CMOs were placed in the same document, for instance, all CMOs from interviews regarding 'Communication' were placed in one document.

Each theory area was then analysed separately. The phrases used in the CMO notes corresponded with the NVivo nodes. Therefore, the researcher referred to NVivo continually to find the data that supported the CMOs. Schematics for CMO configurations were then formed, linking together all the interviewee data (see Figure 4.5).

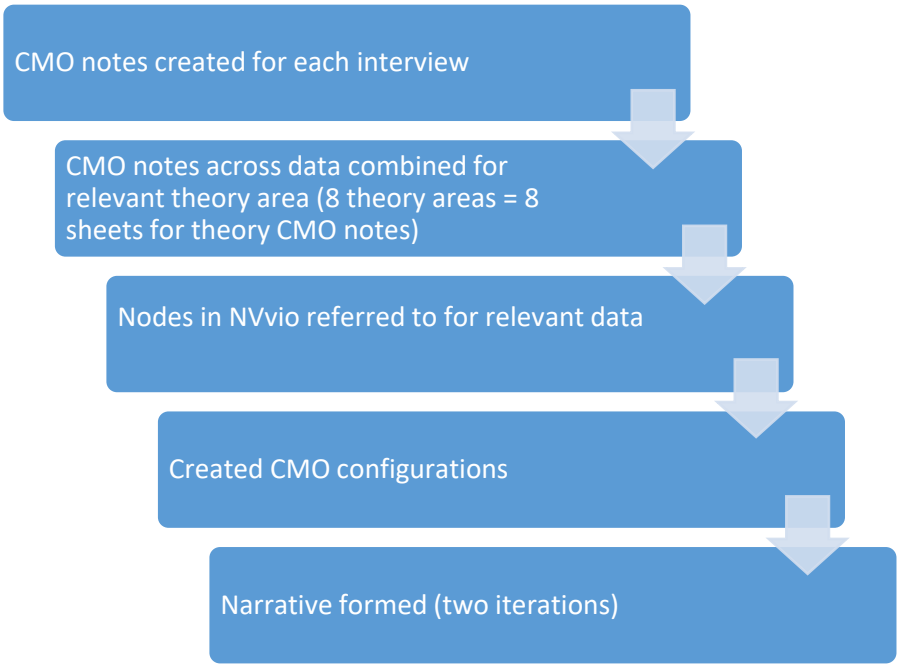


Figure 4.5 - forming CMO configurations

4.14 Initial forming of the narrative (Practice A only)

The Practices' CMO configurations and supporting data were presented as two separate narratives.

Practice A's narrative was formed first, starting with the write-up of staff as their interviews were completed prior to patient interviews. The team, including the Patient Partner, commented on this analysis. The aim of this was to offer other perspectives on the theory; a process similar to the previously discussed interpretative triangulation (see p.61) (Rothbauer, 2008). The process was also intended to highlight any structural changes needed. It resulted in the CMO configurations being broken down from a CMO configuration for each theory area into several CMO configurations for the multiple hypotheses.

The patient narrative for Practice A was then formed. It was ensured that this narrative did not simply fit around the staff narrative, as the aim of the study was to explore patient acceptability of the role, not staff acceptability. Instead, the patient analysis was used to refine theory, add to theory or challenge the theory from staff's data when appropriate.

Schematics for CMO configurations were refined through adding the analysis from patient data. New schematics from patient data were also added to the narrative, including ones that challenged the staff CMO configurations. The rationale for differences between patient and staff theory was put forward, often using retroduction (The RAMESES II Project, 2017).

The summary of the narrative for each theory area related the analysis back to whether the initial hypotheses had been supported or refuted. However, the team's input highlighted challenges in comprehension due to the complexity of having theory areas and hypotheses presented simultaneously, particularly when there was a high-level of theory overlap. It became apparent that the theory area 'Scope of practice' encompassed all other theory areas and did not have its own individual hypotheses. Consequently, inclusion of this theory area was highly repetitive.

4.15 Final narrative

The final narrative removed the theory area 'Scope of practice', so that the total number of theory areas was reduced to seven. The data from this theory area was integrated into the narrative of the overlapping theory areas.

All the initial hypotheses were presented as a collective at the end of presentation of all theory areas, which allowed overlap to be clearly discussed.

Practice B's narrative was then formed in the same manner as the second iteration of Practice A. However, as staff and patient interviews were carried out simultaneously for pragmatic reasons, the narrative was formed collectively as opposed to staff and then patient analysis. To ensure that the study met its aim as a patient acceptability study, patient data were the central evidence required to support or refute staff hypotheses.

4.16 Reflexivity

Patton (2015) advises that to acknowledge the role of the researcher in knowledge creation, there should be a report that includes information about the researcher(s). Berg (2011) advises that these reflective accounts should be in first person, as the researcher takes *'ownership and responsibility for what is being stated'* (p.179). The following section presents a first-person account of the researcher's background, prior knowledge, and the reflective process.

4.16.1 Researcher's background and her changing position as an early career researcher

I began my PhD in October 2016, after graduating in July 2016 from Northumbria University with a First Class BSc (Hons) in Physiotherapy, coming into the research with clinical placement experience and without my physiotherapy junior rotations. When I started the PhD journey, I had been cognisant of both the pros and cons of going straight into research. The cons were the potential to lose my clinical skills and not be fit for practice in the future; other concerns had included the risk of not understanding the world of physiotherapy practice and the limitations this may have on my understanding of research in practice.

My concerns decreased over the course of the research. In early interviews, several patients passionately expressed their praise for the research topic, which assured me of the value of the work I was undertaking. I have found that as my knowledge has increased, and as I had more data that was 'mine', I felt increasingly confident in my ability. This in turn had a positive impact on how I conducted interviews as I had greater conviction in the questions I was asking and found myself increasingly probing to get more in-depth responses. Initially I felt that I could not position myself in either the 'physiotherapist' or the 'researcher' field, I now feel comfortable engaging in discussions with both. At the beginning of the research, I called myself a 'physiotherapist', not practising clinically but doing research. Now, I would call myself a researcher with a physiotherapy background.

4.16.2 Positionality interviewing staff

I felt that my physiotherapy degree was helpful in me understanding the terminology of the physiotherapy field and being able to engage in informal conversations in the FCP clinics. After these clinics I felt more confident interviewing the FCPs as I felt a rapport had been built; nevertheless, I felt that not practising had been beneficial. Soni-Sinha (2008) discusses the importance of 'fluidity'- being able to come in and out of positionality. I could be 'inside' as I understood the fundamentals of the profession, nonetheless, I had not practised in Primary Care and could be 'outside'. I feel this outsider position limited the amount of unrecognised assumptions that could influence my analysis (assumptions that were not theory-driven).

Being an insider was more evident in the interactions with the FCPs, but was less so with other members of staff who do not have the same degree of shared-understanding of physiotherapy. As these members of staff were not involved in the recruitment process, I had fewer interactions with them and I am unsure as to whether these members of staff were aware of my physiotherapy background. However, I felt an element of being an insider with GPs, as we had shared terminology that is universal to health practitioners.

4.16.3 Positionality interviewing patients

Predominantly I felt neutral, neither the insider nor outsider in patient interviews. I have not experienced the FCP role as a patient, however, I have observed FCP clinics and I have been a patient in Primary Care. The occasions I did feel an outsider were when the patient discussed their experiences of being an older patient. As a young researcher, I had clearly not experienced age-related conditions. Patient 3, who highlighted their experiences as an older patient, also discussed their experience of a young female physiotherapist:

> *"I started having this course with a young female physiotherapist. I say young because I think she … I mean, she was quite competent but I don't think she … by the age point of view she must have started her training a long time ago or she'd just completed it."* (Patient 3)

I wondered if being older or younger possessed particular importance to this patient and whether my age implied I was any more or less competent in being able to express his experiences.

4.16.3.1 The process of reflexivity

Immediately after each interview, I wrote up a reflection on how I felt the interview went, my mood at the time of the interview and how I perceived the interaction with the interviewee. It is advised that the researcher writes down their initial impressions of the interview and things they want to remember immediately after the interview has ended (Berg, 2011).

The following journal extract was written immediately after one of my later patient interviews:

"I think I may have been overly sensitive to the patient's tone and misconstrued it to be dismissive. This affected my ability to build a rapport with the patient. In hindsight, I should have reflected on this after the first phone call where we had discussed the research, as I had been aware of her tone then. If I had done this I could have prepared for this before the interview so that I would have been able to remove any personal element from her responses. The main impact on the interview was that I may not have pushed things as much as I would have ordinarily, as I felt less comfortable in the interview."

Rapport can be defined as the positive feelings that develop between a researcher and the participant (Berg, 2011). As this was one of my later interviews, I was extremely cognisant of the importance of building up a rapport and using methods to facilitate rapport building. This account does not take into consideration that the rapport dynamic works both ways; it is not just whether the participant feels comfortable. I did not express it in this reflection initially, but I found it confronting to openly discuss a difficulty in forming a rapport that I felt stemmed more from the participant's rejection of my attempts, and I was worried that disclosure of this would suggest I was blaming the participant. As reflexivity is a constant process, I have reflected upon this again. My new outlook is an acceptance that, for whatever reason, rapport had not been built; however, reflecting on my other interviews I can see that there is no issue overall in developing rapport.

Another reflection detailed below explains an unexpected patient complaint:

"I think the more notable part of the interview was the patient highlighting dissatisfaction with not knowing who I was in the consultation until I introduced myself at the end. I felt embarrassed and upset as I would always like to think I am professional and considerate of interviewees and patients alike. It was something I had noticed in only one evening clinic of

four patients; the FCP had not introduced me immediately as he had in previous clinics. I felt I was in an uncomfortable position at the time as I had been aware of it, but the FCP started the consultation immediately and I did not feel like I could interrupt to introduce myself. I was also concerned about the impact it might have on the rapport I had with the FCP who I had not yet interviewed. In the future, I would ensure that I had a protocol set with the FCP (or any other person involved in recruitment) acknowledging that either they would introduce me or I would introduce myself."

As Ritchie and Lewis (2003) highlight, the interview is always a venture into the unknown and impossible to predict. Situations may arise which require the researcher to handle carefully; the account above demonstrates an example in my interviews. My reflection highlights a self-conscious feeling in clinic as to what my position was as a researcher observing, and concerns regarding maintenance of rapport with the FCP. I discussed the event with a member of the team, as it was important for me to evaluate the situation to prevent repetition in the future. After reading the transcript, I was content with my response to the situation, as I was respectful and the patient was accepting of my apology.

4.17 Structure of the analysis

The analysis for Practice A and B will initially be presented separately as two chapters.

The theory areas are presented in an order that demonstrates the chronological process of accessing the FCP role (see Figure 4.6 - Presentation of Individual Theory Areas). The first three areas are:

1. 'Previous Experience of Condition Management'
2. 'Patient Expectations of Condition Management'
3. 'Professional Hierarchy'.

These theory areas all relate to aspects that influence the patient acceptability before they accessed the role. The next two theory areas regard how the patients came to access the role. How patients were made aware of the role – 'Promoting the Role to Patients' – and the process of them accessing the role – 'Accessibility'.

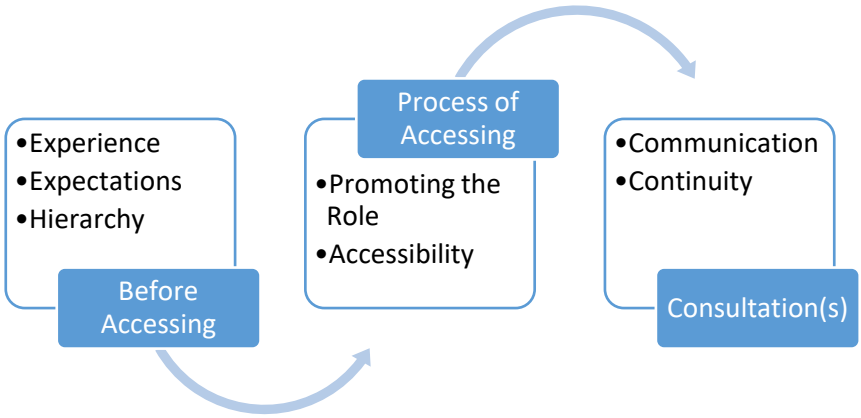


Figure 4.6 - Presentation of Individual Theory Areas

The final two theory areas relate to the consultation itself: the impact of 'Communication' during the consultation; and the final theory area regards 'Continuity of the Individual Practitioner'. Continuity only affects the patient if they had more than one consultation.

Each theory area will initially be presented individually. There is a high level of overlap between theory areas, in other words, aspects of contexts and mechanisms are shared across several theory areas. This interconnected nature of theory areas will be discussed and presented visually. Finally, the rival emerging theories will be presented. In other words, data that contradicts theory areas will be presented.

All the theory areas were present in the findings of both Practices. However, there were differences in CMO titles. The CMOs with unique titles, overlap and rivaling of theory that are completely unique to the Practice will be presented in the individual Practice chapter. However, when there are commonalities between Practices in a majority of CMO components, they will be presented in Chapter 7[9].

The final analysis chapter will be the 'Interpretation of Practice A and B analyses'. This section will critique the strength of hypotheses. Comparisons will also be made between the two Practices, as the rationale for similarites or differences in CMOs will be discussed. Finally, there will be a discussion in this chapter on how the theory areas correspond with the initial hypotheses that were formed in the realist review.

Due to the length of theory areas' titles, several titles are shortened throughout the chapters (see Table 4.2).

Table 4.2 - shortened theory area titles

Theory Area Title	**Shortened Theory Area Title**
Previous Experience of Condition Management	Experience
Expectations of Condition Management	Expectations

[9] The only exceptions to this is the CMO title Length of Consultations and rationale for wanting continuity which is distinguished by the title 'rationale for Practice A' and 'rationale for Practice B. The explanations are provided in the respective sections.

Promoting the FCP Role	Promoting the Role
Continuity of the Individual Practitioner	Continuity
Professional hierarchy	Hierarchy

5 Chapter 5: Practice A findings

5.1 Chapter summary

Findings that are individual to Practice A are presented in this chapter. An overview of the Practice and their staff, and the patient participants will be presented. The findings for each individual theory area, overlap of theory areas and rival theory areas will then be presented. An overview of CMOs will be presented at the beginning of both the individual theory area sections and the overlap sections. There are theory areas which have no CMOs individual to Practice A, these include 'Promoting the role' and 'Continuity of individual practitioner'. These sections are not presented in the individual theory sections, but can be found in overlap, rival and shared Practice theory area sections. CMO diagrams will be presented at the beginning of each of these sections; begin by reading the resource mechanism (numbered 1.) and follow this around anti-clockwise to the outcome (numbered 4.).

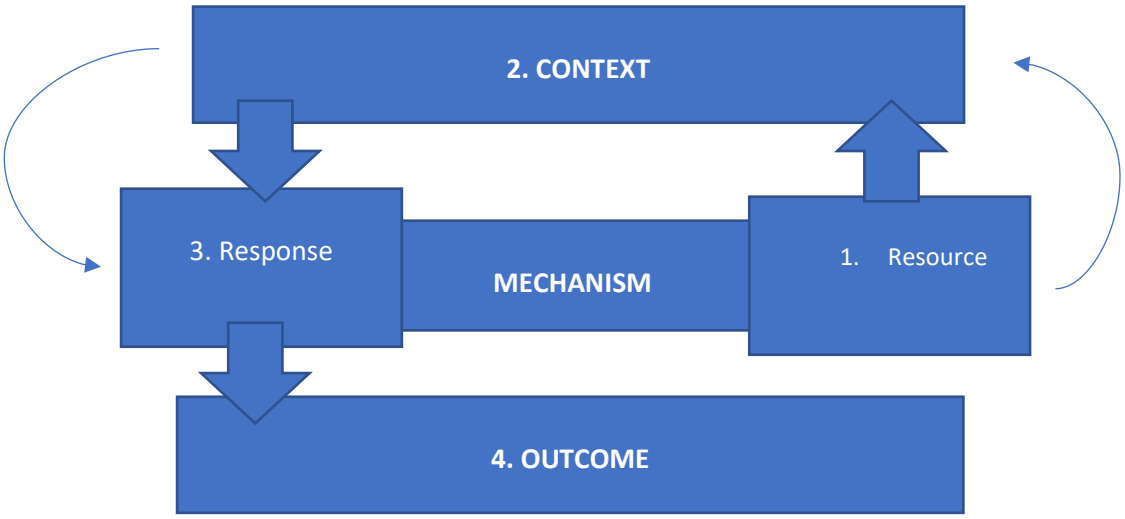


Figure 5.1 - Presentation CMOs

Staff interviews were carried out by the primary researcher (LM) between June and September 2018. They were all undertaken ahead of the patient interviews. Patient interviews were carried out between October and December 2018. The order of interviews was as follows:

1. Medical Receptionist[10]
2. Management Partner
3. FCP 1
4. GP 1
5. FCP 2
6. All patient interviews (n=5)

The research team ceased recruitment of patient participants after five patient interviews, this was due to theory areas no longer developing in a novel way.

In Practice A, staff interviews were on average 25 minutes long and ranged from 11 to 47 minutes in length. Patient interviews lasted between 36 minutes to 54 minutes and were on average 43 minutes long.

[10] Term adopted by Practice staff, however, not used by patients interviewed. Data referring to Practice A only will use this title; the majority of the thesis will refer to 'Receptionists'.

5.2 Practice A overview

Practice A was located in the South-West of England and was part of a Medical Centre consisting of two sites approximately two miles apart. The majority of the Practice's population were >50 years of age and it was situated in an area in the top 50% most deprived in the UK (see Table 5.1) (GOV.UK, 2015). However, the true extent of deprivation is masked by the average rank that includes the variation in levels of affluence.

Table 5.1 - Practice A demographics

Population count	**Males**	**Females**				
16,420	7,961	8,459			**Gender**	
				Age	Male	Female
			0-9	1,426	715	711
			10-19	1,452	731	721
			20-29	1,441	726	715
			30-39	1,495	744	751
			40-49	1,827	925	902
			50-59	2,431	1204	1227
			60-69	2,494	1192	1302
			70-79	2,341	1134	1207
			80-89	1,184	487	697
			90-99	321	102	219
			100+	8	1	7

5.2.1 Access to Practice A

Practice A offered extended opening hours until 8pm two days per week, and opened from 8:30am to 12:45pm on one Saturday per month. Outside of these core hours patients were able to contact the Improved Access Service. Through this service they could make a face-to-face or telephone appointment at neighbouring practices up until 8pm, Monday to Friday and Saturday mornings. Appointments were available with a range of different HCPs, including doctors, NPs or a Primary Care Practitioner.

Table 5.2 - Practice A opening hours

Monday	8:30-20:00
Tuesday	8:30-18:30 *closed one Tuesday of every month
Wednesday	8:30-20:00
Thursday	8:30-18:30
Friday	8:30-18:30
Saturday	8:30-12:45 * one Saturday of every month only
Sunday	CLOSED

5.2.2 Practice Staff

Practice A had a range of different HCPs in-house as well as an extensive admin team. The table overleaf outlines this study's staff participants (see Table 5.3). For the full list of all members of staff and further detail on the participants, refer to Appendix 56.

Table 5.3 - Staff participants overview

	Member of staff				
	Medical Receptionist 1	**Management Partner 1**	**FCP 1**	**GP 1**	**FCP 2**
Time in the Practice	One year	38 years in three roles	1.5 years	14 years	1.5 years
Role in the Practice	Book patients in with most relevant HCP	Manage strategic planning in the Practice	1.5 days a week triaging, diagnosing, signposting and providing advice	Salaried GP	Cover basis role equating to around 2-3 days a month with the same responsibilities as FCP 1
Extended scope skills	N/A	N/A	Injection therapy, undergoing prescribing qualification (able to order bloods and X-rays but not permitted in the role)		None
Other clinical roles	N/A	N/A	Clinical Specialist Rheumatologist (Band 8)	None	MSK Band 6
Previous clinical experience	N/A	N/A	25 years NHS physiotherapist	14 years in a different Practice	10 years NHS physiotherapist, six years MSK Band 6
Involvement in developing FCP role	None	Yes	None	Yes	None

5.2.3 Development of the FCP Role

The Practice Manager and GP partners evaluated routinely collected audit data to find the proportion of patients being seen for MSKDs. The Management Partner, Practice Manager and GP Partners were instrumental in discussions on implementing the FCP role with the local Trust's Deputy Head and Head of MSK services. The role came into the Practice in September 2017, beginning with a six-month pilot and it was introduced with the intention of reducing the demands on GPs. The role is funded by GP Partners who pay the local Trust for FCPs on an annual contract basis. The Practice Manager and Nurse Practice Manager provided staff training on the role.

For further information on the Practice, including the process of making an appointment, and most common reasons for consulting a FCP, refer to Appendix 56.

5.3 Overview of patient participants in Practice A

Table 5.4 provides an overview of the patient participants[11].

Table 5.4 - Overview of patient participants

Patient	Gender	Age	Location of MSKD	Process to access the FCP	Accessed GP for MSKD?	Experience of other APs or HCPs that had an impact on their views of FCPs
1	Male	66	Shoulder	Made aware of FCP when booking GP appointment	Yes	Yes - NPs
3	Male	80	Arthritis in multiple sites	Made aware of the role by his diabetic nurse	No (navy medic only)	Yes – diabetes nurse
4	Male	75	Elbow (previously knees and hips also)	Made aware of FCP when booking GP appointment	Yes	Yes – community pharmacist. Negative experience of physiotherapists
5	Female	79	Shoulder	Made aware of FCP when booking GP appointment	Yes	Primary Care Practitioners. Negative experience of physiotherapists.
6	Female	84	Hips	Made aware of FCP when booking GP appointment	Yes	None

[11] Patient 2 was excluded at the second screening at the time of the interview as she had accessed a GP who referred her to the FCP.

5.4 Individual theory areas

5.4.1 Patient experience of condition management

There was only one hypothesis in this theory area (see below).

5.4.1.1 Patients indirectly evaluating the FCP role by comparing this experience to their experience of the GP

This hypothesis highlighted how experiences of GPs affected patient evaluation of the FCP role (see Figure 5.2).

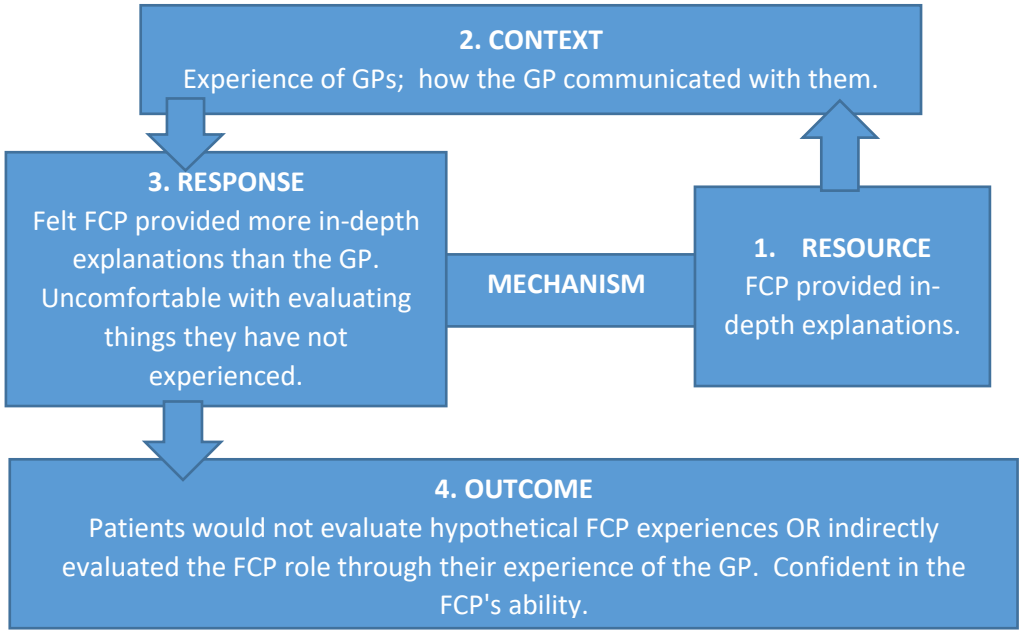


Figure 5.2- Experience CMO

Patient 5 had not experienced a prescribing FCP and expressed unease discussing whether FCPs should be able to deprescribe patient medications:

> *"I haven't had an experience of that so I'd rather not … well I can't really discuss that can I?."* (Patient 5)

However, patients were well equipped to compare FCP and GP consultations. Patients 1 and 6 compared the GP's communication skills to the FCP's. Patient 1 drew parallels between the consultations, highlighting that the explanation from the FCP on their MSKD was more-in-depth:

> *"She [the FCP] seemed to have a better knowledge of the human body and muscular properties – if you like –or muscular conditions, than what a GP would. And she seemed to go into more depth."* (Patient 1)

5.4.2 Patient expectations of condition management

Practice A's findings resulted in two CMOs for the individual theory area:

'Patient expectation that FCP accesses GP for prescriptions.'

'Patient expectation that they can choose which profession injects.'

5.4.2.1 Patient expectation that FCP accesses GP for prescriptions

This hypothesis made an association between patient's perceived severity of condition and their expectations on HCPs prescribing (see Figure 5.3).

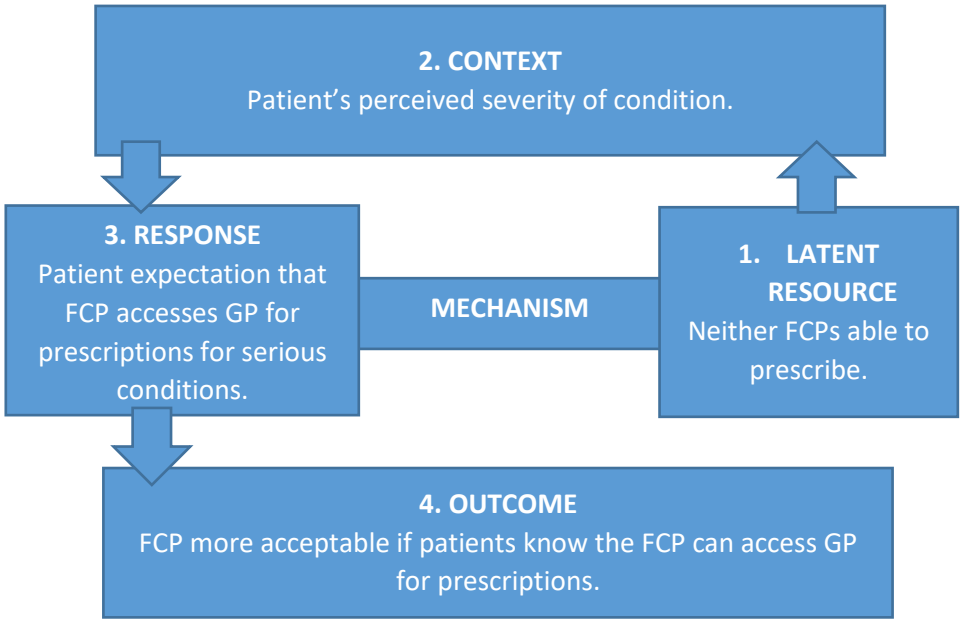


Figure 5.3- Expectation CMO

Patients' perceived severity of their condition[12] had an impact on their acceptance of the FCP being able to prescribe medications – a specialist capability. Neither of the FCPs were able to prescribe; however, FCP 1 was undertaking her Independent Prescribing qualification. The ability of the FCP to prescribe was highlighted in all staff interviews as a skill that may be useful for the role:

> *"That [Independent Prescribing] may well help from the point of view of knowing what pain relief medication would be good for the patient to take without necessarily having to discuss that with the GP." (Management Partner 1).*

[12] See section 7.2.2.1, p. 203 where this theme is discussed in more detail as a CMO shared by the Practices.

Patient 1 felt that FCPs may need to access a GP for prescriptions for more *'serious'* conditions. Patient 6 had similar worries regarding patient safety in situations where complex patients required a prescription:

> *"she [FCP] may not know what side effects and things like that but I'm sure … you know, again, if they needed to ask they'd ask [the GP]."* (Patient 6)

It was hypothesised by FCP 1 that patients would have *'more faith'* in the FCP role if they knew that they could access the GP for prescriptions:

> *"[if], you couldn't prescribe, I think that may make them lose faith in us slightly. But then, on the other side, if they knew we work alongside the GPs and we can go in and talk to them and discuss anything, then I think that would then help."* (FCP 1)

Expanding upon this, Patient 1 expressed uncertainty on FCPs prescribing for all conditions, but implied increased acceptance of this if the FCP accessed the GP for prescriptions:

> "*If the first practitioner prescribed medication um … and said 'Look, I will prescribe it but you'll have to wait a couple of hours before you can collect it. It has to be authorised by a GP I think that would be fine.'* (Patient 1)

These responses highlight experiences of GPs carrying out prescriptions; therefore, the FCP were not themselves prescribing. Only Patient 4 was aware of the FCP being able to access the GP and patients had a mixed understanding of the ability of the FCP being able to prescribe.

FCP 2's response highlighted a limited number of patients requiring prescriptions:

> *"About 10-13% of patients have a prescription component to their consultation. So that's … that's 85-90% that don't. So in terms of evaluating how useful … or how crucial prescribing is there's definitely a core element but there's obviously a lot of patients where we don't."* (FCP 2)

FCP 2's response implies that the wider Practice patient population do not require prescriptions. None of the patients interviewed received a prescription, thus supporting this hypothesis.

5.4.2.2 *Patient expectation that they can choose which profession injects for their MSKD*

This hypothesis demonstrates patient expectations of an FCP with the specialist capability of injection therapy (see Figure 5.4).

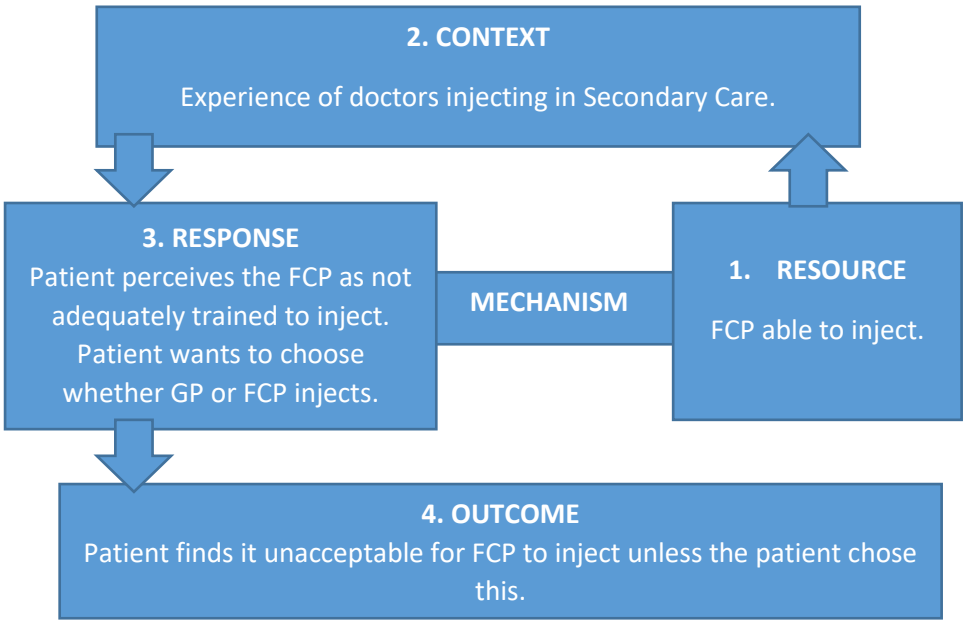


Figure 5.4 - Expectation CMO

Patient responses suggested they wanted to maintain choice in terms of who provided injection therapy. FCP 1 was injecting within the Practice, and FCP 2 was in the process of completing competencies to be able to inject corticosteroids as part of the role. All patients interviewed were accepting of the FCP injecting[13].

Although Patient 1 was accepting of a FCP injecting, he felt that other patients may not be and should be permitted to choose who injects. He theorised that some patients may see the FCP as not as well trained and that due to patients only ever experiencing doctors injecting, predominantly in hospitals, they expected that only doctors should be injecting:

> *"I think because they think they're only, if you like a nurse and not a fully trained doctor. People seem to perceive that doctors and … people in hospitals are only allowed to give intravenous injections." (Patient 1)*

[13] Except Patient 6 who is undetermined as injections were not discussed in the interview.

5.4.3 Professional hierarchy

The theory area Professional hierarchy had only one CMO from Practice A's findings (see below).

5.4.3.1 Perception of hierarchy due to access to services

Despite hierarchy not being present in the Practice, it was hypothesised that patients perceived some HCPs to be *'higher up'* than others due to their ability to access services (see Figure 5.5).

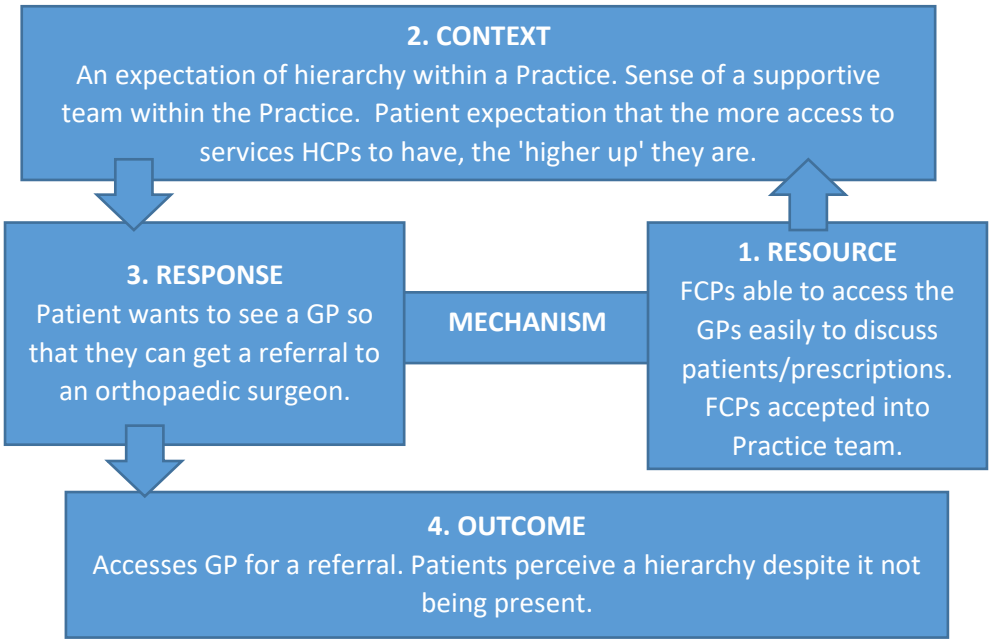


Figure 5.5 - Hierarchy CMO

Staff responses denied a hierarchical system when asked and their responses indicated that the FCPs were well-accepted into the team:

> *"you can go and ask anyone anything and they're really respectful, really appreciative, definitely seen to be part of the team."* (FCP 1)

All patients[14] stated that they had not observed hierarchy operating in the Practice; corresponding with staff responses. Although patients did deny a hierarchy when asked outright, they alluded to aspects. Patient 1 suggested the idea of experts being in hospitals. A similar idea was stated by Patient 3; he wanted to access a GP to receive a referral to an orthopaedic surgeon in Secondary Care:

> *"I would ask to see a GP and if they said 'Well we'd prefer you to see a whotsit ..' I'd say 'No I don't want to. I want to see a GP and I'm hoping to get a referral up to*

[14] Except Patient 1 who due to the interviewer's error was not questioned on it.

an orthopaedic surgeon"… "I'd have to see someone higher up, if they're higher up. Someone with more access to different treatment." (Patient 3)

Patient 3's response also demonstrates a perception that HCPs with more access to services are *'higher up'*.

5.4.4 Accessibility

Findings resulted in one CMO for Accessibility in the individual theory section:

'Length of consultations Practice A rationale.'

5.4.4.1 Length of consultations Practice A rationale

The effect on the acceptability of a longer FCP consultation comparative to a GP consultation is highlighted in this hypothesis (see Figure 5.6).

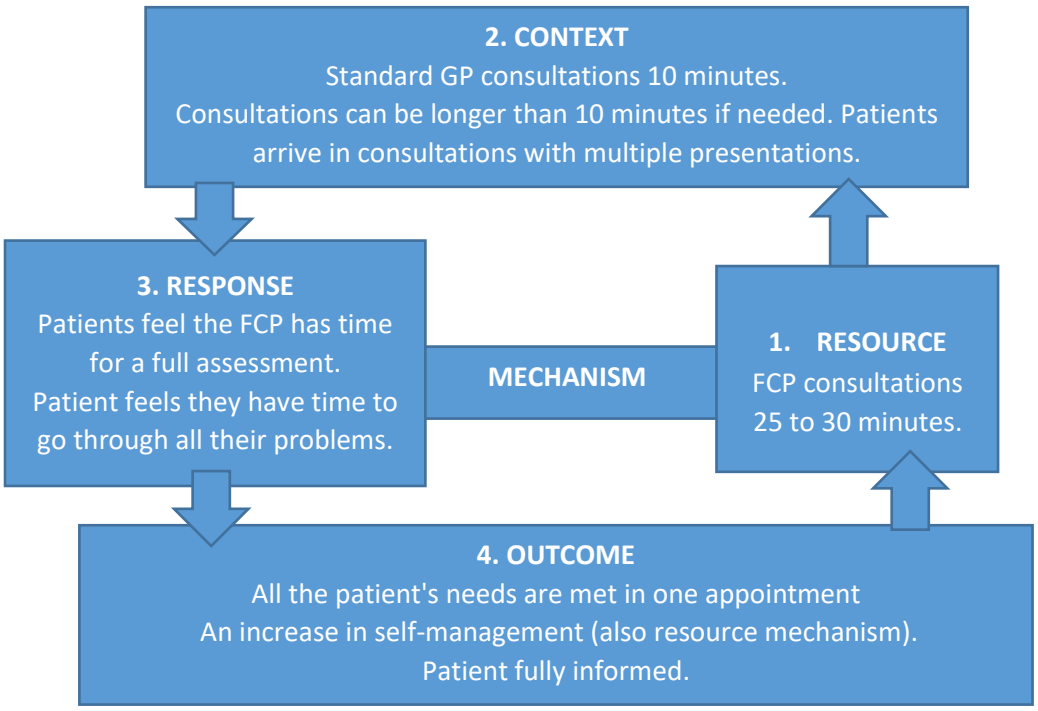


Figure 5.6 - Accessibility CMO

GP consultations at Practice A were 10 minutes in length, in line with the national average (NHSE, 2017b). However, if the reception staff identified that patients had several issues they wanted to discuss, they could book them in for longer appointments:

> *"We always take a brief idea of the problem and then we can assess it from there and can give them a longer appointment if it's needed."* (Medical Receptionist 1)

The Management Partner stated that they were able to extend appointments as required as it was accepted that FCPs would be behind schedule with complicated cases. Patient 1 was the only patient who referenced longer GP consultations in the Practice. It was recognised that this context might change, due to increasing pressures from staff shortages:

> *"There is a growing trend for GPs to want to provide longer appointments, but certainly, with the way we are with limited number of staff nowadays and the difficulty in recruiting GPs, it's almost impossible."* (GP 1)

Patients 1, 3 and 5 all referenced not having long enough in GP consultations and only Patient 6 had not noticed the GP consultation length[15].

The FCP consultation lengths were longer, lasting between 25 to 30 minutes. Although staff reported that patients had not expressed being more satisfied as a result of longer FCP appointments, the Medical Receptionists, FCP 1 and Management Partner 1 did hypothesise that this may have been the case. All patient interviews highlighted that the FCP consultations were longer in length than a standard GP appointment, except Patient 6 who had not been aware of the length of the consultation. Nevertheless, all the patient responses expressed satisfaction with the length of the FCP consultation, thus supporting the staff hypothesis.

The Management Partner and Medical Receptionist highlighted that longer consultations resulted in patients: having their questions answered (Medical Receptionist); being more informed and, therefore, more able to self-manage (Management Partner):

> *"They can go through with the patient what they need and very often the patient can go away with full information and full knowledge, rather than the GP saying 'Right ok, you've got a problem. I now need to refer you to physio for the treatment. (*Management Partner 1)

Patients 4 and 5 confirmed that they felt they were able to discuss all their problems. Patient 5 made comparisons with previous experience of short GP consultations that resulted in a short assessment and her not being able to explain all her issues:

> *"I think it's absolutely fantastic because so often when you go to the GP you're limited to so many minutes, like three minutes or four minutes. There's no way you can explain everything that's going on, there's no way that he or she can actually help you in that situation and understand and do mobility exercises."* (Patient 5)

Patient 4 and 5's responses highlighted that all their questions were answered, thus coinciding with the Management Partner and Medical Receptionist's hypothesis that patients are fully informed from a longer consultation:

[15] Patient 4 was not questioned on this.

"She wasn't in a hurry. She examined, she tested, she observed. I felt comfortable, I felt that she'd answered all my queries or questions, she'd seen what she needed to see and made her diagnosis." (Patient 5)

FCP 1 suggested that patients did not feel rushed in the longer FCP consultation, felt listened to and were consequently more satisfied:

"If a patient feels … doesn't feel rushed and has plenty of time to be listened to that … or not just logic but, you know, I'm sure there's evidence to do with that as well, um … that their satisfaction rates increase." (FCP 1)

This suggestion was evidenced by responses from Patients 4 and 5 as they did not feel rushed; Patient 5 felt comfortable in the consultation as a result (see earlier quote, p.149).

Patient responses also provided a more in-depth understanding on the outcomes of a longer consultation, based on their own experiences. Namely, Patients 4 and 5 described person-centred care, where a longer consultation allowed the FCP to take into consideration the individual patient's needs:

"*If she's communicating according to the knowledge she has of you as a person it's going to take a little bit longer"* (Patient 5)

"They're very friendly, they're very … they listen to you. They give you time to explain things. I'm sure that I get on their nerves after the first five minutes. I'm most likely get on your nerves after the first two minutes." (Patient 4)

5.4.5 Communication

For the Communication theory area, Practice A's findings resulted in the formation of two CMOs:

'Patient feeling valued.'

'Communication when prescribing.'

5.4.5.1 Patient feeling valued

This hypothesis regarded how the FCP could make the patient feel valued through the way they communicated with them (see Figure 5.7).

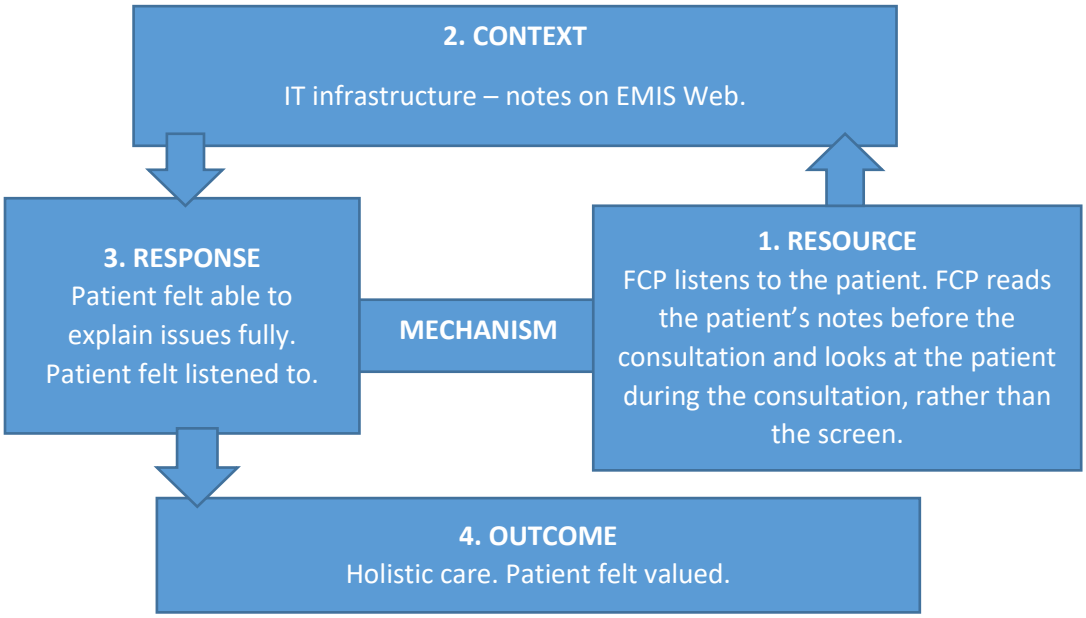


Figure 5.7 - Communication CMO

Both FCPs also worked in Secondary Care and could, therefore, make current comparisons between the two working environments. FCP 2 stressed that in Secondary Care patients are assessed by other HCPs before the physiotherapist; in contrast, the FCP may have been the first HCP that the patient had seen. It was emphasised that without these additional prior contacts, the FCP had to really listen to the patient to ensure no red flags were missed, thus ensuring patient safety:

> *"So it's getting out of that kind of treatment mind-set and assessing and also being like you're the first person that a lot of the people have seen. So it's being much more aware of your red flags and listening to the patient as a whole."* (FCP 2)

FCP 1 felt that listening to the patient was associated with a comprehensive assessment in which they were able to identify key information to provide holistic care. FCP 2 also identified the importance of '*listening to the patient as a whole'*. Patients 3, 4 and 5 all referenced the importance of the FCP listening to them in the consultation; Patient 4 highlighted that this allowed them to explain their issues fully:

> "*They're very friendly, they're very … they listen to you. They give you time to explain things."* (Patient 4)

Patients 3 and 5 expressed that the outcome of the FCP listening resulted in them feeling valued as people:

> Interviewer: *"And what impact does it have on you that she listened to you?*
>
> Patient 5: *A big impact. Because that, to me … especially as you get older you feel you need that reassurance. That they're caring for you as a person and not just as a number."* (Patient 5)

Patient 3's response also highlighted how the notes on the screen facilitated the FCP being able to listen to the patient and change their body-language so that they addressed the patient and not the computer screen:

> *"So I was quite impressed that, you know, in other words she had done her homework [read the patient notes] and then she turned round to me and she looked it up, just checked that it was me."* (Patient 3)

The Practice Profile document sent to the researcher from the Practice Partner stated that EMIS Web was used for their clinical system (personal communication Management Partner 1, 2019).

5.4.5.2 Communication when prescribing

Neither FCPs were able to prescribe medications. Nevertheless, it was hypothesised that a prescribing FCP would be able to open up conversations with patients regarding their prescriptions (see Figure 5.8).

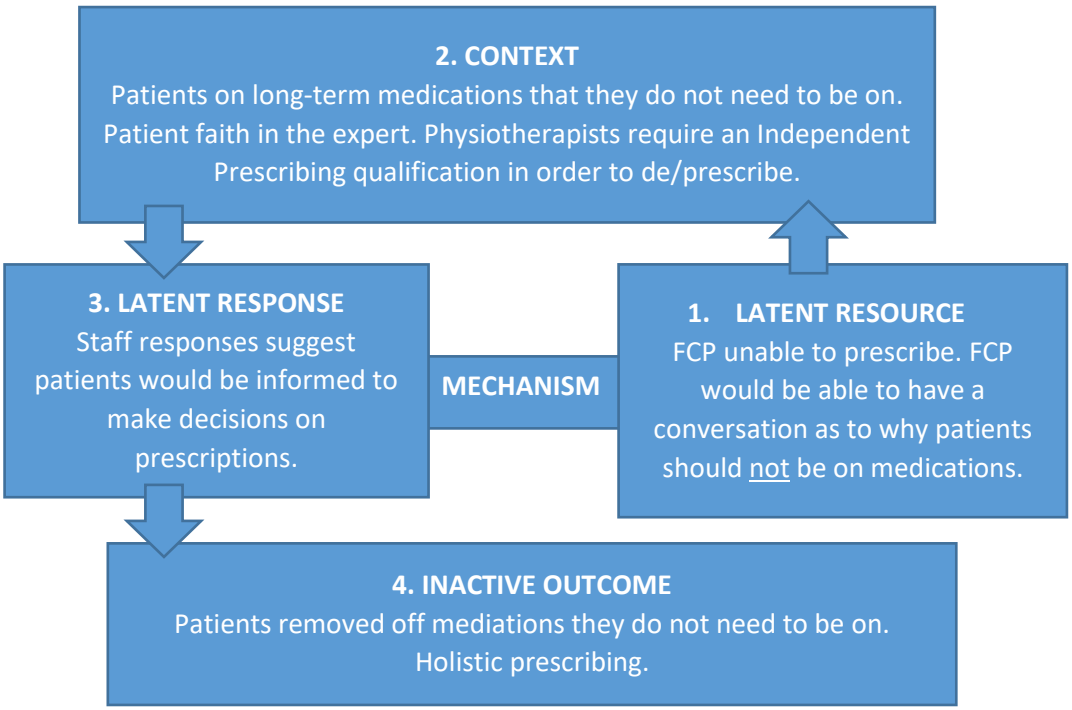


Figure 5.8 - Communication CMO

Knowledge of prescribing was a common theme in interviews. It was highlighted that a prescribing FCP would have the expertise to be able to prescribe holistically, considering the complete clinical picture of the patient:

> *"they [colleagues who have their Independent Prescribing qualification] just felt they could put the whole clinical picture of that person sitting in front of them together a bit more because they had the knowledge of the…all the drugs they were on and why they were on them and it just kind of made more sense."* (FCP 1)

There was also the suggestion from both FCP 1 and FCP 2 that de-prescribing may be of more value. De-prescribing is the process of safely removing patients from medications or reducing the dose to minimise side effects and interactions. There were patients who were taking long-term prescriptions without any knowledge of why:

> *"I think a lot of patients don't even know why they're on some of them [medications], they've just been on a repeat prescription and they've been on them for years."* (FCP 2)

Patient responses confirmed this unquestioned acceptance of the medications they are prescribed. Patient 6 stated that if the FCP was able to prescribe for them, they would comply:

> *"If she said 'Take this' or 'Do that' then yeah I'd do it because that's what one does … to get better hopefully."* (Patient 6)

The response highlights the passivity of the patient and faith in the FCP as an expert. Patient 5 felt that they would be accepting of a prescribing FCP and kept referring back to them being *'trained'*. However, patient 4 stated that they would not continue with prescriptions they felt were of no benefit to them:

> *"Well I must admit I take medications but I think they're ones that benefit me. If they gave me something that I didn't think was benefitting me I personally would stop it. I'd say 'Don't bother'."* (Patient 4)

Patient 4's response differs in him being clear that he would be involved in decision-making in relation to his prescriptions. FCP 1 felt that if they had full knowledge of medication then they would be able to have an informed discussion with a patient. She theorised that this would allow the patient to contribute to decisions on whether they should be taking their medications. These mechanisms may result in patients themselves choosing not to take prescriptions, although as the FCP is not able to prescribe, the responses display latent mechanisms and an inactive outcome:

> *"So having the knowledge to have an informed debate or discussion with the patient is … so that you don't necessarily prescribe but you … you can give them an informed reason why you might advise against that"* (FCP 1)

5.5 Overlapping theory areas

Frequently there was overlap in theory areas, where elements of the context or mechanism were related to more than one theory area. The overlap across the theory areas are highlighted in. This section presents the interconnected nature of the theory areas, however, the connections made could have been endless. Consequently, the focus of these findings is on the theory areas with the most overlap, and the overlaps that may have the greatest implications for service development.

Table 5.5 - Practice A Theory Overlaps

Overlapping theory areas	CMO title
Promoting the role, Expectations, Accessibility	Aspects of the FCP role patients were made aware of
Experience, Promotion the role	The effect of patient experience of APs on patient understanding and acceptance of the FCP
Experience, Continuity	Patient preference of continuity due to GP experience

5.5.1 Overlap 1 – Aspects of the FCP role patients were made aware of

This hypothesis connected three theory areas: Promoting the Role; Expectations of Condition Management (Expectations); and Accessibility. There were aspects of the theory areas Accessibility and Expectations that could inform how the FCP was promoted to patients (see Figure 5.9 for the CMO).

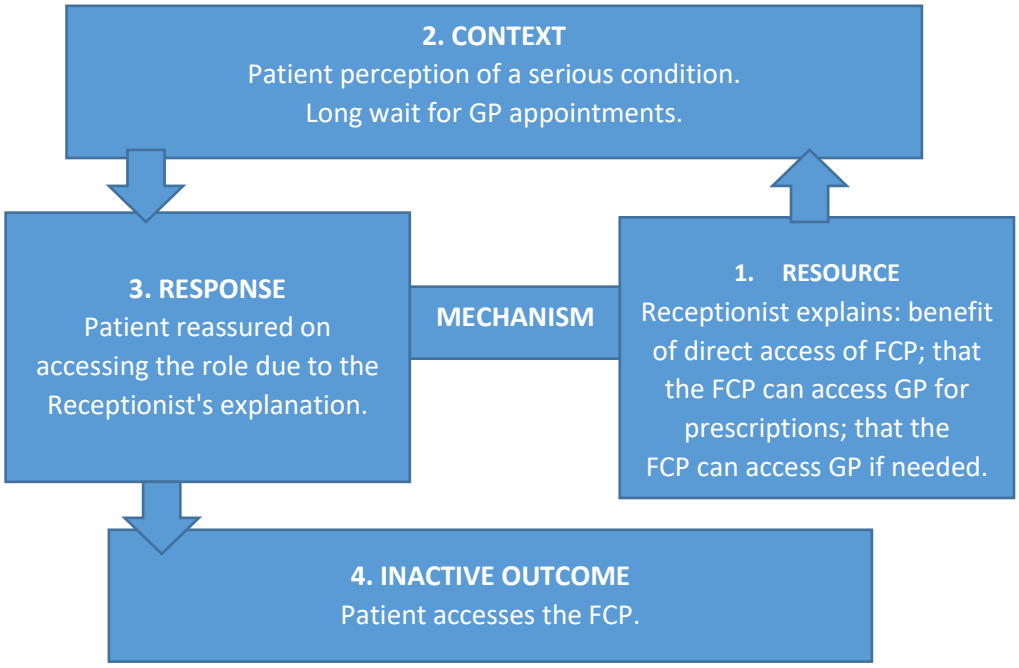


Figure 5.9 - Overlap 1 CMO

Patients 1, 4, 5 and 6 all experienced the Medical Receptionist promoting direct access to a FCP, who they suggested as the most appropriate professional to see for a MSKD ('Accessibility'):

> *"So it is a case of explaining it to them and making them aware and then they seem to understand that it is the best care pathway for them."* (Medical Receptionist 1)

Patient responses confirmed this, as Patient 1, 4, 5 and 6 all experienced the Medical Receptionist promoting direct access to a FCP ('Promoting the role'). Patient 1 described the explanation:

> *"She's fully experienced and I think she would be better for you to see them in this first instance and she could then refer you to the GP if she thought it was necessary."* (Patient 1)

Furthermore, it was perceived as important that the patient understood that although the FCP could not prescribe, they were able to access the GP for their prescription; this led to patients being reassured ('Expectations') (see p.144). See Figure 5.10 for the overlap between theory areas.

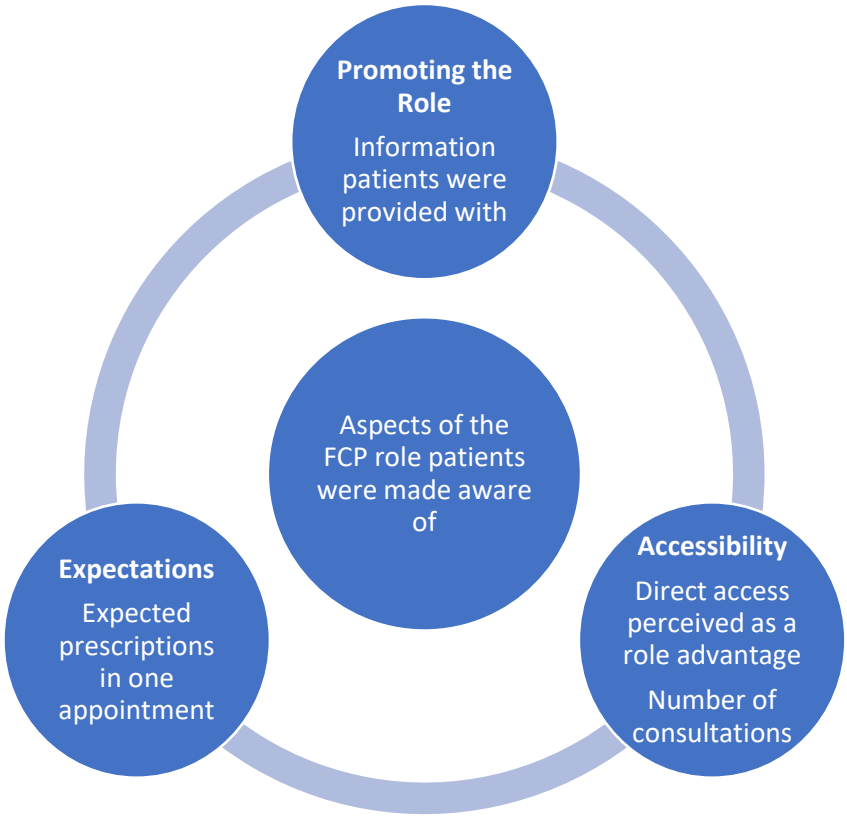


Figure 5.10 - Overlap 1

5.5.2 Overlap 2 - The effect of patient experience of APs on patient understanding and acceptance of the FCP

Overlap 2 made connections between two theory areas – 'Experience' and 'Promoting the role' – highlighting how previous experience of APs affected the patient understanding of the FCP role (see Figure 5.11 for CMO).

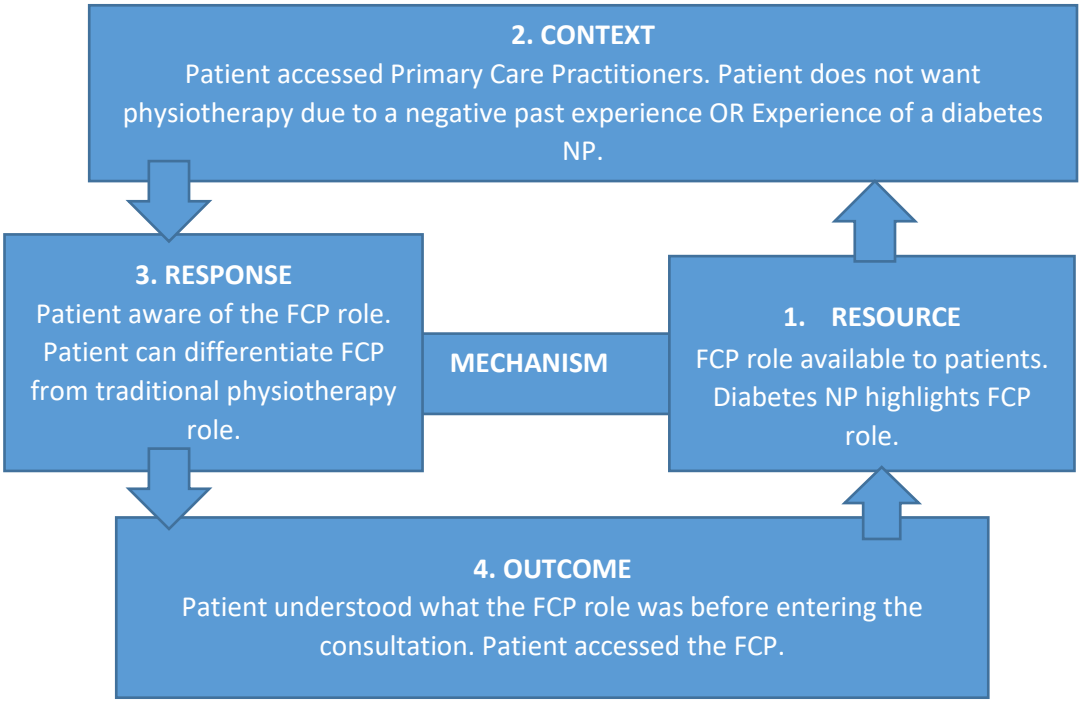


Figure 5.11 - Overlap 2 CMO

FCP 1 hypothesised that due to contact with PCPs, patients were more familiar with Advanced Practice roles and titles:

> *"I think that increasingly they're used to practitioner titles, you know, Nurse Practitioners, um … we have three paramedics at *Practice A's name* so … who will be, what's the title? Primary Care Practitioners and there are all sorts of practitioner terms so I think that they're coming into contact with that more."* (FCP 1)

Despite FCP 1's theory, only Patient 5 had PCP experience, she also had past negative experiences of physiotherapy which she expressed would stop her from accessing a physiotherapist. However, she accessed the FCP, suggesting that she did differentiate between the two roles prior to the consultation, unlike Patient 3 whom only had this understanding post-consultation. It can be postulated that her experience of the PCP aided her understanding of the FCP role and thus resulted in her accessing the role.

Patient 6 demonstrated the direct role that the diabetic nurse had played in encouraging them to access the FCP:

> *"I had actually been to see a practice nurse about diabetes … for my … and as she watched me trying to get out of my chair, she asked me what was wrong and I said 'Well, usual routine, can't get up' and she said well did I realise there was a musculoskeletal practitioner in the surgery, and I said no." (Patient 3)*

This response is able to highlight a clear mechanism between patient experience of an AP, and them subsequently accessing an FCP. See Figure 5.12 for the overlap between theory areas).

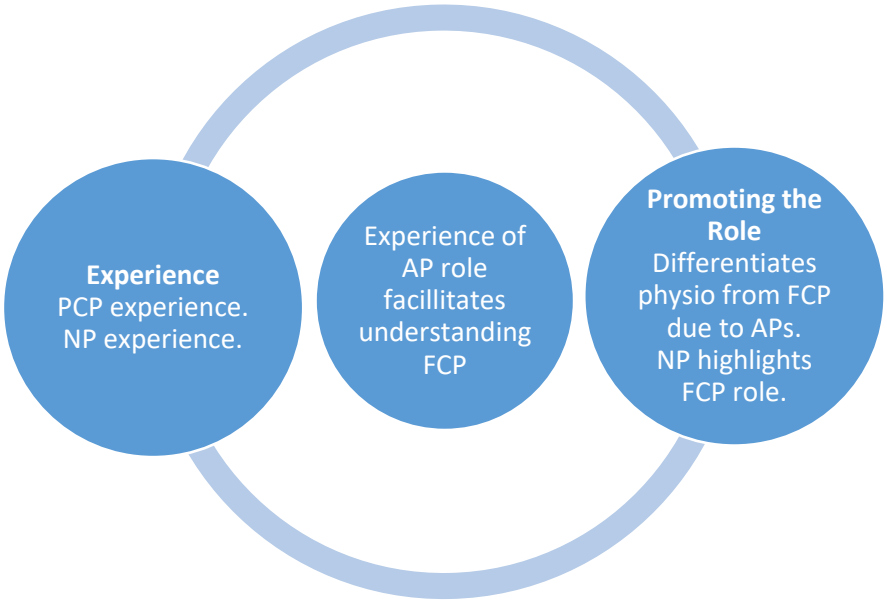


Figure 5.12 - Overlap 2

5.5.3 Overlap 3 – Patient preference for continuity of the FCP due to GP experience

This hypothesis highlighted the reasoning for patients wanting continuity of the FCP, including the influence of GP continuity (see Figure 5.13 for CMO).

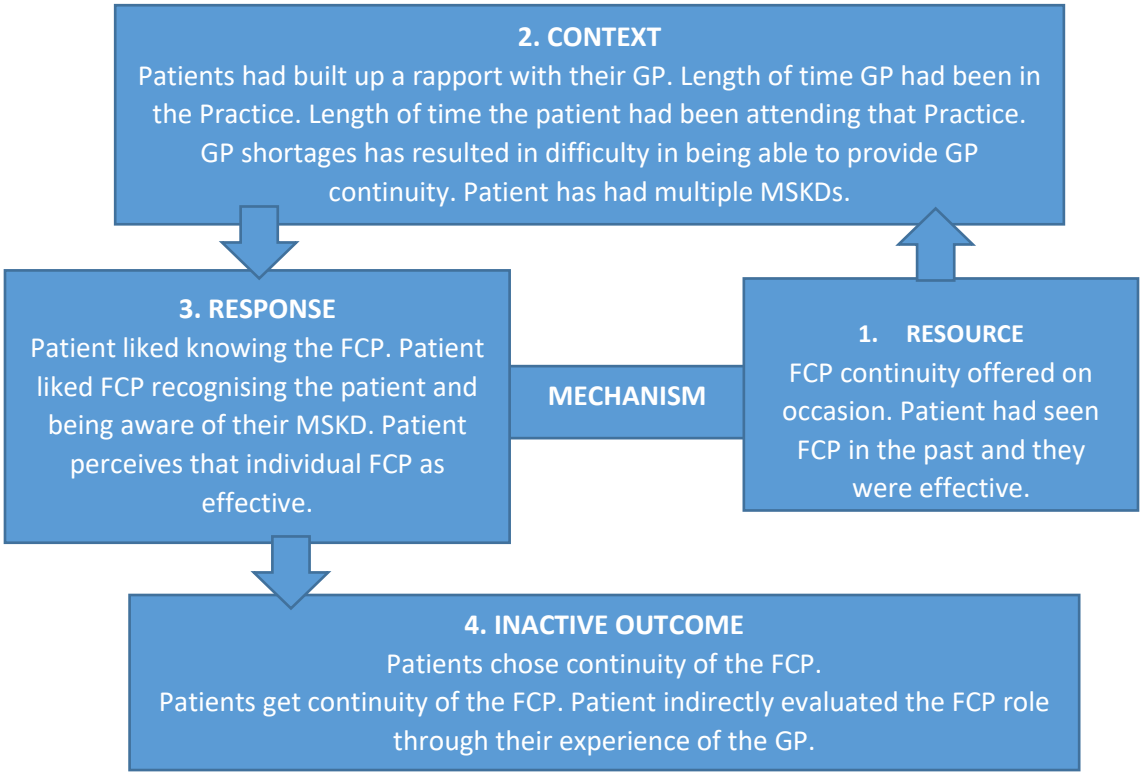


Figure 5.13- Continuity of the Individual Practitioner CMO

Before the FCP role was implemented many patients, particularly frequent attenders, had built up a rapport with their GP. FCP 1 highlighted that this relationship was impacted by how long the GP had been retained by the Practice, as well as how long the patient had remained registered at the Practice:

> *'Interviewer: "Do they express why they want to see the same GP each time?"*
>
> *GP 1: "Yes, for continuity of care and sometimes because they establish a relationship and trust with one individual."* (GP 1)

Patient responses demonstrated that predominantly they did have experience of GP continuity[16]. Although Patient 4 did not reference continuity of the GP, he valued having someone who knew him.

[16] Patient 1 did not reference continuity of the GP.

Medical Receptionist 1 and GP 1 highlighted that patients wanted continuity in their care. The interviewer questioned the Medical Receptionist on why the patient had a preference for continuity:

> *"Just for continuity so it's because the practitioner was already aware of their condition so they just wanted to see the same one."* (Medical Receptionist 1)

Although patients would prefer practitioner continuity, it was stressed by GP 1 that this was increasingly difficult due to staff shortages. Patient 5 was the only patient to highlight that although they had GP continuity in the past, they have recently found it more challenging to access the same GP.

The working hours of the FCPs differed; FCP 1 worked 1.5 days a week at the Practice, whereas FCP 2 only worked as cover and was therefore only in the Practice 4-5 times a month. Consequently, FCP 2 stated continuity was not something she could personally offer. FCP 1 was in the Practice more frequently; when patients accessed her for continuity, it was a result of the FCP recognising the patient and being aware of their condition:

> *"I do get patients that come back to me and say 'I've wanted to come back to you'"*
> *"… I wouldn't say I get to know patients in the same way GPs do but I recognise patients and I can remember, you know, seeing them for a particular condition and then they're back"* (FCP 1)

This hypothesis may be cross-referenced with the theory area 'Experience' and its hypothesis 'patients indirectly evaluating the FCP role by comparing this experience to their experience of the GP'. If patients have had continuity with the GP and have a preference for this, this may then be expected from the FCP. This association is not directly indicated in the findings and is instead formed through retroductive thinking.

When asked about why patients wanted continuity, FCP 1 hypothesised that if the FCP had treated the patient's MSKD in the past and had been effective, then this would result in the patient accessing this individual practitioner in the future:

> *"… you know, they see that I've been effective for them. Um … that might be a reason but I haven't … I can't really say hand on heart why that would be."* (FCP 1)

See Figure 5.14 for overlap between theory areas.

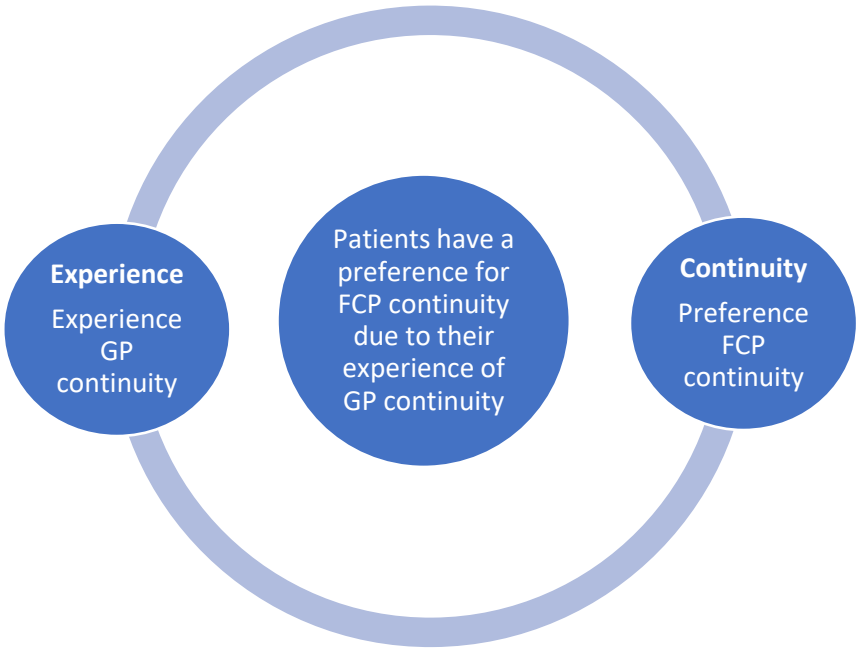


Figure 5.14 - Overlap 3

5.6 Rival emerging theories

5.6.1 Rival 1 - issues of sustainability

Although decreased waiting times were demonstrated to be important, there were identified issues in the sustainability of reduced waiting times (see Figure 5.15 for CMO).

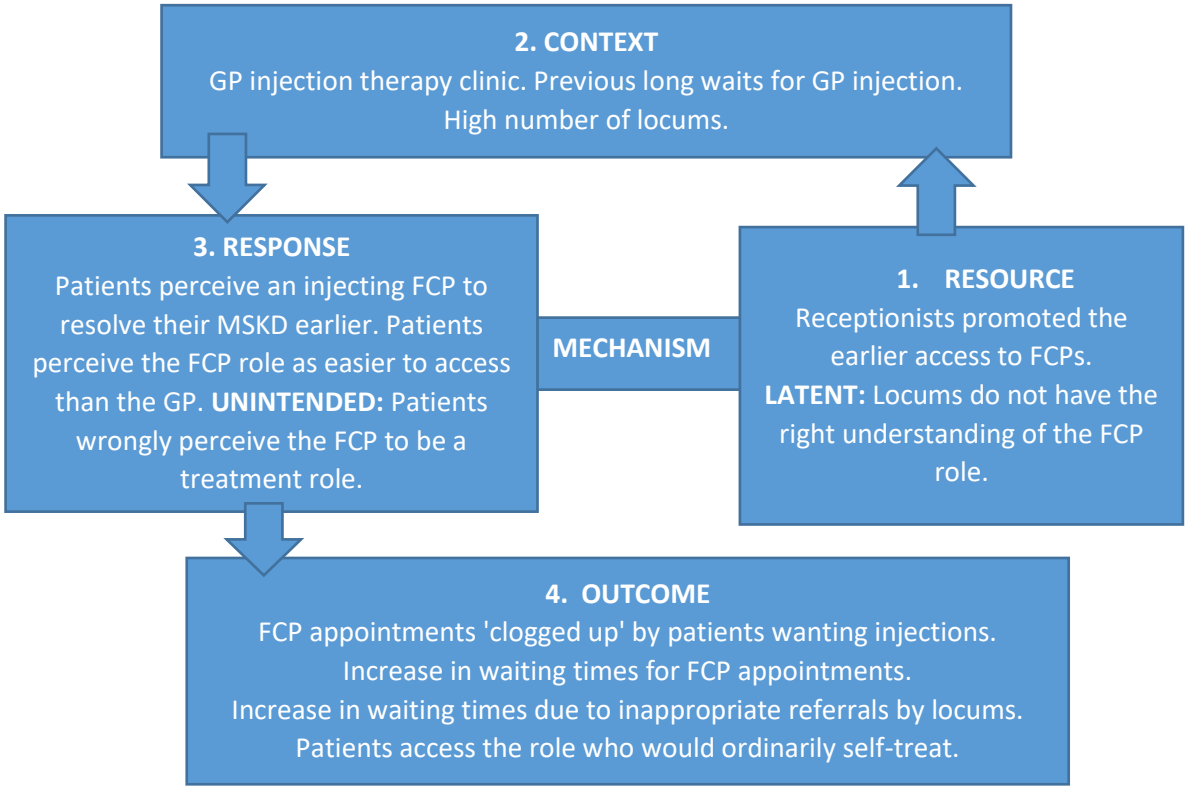


Figure 5.15 - Rival 1 CMO

The ability for the FCP to inject was highlighted by the Management Partner as potentially increasing waiting times for a FCP appointment. Injection therapy was expressed to be a desirable skill for the role by FCP 1 and FCP 2. Nearly all the patients were accepting of the FCP injecting[17]. FCP 1 was practising injection therapy within the Practice, and FCP 2 was in the process of completing competencies to be able to inject as part of the role.

This Practice already had a GP injection therapy clinic that patients could attend. Both the Management Partner and FCP 1 were concerned that patients could wrongly perceive the FCP to be a treatment role. FCP 1 had first-hand experience of patients coming in primarily for injection therapy. The Management Partner hypothesised that this could result in FCP appointments being *'clogged up'*:

> *"What we don't want to do is get them clogged up … these appointments clogged up with patients who need joint injections because we already run a joint injection session at the surgery that the GPs manage."* (Management Partner 1)

The benefit of an injecting FCP, as expressed by Patients 3 and 4, was the ability for a patient to get their injection sooner and thus resolve their MSKD earlier:

> *'[An injecting FCP] allows the patient to get treatment that they may want, as I would certainly want, and hopefully clear the problem up a lot faster'* (Patient 4)

Patient 5 discussed her previous experience of only one GP being able to inject, and suggests previous longer waits for an injection:

> *"there was only one doctor who could actually administer the injection at that stage. So the fact that I could get it from somebody else was just amazing to me and I was just so thrilled."* (Patient 5)

The practice now has a GP injection clinic and therefore the patient would not have been relying on one GP as she had previously.

The increase in waiting times was reinforced by FCP 1, who stated that there was a four week wait for a consultation with an FCP, whereas previously it had been between one or two weeks. However, she did not feel that patient satisfaction had been negatively affected as a result; partly because other services within the Practice ensured that patients could be

[17] Except Patient 6, as injections were not discussed in the interview.

seen by a professional quickly. When asked whether an increase in waiting times may have been decreasing patient satisfaction she responded:

> *"Not at the moment, because it's only four weeks and I think people still think that's quite quick." … "they started what they call an urgent care clinic" … "where patients book in, just turn up and wait to be seen, and there's … so basically they can always get an appointment if they wait."'* (FCP 1)

The Practice had a high number of locums, and it was highlighted that occasionally the new locums would start working in the Practice without being aware of the FCP role. The locums referred the patient to what they believed to be traditional physiotherapy rather than the FCP role which resulted in inappropriate referrals and an increase in waiting times:

> *"They [locums] might just think you're a…I've had incidences where they've just referred patients thinking it was a physio…traditional physio service."* (FCP 1)

As Patient 5 highlighted, it was the direct access and reduced wait that *"clinched it for me to see her".* Receptionists were, therefore, encouraging the appropriate patients to access the role through highlighting the reduced wait:

> *"I said 'Do I not see a doctor?' 'No' she says 'It would be better to see the practitioner and also it would be quicker' because she had an appointment earlier than the doctor. So I said fine."* (Patient 5)

However, the Management Partner hypothesised that patients with minor conditions, who would have ordinarily self-treated, may access the role:

> *"Sometimes waiting lists, though, can work the other way, so that if it's too easily accessible, then the patient may not value it or may just keep coming in for minor things that they would otherwise self-treat."* (Management Partner 1)

FCP 1 highlighted that waiting times had increased and there was now up to a four-week wait for an appointment. However, FCP 2 stated that it was up to a four-day wait for an FCP appointment and often there were on-the-day appointments. This may be explained by the cover-basis working hours of FCP 2.

Patient 1 disagreed with the Management Partner's prediction of over-demand. He felt that the Medical Receptionists would offer the earlier appointments only to those most in need and that a two to three week wait may put off some patients who would be able to self-manage:

"If they were told they'd got a two-week-wait before they can see somebody they'll … they just wouldn't bother phone … accepting an appointment, they'd try and rectify it themselves. But if it was serious enough they would say 'Yes, I would see the first practitioner'"…." It would all be down to the Receptionist's decision and whether or not it was a situation where they had to see somebody immediately" (Patient 1).

None of the patients reported anywhere near a four-week wait; Patient 3 stated that they were waiting 10 days, Patient 5 got a next-day appointment due to a cancellation and all patient responses highlighted acceptability of their wait.

See Figure 5.16 for overlap between theory areas.

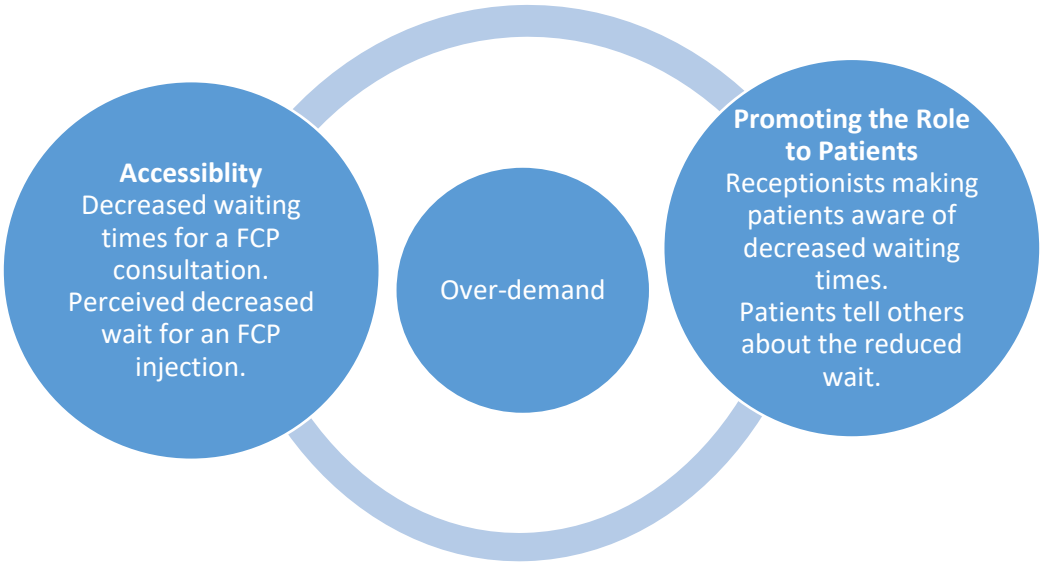


Figure 5.16 - Rival 1 Overlap

5.6.2 Rival 2 - challenges faced by the Receptionists

Rival 2 was a threat to the theory area 'Promoting the Role' (see Figure 5.17).

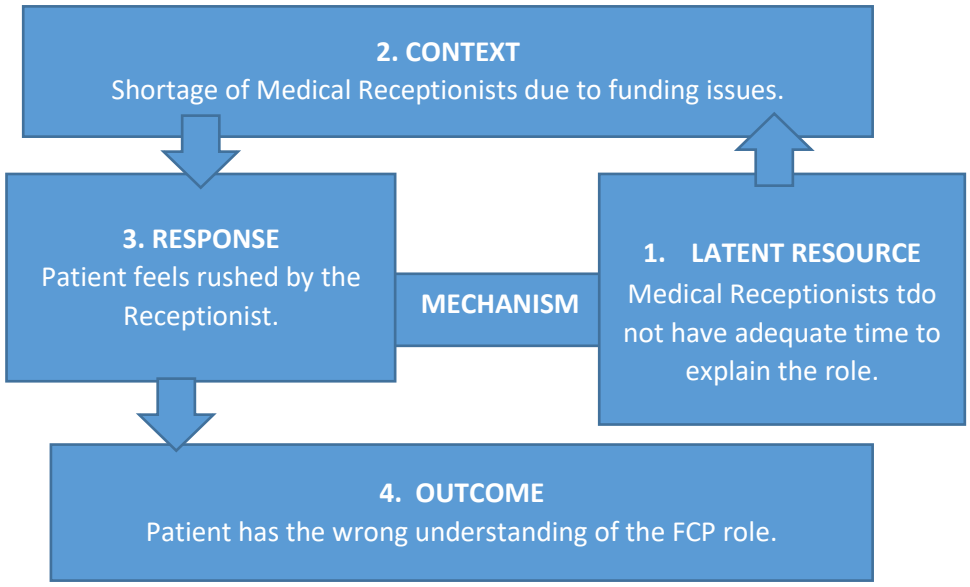


Figure 5.17 - Rival 2 CMO

Patient understanding of the FCP role may have been negatively impacted by a shortage of Medical Receptionists. Management Partner 1 highlighted that Practice A faced funding issues resulting in an inadequate number of Medical Receptionists to book appointments. This may result in time challenges when explaining the role, which could have reduced patient understanding of the FCP. Staff responses did not highlight this, however, Patient 1 and 3's responses support this hypothesis. Patient 1 felt the Receptionist had to *"move on to the next patient"* and Patient 3 was given no information on the role as they directly asked to see the FCP:

> *"They [Medical Receptionists] didn't give me any information or discuss it because they thought I knew, because I walked in and said 'May I have an appointment with the musculoskeletal practitioner?' So it must [sic] looked 'Oh this guy knows it' sort of 'Wow! Quick'. They just gave me the interview."* (Patient 3)

5.7 Summary of findings

Key findings of Practice A's analysis chapter have included patients evaluating the FCP role indirectly by comparing it to the more familiar GP role. Furthermore, patients had expectations on whether FCPs should be able to prescribe or inject which influenced role acceptability. Findings suggested that greater access to service, for instance scans, resulted in patients perceiving the role to be 'higher up'. Patients felt that a longer consultation

allowed their individual needs to be considered, however, improved communication including listening and thorough explanations also achieved this. There were three overlaps of theory areas, with the highest overlapping CMO demonstrating how direct access and an understanding of FCP's prescribing abilities could be used in patient role promotion. There were two rival theory areas, including the issue of whether the role could cope with the increased demand if it were widely promoted, and whether Receptionists were already too burdened to promote the role. The subsequent chapter will focus on Practice B's findings.

6 Chapter 6: Practice B Findings

6.1 Chapter summary

Using the same structure as the previous chapter, Chapter 6 will begin by giving an overview the Practice and of the patient participants. Following this, there will be presentation of the findings that are individual to Practice B. The findings for each individual theory area, overlap of theory areas and rival theory areas will then be presented. An overview of CMOs will be presented at the beginning of both the individual theory area sections and the overlap sections.

Due to practitioners having busy schedules, it was not possible to carry out all their interviews ahead of the patient interviews. Interviews were carried out between November 2018 and February 2019 by Leah Morris. The order of interviews was as follows:

1. Receptionist 2[18]
2. GP 2
3. Patients 7-8
4. FCP 3
5. Patient 10
6. Practice Manager 2
7. Patient 9 (rescheduled)
8. Patient 11
9. FCP 4

The Practice ceased recruitment of patient participants after five patient interviews, this was due to theory areas no longer developing in a novel way. The combined total of Practice A and Practice B resulted in 10 patient interviews.

Staff interviews in Practice B ranged from 11 minutes to 40 minutes, and had an average length of interview of 24 minutes. The longest interviews in both Practice A and B were with the FCPs.

In Practice B, the average length of patient interviews was 46 minutes. The patient interview lengths ranged from 32 minutes to 61 minutes.

[18] Operations Manager and Practice Manager 2 in Practice B were the same individual. This was due to her changing role over the course of the research process. Initially, she was managing reception as well as taking calls on reception as Operations Manager; her role changed to Practice Manager several months after her first interview was conducted.

6.2 Practice B overview

The Practice was based in West Yorkshire, in an affluent area four miles outside of the city centre. The CCG report from spring 2017 suggested that the Practice was in the second least deprived decile, scoring 9 – with 10 being the least deprived[19]. A majority of patients were within the 30-39 age group or the 40-49 bracket (see Table 6.1) (NHS Digital, 2019b). The Practice was in a multi-cultural area; in 2011, 8.2% of the population of Practice B's neighbouring city did not have English as their main language compared to the national average of 4.4% (Office for National Statistics).

Table 6.1 - Practice B demographics

Population count	Females	Males
13,771	7,014	6,757

	Age	Female	Male
0-9	1,824	871	953
10-19	1,393	638	755
20-29	1,312	712	600
30-39	2,158	1,108	1,050
40-49	2,082	1,073	1,009
50-59	1,695	858	837
60-69	1,481	761	720
70-79	1,069	578	491
80-89	587	360	227
90-99	170	119	51

6.2.1 Access to Practice B

The Practice had evening clinics on Thursdays and Fridays for booked appointments only (Table 6.2 outlines the opening hours). The Practice offered virtual telephone appointments with Clinical Pharmacists in which they were able to prescribe electronically, and virtual telephone appointments with FCPs, in which they could advise patients or organise follow-up; these virtual roles offered a seven-day service. Practice B held face-to-

[19] Not referenced for confidentiality.

face FCP appointments which were available to 25 Practices in the CCG catchment area. There were two other Practices in the catchment area that offered face-to-face appointments. Practice B's FCP clinics ran between 8:00-12:30 and 18:00-20:00 on Wednesdays. By the final interviews (Patients 9-11 and FCP 4) there was a new clinic with a female FCP from 8:00-18:00. This equated to around 16.5 hours a week of face-to-face FCP contacts in Practice B.

Table 6.2 - Practice B opening hours

Monday	8:00-18:00
Tuesday	8:00-18:00
Wednesday	8:00-20:00
Thursday	8:00-21:00
Friday	8:00-18:00
Saturday	CLOSED
Sunday	CLOSED

6.2.2 Practice B staff

Table 6.3 provides an overview of the staff participants in the chronological order in which they were interviewed. For further detail on members of staff, refer to Appendix 57.

Table 6.3 - Staff participants overview

	Member of staff				
	Receptionist 2	**GP 2**	**FCP 3**	**Practice Manager 2**	**FCP 4**
Time in the Practice	Two years	Six years	14 months	4 months	Three years
Role in the Practice	Head of Reception and Operations Manager. Correct triage of patients.	GP Partner, taught GP registrars and carried out minor surgery	Two hours per week triaging, diagnosing, signposting and advising patients	Monitoring of correct care navigation and monitoring finances	4.5 hours per week triaging, diagnosing, signposting and advising patients
Extended scope skills		Minor surgery in Practice	(Able to administer medications under Patient Group Direction (PGD), but not in FCP role)	N/A	None
Other clinical roles		None	MSK outpatients Band 6	N/A	MSK outpatients (based in Practice, Secondary Care service)
Previous clinical experience			10 years NHS physiotherapist. MSK practitioner since 2014	N/A	8 years in MSK outpatients, 6 years MSK senior
Involvement in developing FCP role		Yes	None	None	Yes

6.2.3 Development of the FCP role

FCP 4 led the development of the FCP role in the Practice as a pilot trial. The Practice already had a MSK outpatient service in-house, which was funded by Secondary Care. FCP 4 was practising in this MSK role whilst also running a private MSK clinic. FCP 4 made a joint venture with the Practice to offer the FCP role as an Extended Access role. Key to the role's implementation were the Practice's CEO and one of the Practice Partners, who also had roles as commissioners and were therefore aware of the new Extended Access Fund (NHSE, 2016a). Due to differences in funding, Extended Access services could be outsourced and vary in its running compared to NHS-funded services. The Practice's FCP role was therefore semi-private, which resulted in traditional NHS banding not applying. Both FCPs were Band 6's in their Secondary Care roles; however, their FCP salaries reflected a Band 7 role. There was potential for conflation between the FCP role and the MSK outpatient's service that was in-house; consequently, the Practice labelled the FCP role the Extended Access Physio service. The Extended Access Physio service was running as a pilot trial, with the aim of it reducing GP demand from MSKDs.

6.2.4 Overview of Patient Participants

Table 6.4 provides an overview of the patient participants.

Table 6.4 - Overview of patient participants

Patient	Gender	Age	MSKD site accessing FCP for	Process Accessing FCP	Accessed GP for MSKD?	Experience of other APs or HCPs that had an impact on their views of FCPs	Registered at Practice B
7	Female	82	Knees	Made aware of FCP when booking GP appointment	No – wants to access GP for back	Yes - audiology department in Practice and outpatient physiotherapy 30 years prior	No
8	Male	63	Lower Limb muscular	Made aware of FCP when booking GP appointment	No	Yes – private physiotherapist	No
9	Female	72	Groin pain	Made aware of FCP by the GP	Yes – first contact was with the GP[20]	Yes – experience of NPs	No
10	Female	47	Knee	Made aware of FCP by the GP	Yes – first contact with the GP	None	Yes
11	Male	43	Hips	Made aware of FCP when booking GP appointment	Yes	None	Yes

[20] See section 8.5.2.1 for the rationale for inclusion of Patients 9 and 10 but the exclusion of Patient 2; all of these patients did not access the FCP as true first contact.

6.3 Individual theory areas

6.3.1 Patient previous experience of condition management

There was one CMO configuration for this individual theory area:

'Patient experience of telephone calls with GPs.'

6.3.1.1 Patient experience of telephone calls with GPs

This hypothesis highlighted how patient experience of GPs ringing them may result in them being more accepting of FCP virtual assessments over the telephone (see Figure 6.1)

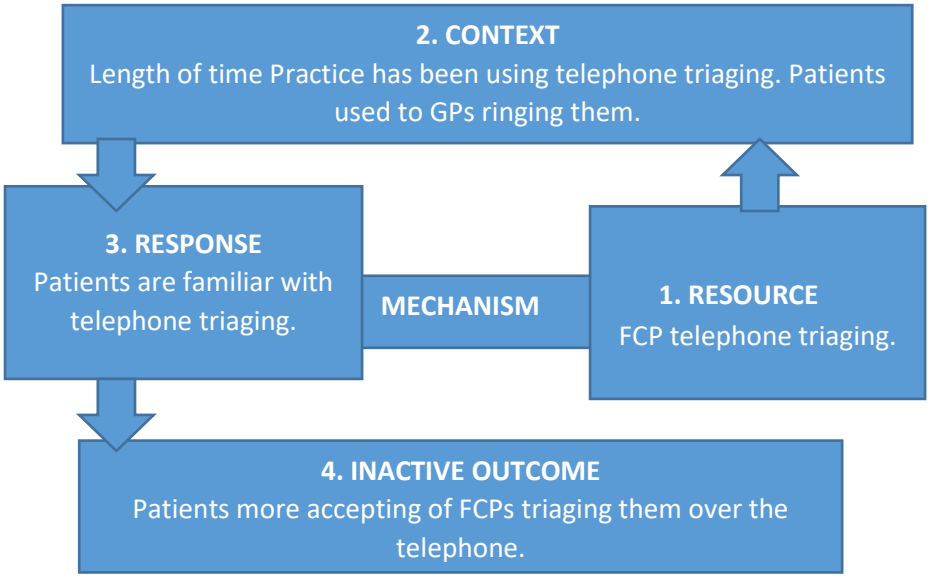


Figure 6.1 - Experience CMO

After the telephone triage with reception, appropriate patients were booked in for a virtual assessment with the FCP over the telephone. FCP 4 felt that patients were more accepting of these virtual assessments if they had experience of GPs ringing them. When asked whether patient acceptability of the FCP role was affected by their GP experience, he responded:

> *"I think so, depending on the Practice they have been referred from. So, *Practice B* is very sort of innovative and they've been using a triage system over the phone for quite a few years now so they're very used to, say, speaking to reception, saying 'Yep, the doctor will ring you back later' so it wasn't any different really from the physio ringing them back."* (FCP 4)

FCP 4 highlighted this mechanism being dependent on whether the Practice used telephone triaging, as well as how long they had been operating with these virtual systems.

6.3.2 Patient expectations of condition management

Practice B's findings resulted in the formation of one CMO for the Expectations theory area:

'Expectation of an understanding of their care pathway.'

6.3.2.1 Patient expectation of an understanding of their care pathway

This hypothesis demonstrated patients wanting to understand their care pathway and how this could lead to management of their expectations (see Figure 6.2).

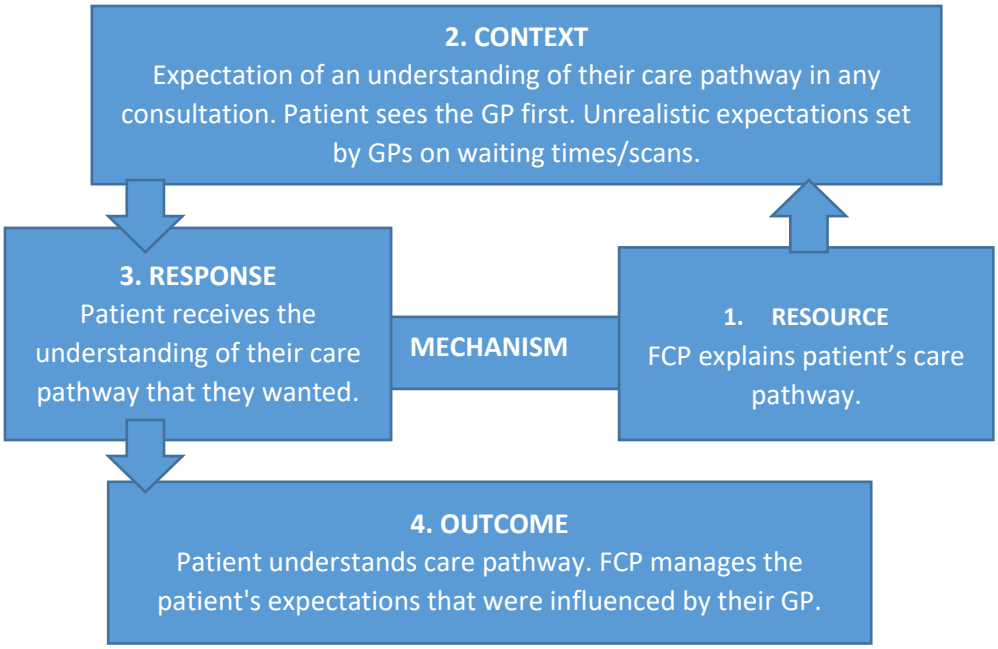


Figure 6.2 - Expectation CMO

Secondary to wanting a diagnosis, FCP 3 felt that the next most important thing for patients was an understanding of their care pathway:

> *"I think all the ins and outs of it aren't that important for patients but it's how long can they expect to wait. Who are they going to go and see and what's going to happen to them after that."* (FCP 4)

FCP 4 highlighted the importance of managing unrealistic patient expectations set by GPs. This was achieved through re-establishing the care pathway, including an explanation on what conditions are appropriate for a scan and how long patients can expect to wait:

> *"it's really common for GPs to say 'Yeah, the MSK team, they'll arrange an MRI scan for your back pain'. Then when it's come through to the MSK team they've spent two or three months on the waiting list thinking 'Yep, great, I'm going to get a scan' and then trying to tell them 'Look, you're not appropriate for a scan'. So, it's managing patient expectations and giving them timescales."* (FCP 4)

Nearly all the patient interviews[21] built upon this hypothesis, as these patients expected their care pathway to be explained to them. Patients 9 and 11 stated that their MSKD and its management should be – and was – explained to them. When asked what they expected from their consultation, Patient 9 stated:

> *"To really examine me and give me an idea as to what the issue was and that's what I got. I got an idea of what it could possibly be and the routes that we would then take so when they talked to me about seeing another physiotherapist"* (Patient 9)

Patient 10 also felt the *'path'* for recovery was set out to them by the FCP. However, Patient 7 was not sure if there was follow-up with the FCP and expressed this as something she wanted to know.

[21] All but Patient 8.

6.3.3 Professional Hierarchy

The Hierarchy theory area had one CMO formed from Practice B's findings:

'Patient perception of the Receptionist's status.'

6.3.4 Promoting the role to patients

Practice B's findings resulted in two CMO configurations being formed regarding the individual theory area Promoting the FCP Role:

'The impact of multiple Practices accessing the role on patient role understanding.'

'Patients require information on FCP's qualifications.'

6.3.4.1 The impact of multiple Practices accessing the role on patient role understanding

It was hypothesised from the findings that multiple Practices accessing the FCP role could have a detrimental effect on patient understanding of the FCP role (see Figure 6.3).

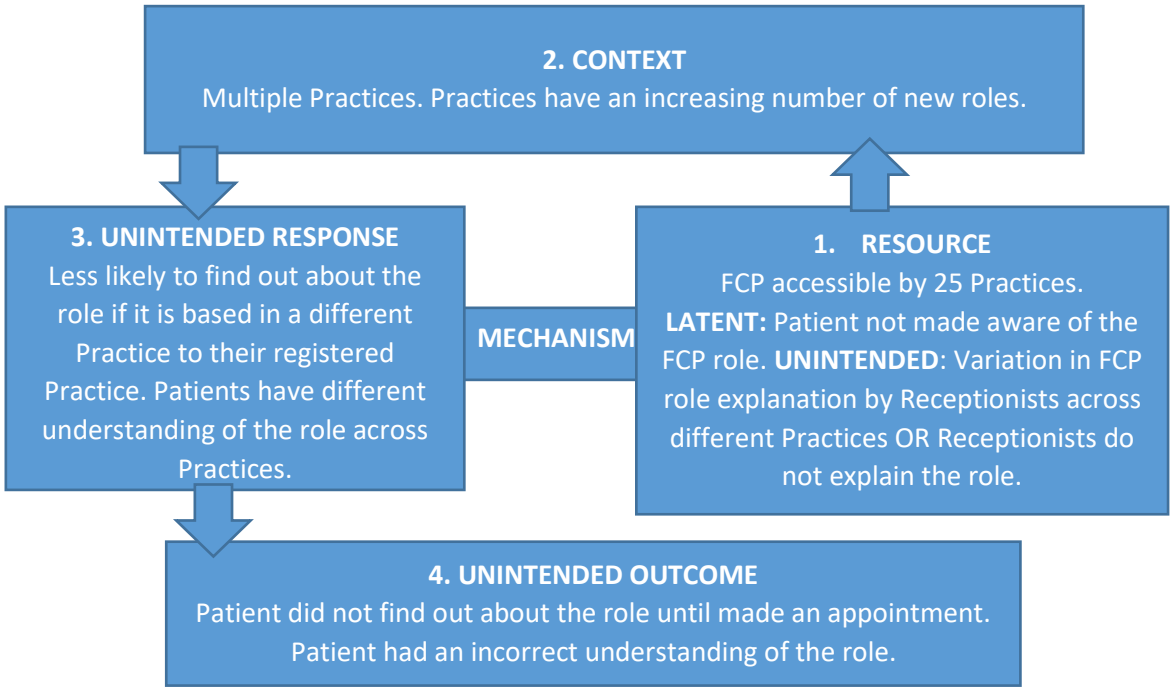


Figure 6.3 - Promoting the FCP Role CMO

Despite staff training, staff responses highlighted a mixed understanding of the role's title. Practice Manager 2/Receptionist 2 called the role the MSK Muscular Service, GP 2 referred to the role as a physiotherapist in the MSK Service. FCP 3 referred to himself as a physiotherapist in an assessment capacity. However, FCP 4 stated that the role should be referred to as Extended Access Physiotherapy Service; this was so it was not conflated with

the FCP role – which had a different funding stream – or the Secondary Care funded MSK Service that was also in the Practice.

FCP 4 and FCP 3 highlighted variation in GP understanding of the FCP role; FCP 4 explained that *'older school practitioners'* did not always understand that the FCP should be first contact, and he provided an anecdote of a patient who had 10 GP contacts before seeing the FCP. FCP 4 disagreed with different Practices having varying understanding; however, he stated some Practices were more '*bought into the concept'* due to having had the role for longer.

The limited GP understanding may have been a result of the mode of communication between staff. FCP 3, FCP 4 and GP 2 all highlighted that predominantly communication between members of staff was virtual, through SystmOne (TTP, 2019). FCP 3 was asked in the respondent validation whether he felt limited communication between GPs and FCPs impacted on GP's understanding, he confirmed that he did feel other Practices had less understanding:

> *"Since we cover multiple practices, the 'home' practice has a pretty good understanding I think, and the others less so. This is likely due to us being based at *Practice B* and not the others. So actually yeah, the limited contact probably does affect this."* (FCP 3 respondent validation)

Patient 7 felt that she was hindered from finding out about the FCP role – and other services – due to these services being offered in a different Practice to her registered Practice:

> *"They belong to the same practice but at another address, which is also a GPs surgery, but obviously it's bigger, and I think it's a good idea but I don't know how you find out unless you need one of them!"* (Patient 7)

None of the patients interviewed knew about the FCP role prior to contacting the Practice to make a GP appointment for their MSKD. Patients demonstrated mixed signposting and explanations on the FCP role by the Receptionists. Patient 8 was the only patient to state that the Receptionist explained the role. Patient 7 felt she was not provided with a role description; however, the Receptionist was successful in changing the patient's perception that the GP was the first step before any other contacts. Conversely, Patients 9, 10 and 11 were not made aware of the role the first time they contacted the Practice; consequently, they accessed the GP first. Patients 10 and 11 were registered with Practice B, therefore

this challenges the hypothesis from FCP 3 that this Practice had *'better understanding'* than others. However, Patient 11 stated that the Receptionist did – after this initial GP contact – explain that the FCP was a specialist in MSKDs. Thus, this highlights a potential mixed understanding amongst Practice B's Receptionists; nonetheless, the reasoning is not evident.

6.3.4.2 *Patients require information on FCP's qualifications*

The FCPs did not have skills outside their capabilities, for instance, prescribing. Nonetheless, this hypothesis demonstrated that patients wanted an understanding of the FCP's skills to have confidence in them (see Figure 6.4).

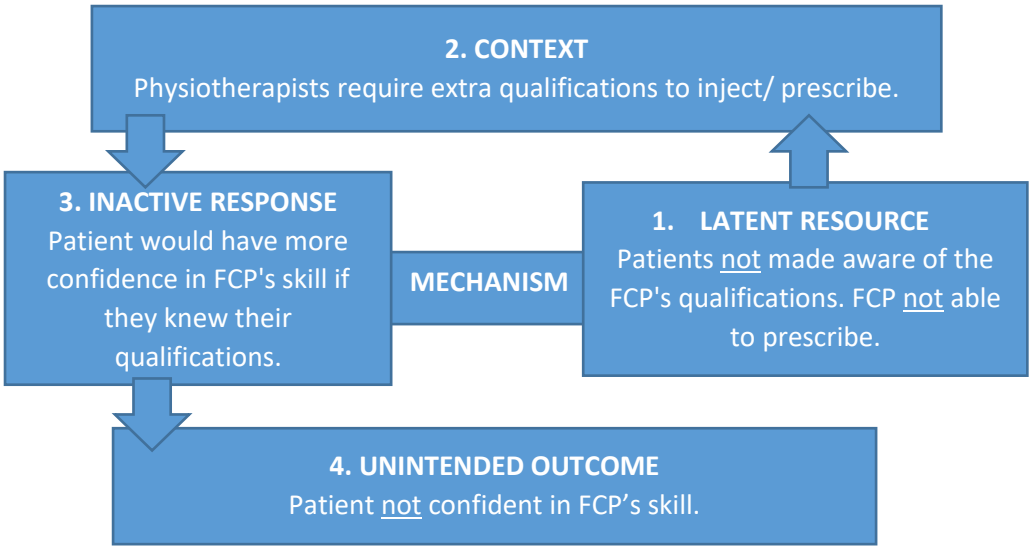


Figure 6.4 - Promoting the FCP Role CMO

Patient 11 stated he would have like to have been informed on the qualifications of the FCP, as he would have then been *'sure in his skill'*:

> *"It would be good if I know what kind of problems he helps with and what education degree he's got before he starts to practice."* (Patient 11)

Although no other patients outwardly expressed needing to know the FCP's training, Patients 9 and 10 both expressed acceptance of the FCP prescribing or injecting only if they were trained. Thus, it may be inferred that ahead of a treatment that is an extension of the FCP's core capabilities, the patient may have requested information on qualifications:

> *"So, I think if they're trained and qualified to do that then they should be able to do that because it's their area of expertise isn't it?"* (Patient 9)

6.3.5 Accessibility

Practice B's findings resulted in the development of three CMOs for the individual theory area Accessibility:

'Appointments closer to patient homes.'

'Availability of appointments outside of working hours.'

'The effect of length of FCP consultations on the acceptability of the role.'

6.3.5.1 Appointments closer to patients' homes

This hypothesis highlighted how patients perceived the travel to the FCP appointment comparatively to Secondary Care physiotherapy (see Figure 6.5).

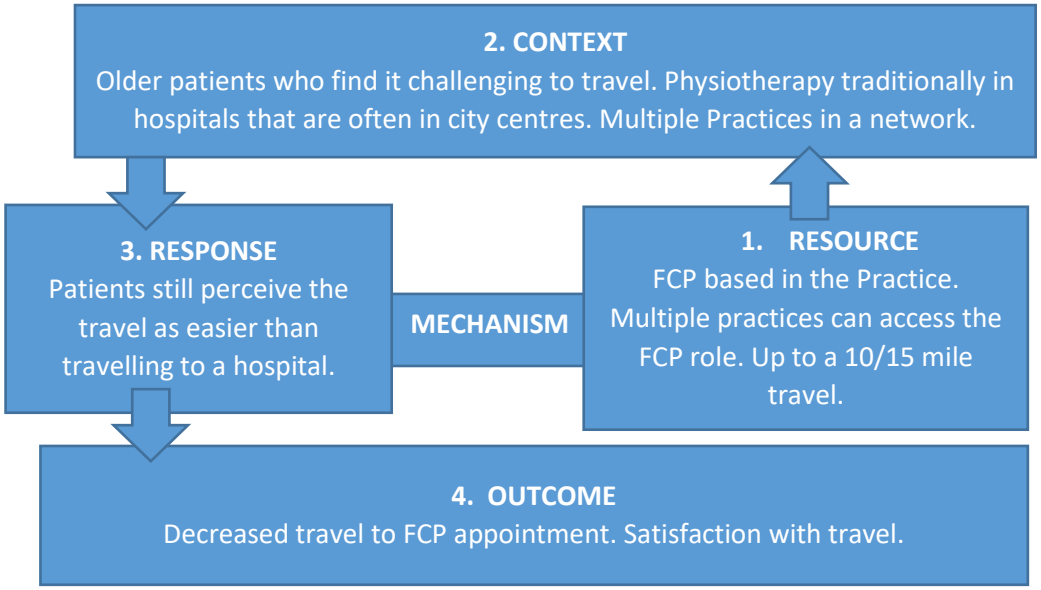


Figure 6.5 - Accessibility CMO

GP 2, Practice Manager 2 and FCP 4 perceived that the FCP role location would be advantageous. Practice Manager 2 highlighted the particular benefit of this to older patients who may find it challenging to travel:

> *"They're seen locally so they don't have to travel into the city centres. Especially elderly people, it's easy for them to come local. It's an easy service to access."*
>
> (Practice Manager 2)

However, FCP 3 perceived travel to be an issue due to the multiple practices and large catchment area, consequently, the role was only local for some. FCP 3 had experienced patients being late or missing appointments due to travel, thus wasted appointments:

> *"With patients travelling they then end up coming late or missing appointments, which impacts the service because – being booked up far in advance – if you then get people who DNA [do not attend], it sort of has an impact on the service that people who maybe need to be assessed quickly can't because it's booked in advance."* (FCP 3)

FCP 4 also highlighted that some patients had to travel 10/15 miles; he felt that through promoting the role as a specialist service, patients were satisfied despite the travelling distance.

Patients 7 and 8 were the only patients to discuss travel; Patient 7 had one of the furthest journeys, at around 10 miles. Although she expressed that the Practice was not her local Practice, she was still satisfied as she had not needed to attend a city-centre hospital. When asked if she would tell others about the role, she responded that she would tell them of this advantage:

> *"It's important that it's available through the practice rather than having to go to a hospital, which can be well anywhere can't it? It can be the middle of town or the other side of town or the next town but I think it's good that it's available through your GP without having to go to the hospital."* (Patient 7)

Patient 7's response coincides with FCP 4's response that patients are satisfied with the service despite having to travel to a different Practice.

6.3.5.2 *Availability of appointments outside of working hours*

This hypothesis demonstrated the importance of having enough evening appointments and decreased patient acceptability if there were long waiting times for these slots (see Figure 6.6).

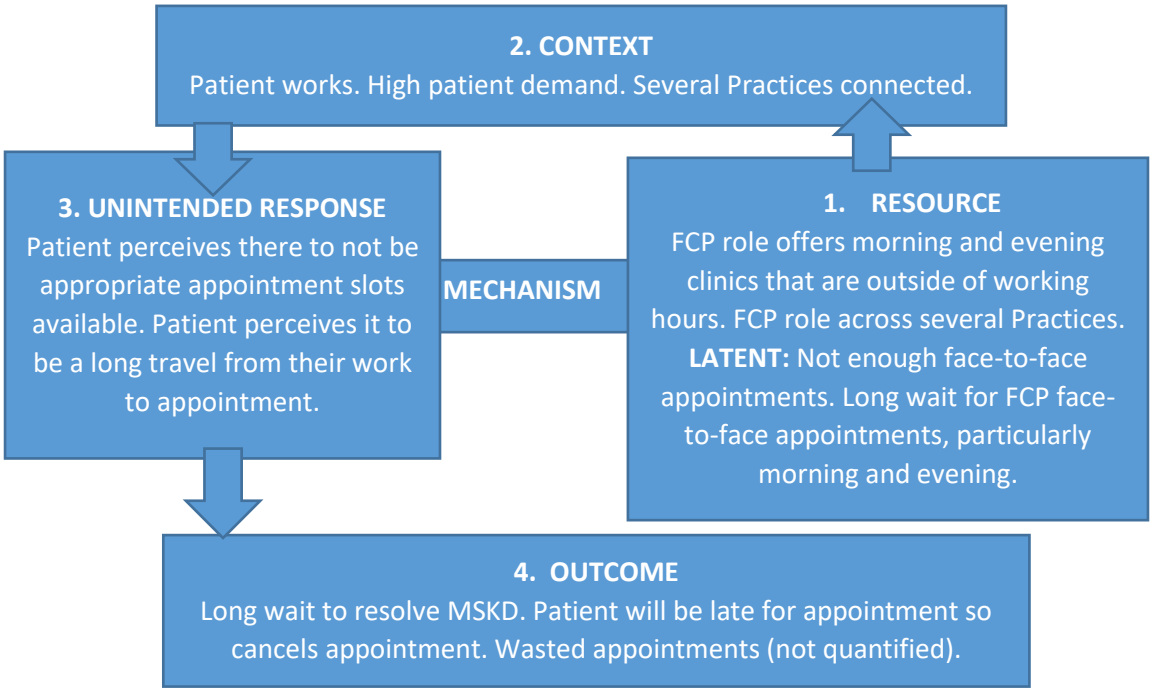


Figure 6.6 - Accessibility CMO

Patient 8 expressed that the Practice was nearby to his local Practice, however, he would have had issues in attending a Practice further away due to travelling from work:

> *"it's quite nearby but if it had been somewhere else I would find it difficult to get to that practice" …"I had to cancel it first time because it's the timing, you know, when you're working as well and the timing sometimes can be an issue."* (Patient 8)

Patient 8 discussed the limited hours the FCP worked, a preference for early morning and evening appointments (which the role was already offering). The patient did connect opening hours with waiting times, suggesting that although an appropriate clinic time may have existed, he had to book far in advance to get that slot:

> *"The timescale, you know, when I acquired my injury was before … it was two weeks after my injury I asked them and it was about three weeks or so afterward to get to them in-between at that time."* (Patient 8)

6.3.5.3 *Length of consultations Practice B rationale*

The length of the FCP consultation was hypothesised to result in FCPs being able to provide thorough explanations to the patient (see Figure 6.7).

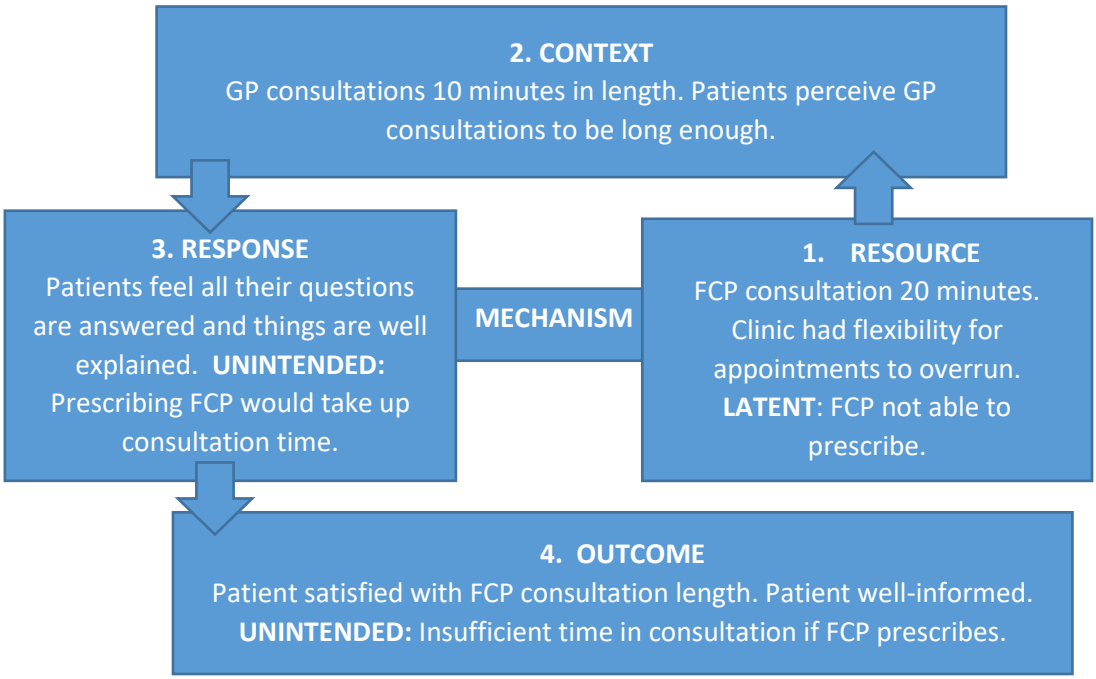


Figure 6.7 - Accessibility CMO

Staff responses highlighted that the length of the face-to-face FCP consultation may have affected patient acceptability of the role. GP 2 highlighted that patients would like longer with the GP than the 10 minute GP slot they received; however, this was not possible due to the high patient demand and GP shortages. FCP consultations on the other hand, were 20 minutes in length. FCP 4 stated that the clinic was slightly longer than the number of booked in patients, to allow some flexibility for patients that may require slightly longer; for instance, patients with multiple problems.

FCP 3 felt that longer consultations allowed them to provide a more in-depth explanation to the patient. He also felt that 20 minutes was sufficient, as their purpose is to assess and signpost, therefore they did not require treatment time:

> *"I run 20 minutes which is still 10 minutes longer than what a GP would give you so at least you still feel like you get a bit more time to explain what's going on. And, again, as just an assessment you don't necessarily need loads and loads more than that because you're not doing a full treatment"* (FCP 3)

In contrast to the staff responses, nearly all patients (all except Patient 11) expressed GP consultations being long enough.

Patient 11 was from Practice B, and he stated he'd have liked to have had a *'little bit longer'* with the GP as not all of his questions were answered. Conversely, he felt the FCP consultation length was sufficient as everything was well explained. When asked about the FCP consultation length, he responded:

> *"Exactly the same time [sic] we need to answer all the questions and make a diagnosis and explain."* (Patient 11)

Patient 10 also expressed satisfaction with the FCP consultation length, as she felt the FCP had enough time to go through everything she needed to.

Patient 8 expressed the length of consultation in similar terms; he felt that the FCP did not need the full allotted consultation length as the patient had nearly recovered. Thus, he perceived all his issues to be addressed in less than the intended consultation length:

> *"The consultation, it did have impact because he told me what I needed to know and what I needed to work on so…that was a reasonable…because I was half recovered"* (Patient 8)

Conversely, Patients 7 and 9's responses indicated communication to be an important factor when they were questioned on consultation length (see p.242).

6.3.5.4 *Accessibility of a female/male FCP or a language interpreter*

This hypothesis demonstrated the effect that the Practice being in a multi-cultural area had on accessibility needs of some patients; this included the need for a male/female FCP, or a language interpreter (see Figure 6.8).

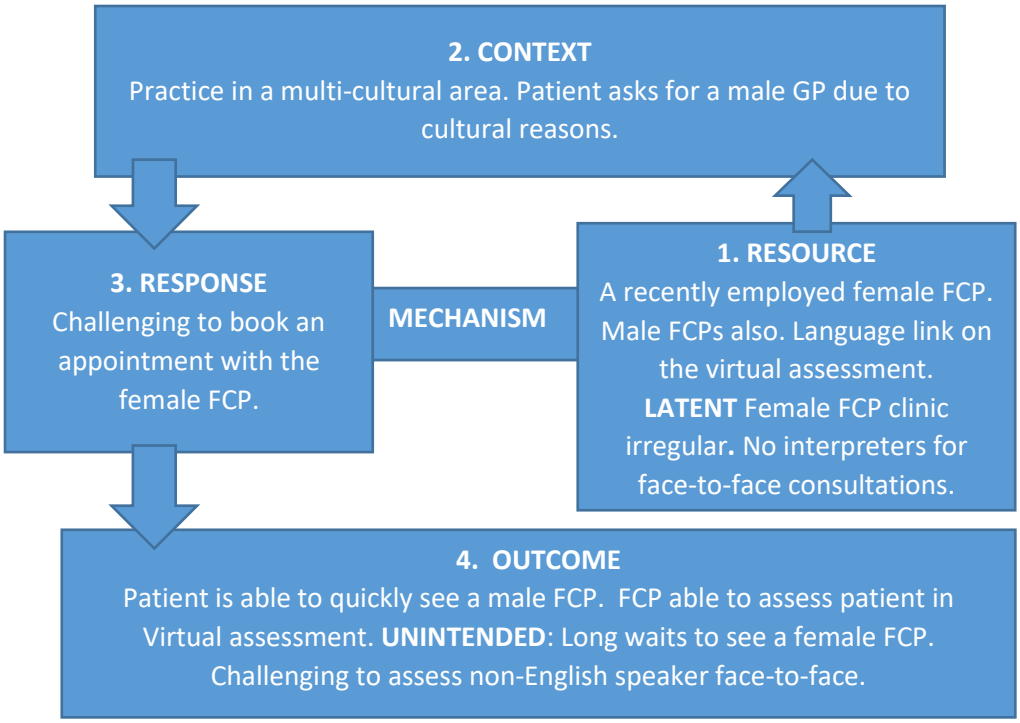


Figure 6.8 - Accessibility CMO

The respondent validation with FCP 4 connected the multi-cultural context of the Practice with the requirement for a female FCP. There was no female FCP in Practice B at the start of data collection; this changed, and one-day-a-week there was a female FCP in the Practice. This was irregular and the clinic day changed according to her commitments as a clinical academic. The female FCP did virtual assessments, therefore, it was possible for the patient to receive continuity with her. However, it can be inferred from FCP 4's response that the irregular clinics may have resulted in it being challenging for the patient to make an appointment with her.

None of the patients expressed needing a female clinician, however, Patient 8 expressed that due to cultural reasons there were times that he would want to see a male practitioner:

> *"as a culture and that if a female is in there without … I know it might be different for women because sometimes when they put women appointments at the GP I ask is it possible to see a male doctor"* (Patient 8)

FCP 4 had experiences of a language barrier when communicating with non-English speakers. The Practice did have language link for the virtual assessments, which overcame the barrier; nevertheless, it was not possible to have interpreters for face-to-face consultations:

> *"It's very sort of multi-cultural, certain parts of certain practices. So we are just getting our heads round a system where you can speak to a patient on the phone, you can also have language link on another line as well – almost like a telephone conference as well. So we have got those sort of things in place now but we can't arrange interpreters to be face-to-face for the face-to-face appointments so that can be a bit more of a challenge."* (FCP 4)

A language barrier was not discussed in patient responses; however, this would not be relevant to the English-speaking sample. The sample included only those who could speak English, and excluded those who could not for pragmatic reasons (this is acknowledged in 'Strengths and limitations of the realist evaluation', p.300).

6.3.5.1 *Patient perception of the Receptionist's status*

This hypothesis demonstrated that the patient perception of the status of Receptionists may result in them rejecting the Receptionist's triage (see Figure 6.9).

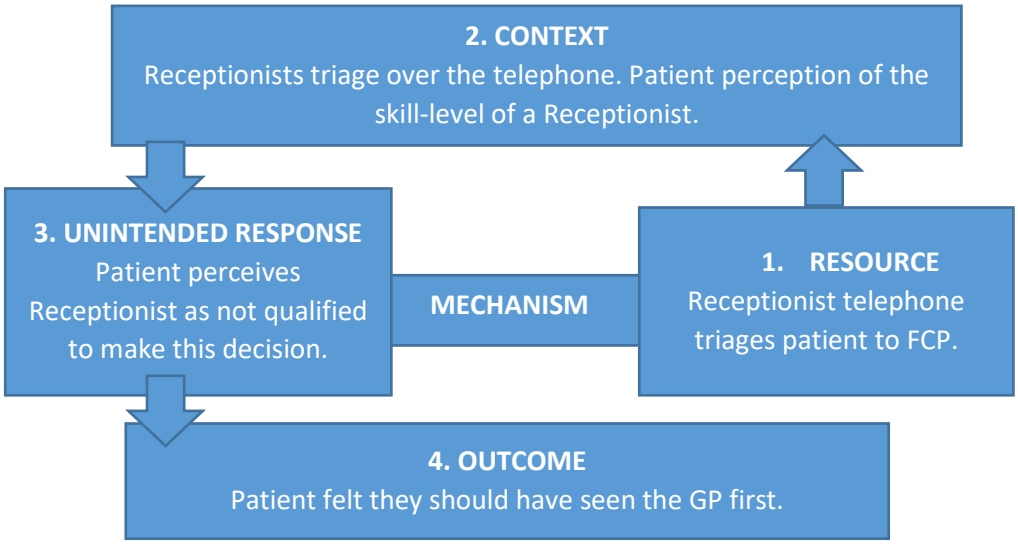


Figure 6.9 - Hierarchy CMO

Patients differed in their responses regarding hierarchy within their Practice; nevertheless, they were nearly all registered with different Practices; only Patient 10 and 11 were with Practice B.

Although staff responses did not highlight an existing hierarchy between members of staff, GP 2 and Receptionist 2 did insinuate a patient-perceived hierarchy. Both discussed the importance of Receptionists reassuring patients that they are seeing the right professional; nevertheless, they highlighted this as challenging due to their role:

> *"it's clearly not always fully possible to assess and assure somebody by phone, especially if you're a Receptionist, but they usually accept it, once they've got some idea of what the diagnosis is."* (GP 2)

Patient 7 built upon the staff hypothesis regarding the acceptance of Receptionists triaging. She felt that Receptionists were not qualified to make the decision as to which professional she accessed:

> *"The route that it took was via the Receptionist, which I don't think is right because I don't think that she is qualified to say 'Oh you don't need to see a GP, you need to see a physiotherapist, I'll have somebody ring you'"* (Patient 7)

6.3.6 Communication

One CMO was formed through Practice B's findings for the individual theory area Communication; referring to communication between FCPs and patients:

'The communication skills of the individual FCP.'

6.3.6.1 2.6.1 The communication skills of the individual FCP

This hypothesis highlighted ways the FCP can communicate with the patient to make them feel more at ease (see Figure 6.10).

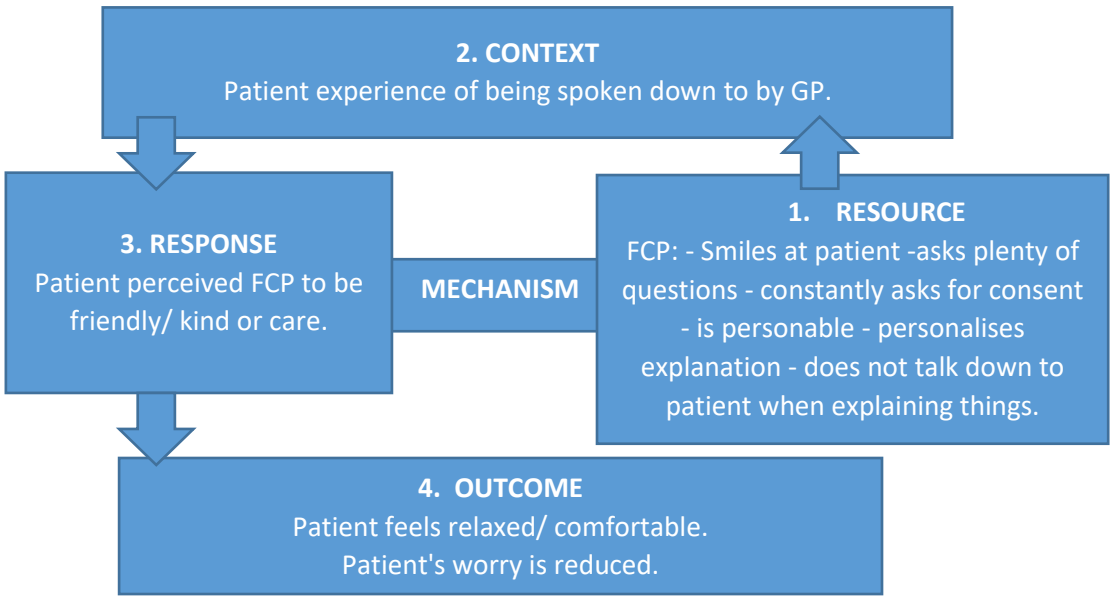


Figure 6.10 - Communication CMO

It was important for patients to feel the FCP was friendly/kind (Patients 9 and 11) and that they cared (Patients 7 and 9). The FCP was able to demonstrate this by: smiling (Patient 10); asking the patient plenty of questions (Patient 8); constantly asking consent (Patient 9); being personable (Patient 10), including personalising their explanations (Patient 9); and not talking down to the patient when explaining things (Patient 10). Through the FCP appearing friendly, Patient 11 and 10 stated they felt relaxed, and Patient 9 felt comfortable, her worry was reduced:

> *"I liked that I felt *FCP 4* cared, he was quite warm and friendly. He was obviously knowledgeable about … he talked about he'd had a similar issue with … because it could possibly be a tear in the muscle and he talked about … so he personalised it which I think … for me I quite like that to see that somebody has got an understanding of what you've got or what you may have. And I think the way he examined me, he asked me if I minded him examining me."* (Patient 9)

The patient experience of the FCPs' communication was often contrasted with their experience of GPs talking down to them (see theory area overlap, p.235).

6.3.7 Continuity of the individual practitioner

Practice B's findings led to the formation of one CMO for the individual theory area:

'Rationale for wanting continuity.'

6.3.8 Rationale for wanting continuity

This hypothesis regarded why patients valued FCP continuity (see Figure 6.11).

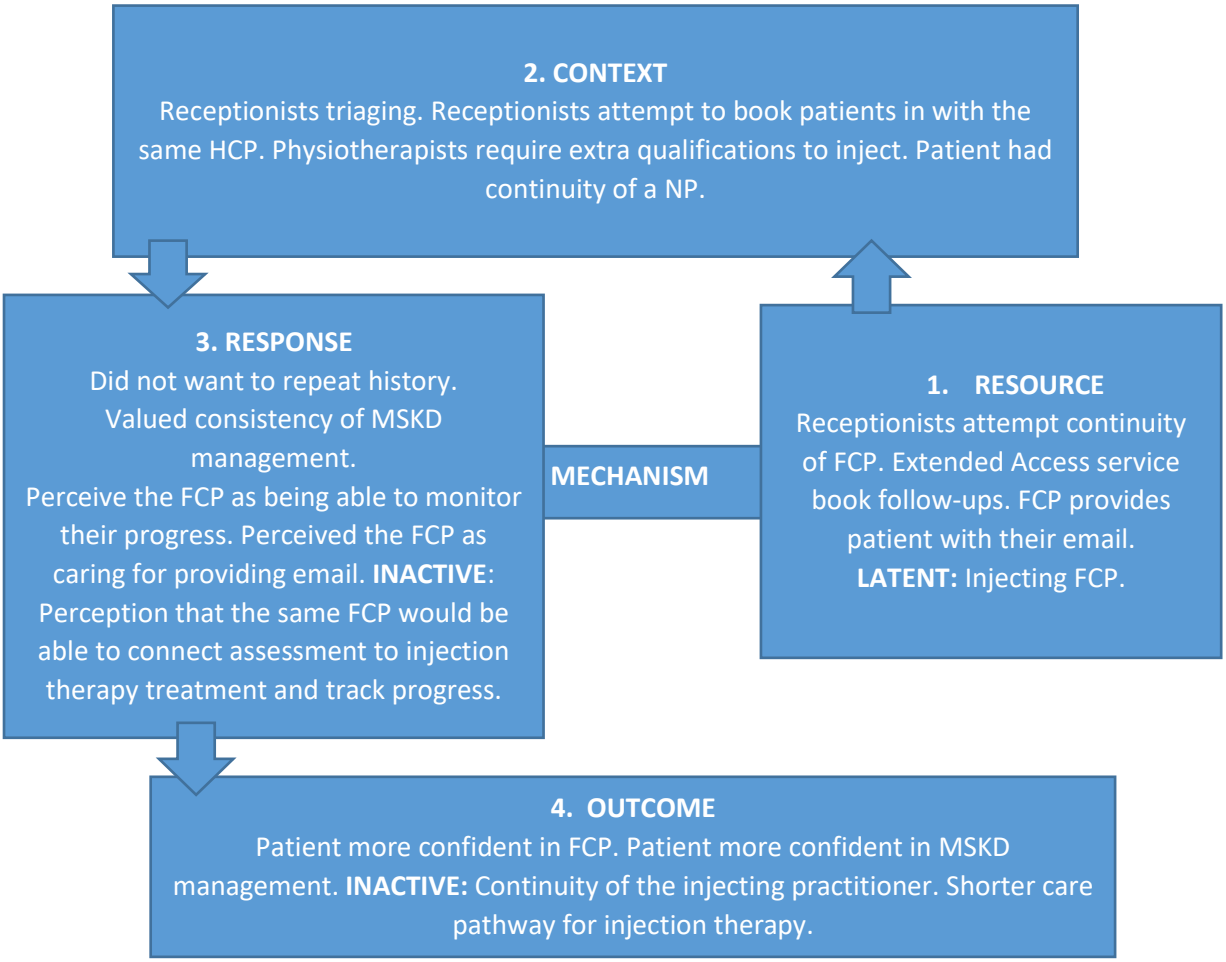


Figure 6.11 - Continuity CMO

Receptionist 2 highlighted their role in *'re-booking for consistency with the right person';* Receptionists were booking patients in with the same HCP when possible, including the FCP. Follow-ups with the FCP were booked by the Extended Access service and FCP 4 stated that he would try to provide continuity, particularly if booking a face-to-face appointment after assessing a patient over the telephone:

> *"If I've spoken to them over the phone I'll do my best … if they need seeing face-to-face, I'll do my best to see them face-to-face just for that continuity of care. I think*

most of the time people are just happy to be seen and seen quickly and people don't mind travelling either" (FCP 4)

FCP 3 did not do virtual assessments, as he felt uncomfortable providing advice without seeing the patient. Consequently, continuity was never achieved for those patients who saw him in a face-to-face appointment. Although he read the notes from the virtual assessment, he wanted to hear the patient's story from them, as it facilitated clinical-reasoning. Occasionally he experienced patients expressing dissatisfaction with having to repeat themselves:

"I think it's always worth recapping and I know that does upset some patients that you kind of get the 'Is it not all on my notes?' type thing but I think, for me, I want to hear it from the horse's mouth, so to say." (FCP 3)

Patient responses expanded upon this hypothesis. Patients 7, 8, 10 and 11 all expressed a preference to see the same FCP. Concurring with staff responses, patients 10 and 11 did not want to repeat their history. Patients 8 and 10 also valued the consistency that came from the same FCP managing their MSKD, as they would not receive several interpretations of exercises (Patient 8) and the FCP would be aware of what the patient was capable of (Patient 10):

"I would always prefer to see the same person. I have more confidence that they know me. I don't have to go through the pre-amble every time, which becomes tiring." (Patient 10)

Patient 10's response also demonstrates the importance of being confident that the FCP knew the patient. Patient 8 held a similar view, as he perceived that the FCP – being knowledgeable on his condition – would be able to better monitor his progress and increase the patient's confidence:

"if I see the same physio they can monitor my record and my progress, whereas if I see different people, a different person, they have to look at my record all the time and then they have to put their input" (Patient 8)

Patient 8 stated that through one FCP monitoring his progress he would feel he was *'making progress, makes me more confident'.* However, this is not in line with the aim of the FCP role (see p.245 for further discussion).

Patient 7 also expressed satisfaction in the FCP providing her with his email address, so that any questions could be addressed by the same practitioner. She perceived him as caring as a result:

> *"*FCP 4* gave me his email address and said 'If you have a problem or you want to talk about it email me and I'll see what I can do.' Now this is something that you're usually used to but doesn't happen very often so I think this is why my pleasure of seeing *FCP 4* was such a pleasure because he said 'If you need …' you know 'contact me.' Which was the first time anybody had said that in a long time."* (Patient 7)

Patient 7 implied continuity being preferential for the FCP injecting as the FCP could track the effectiveness of the treatment. Although neither FCPs were able to inject, the patient was questioned on this skill as a hypothetical situation. Her response indicates a belief that the practitioner would be able to connect their assessment to injection as a treatment:

> *"They could see how things were improving or if they weren't improving and they would be in control of what was happening to the patient. More than referring backwards and forwards"* (Patient 7)

6.4 Theory Area Overlap

This section will describe the interconnected nature of the theory areas. As there are a myriad of overlaps, in this section only the most frequently overlapping theory areas will be discussed, as well as the overlaps that may have the greatest implications for service development (see Table 6.5).

Table 6.5 - Theory area overlap Practice B

Overlapping theory areas	**CMO title**
Expectation, Accessibility, Hierarchy, Promoting the role, Experience	The role of the Receptionist in changing patient expectations
Accessibility, Experience, Expectations, Promoting the role	Expectations on the number of appointments based upon experience of traditional physiotherapy
Experience, Expectations	The effect of patients' private physiotherapy experience
Expectations, Experience	Patients adamant that they access the GP

6.4.1 Overlap 1 – The role of the Receptionist in changing patient expectations

This overlap connected five theory areas and highlights how the Receptionist may not be able to change the patient expectation that they should be accessing the GP due to a perception of hierarchy (see Figure 6.12 for CMO).

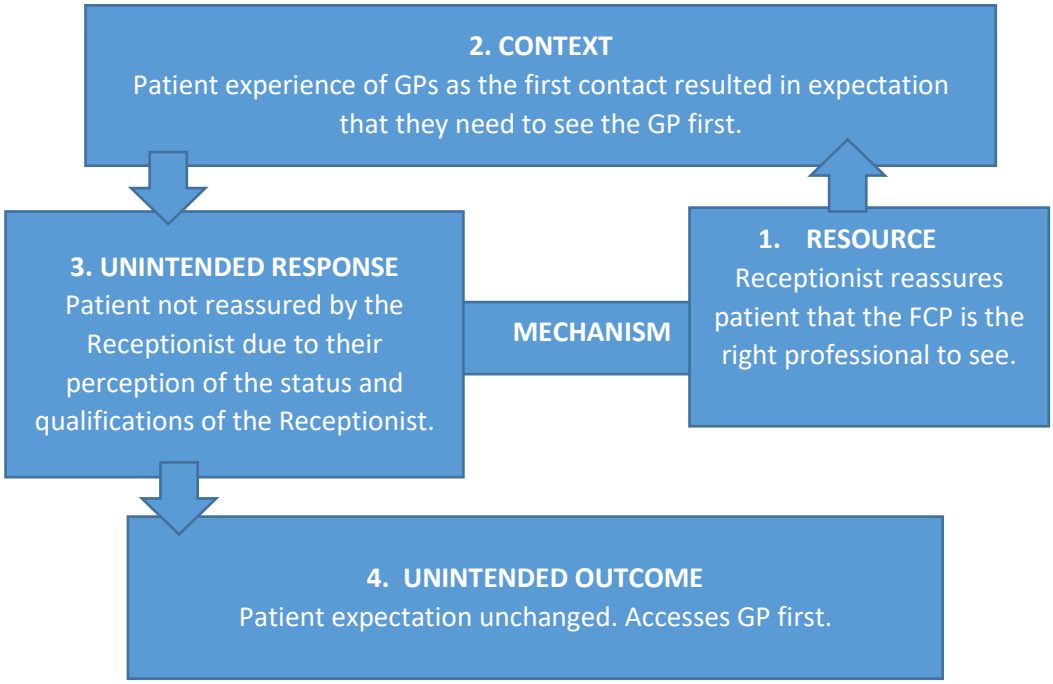


Figure 6.12 - Overlap 1 CMO

Receptionist 2, FCP 4 and Patient 7 all highlighted a patient expectation of the GP as the first step in care; this expectation was based on previous experience of GPs traditionally always being the first contact. However, GP 2 and Receptionist 2 highlighted that this expectation could be altered by the Receptionist reassuring the patient that the FCP was the right professional to access for their MSKD. Nevertheless, it was not always possible for the Receptionists to change the patient's expectation; this was due to patient perceptions of the status and qualifications of a Receptionist. This raises discussions on which professions are able to champion the service, and who patients trust as advocates:

> *"It's clearly not always fully possible to assess and assure somebody by phone, especially if you're a Receptionist, but they usually accept it, once they've got some idea of what the diagnosis is."* (GP 2)

> *"The route that it took was via the Receptionist, which I don't think is right because I don't think that she is qualified to say 'Oh you don't need to see a GP, you need to see a physiotherapist, I'll have somebody ring you'"* (Patient 7)

See Figure 6.13 for overlap between theory areas.

Figure 6.13 - Overlap 1

6.4.2 Overlap 2 – Expectations on the number of appointments based upon experience of traditional physiotherapy

Overlap 2 connected four theory areas and demonstrates the link between experience of traditional physiotherapy and what patients expect from a FCP (see Figure 6.14 for overlap between theory areas).

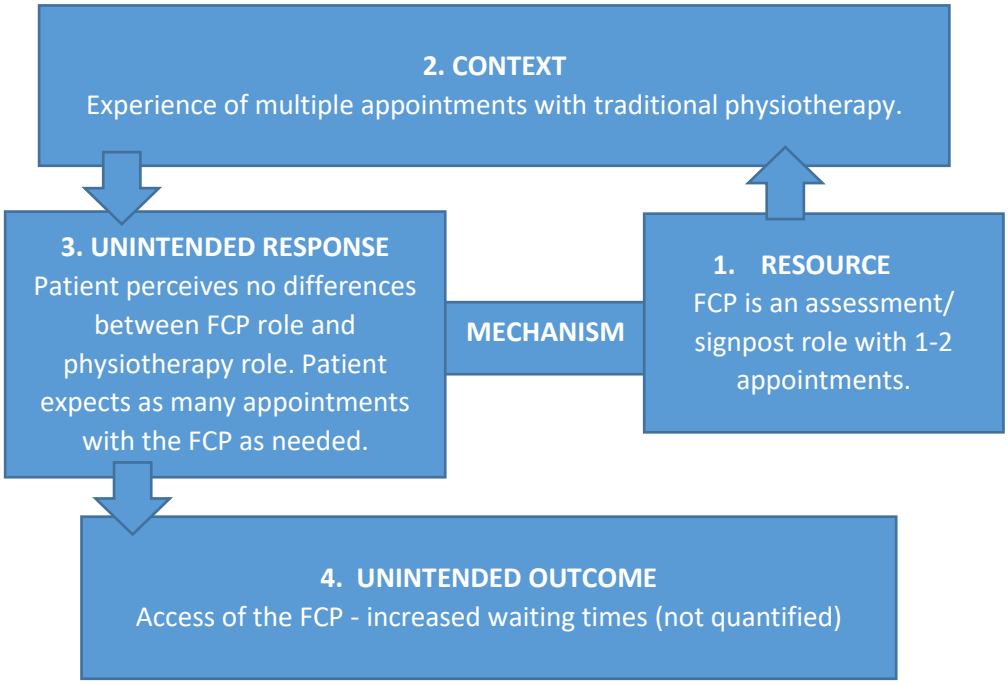


Figure 6.14 - Overlap 2 CMO

Predominantly, patients felt they should be able to receive as many appointments as necessary[22]. Further to this, all the patients stated that there were no differences between a traditional physiotherapist role and the FCP role. Using retroductive thinking, it may be inferred that as patients are not distinguishing between the roles, their experience or understanding of traditional physiotherapy – in which they would receive multiple appointments – forms their expectations of the FCP role. Although this was not quantified, it may be inferred that an expectation of several appointments could result in inappropriate access of the FCP role by patients and thus have an effect on waiting times.

Patient 9 may have not expected several appointments; however, she wanted to know if she would receive treatment in the appointment:

[22] Patient 9 was the exception.

"If there was any question it would be would the physio do any work on … you know like any exercises with me on the day" (Patient 9)

See Figure 6.15 for overlap between theory areas.

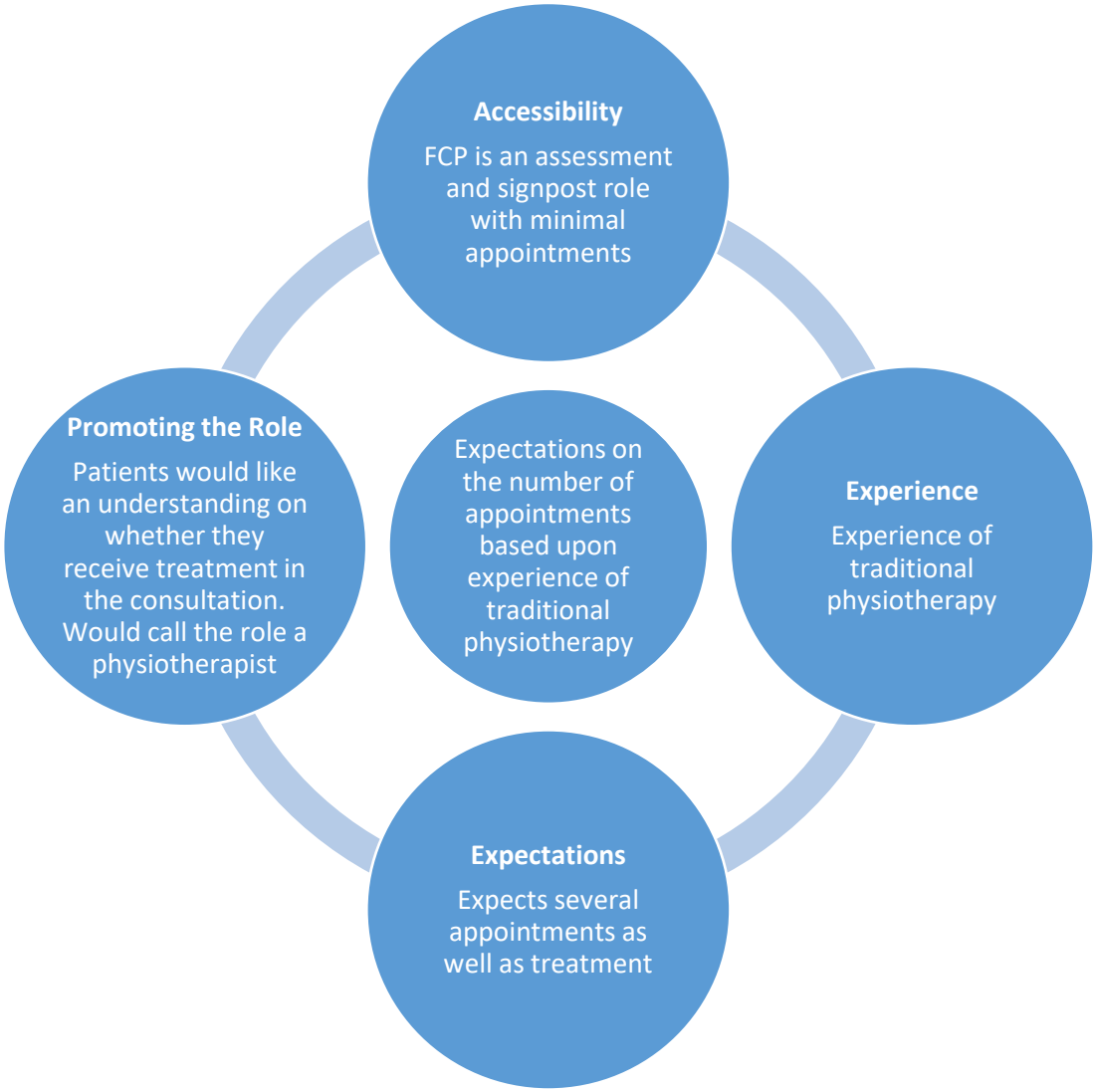


Figure 6.15 - Overlap 2

6.4.3 Overlap 3 -The effect of patients' private physiotherapy experience

This overlap demonstrates the effect of private physiotherapy experience expectations of the FCP (see Figure 6.17 for CMO).

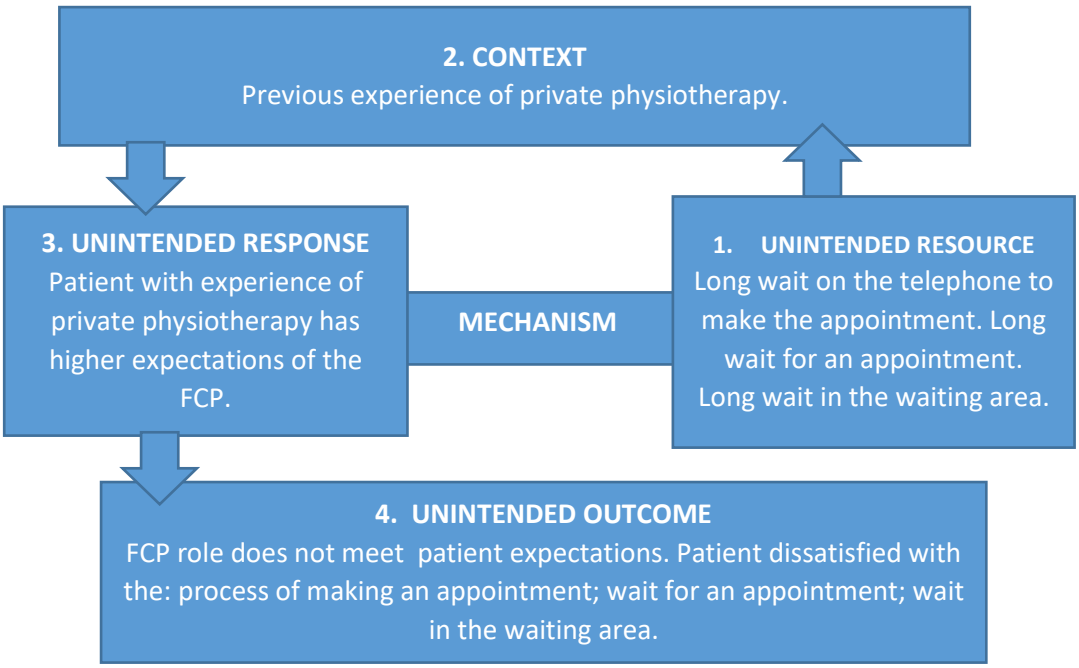


Figure 6.16 - Overlap 3 CMO

Only Patients 7 and 8 had experience of physiotherapy. Patient 7 had an experience of NHS MSK outpatients over 30 years ago, whilst Patient 8 had private physiotherapy experience and A&E experience for his MSKDs. Patient 8 was the only patient with private experience and he was also the only patient to express dissatisfaction with: the wait whilst making an appointment on the telephone; the waiting time for a FCP appointment; and how long he had to wait in the waiting area. Patient 8 felt that the FCP may have been a private service:

> *"I think a physio in the hospital and a physio in the practice might be … physio in the practice might be doing it uh … like a … I don't know as a private thing that's - to the practice whereas the NHS at the hospital they know at the start of their role they have to treat everybody maybe whoever comes."* (Patient 8)

Using retroductive thinking, it may be inferred that patients who access private physiotherapy services –which have a less patient demand and therefore more capacity for flexibility – may have higher expectations of the FCP service.

See Figure 6.17 for overlap between theory areas.

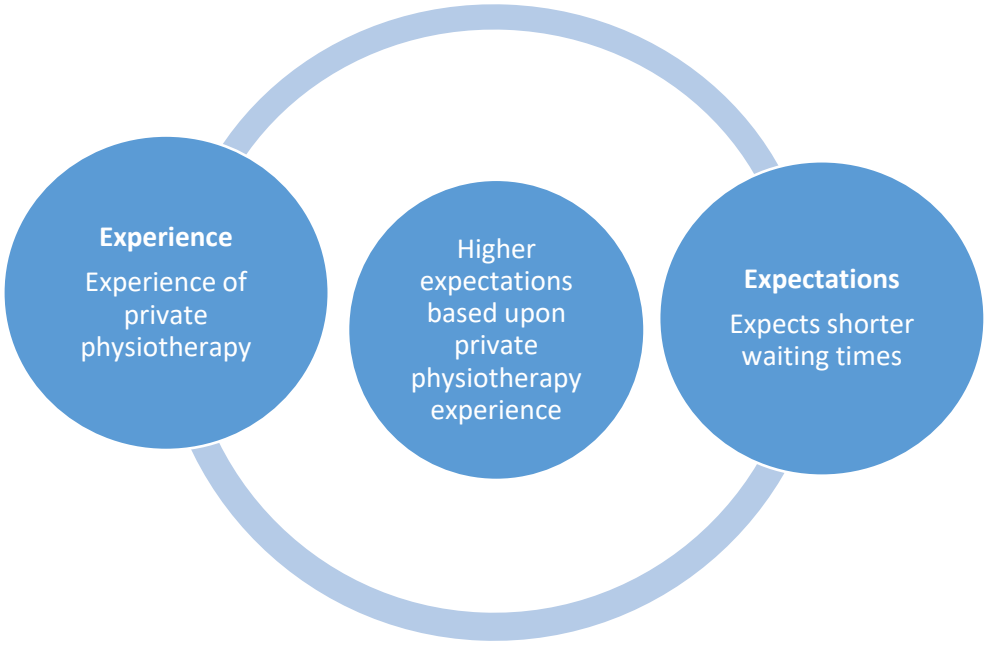


Figure 6.17 - Overlap 3

6.4.4 Overlap 4 – Patient expectation of face-to-face appointments

Overlap 4 highlights how virtual assessments align with patient expectations of how conditions need to be diagnosed (see Figure 6.18 for CMO).

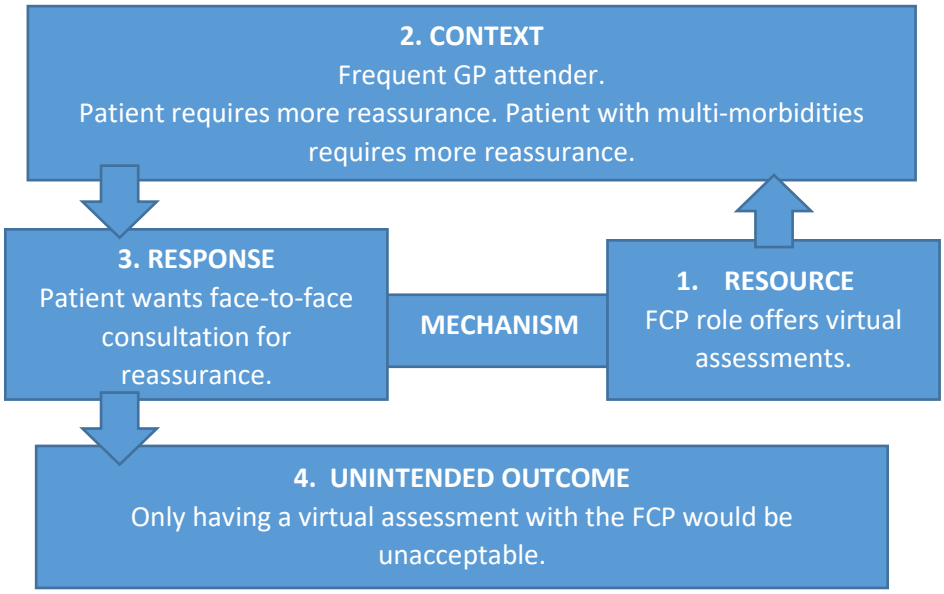


Figure 6.18 - Overlap 4 CMO

FCP 4 highlighted an expectation of the mode of consultation. He hypothesised that patients who were frequent GP attenders were only satisfied if they had a face-to-face consultation with the FCP:

"Some people definitely do just want to be seen face-to-face no matter what the problem. You can look back in their notes and you generally get that sort of feeling from multiple GP attendances for lots and lots of different problems, so they do like to be seen face-to-face" (FCP 4)

This expectation of a face-to-face appointment may have stemmed from the patient need for more reassurance through a physical examination and a perceived more accurate diagnosis:

"They do feel like they've had that face-to-face reassurance and the actual problem has been looked at, in a sense, of the movement patterns and things like that and we can give them more of an accurate diagnosis." (FCP 4)

Patient 7 was the only patient who expressed unease at being advised over the phone and she was also the only patient who expressed having multi-morbidities; as well as having MSKDs, she had chronic obstructive pulmonary disease (COPD), a progressive respiratory disease that is incurable and will therefore require lifetime management (NIH, 2019). Using retroductive thinking, it may be inferred that patients with multi-morbidities require more reassurance:

"If they'd have recommended it probably but I don't know how they can recommend things over the telephone without actually nobody ever seeing you" (Patient 7)

See Figure 6.19 for theory area overlaps.

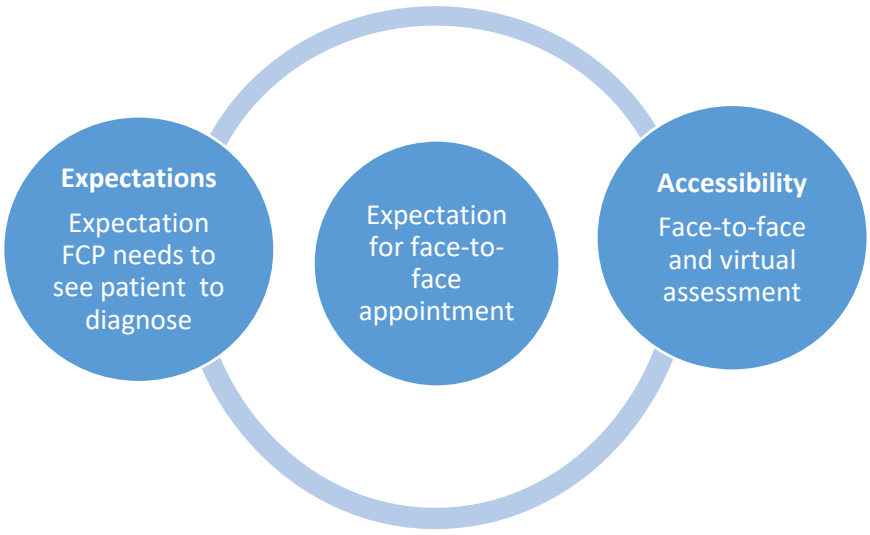


Figure 6.19 - Overlap 4

6.4.5 Overlap 5 – Patients adamant that they access the GP

Overlap 5 highlighted how Receptionists promoting the role may be ineffective if patients have an ingrained expectation to access the GP (see Figure 6.20 for CMO).

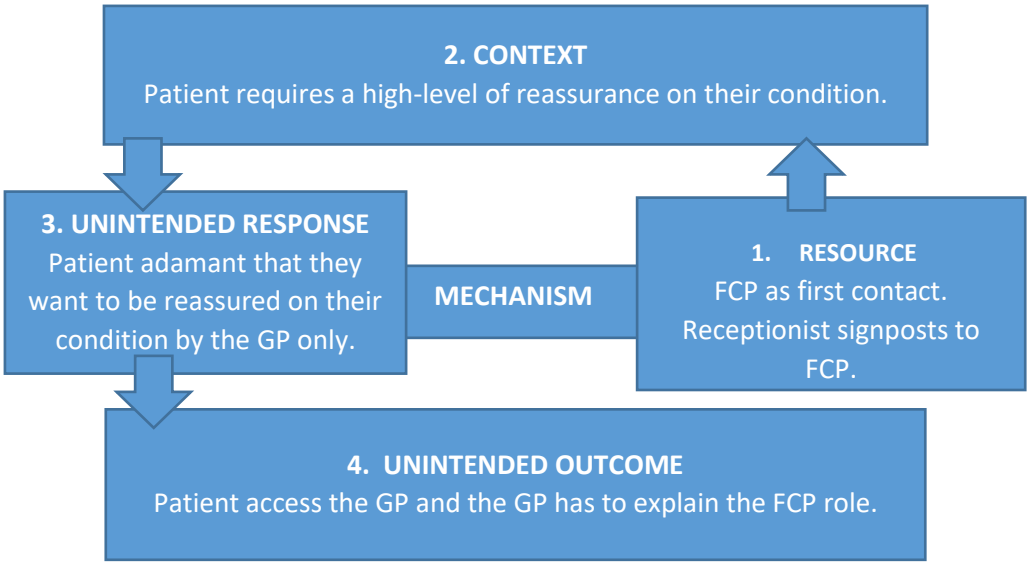


Figure 6.20 - Overlap 5 CMO

An alternative CMO that resulted in the same outcome of patients rejecting the Receptionist's role description was overlap 5. This demonstrated how 'Expectations of Condition Management' could negatively affect 'Promoting the Role'.

Practice Manager 2, GP 2 and Receptionist 2 all discussed occasions where patients were not accepting of the Receptionists description and were thus adamant that they accessed the GP. When asked if patients had ever expressed not wanting to see a FCP, GP 2 answered:

> *"Some still want to see a doctor first, but that's often there's uncertainty about the diagnosis and they want reassurance, or they just haven't really understood what the MSK service provides because more often than not, when they come and see us, we direct them onto there anyway."* (GP 2)

GP 2's response demonstrates two mechanisms that could result in patients accessing the GP - patients wanting reassurance, or – as also hypothesised by FCP 3 – patients not understanding the role. GP 2 highlighted their role to signpost these patients to the FCP. However, the only Patients who accessed the GP were Patients 10 and 11, and this was due to them not being told about the role; thus they were not provided with a role description.

However, Patient 11 did state that the GP then signposted him to the FCP, thus coinciding with GP 2's response:

> *"She mentioned about the physio this appointment. She told that this problem I need to work with a physio."* (Patient 11)

Patient 7 stated that the GP discussing the role with her would not have influence on her:

> *"I don't think it would have had any impact really because perhaps he would have just said 'You need to see the physiotherapist' and I would have felt I'd wasted his time."* (Patient 7)

It may be that this patient's previous negative experience of the GP dismissing her may have influenced her views. Previously she had been made to feel that she had wasted the GP's time when she could have directly accessed the audiology service. This negative method of signposting to another service may have transferred over to her expectations of signposting to the FCP.

Patient 10 was not made aware of the FCP role in the GP consultation, instead she was told about the role when receiving X-ray results; she was unsure who she was speaking to. Although the Receptionist did not highlight the FCP role to the patient, her response still demonstrated that if she had been signposted she still would have seen the GP. This was a result of the patient's expectation that physiotherapy would require exercises that she perceived she would be unable to complete.

See Figure 6.21 for overlap between theory areas.

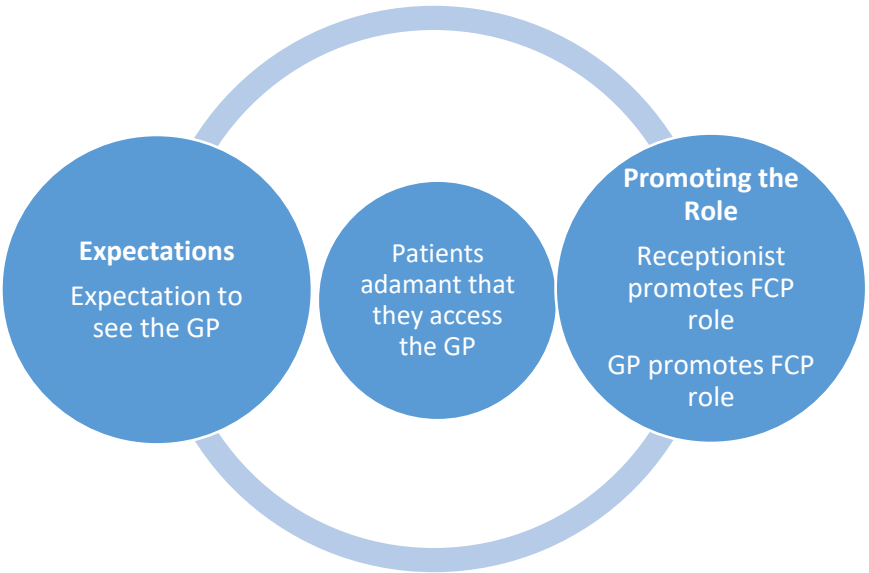


Figure 6.21 - Overlap 5

6.5 Rival emerging theories

6.5.1 Rival 1 – Unacceptability of virtual assessments

This rival hypothesis highlights how staff and patient perceptions of the FCP model did not always align, with staff supporting self-management through virtual assessments but patients opposing them (see Figure 6.22).

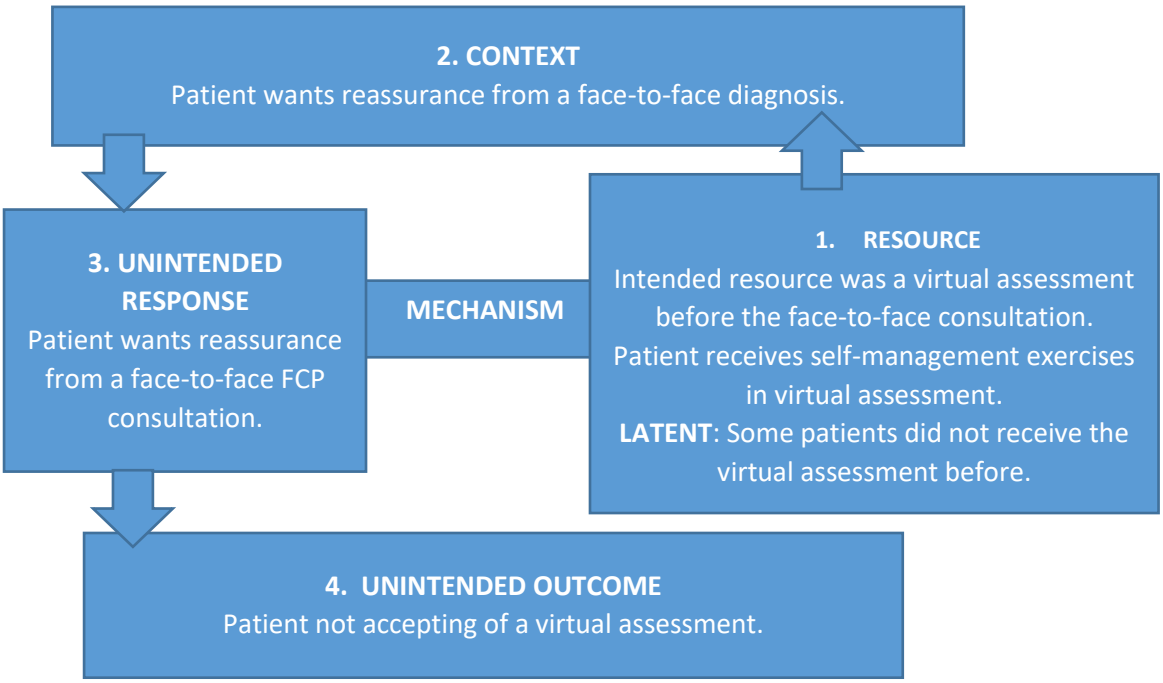


Figure 6.22 - Rival 1 CMO

Staff responses underlined convenience as a key benefit of virtual assessments. However, patient responses were mixed in their acceptance of the virtual assessment. Despite the intended route for a face-to-face appointment, only two-out-of-five patients received a virtual assessment before their face-to-face consultation (Patients 7 and 9). Patient 11 was the only patient who was entirely accepting of a virtual assessment. Patient 10 would not want to have to repeat herself in a second consultation, whilst Patients 7 and 9 both felt there were issues in being able to assess someone's conditions over the phone:

> *"I had a telephone conversation with a different *FCP 4*, he gave me some exercises which actually made it worse, because I think the telephone consultation … I think it's difficult, I think he gave me some exercises to what he thought it could be but I suppose without seeing somebody it's quite difficult."* (Patient 9)

Patient 9 felt her MSKD had been worsened by the self-management exercises provided in a virtual assessment, and she was not accepting of MSKDs being managed entirely by virtual assessment. This coincides with the theory area 'Expectations', as it was important to patients to receive reassurance from a face-to-face diagnosis.

6.5.2 Rival 2 – Threats to accessibility

There were several factors highlighted that could negatively impact on waiting times and length of consultations (see Figure 6.23).

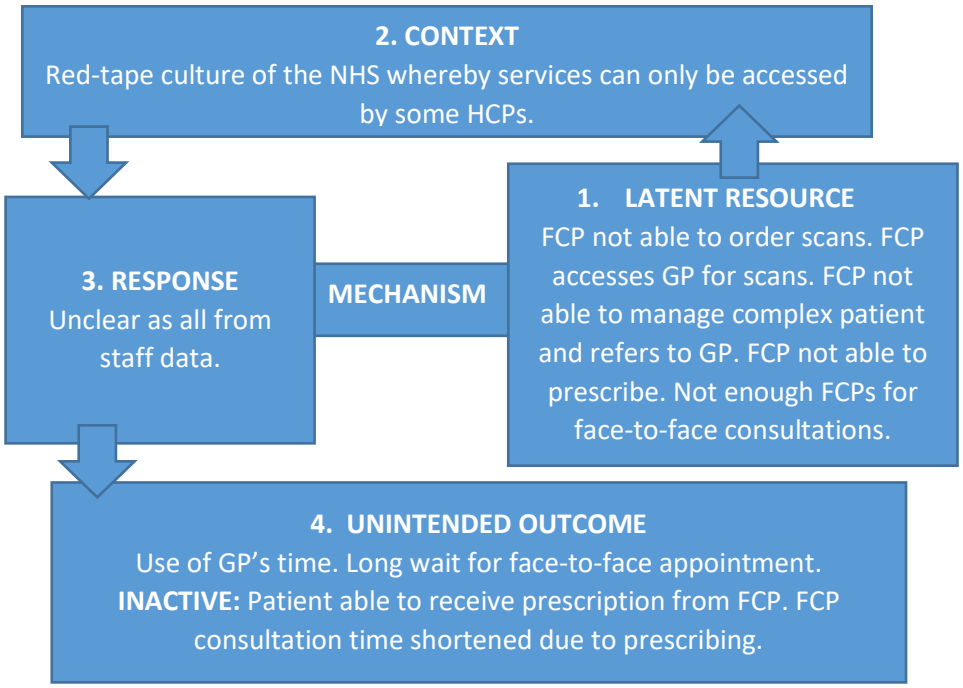


Figure 6.23 - Rival 2 CMO

There was a *'red tape'* bureaucratic culture (FCP 3) whereby patients have to see certain professionals in order to access others, as highlighted by both FCPs and GP 2. FCP 4 stated that they were not able to order scans and therefore accessed GPs on occasion which he perceived to be an ineffective use of GP's time:

> *"yesterday I had to arrange … had to task the GP back to arrange two ultrasound scans for shoulders post trauma and so it would be just much easier if I could do it there and then in the clinic rather than adding to the GP's workload."* (FCP 4)

FCP 3 discussed how limited experience of the individual FCP could result in more complex patients being referred back to the GP:

> *"I still defer quite a lot of stuff back to another professional or back to a GP so I give my opinion on it but I would still ask someone else's opinion because I don't know everything and I never will know everything. And I think less qualified people maybe haven't come to that realisation yet and I think that's another thing that we should approach with caution with some of these roles."* (FCP 3)

It was highlighted by the FCP 3 and Practice Manager that there were not enough FCPs in Practice to meet the demand for face-to-face appointments. There were 19 FCPs carrying

out virtual assessments across the 25 Practices and only three FCPs then assessing patients face-to-face. FCP 3 stated that this could result in long care pathways, particularly for those who needed referring on to Secondary Care services following on from the FCP face-to-face appointment:

> *"I think the prime example being someone with back pain who has leg or radicular symptoms and then for an onward referral onto the spinal treatment service they need a face-to-face ideally to assess the neuro component of that and, because we've got lots and lots of phone calls being made and not enough face-to-face, that person could wait three weeks for that assessment before they get it referred."*

Neither FCPs were able to prescribe; however, FCP 3 perceived that if the role did provide this service, consultations would no longer be long enough:

> *"I think it's another thing to add in that takes more time so actually going from your 20 minute assessment to get someone assessed and redirected you've then got to assess them, decide what medication would be appropriate for them and prescribe that and I think it's all extra time and it's taking another task on that we don't necessarily need."* (FCP 3)

6.5.3 Rival 3 – Acceptability of accessing a FCP for serious conditions

Patient responses were not unanimous regarding perceived severity of condition (see Figure 6.24).

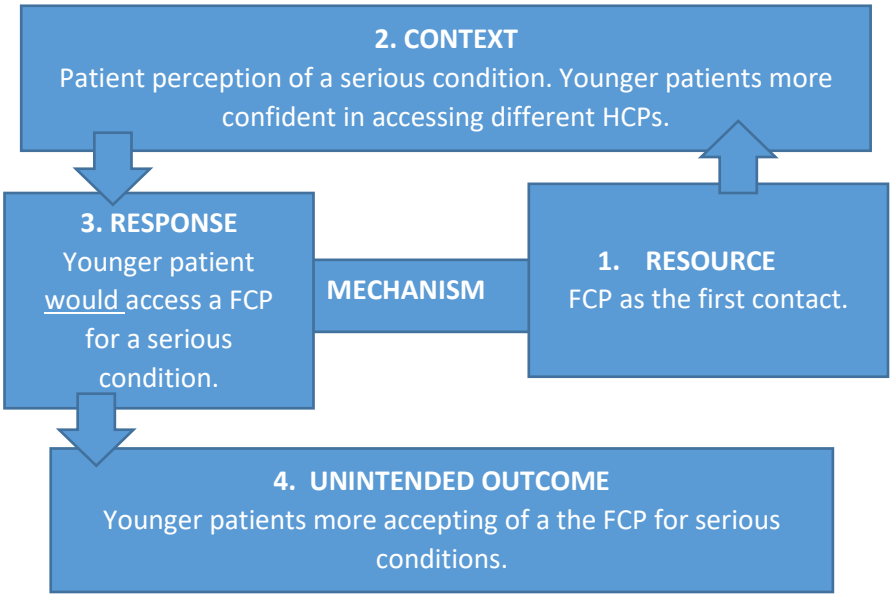


Figure 6.24 - Rival 3 CMO

Patients 9 and 11 both stated that they would access the FCP for a condition that the perceived as serious. They both felt that the FCP was appropriate to see as they were the MSKD specialist and could refer on to a Secondary Care specialist if needed. Patient 9 was accepting of seeing a FCP first, as she had *'faith in the experts'*:

> *"Well I think if it was more serious then you need to probably see somebody more specialist, I suppose. It depends what it is. I think if it's something that I think a physio can help me with then great, but if it isn't then … it's like with the problem I've got now, they're referring me to an MSK doctor so if that's what *FCP 4* thinks or that's…after reviewing the notes that the route they think I should go then I put my faith in the experts."* (Patient 9)

It is not clear as to why these two patients were the only patients who were accepting of seeing a FCP for a serious condition. Thinking retroductively, it may be that the patient's age was a contributing factor as they were the two youngest patients in the sample. The shared theory area 'Experience' highlights that older patients were used to GPs being the first step and thus expected to see a GP. It may have also been that younger patients were more confident in FCP management as they were more familiar with accessing different HCPs. The hypothesis regarding severity of conditions is not rejected, but it may be dependent upon the patient's age.

6.5.4 Rival 4 - Refuting patients promoting the FCP role

Predominantly (all but Patient 7), responses highlighted that patients did not discuss the role with others, nor would they feel inclined to:

> *"Well, I'm pleased with what *FCP 4* did but I have no more information really to say about it."* (Patient 10)

It is unclear as to why Patient 7 did promote the FCP role, whilst the other patients did not. GP 2 did state that patients discuss the role, however there is not enough evidence from patients to support word-of-mouth as an effective method in role promotion and therefore no CMO is formed from this patient response.

Although there is limited evidence on this rival theory area, a shared theory area section expands upon this theme (p.240).

6.6 Summary of findings

Findings specific to Practice B included patients wanting to understand their care pathway so that they had appropriate expectations of management. An important context present in only Practice B were the multiple Practices that could access the role and their inconsistency in role promotion. The length of consultation was highlighted in Practice B as well as A, but in Practice B a unique unintended outcome was the potential for consultation lengths being cut too short if the FCP used time prescribing. Findings highlighted that patients wanted the FCP to be personable in the consultation so that they felt relaxed. Although patients did express wanting continuity of the individual FCP, staff stated this was not how the role waks intended. There were five overlaps of theory areas in total, the greatest number of overlapping theory area demonstrated how Receptionists may face challenges in promoting the role if patients perceive them as unqualified to triage, thus, undermining their acceptability as a gatekeeper. There were four rival theory areas, including virtual assessments being unacceptable to patients, despite staff hypothesising patients valuing their convenience. The next chapter will focus on Practice findings shared by the Practices.

7 Chapter 7: theory areas shared by both Practices

7.1 Chapter summary

In Chapters 5 and 6, CMOs individual to Practice A and B respectively were discussed, and in the final sections of these chapters, overlap between CMOs of different theory areas were presented.

In this chapter the CMOs that were shared by both Practices will be discussed (n=10). There were no shared CMOs for the theory area 'Continuity'.

Occasionally there were minor differences in aspects of the CMO. Thus, although data from both Practices will be integrated, it will be clearly stated where the data originated from. The overlap between theory areas that were shared will be presented last.

7.2 Individual theory areas

7.2.1 Patient previous experience of condition management

Practice A and B's findings resulted in two shared CMO configurations being formed regarding the individual theory area Experience of Condition Management:

'Perception of the GP as the first step.'

'Experiences of APs.'

7.2.1.1 Perception of the GP as the norm/as the first step

This shared CMO highlights how two different contexts resulted in patients having a similar perception of the GP as the norm/first step (see

Figure 7.1).

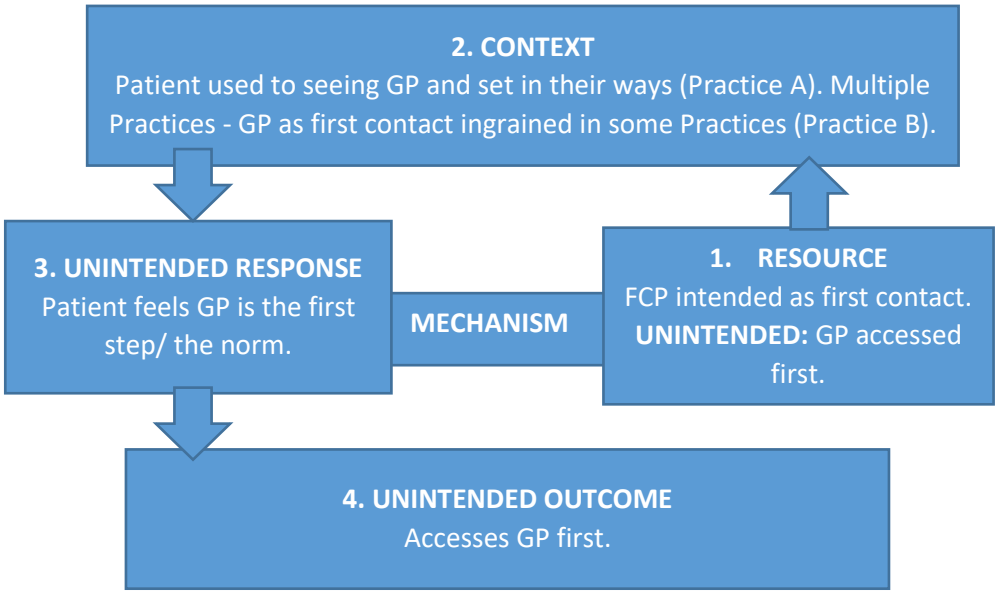


Figure 7.1 – Shared experience CMO

A similar mechanism present in both Practices was patients perceiving the GP as the *'norm'* (Practice A, supported by Medical Receptionist 1 and Patient 1) or as the first step (Practice B, supported by Receptionist 2, FCP 4 and Patients 7 and 10). For both Practices this led to an unintended outcome of patients accessing the GP:

> *"Sometimes they just want to see a GP. I think it's because that's normal … not normal but that's what they expect to see so sometimes they will just request to see a GP and they don't want to see the musculoskeletal but most of the time they are open to seeing them and they're willing to see them."* (Medical Receptionist 1, Practice A)

Medical Receptionist 1's response suggests some patients would be willing to see the FCP. The divergence between these patients was postulated to be a result of some patients being *'set in their ways'*, suggesting a habit from previous experiences:

> *"Some people are quite set in their ways so they just prefer to see a GP and take that route initially and then go on based on what the GP recommends*." (Medical Receptionist 1, Practice A)

However, Patient 2 and Patient 6 (both Practice A) demonstrated that they were accepting of seeing the FCP regardless of their past GP experience. Nevertheless, patient interviews only included those who had experienced the FCP role and did not include those who had not accessed the role. This might explain the disconnect between the Medical Receptionist and patient responses.

A pivotal context present in Practice B, but absent from Practice A, was the effect of multiple practices accessing the role. FCP 4 highlighted different Practice contexts influencing this patient expectation. He felt that the patient expectation of GP involvement was more prominent in Practices where it is *'ingrained'* that all patients are managed by the GP first:

> *"Some practices are very ingrained where everything will come through the GP first. So that's just the expectation of the patient to see the GP first, even if it is just a phone call to the GP saying 'Yep, you just need to speak to the physio.' So I think it is very much practice-based. And certainly the older patients – I'd probably say 50s, 60s plus - are a bit more used to having that GP on hand to deal with every problem"* (FCP 4, Practice B)

FCP 4 felt that this expectation was more prominent in patients over the age of 50. He theorised that this was due to patients being used to accessing a GP for all their problems. Patient 7's response provides further evidence for this hypothesis:

> *"I felt that the Receptionist at my practice should have referred me to my GP first so that I could have started at the beginning"* (Patient 7, Practice B)

Patient 7 was 82-years-old at the time of interview, and therefore her age may have contributed to her being '*used to'* having the *'GP on hand*', as FCP 4 theorised. Expanding upon this, Patient 7 discussed that, despite the increased capability of physiotherapists, not all patients were aware of this:

"I think physio now is so much different to what it used to be because, it's like everything, everything is different to how it used to be and I think physios are possibly underestimated" (Patient 7, Practice B)

7.2.1.2 Patient experiences of APs

This CMO demonstrated two polar contexts – positive and negative experience of a Community Pharmacist – and how they influenced patient acceptability of the FCP prescribing (see Figure 7.2).

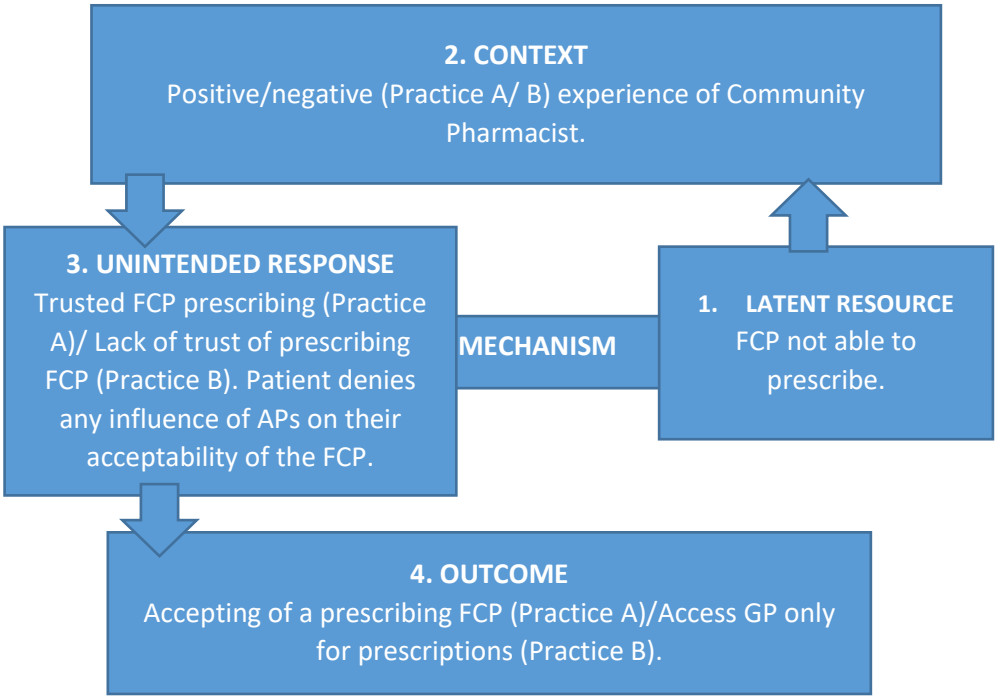


Figure 7.2 – Shared experience CMO

When it was posed to Medical Receptionist 1 that patients are less accepting of the FCP role if they have not experienced it, she stated simply '*No'.* Patient interviews unanimously highlighted acceptability of accessing the FCP when the Medical Receptionist triaged them. In order to expand upon this undeveloped hypothesis, FCP 1 was asked whether experience of these wider roles may impact upon patient evaluation of the FCP role; she felt they did not. Nonetheless, FCP 1's response conflicts this:

*"I think that increasingly they're [patients] used to practitioner titles, you know, Nurse Practitioners, um … we have three paramedics at *Practice A's name* so … who will be, what's the title? Primary Care Practitioners and there are all sorts of practitioner terms so I think that they're coming into contact with that more. I'm really clear about saying 'I'm a physiotherapist by background and I'm seeing you*

> *on behalf of the GP today to assess and diagnose you and come up with a management plan.'"* (FCP 1, Practice A)

This response suggests that the high number of AP roles in Practice A may have resulted in patients having a greater understanding of the FCP role than patients attending a Practice without these roles.

The patient participants all had varying levels of experience of other HCPs, reflecting the variation in the general patient population's Primary Care experience. In Practice A, no patients referred to the role as the FCP, instead they all had slight variations in the titles they used. This seemed to be unrelated to their previous experience of HCPs. For instance, Patient 1 –who had experienced a NP –referred to the role as a muscular nurse at times, whilst Patient 6 – who had no experience of any other HCPs – referred to the role as a musculoskeletal nurse. Whilst in Practice B, all patients referred to the role as physiotherapist. Previous experience of other APs did not affect patient understanding of the FCP role in Practice B. Patients 7, 9 and 10 all had experiences of NPs, however they did not conflate this role with the FCP role.

Patient 4 drew parallels between their experiences of the Clinical Pharmacist with the FCP. Consequently, he would have been accepting of a prescribing FCP:

> *"I've also seen a chap who's a Clinical Pharmacist, who does the same sort of job, you know? He can prescribe and goodness knows what else, so it's not just obviously 'skeletalmusculo' people doing this, they're obviously introducing this to cover a range of … I wouldn't say problems, but a range of skills I take it."* (Patient 4, Practice A)

In contrast, Patient 10 had a negative experience of a Community Pharmacist making a mistake which meant she did not want a FCP prescribing for her in the future:

> *"I would prefer that to be in the hand of the doctor"... "I prefer to have medication reviews done by somebody who has in front of them the whole history and knows what can react with what."* (Patient 10, Practice B)

When asked whether accessing a Community Pharmacist had any impact on him accessing the FCP, Patient 4 responded:

> *"I do not think it has had any effect on my being prepared to see a FCP."* (Patient 4, Practice A, email reply from the respondent validation)

7.2.2 Patient expectations of condition management

Findings from both Practices formed one shared CMO for the theory area Patient Expectations of Condition Management (see below).

7.2.2.1 The effect of a perception of a serious condition

This shared CMO demonstrated the affect a perception of serious condition had on patient expectations of the FCP's capabilities (see Figure 7.3).

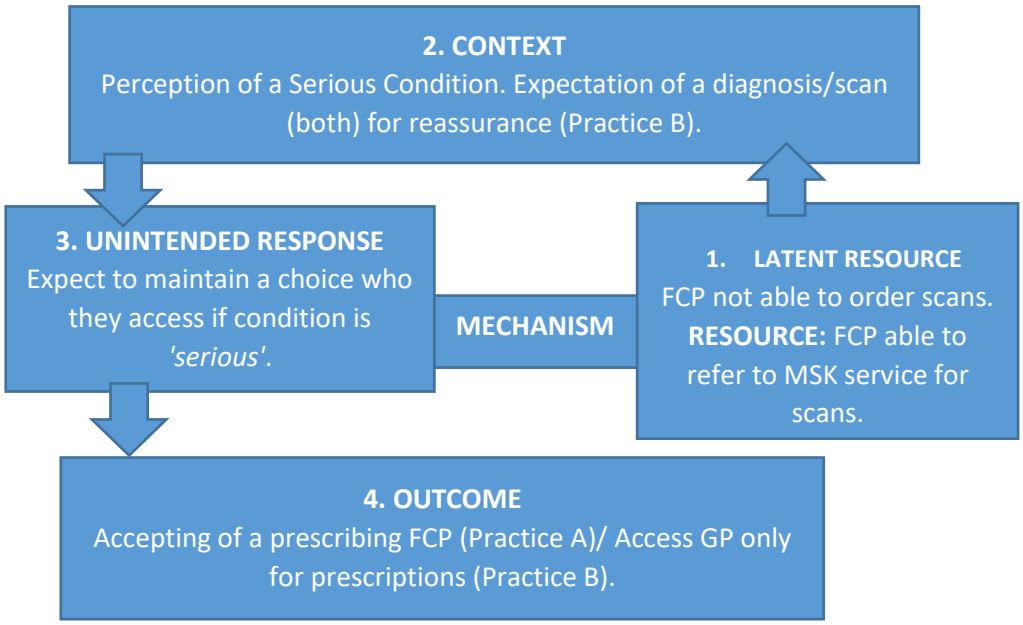


Figure 7.3 – Shared expectations CMO

The perception of a serious condition was a common theme across both Practices. In Practice A, FCP 2 expanded upon what conditions patients perceived as *'serious';* this included anything trauma-related; conditions that were not improving; back pain; anything that patients did not understand; or any new conditions:

> *"And you get some patients that have back pain, it's the first time they've ever had it, don't know what it is, don't know how to manage it and want to come in within a day or two."* (FCP 2, Practice A)

In Practice B, FCP 3 and FCP 4 and the majority of patients[23] highlighted that patients who perceived their condition to be *'serious'* expected to be seen by a GP. However, patients had varying ideas on what was '*serious'*. Patient 8 felt that the GP had more of an understanding regarding their *'internal condition'* and could refer on if needed. Patient 7 felt that her MSKD needed to be seen by the GP as she was concerned it was worsening her COPD:

[23] All but Patients 9 and 11.

> *"I'm worried because of the shape of my back and the fact that I have COPD that I can't take a very deep breath and I think that's because my spine is coming forward."* (Patient 7, Practice B)

FCP 4 highlighted pain to be the basis of the patient perception that their condition was serious and required urgent attention. All patients referred to their pain; however, only Patients 8 and 10 referenced the need to be seen earlier due to pain:

> *"You know if somebody's suffering a lot they don't see you straightaway.."* (Patient 8, Practice B)

FCP 4 highlighted a disconnect between what patients perceived as *'serious'*, versus the concerns of professionals. Patient 7 stated she accessed the Practice about her back, but the Receptionist provided her with a referral for a different MSKD problem that was of lower priority to her. She felt that she should have been seen by a GP, and that her back was the concern:

> *"The route that it took was via the Receptionist, which I don't think is right because I don't think that she is qualified to say 'Oh you don't need to see a GP, you need to see a physiotherapist, I'll have somebody ring you"* (Patient 7, Practice B)

In both Practices, if patients perceived their condition to be serious, they expected to be able to maintain the choice of which professional they accessed. In Practice B, Patient 7's response provided support for wanting to maintain the choice of professional. Some of these patients in Practice A accessed a FCP but were less satisfied. However, if the FCP provided the patient with an explanation of their condition and its management, patients had an understanding that resulted in them being reassured and accepting of the role:

> *"part of the role is to … assuming you think this … is to reassure the patient that there's no obvious signs of any sinister pathology, so … and reassurance is a core part of what we do."* (FCP 1, Practice A)

Nevertheless, if patients were *'set in their ways'* (Medical Receptionist 1), then the explanation would be ineffective (see p.210 for further discussion).

In both Practices, the expectation of a serious condition resulted in patients wanting to receive a diagnosis and a diagnostic scan. In Practice A, GP 1 was asked whether a perception of a serious condition impacted FCP acceptability; he responded:

> *"...as a GP, we have many roles and sometimes people come to us with more than one problem, so it may be, partly, they're coming to us for a musculoskeletal problem, partly for something else that's not related to physio, so that may be one reason. Another reason may be, as you said, that if they consider that their problem is so severe that they perhaps need investigating, or referring on, they may not realise that the physiotherapists can do that*[24]*."* (GP 1, Practice A)

In Practice B, receiving a diagnosis was also an essential component of the consultation highlighted by all members of staff. FCP 3, FCP 4 and GP 3 all highlighted that receiving a diagnosis provided patients with essential reassurance. When asked whether there was a link between wanting a diagnosis and wanting scans, FCP 3 responded:

> *"I think patients want scans to prove that there is something "wrong" with them. Generally, the understanding that a scan isn't necessary unless to rule out serious pathology – or if it would change management plan – is lacking.*" (FCP 3 respondent validation, Practice B)

GP 2 highlighted the need for Receptionists to reassure patients that they were seeing the right professional who could provide them with a diagnosis; thus, coinciding with Practice A. In Practice A, Patients 3 and 6 had required scans, but they had <u>not</u> stated that they expected one. Whereas in Practice B, Patient 11 had expected a scan and he <u>did</u> require one. Patient 11 demonstrated that he was hopeful for a diagnosis from the scan, but it was inconclusive. He was asked in the respondent validation to clarify meaning and responded:

> *"I'd prefer physio but also, I prefer to make [sic] a scan. And if physio can refer me to scan same as GP [sic], yes, I'd prefer physio*" (Patient 11 respondent validation, Practice B)

[24] . The GP's statement is not entirely accurate; as the FCP's highlighted that they could not refer for Investigations; they could, however, refer to a MSK service that referred patients on for investigations.

7.2.3 Professional hierarchy

The Practices shared one CMO for the theory area Hierarchy (see below).

7.2.3.1 Patient perception of hierarchy independent of its existence

Findings suggested patients had a perception of hierarchy, despite denial of one being present in the Practice; this perception was based upon patient perceptions of HCPs skill-level (see Figure 7.4).

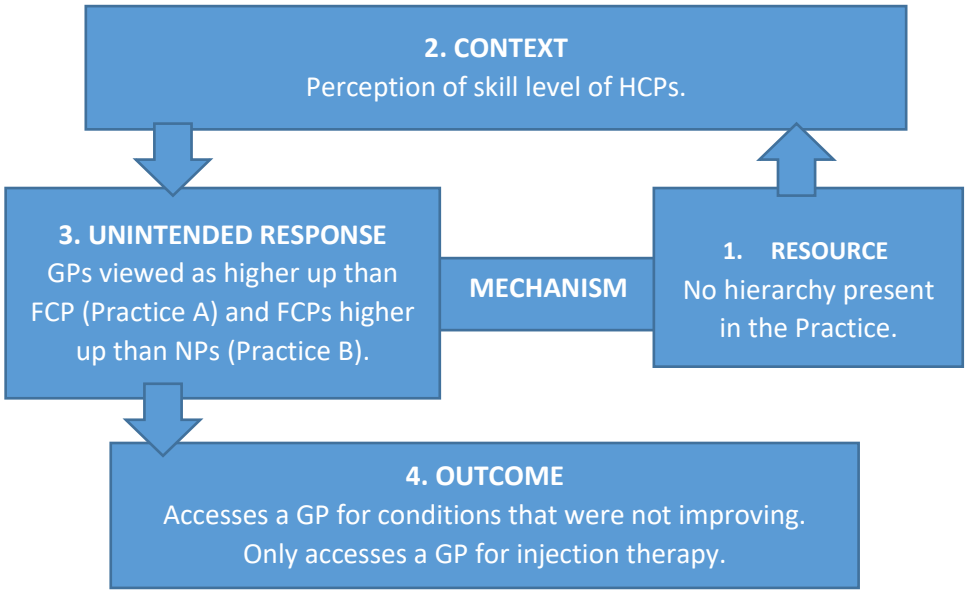


Figure 7.4 – Shared hierarchy CMO

Both Practices demonstrated a rejection of hierarchy by members of staff. As FCP 2 discussed the effect of uniforms on their role understanding (see p.219), patients were then questioned on whether the FCP wearing their own clothes (Practice A) or a uniform (Practice B), affected their perception of them, however all patients rejected this hypothesis. When asked about hierarchy, Patient 3 started discussing uniforms and he was then asked whether this affected his perception of the FCP, which he rejected:

> *"No, it's only when you mentioned it I actually realised it. I noticed it. But I don't judge people by their clothes or what they look like. I judge them by how they react."* (Patient 3, Practice A)

However, present in both was a patient perception of hierarchy based upon skill-level. In Practice A, when asked about whether they were comfortable with a FCP injecting, Patient 1 referred to the FCP as a nurse and stated that they were *'only'* a nurse:

> *"I think because they think they're only, if you like a nurse and not a fully trained doctor. People seem to perceive that doctors and … people in hospitals are only*

> *allowed to give intravenous injections. I think the stigma is basically that if you need an injection you go and see a doctor or go to the hospital. Um … seeing a first practitioner may take a while for people to get used to that situation."* (Patient 1, Practice A)

There was a suggestion from Patients 1, 3 and 6 that GP's had higher qualifications than other HCPs. Patient 1 perceived the training of a FCP to be lesser than a GPs. Patient 6 felt she might have needed to be referred to someone of *'higher qualifications'* if her MSKD was not improving.

In Practice B, Patient 9 perceived the FCP to have a higher skill-level than a NP. When asked about whether there were differences in her NP and FCP care, she said:

> *"I tend to think the nurse practitioner can give a certain level of care because of training and the level that they're at, whereas the physio can probably go into more detail."* (Patient 9, Practice B)

Patient 9 had rejected an existing hierarchy within the Practice, yet her response still had core beliefs on a professional hierarchy based on a patient perception of skill-level. This can also be observed in Practice A, as Patients 4 and 6 stated that they expected a hierarchy, despite them not witnessing any hierarchy within the Practice:

> *"I would just assume, like any business, the top doctor or whatever … mostly it's a manager, sort of a … like they tend to have nowadays are in charge, which is just how it goes."* (Patient 6, Practice B)

7.2.4 Promoting the role to patients

Analyses of the Practice findings resulted in three shared CMOs being formed:

'Patient understanding of the FCP role prior to the consultation.'

'The use of media methods to promote the role.'

'Patients sharing their experiences.'

7.2.4.1 Patient understanding of the FCP role prior to the consultation

This hypothesis demonstrates how Receptionists' role descriptions may be ineffective in enabling patient understanding (see Figure 7.5 for CMO).

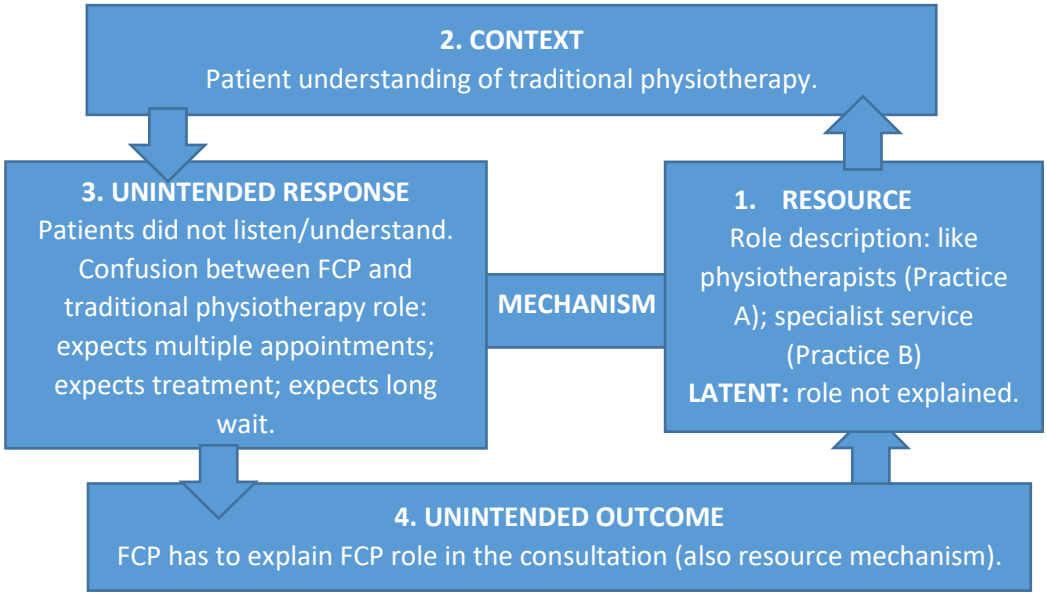


Figure 7.5 – Shared promoting the FCP role CMO

The importance of the Receptionists in promoting the FCP role was emphasised in the analysis of both Practices[25]. Receptionists provided patients with a role description when they contacted the Practice to book a GP appointment. The explanations did differ – in Practice A FCPs were described as similar to physiotherapists, whereas in Practice B they were called a specialist service:

> *"Normally it's along the lines of 'they do a similar role to a physiotherapist' because they already know what a physiotherapist does so they can relate towards that"*
>
> (Medical Receptionist 1, Practice A)

[25] In Practice A all members of staff except Management Partner 1. All members of staff in Practice B.

"The Receptionist once mentioned to me that the physio is a specialist about muscles and joints, and that's it." (Patient 11, Practice B)

However, FCP 2 (Practice A) and FCP 3 (Practice B) expressed occasions where there was limited patient understanding on the role when patients attended the consultation. They felt the role was either: not explained to patients on the phone (FCP 4); they had not understood; or they had not listened to the role description (FCP 3 and 4).

The importance of differentiating between a traditional physiotherapist and a FCP was highlighted by both Practices. FCP 2 discussed the two key differences visible to patients were physiotherapists predominantly working in a hospital environment and in a uniform, whereas the FCPs worked within the General Practice surgery, in their *'own clothes',* in the same way as GPs. It was hypothesised by FCP 2 that patient's confusion on the FCP role originated from the context of how they understand traditional roles:

"We're in a GPs surgery, we're not in physio uniform, so we go in, kind of own clothes as such, sometimes I don't think they fully understand who we are until we're actually in with us and then we explain who we are and what our role is" (FCP 2, Practice A)

Practice A's patient responses supported the idea that there was confusion between the FCP and traditional physiotherapy nuances. Patient 1 referred to the FCP as a physiotherapist in some parts of the interview, although he also referred to them as a *'muscular nurse'*. Patient 6 was unable to differentiate between the two roles when asked. Patient 3 expressed his own confusion on how the FCP role was different to a physiotherapist, and how he received clarification when he went into the consultation:

"when you go into the surgery, why aren't there labels up there about what the medical … what the musculoskeletal practitioner can do? I did not know until I walked into the room." (Patient 3, Practice A)

Patients in Practice B support the hypothesis that they may erroneously perceive the role as a traditional physiotherapy role. All of the patients in Practice B referred to the role as a physiotherapist and were not aware of any other titles:

"I don't really put a title … I just sort of had physio. That was it. When I said where I was going, I was going to see a physiotherapist about my knee." (Patient 7, Practice B)

In both Practices the FCP often had to explain the role to patients in the face-to-face consultation (Practice A, see above quote from Patient 3) or the virtual assessment (Practice B):

> *"Giving them a good explanation of what we're trying to achieve from the phone call. I think it's just educating the patient, during the phone call as well"* (FCP 4, Practice B)

Practice Manager 1 felt that patients sometimes wrongly perceived there to be a long wait for the FCP, as this was their experience with traditional physiotherapy. Consequently, she stressed the importance of Receptionists educating patients on why the FCP was the best route. Patients 8, 10 and 11 all felt that they should receive as many appointments with the FCP as needed to resolve their MSKD – as they would for traditional physiotherapy – whilst Patient 7 was unsure on how many appointments she needed. Patient 9 was the only patient to express a correct understanding of the role's intended access:

> *"If on a first appointment you get some exercises, you get that support and that guidance and that advice and it helps, then you don't necessarily need to go back that many times. But if it doesn't and you need to go back and be reassessed then you might need more"* (Patient 9, Practice B)

Patient 9 still expressed uncertainty as to whether the FCP consultation would include treatment; this was something she wanted to be aware of ahead of the consultation. Although the number of consultations were <u>not</u> highlighted to be part of Practice A Receptionists' explanations, patients were knowledgeable of the number of consultations. Nearly all[26] Practice A's patients expressed an understanding that they would receive two to three consultations maximum. Patients 4 and 5 were aware of the differences between the roles, in particular, that the FCP had a different skill-set and their role was not a treatment role:

> *"They obviously are a cross between a physiotherapist and a nurse, able to do some of the minor things that doctors would take like injections and things like that so … I've never quite known exactly what their qualifications were so I couldn't give them a name sort of thing. I just expected to see someone who knew about*

[26] Patient 1 was not questioned on this and Patient 6 had no expectations.

physiotherapy and knew about musculoskeletal problems, you know?" (Patient 4, Practice A)

7.2.4.2 The use of media methods to promote the role

This hypothesis demonstrates how the use of media methods to promote the FCP role may be ineffective (see Figure 7.6 for CMO).

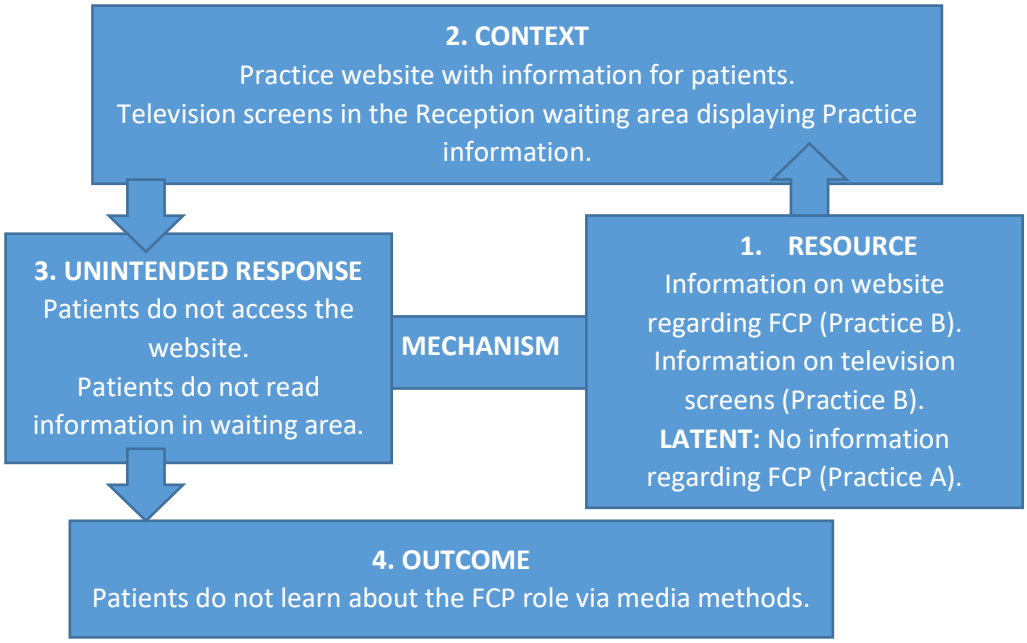


Figure 7.6 – Shared promoting the FCP role CMO

Although Practice A's website was highlighted as a method for promoting the role to patients, GP 1 perceived it as being poorly accessed. The researcher was unable to find information on the role on the website. There was information available on Practice B's website, however none of the patients interviewed expressed learning about the role from the website.

Patients 3 and 5 (Practice A) expressed that they were most likely to look at the television screens in the Practice rather than noticeboards. Patient 3 expressed that the information he felt should be conveyed on the screen should be:

"Having a 'Muscular-Skeletal' Practitioner in the surgery; what type of ailments can be addressed; how to book an appointment" (Patient 3 respondent validation, Practice A)

Practice Manager 2/Receptionist 2 (Practice B) discussed the Practice TV screens and website:

"We display it on our TV screens, we have it on our website and we inform patients when they ring up what the service is about and what they will gain from that."

(Practice Manager 2, Practice B)

Patients predominantly stated that they did not read the information in the waiting area, with only Patient 9 stating she read the noticeboards (though she did not discuss any FCP information).

7.2.5 Accessibility

The theory area Accessibility had three shared CMOs from the Practice findings:

'Decreased waiting times.'

'Meeting patient needs in one appointment.'

'The convenience of self-management.'

7.2.5.1 Decreased waiting times

This hypothesis demonstrates what patients perceive as advantageous in being able to receive an earlier appointment with the FCP (see Figure 7.7).

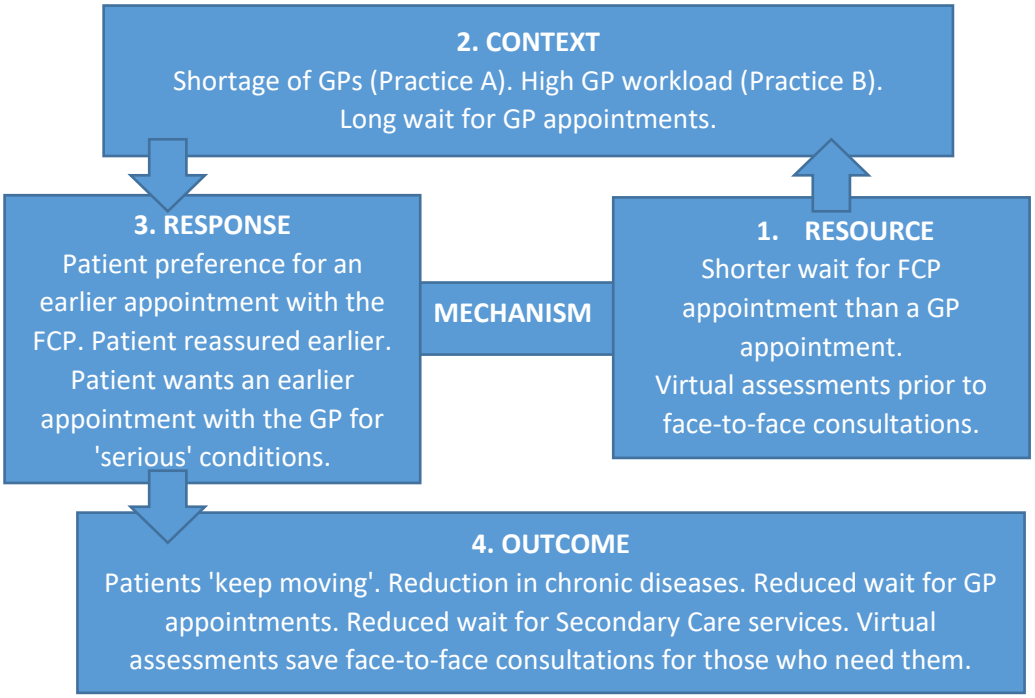


Figure 7.7- Shared accessibility CMO

In both Practices, the ability for the FCP role to decrease the wait for face-to-face appointments was highlighted[27]. The rationale for starting the FCP role in the Practice A was to reduce the GP's MKSD demand as they were facing GP shortages. Practice B's responses did not reference staff shortages; however, they did highlight the benefit of the FCP reducing the GP's workload.

It was emphasised by Management Partner 1 (Practice A) that the patient could be seen sooner by bypassing the GP. In Practice B, FCP 4 stated that the wait for a GP appointment was two-to-three weeks, whereas the wait for a FCP consultation was one-to-two weeks. It

[27] By all members of staff in Practice A and GP 2 and FCP 4 in Practice B.

was hypothesised by FCP 4 and GP 2 that a short wait for a face-to-face FCP appointment was important for patients.

Patient responses confirmed this hypothesis. Patient 8 was dissatisfied with the length of time he had to wait for a face-to-face appointment and Patient 10 had booked into another Practice, but then changed her appointment to Practice B as she felt she *'was going to be waiting too long'*. Patient 11 expressed a general preference for being seen sooner. Patient 9 was impressed with a short wait as it reduced how long she had to wait for a referral to a MSKD doctor. Patient 7 discussed the benefit of an earlier appointment in reducing her worry:

> *"Particularly if you're worried about something, whether you had pain or not, the quicker you're seen the lighter you become in yourself and the worry goes away that it's been taken seriously."* (Patient 7, Practice B)

In Practice A, FCP 2's response expands upon Patient 7's, as she made the association between seeing a professional sooner and a reduction in chronic MKSDs. She highlighted that the advantage of early patient reassurance is patients 'keep moving', which reduced the risk of a MSKD becoming a chronic condition:

> *"So, catching them early, reassuring them, getting them moving, they're more likely to get better than end up seeing us three months down the line with CRPS [chronic regional pain syndrome] because they haven't moved their ankle in three months"* (FCP 2, Practice A)

Every patient response in Practice A highlighted decreased waiting times to result in earlier management of their MSKD. Patient 1 referenced early advice aiding their recovery and Patient 5's response highlighted early reduction of pain and anxiety as an essential consideration of the management of MSKDs:

> *"You know the pain gets worse and the anxiety gets worse and it just doesn't help a person's wellbeing when they have to wait quite so long for a procedure."* (Patient 5, Practice A)

Responses from both Practices highlighted the FCP role's potential to decrease waiting times for GP appointments:

> *"[We] designed it in such a way so that these patients could be directed straight to the practitioner without going to a GP. So it saved GP appointments, but it also*

means that the patients get the benefit of seeing the right person straightaway." (Management Partner 1, Practice A).

Moreover, responses highlighted the potential for the FCP role to reduce waiting times for Secondary Care services. In Practice B, FCP 4 stated there was 60% reduction of referrals to Secondary Care in some Practices as a result of the early, specialist management that the FCP role offered. He hypothesised that this could *'potentially could cut physio waiting times down'.* Furthermore, Practice A responses demonstrated that the FCP role may expedite the process of a patient receiving a scan. It was highlighted by Patient 5 that it *"takes months sometimes to get an appointment [for a referral]"*. Patients 3 and 4 highlighted that a reduced wait for an FCP appointment would lead to a reduced wait for an X-ray and a specialist referral respectively. Again, the outcome of this would be their MSKD would be managed and potentially resolved sooner. Only two patients (Patients 3 and 6) had required an X-ray and the FCP was able to access the GP for them. Patients 3 had highlighted satisfaction, as despite the FCP not being able to order X-rays, they were able to get their X-ray on the day:

"I think, her assessment because the next thing she did was write out a note for me to go and have an X-ray that day." (Patient 3, Practice A)

Specific to Practice B, there were expressed benefits of a virtual assessment on waiting times. FCP 3, FCP 4 and the Practice Manager all discussed the purpose of the face-to-face consultation to be differential diagnosis or assessment of the severity of their condition. When asked about her views on the virtual assessment, the Practice Manager hypothesised that virtual assessments saved face-to-face appointments for those who urgently required them:

"They [FCPs] can assess whether they need to see you more urgently in a face to face appointment or whether they can just give you some exercises and then follow-up later on with a phone call." (Practice Manager 2, Practice B)

Patient responses did <u>not</u> highlight this advantage.

7.2.5.2 *Meeting patient needs in one appointment*

The FCPs were not able to deliver all treatments. Nevertheless, the FCPs were able to access the GP for prescriptions. This hypothesis highlights it as important for patients to be able to have their needs met in just one appointment (see Figure 7.8 for CMO).

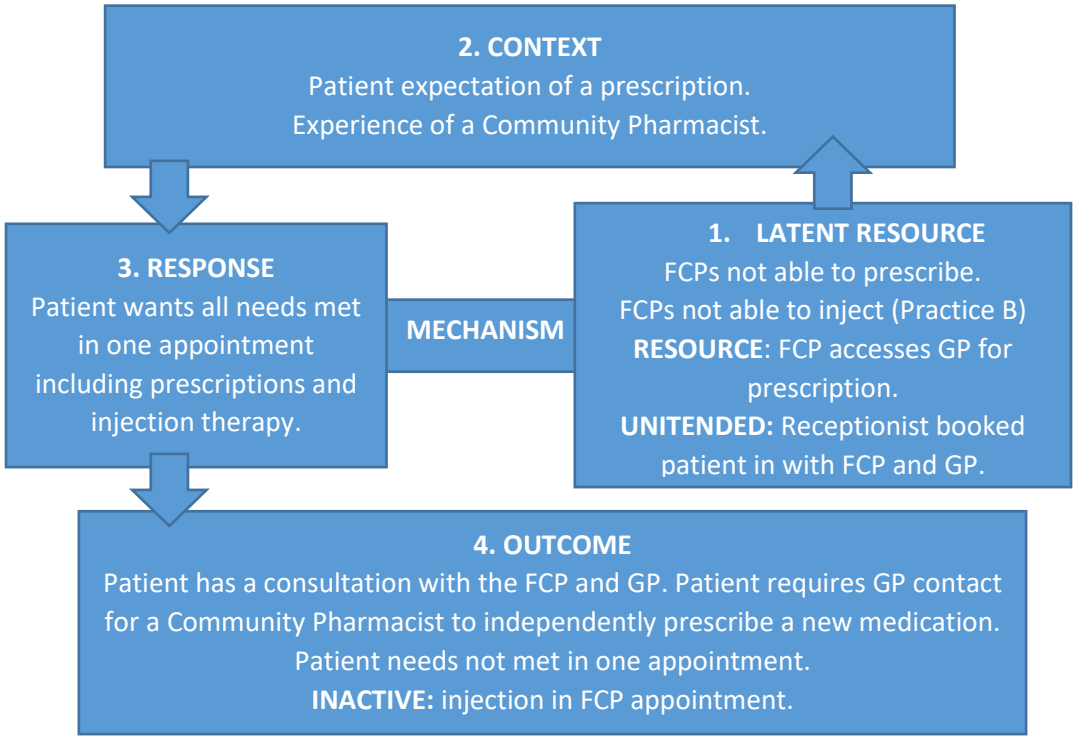


Figure 7.8 – Shared accessibility CMO

Analysis of Practice A and B highlighted the importance of the FCP having sufficient skills to meet the patient's needs in one appointment. Staff responses predominantly highlighted prescribing as a skill. None of the FCPs were able to prescribe, however FCP 1 was undergoing her qualification. When asked about how patients would respond if they had to receive their prescriptions in two appointments, FCP 1 responded:

> *"I think that a lot of people … patients might well say 'Well, what's the point of coming to see you if we can't get everything we want in one hit?"* (FCP 1, Practice A)

Both Practices overcame this barrier through the FCP accessing the GP. In Practice A, Patient 1 also felt that it was not essential that they received their prescription in one appointment; this was due to increased acceptability of a GP signing the prescription.

In Practice B, FCP 3 felt confident discussing prescriptions with the GP due to his PGD experience in Secondary Care. Patients could see FCP 3 and receive their prescription in one appointment:

> *"I've worked … given out medications on a PGD basis and wound management, wound care, infections, other such things like that. So I think if things in the FCP have always come in that were looking cellulitic or things like that, I think I would feel happy to then bounce that back to a GP rather than it sitting within the MSK service."* (FCP 3, Practice A)

Both Practices highlighted the alternative route of the patient (Practice A only) or the Receptionist/FCP accessing the Community Pharmacist. When asked whether they would be deterred from accessing the FCP if they could not prescribe, Patient 4 stated that he would not, this was due to his experience of the Community Pharmacist prescribing:

> "*I me, personally, no. I think I've been lucky in getting in touch with *pharmacist's name*, the pharmaceutical chap and he can prescribe. I think he can only prescribe things you've had before'* (Patient 4, Practice A)

In Practice B, FCP 3 and FCP 4 highlighted that the patient could be put on the Community Pharmacist's list for them to receive their prescription. Receptionist 2 did not highlight the Community Pharmacist's role, instead, she stated that they *'pacified'* patients by booking them in with the FCP and the GP for their prescription. This can be explained by the sequence of the interviews, FCP 4's interview was five months after Receptionist 2. Thus, the Community Pharmacist's role had been developed in that time:

> *"Rather than saying go back, ring your GP and then wait for someone to get back to you, we're looking at how to make it smoother by putting them straight onto the pharmacy list say 'Ok, you'll get a call later on today from the pharmacist to discuss your medication.*" (FCP 4, Practice B)

However, Community Pharmacists are only able to carry out repeat prescriptions and not new prescriptions. It can be inferred that this original prescription will have originated from the patient's GP and therefore there was a prior need for the GP in their care-pathway.

FCP 4 was asked 'in an ideal world' how he would have liked the role to run. He felt a '*one stop shop'* would be best so that all patient needs were met in just one appointment. He also discussed how injection therapy – a skill that neither FCPs held – would reduce the need for another referral.

Patient responses were not able to support the staff hypothesis regarding prescriptions specifically, as none of the patients had required a prescription and thus had no experience

of any of the prescribing routes. Nevertheless, when questioned on an injecting FCP, patients 8 and 9 discussed the extended scope skill in relation to their needs being met in one appointment:

> *"It would be beneficial because then I don't have to go anywhere else. If he can do it rather than me going elsewhere it would be better if everything is done there and then rather than booking another appointment to go somewhere else."* (Patient 8, Practice B)

7.2.5.3 The convenience of self-management

This hypothesis presents the potential benefits of the FCP providing self-management exercises and advice (see Figure 7.9 for CMO).

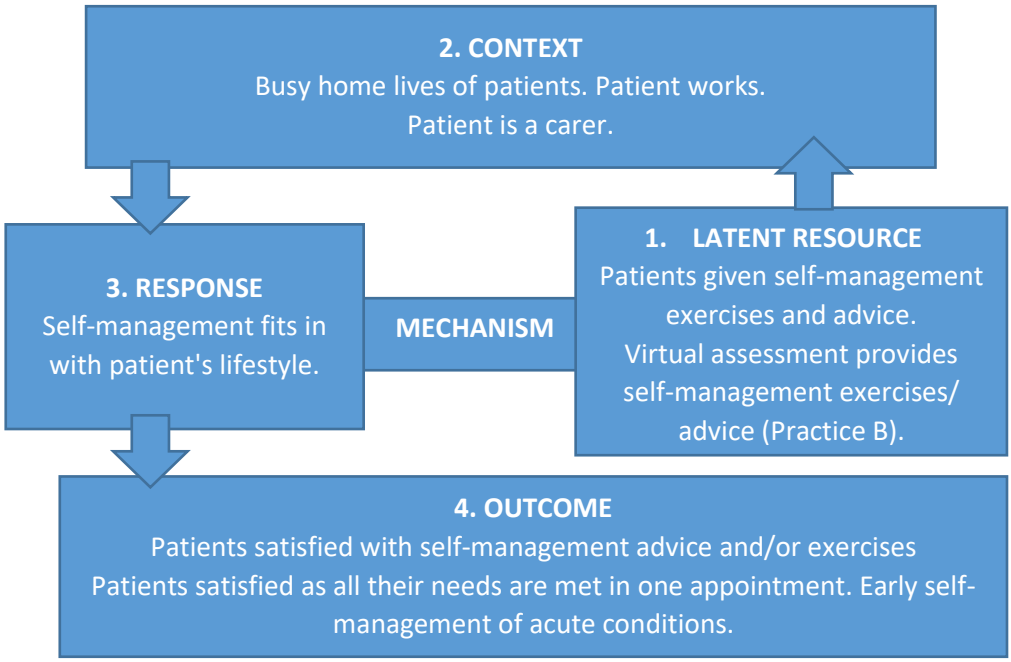


Figure 7.9 – Shared accessibility CMO

In both Practices, staff discussed the convenience of being able to receive self-management advice and exercises. FCP 2 highlighted that patients often had busy home lives and therefore self-management exercises and advice better fitted their lifestyle. He felt patients were satisfied with the management of their MSKD in one appointment:

> *"they'd rather just be doing stuff at home because they're a carer or they've got other stuff going on at home, that they don't want to be going to other appointments, then I think, then we can give them those exercises or that advice to be doing at home, so I think it's giving the patients options as well."* (FCP 2, Practice A)

In Practice B, following on from the phone call with the Receptionist, the intended next stage in the care pathway was a virtual assessment. All members of staff highlighted this virtual assessment to be management in itself, and not simply a precursor for a face-to-face appointment. FCP 3 and the Practice Manager highlighted that a majority of patients could be managed in these virtual assessments, with the Practice Manager stating that resources were used most efficiently. The key benefit of the virtual assessment was the early assessment of the patient. Receptionist 2 and FCP 4 stated that on-the-day virtual

assessments were occasionally offered, however, the wait was often two-to-three days. It was perceived by FCP 4 that this short wait for this assessment led to early self-management of acute MSKDs:

> *"They [patients] do like the virtual stuff because it is very quick. You know, if you can get a call within two or three days for something that's only just an acute problem that's started up, a lot of the time it's education, reassurance and basic management."* (FCP 4, Practice B)

Further to this, GP 2 and FCP 4 all hypothesised that the virtual assessment was more convenient for patients. Patients could be assessed over the phone during their lunch break at work:

> *"It's often a bit more convenient to speak to somebody by phone because it's 10 minutes at the desk at work, as opposed to having to take an hour and a half out of a working day to come to the surgery and see somebody"* (GP 2, Practice B)

None of the patient data supported this hypothesis (see section 7.4.4).

7.2.6 Communication

Analyses of both Practices resulted in one shared CMO being formed for the theory area Communication (see below).

7.2.6.1 Explanation on the FCP's MSKD management and clinical-reasoning

This hypothesis demonstrates the effect of patients understanding their MSKD and how it may lead to increased acceptability of the FCP's MSKD management (see Figure 7.10 for CMO).

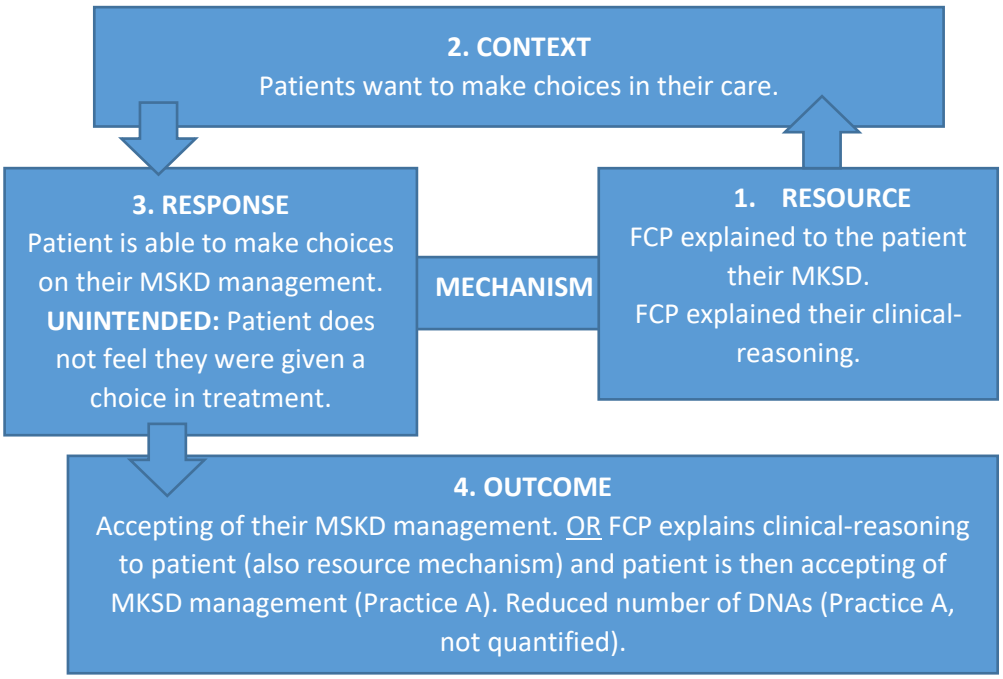


Figure 7.10 - Shared communication CMO

The same resource mechanism was present in both Practices and highlighted by all the FCPs - the FCPs explaining to the patient their MSKD. FCP 2 and FCP 3 highlighted the importance of patients having the ability to make choices and confidence in their treatment:

> *"get them to understand what the cause for their pain is, lots of reassurance that these things don't need scans, they don't need x-rays, that this is the reason why, this is how we treat it and giving them treatment options, this is how we treat it, this is what the evidence says and let them be involved in their decision making. If they've decided how they want to treat it, then they're more likely to go away and do that."* (FCP 2, Practice A)

Patient 10 recounted her experience of the FCP explaining their clinical-reasoning for the best treatment option when setting out the options:

> *"My only further option is injections. When I ask for that is up to me. Now, the question is how far do I go in pain before I've had absolutely enough of this? It's all my decision now and that's the only option available."* (Patient 10, Practice B)

In both Practices it was felt that providing clinical-reasoning resulted in patient confidence in the management plan:

> *"If you like them [the FCP] and they explain things to you, you trust them more and you think that what they're telling you is correct."* (Patient 6, Practice A)

There were some outcomes unique to Practice B. Patients 4 and 5 did not feel that they were given a choice. Nevertheless, there was an acceptance by Patient 4 as he felt '*I'm sure that they want to do the best for me'.* Patient 5's response demonstrates how the FCP providing their clinical-reasoning also resulted in acceptance of the patient not choosing their treatment:

> "*Well we discussed it. She discussed it. She gave me the pros and cons and then she made her decision and I accepted it."* (Patient 5, Practice A)

When asked what impact – if any - being able have a discussion with the FCP had on the patient, she responded:

> "*You were shown what was possible and what the outcome of that would be - and if it wasn't like that - what the outcome of that would be."* (Patient 5, Practice A)

It was highlighted by FCP 2 that patients were more likely to miss an appointment without providing a reason if they did not engage with their care. Through involving patients with such decisions and considering the demands of patient's home or work life, it was hypothesised patients were less likely to DNA (did not attend):

> *"If we're just sending them to physio, for example and just saying 'right, you need to do this, off you go,' then they're more likely to just DNA or not engage in it, whereas they'd rather just be doing stuff at home because they're a carer or they've got other stuff going on at home, that they don't want to be going to other appointments."* (FCP 2, Practice A)

7.3 Shared overlap

Frequently there was theory area overlap of both Practice findings. This was where elements of the context or mechanism were related to more than one theory area. The overlap across the theory areas that were shared by both Practices are highlighted in Table 7.1. This section will describe the interconnected nature of the theory areas.

Table 7.1 - Shared overlap

Overlapping theory areas	CMO title
Communication, Accessibility, Hierarchy, Experience	Experience of GP hierarchy
Experience, Expectations	Experience of physiotherapy and its effect on expectations
Expectations, Communication	FCP reassuring patients that conditions are not serious

7.3.1 Shared overlap 1 – Experience of GP hierarchy

The most overlapping theme linked together four theory areas in both Practices by demonstrating how the FCP communicated with the patient compared to the GP (see Figure 7.11 for CMO).

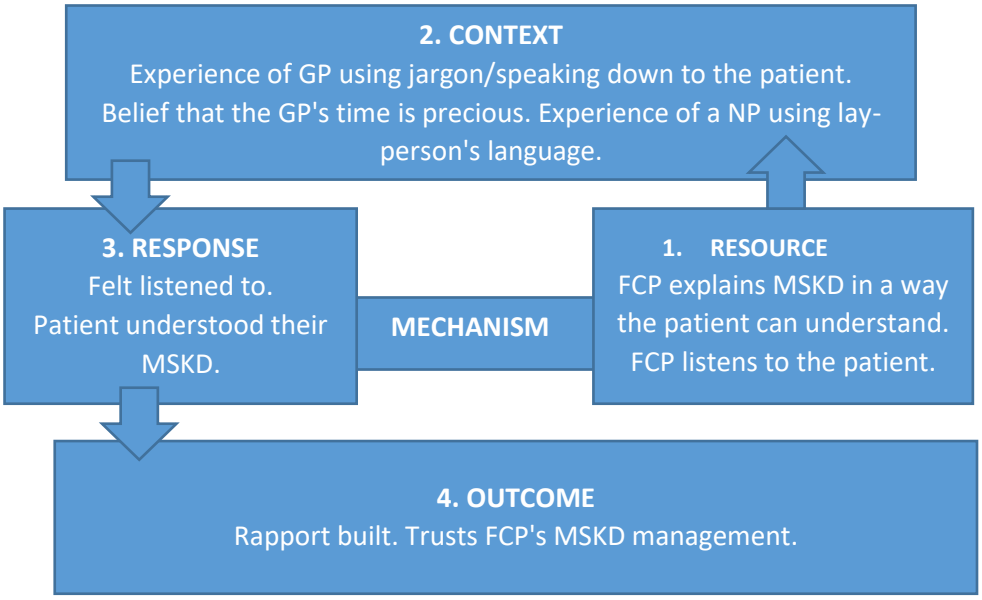


Figure 7.11 - Shared overlap 1 CMO

Patient 3 had experience of the GP using jargon; the patient contrasted the GP's communication to a NP, who used language they could understand:

> *"I would say that dealing with the doctor is very much a specialist process where I explain what I perceive to be my problem and let him make a decision, whereas when I was talking to the practice nurse I find it a much easier one to one because I can understand the language for a start, they tend not to use technical jargon"*
>
> (Patient 3, Practice A)

Patient 3's response demonstrates an experience whereby the GP used language that he could not understand; it may be inferred from this response that he had feelings of being subordinate to the GP. Patient 6 and 10 similarly discussed an experience of being *'spoken down to'* (Patient 6) by the GP and other experts, but not having this experience with the FCP:

> *"He [the FCP] was very, very clear and there was no talking down to me in any way, even though I had no knowledge of my bone … I have no in-depth knowledge of my bone structure."* (Patient 10, Practice B)

As a consequence of the way they were spoken to, Patient 3 and 10 felt they should not waste a GP's time. Patient 6 felt that the GP's communication negatively affected rapport and made parallels with the FCP, who did not talk to her in this manner:

> *"Well, I think I was listened to. Sometimes people when they're sort of experts in things can talk down to you a bit, you know. I mean, like some doctors do. But neither of them did." … "If you like they and they explain things to you, you trust them more and you think that what they're telling you is correct."* (Patient 6, Practice A)

Although the Practice findings were predominantly similar, there was one key difference of multiple Practices being able to access Practice B FCPs. Consequently, there were multiple different GPs these patients could access. Patient 9 had found the members of staff in her Practice easy to talk to, but perceived this may not be true of all Practices:

> *"You don't get that impression [that a hierarchy exists], you know, all the doctors are really easy to talk to and I think the nurse practitioners are as well so I don't ever feel like that. I know I've spoken to other people that don't have such great experiences in their practices"* (Patient 9, Practice B)

See Figure 7.12 for overlaps between theory areas.

Figure 7.12 - Shared overlap 1

7.3.2 Shared overlap 2 - Effect of patients' previous physiotherapy experience on expectations

Shared overlap 2 highlights how previous experience of physiotherapy can negatively or positively affect patient acceptability of the FCP's MSKD management (see Figure 7.13 for CMO).

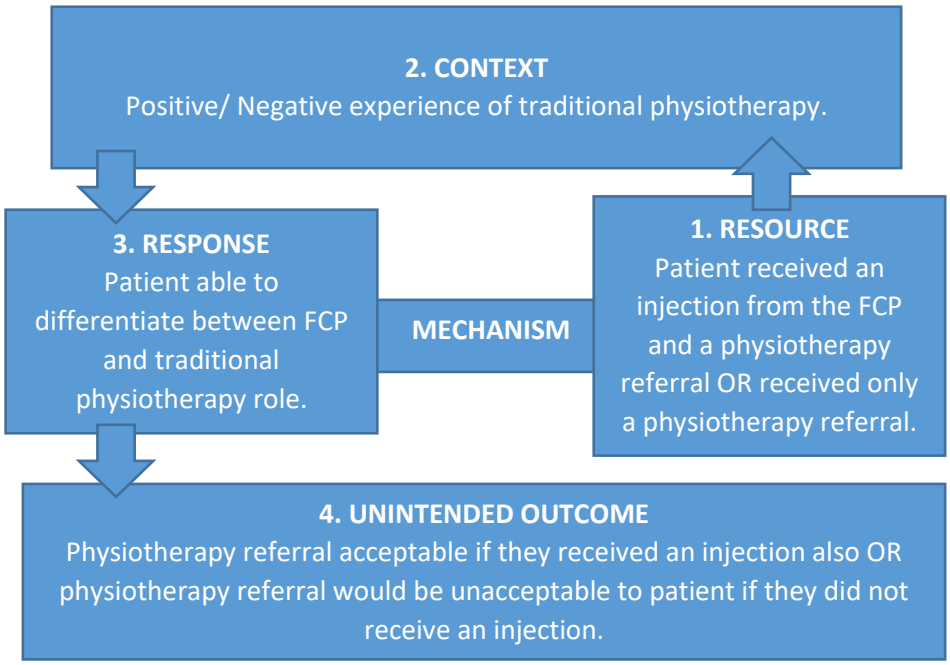


Figure 7.13 - Shared overlap 2 CMO

Both Practices' findings inferred that previous physiotherapy experience could affect patient expectations of the FCP. The Practices demonstrated two polar contexts – positive and negative experiences of physiotherapy. Responses from Practice A (Patients 4 and 5) discussed negative experiences of physiotherapy:

> *"After four weeks I didn't want to go again but I went to finish the course because I had to and then only did I get an injection and that cleared the issue up" … "perhaps a bit of massage and even these machines that they use, ultrasound and that sort of thing could've made a huge difference in the recovery … in a quicker recovery."* (Patient 5, Practice A)

Patient 5 stated she would not access physiotherapy in Secondary Care again and a physiotherapy referral from the FCP would have been unacceptable. Consequently, her physiotherapy experience would affect her expectations of the FCP consultation outcome.

Patient 4 was also not accepting of physiotherapy due to exercises that he felt were not as effective as his own. Nevertheless, he accessed the FCP, received an injection and was able to distinguish between the two roles:

> *"I just assumed these people were, as I said, swish physiotherapists with more knowledge and more experience and more power sort of thing, so I was open-minded when I went in"* (Patient 4, Practice A)

In Practice B, FCP 3 discussed patients expecting treatments due to their physiotherapy experience:

> *"I think there are some people who've maybe experienced us in the past or the people who sort of know what treatment they want anyway that can be quite pleased that they're seeing a physio rather than a doctor." (FCP 3, Practice B)*

Responses from both Practices demonstrated that the contexts of physiotherapy experience resulted in an expectation on types of treatment. What differed were the treatments that the FCPs could offer – the FCPs in Practice A could carry out injection therapy – whilst the FCPs in Practice B were unable to do so. In Practice A, the patient would have been dissatisfied with the FCP referring them to physiotherapy and she had an expectation of a hands-on treatment. However, as the FCP was also able to inject the patient alongside referring them to physiotherapy, the patient was satisfied. No outcome data were present in Practice B due to the context and mechanism being provided by staff responses only. Nevertheless, Practice A suggests that if the expectation of hands-on treatment were met, then the patient would have been satisfied.

See Figure 7.14 for overlap of theory areas..

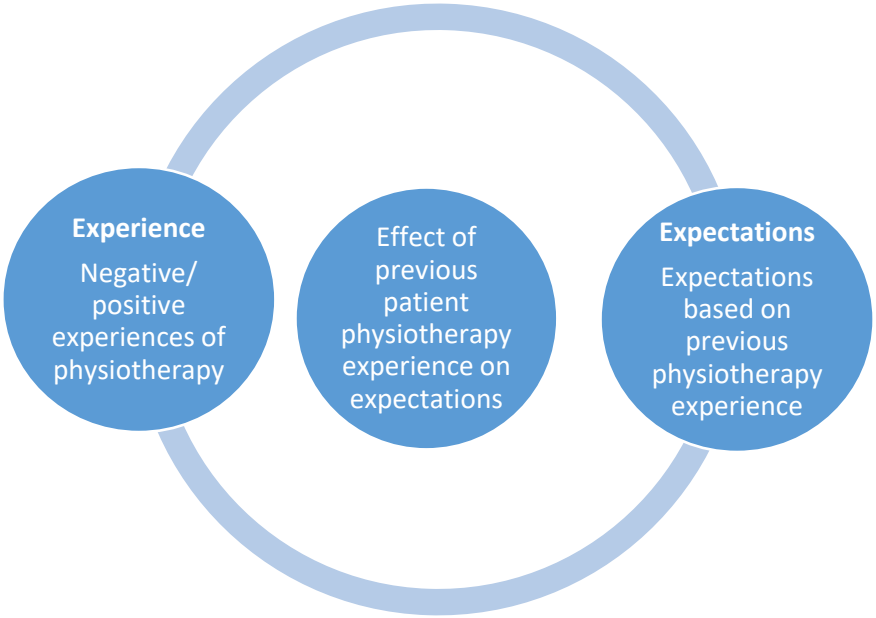


Figure 7.14 - Shared overlap 2

7.3.3 Shared overlap 3 – FCP reassuring patients that conditions are not serious

This overlap inferred that there some patients require higher levels of reassurance and thus the FCP needed to be able to communicate that there is no serious pathology (see Figure 7.15 for CMO).

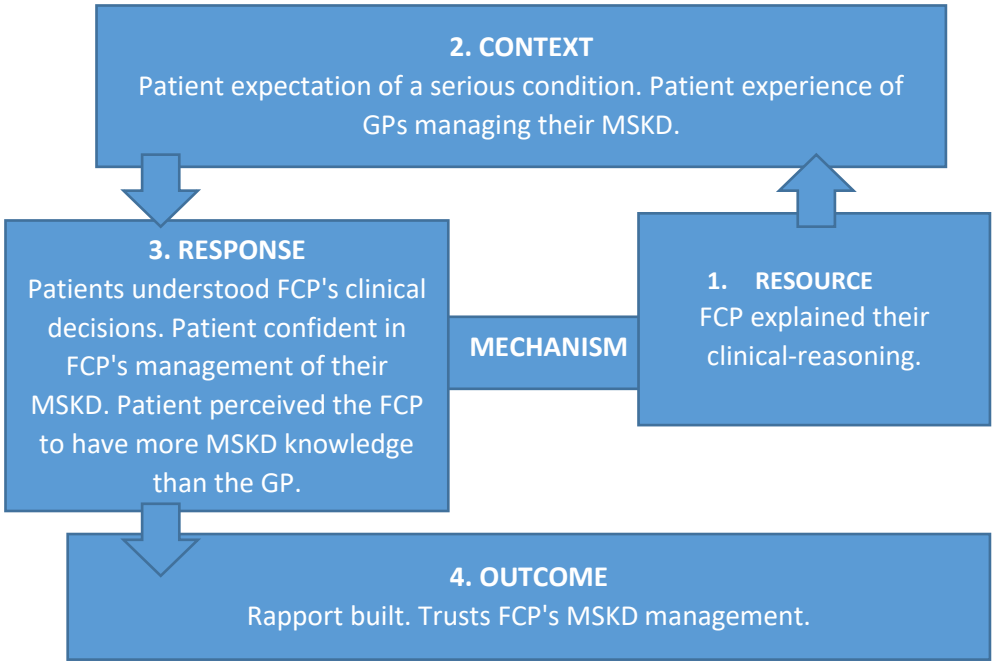


Figure 7.15 - Shared overlap 3 CMO

All FCPs expressed the importance of communicating no serious pathology. A key outcome of patient understanding was patients being reassured by the FCP explaining their rationale for their decisions. It was hypothesised that the FCP's communication skills resulted in patients having more confidence in the FCP's ability to deliver care and being reassured:

> *"And communication skills and all the other things that we do with patients really. I think it's something you need to be able to deliver well so that patients are happy and also to be confident that you're … in your own ability to deliver."* (FCP 1, Practice B)

> *"I think the big thing is having … clarifying that you don't feel there's anything more sinister going on"* (FCP 4, Practice A).

Patient responses did not directly highlight increased confidence from the FCP providing a high-level of knowledge. Nevertheless, Patients 1 and 4 discussed the FCP having a higher-level of knowledge than the GP; Patient 4 perceived this to be due to a greater experience of MSKDs. Consequently, their responses demonstrate a greater level of confidence in the FCP than the GP, coinciding with FCP 1's hypothesis:

"I think seeing these people [FCPs] is good and they may be better or as good as a GP. They may have seen more than a GP in this area, you know, whether it's knees or elbows or whatever, through their work they've had more experience than the GP so um … it may be better to see them." (Patient 4, Practice A)

See Figure 7.16 for overlap between theory areas.

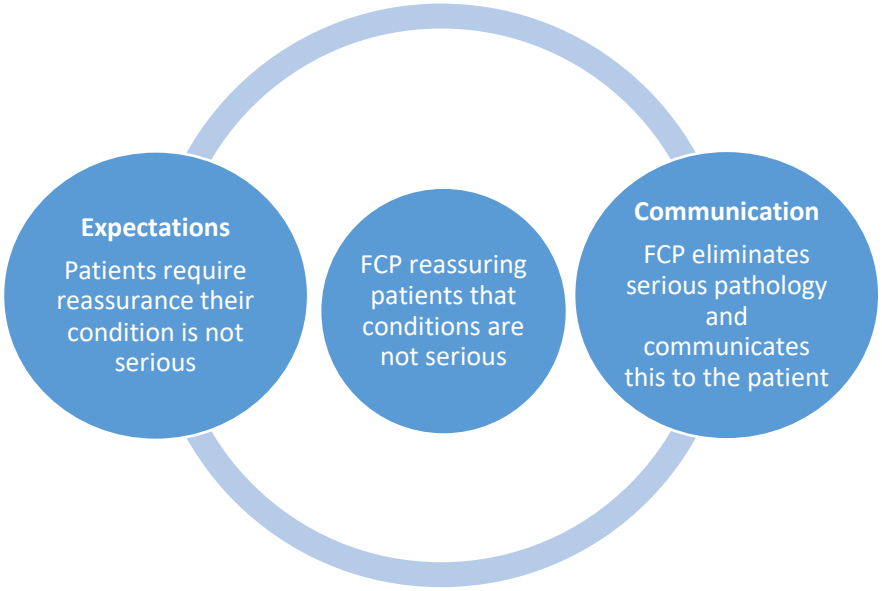


Figure 7.16 - Shared overlap 3

7.3.4 Shared overlap 4 – Patients sharing their experience of improved access

This CMO demonstrated how the sharing of patient experiences – with particular emphasis on the reduced wait for an appointment – may result in patients being made aware of and accessing the role (see Figure 7.18).

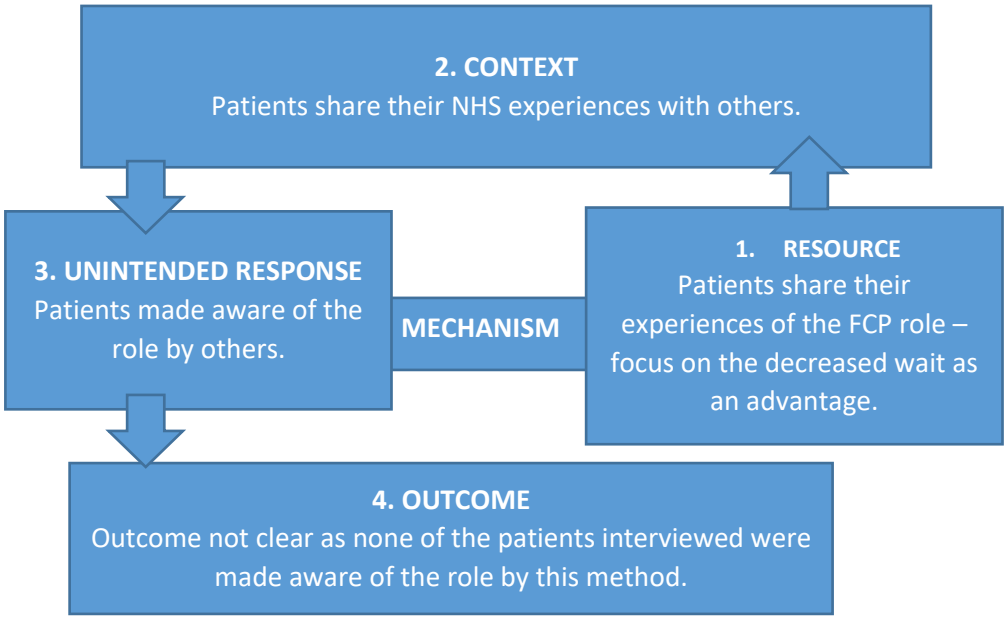


Figure 7.17 - Shared overlap 4 CMO

A method of promoting the role that both Practice GPs perceived as effective *was 'word-of-mouth'*, where patients shared their experiences of the role with others:

> *"So when they phone up for a problem and they're put in with the physios, they'll remember that for next time and people talk as well, people spread the word in the community."* (GP 1, Practice A)

Patients 3, 4 and 5 stated that they would discuss the role with family and friends and share their positive experiences and only Patient 6 felt she would not. The key benefit that Patient 5 highlighted to others was the reduced wait:

> *"Well I … those with whom I speak I say 'This is fantastic because I was referred straightaway and I also got help straightaway."* (Patient 5, Practice A)

Only Patient 7 (Practice B) stated she had spoken to family and friends about the role, and she explained to them the benefit of the appointment being closer to home:

> *"It's important that it's available through the practice rather than having to go to a hospital, which can be well anywhere can't it?"* (Patient 7, Practice B)

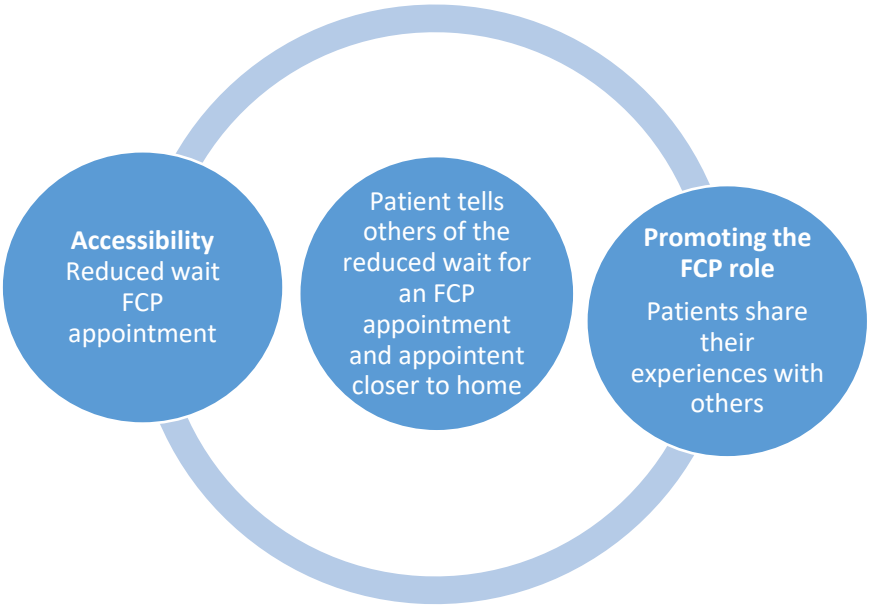


Figure 7.18- Shared overlap 4

7.4 Shared rival hypotheses

7.4.1 Shared rival hypothesis 1 – Communication and length of consultation

The findings highlighted a dichotomy within the theory areas 'Accessibility' and 'Communication in which both theory areas may result in similar outcomes (see Figure 7.19).

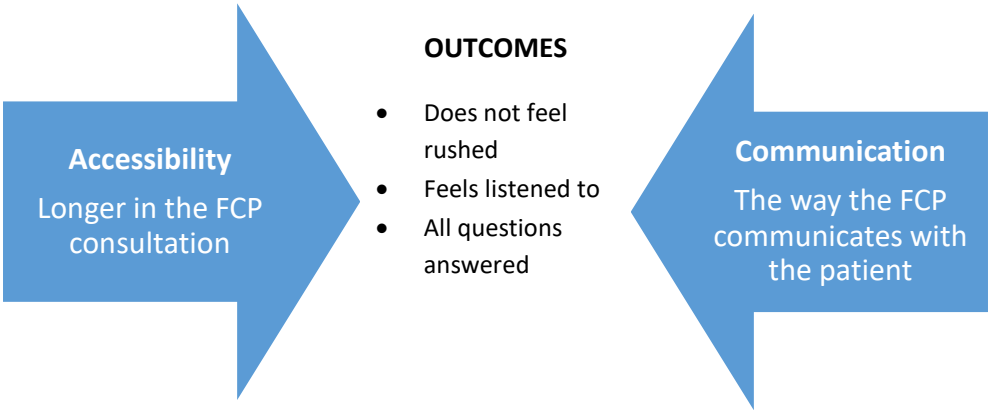


Figure 7.19 - Rival hypothesis 1

It was suggested that the communication skill of the individual was a more pivotal factor that contributed to patients feeling listened to:

> *"it will partly depend on the experience of the clinician, the um … the communication skills and consultation style, whether the patient feels listened to, whether they … whether their expectations have been met etc. So I think it's too simplistic just to say time is … time … increased time would increase satisfaction. I think that would be hard to say."* (FCP 1)

Patient 3 and 4 (Practice A) and Patients 7 and 9 (Practice B) responses expanded upon the FCPs. When asked whether consultation length or the way they were communicated with were more important, Patient 3 stated it was *'too simplistic a question'* as what mattered was *'how they get it over to you'.* Patient 4 felt that the individual patient could be taken into account in a shorter consultation if there was a skilled FCP in the role, as was the case of the Band 7 FCPs at Practice A:

> "If *they come straight to the point and say 'Well I'm sure that your trouble is blah, blah blah' then obviously it would be a lot faster than if she said 'Well you know of course it could be so and so, let's think about that. Or it could be so and so, let's try …' It would depend on your situation and how*

their experiences and their skill and what they think it might be, I suppose."
(Patient 4, Practice A)

Patients 3 and 4 (Practice A) and Patients 7 and 9 felt they were able to explain their problems and were provided with an in-depth explanation. This resulted in them not feeling *'rushed'*:

"I think it depends. You just want to go to an appointment and feel like you've been seen and you haven't been rushed and that individual that's assessing you or working with you is giving you their time.." (Patient 9, Practice B)

Patient 7 (Practice B) felt it was more important that the FCP was able to make the patient confident in their knowledge so that they felt at ease. Patient 7 also perceived that the attitude of the FCP was more important than how long they had in the consultation, in particular, she needed to feel she was not dismissed in the appointment:

"I don't think it matters whether it's five, ten, fifteen, twenty minutes as long as you feel that they are competent and are dealing with the problem. I.e. you can walk in and see somebody in five minutes you can walk out and feel that 'Oh, they dismissed me.' Or you can feel confident that they've dealt with what the problem"
(Patient 7, Practice B)

Furthermore, Patient 7 felt it important that there was no hierarchy between the FCP and the patient. She had experienced a GP *'talking down'* to her; thus, it may be that this negative experience determined the importance of the way the FCP communicated with her. Thus, for this patient a culmination of 'Hierarchy', 'Previous Experience of Condition Management' and 'Communication' were more pivotal than 'Accessibility' for acceptability of the FCP role.

7.4.2 Shared rival hypothesis 2 – meeting patient needs in one consultation

This rivalry demonstrated a potential threat to Accessibility, rather than contradicting theory areas. Responses from both Practices identified occasions where it was not possible for FCPs to access GPs and the patient was not able to receive this service:

> *"…I always say 'It's up to the GP's discretion and they will review your medication and if you call tomorrow there will be a…there will be something'"* (FCP 1, Practice A)

FCP 3 identified a barrier due to the FCP having an evening clinic that was outside of the GP standard working hours. Consequently, signing of the prescription was dependent on a duty doctor being available:

> *"I have one clinic in an evening, six to eight, where there's potentially not a GP around but then that could potentially go on a pharmacy list if we get that sorted."* (FCP 3, Practice B)

However, FCP 2 could not recall any occasions they had not been able to access the GP for the patient's prescription. As none of the patients had required a prescription, it was not possible to test this resource mechanism with patient data.

7.4.3 Shared rival hypothesis 3 – Continuity preferential but not essential

This shared rivalry demonstrated how the theory areas Accessibility and Communication may be more pivotal factors in patient role acceptability than 'Continuity' (see Figure 7.20).

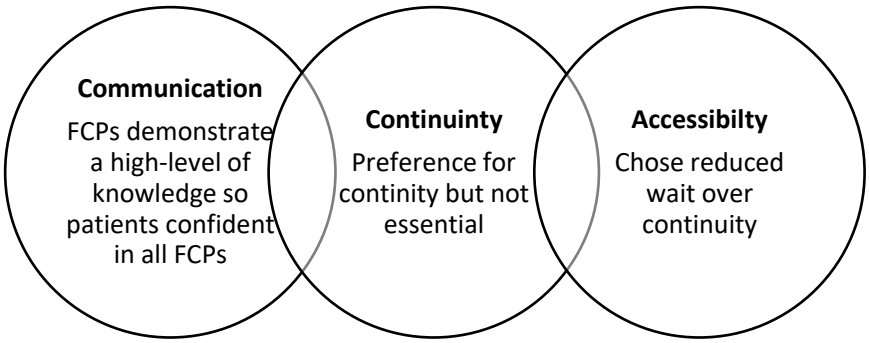


Figure 7.20 - Shared rival hypothesis 3

In Practice A, it was highlighted by the Management Partner and FCP 1 that the nature of the FCP role means continuity may not always be achieved. The Management Partner inferred that the nature of the FCP role was different to the GP role, in that MSKDs are not conditions that necessarily require continuity. As a result, she hypothesised that patients do not expect continuity of care from an FCP:

> "*It's not necessarily something that you need the continuity of care from. If someone's just appeared with a bad back because they've tweaked it or done something … I think people are more acceptable that that sort of thing would normally go to a physiotherapist who they wouldn't know and it's not the same as the continuity within the practice."* (Management Partner 1, Practice A)

In Practice B, GP 2 highlighted developments in electronic notes that result in continuity of the practitioner being unessential:

> *"I think it's maybe a little bit less of an issue these days because the notes that we keep on the computer system are so comprehensive.*" (GP 2, Practice B)

Patients 3, 5 and 6 all expressed continuity of care as preferential, but unessential for the FCP role which does not require several appointments. Patient 5's response supported the Management Partner's hypothesis regarding seeing the GP more frequently than the FCP:

> *"I don't think you see them as often and you're seeing them for a similar problem each time. Whereas the doctor you're often … it's a variety of problems across the board"* (Patient 5, Practice A)

There were separate contentions from the theory areas 'Continuity' and 'Accessibility' and 'Communication' (see Figure 7.20).

Patients 1 and 4 interviews highlighted that continuity of the FCP was not vital providing that their level of skill was the same and that they appeared competent:

> *'I would like to see the same person if at all possible. If not I wouldn't be opposed to seeing somebody with the same level … skill level as the previous person I saw.*'
> (Patient 1, Practice A)

Therefore, the FCP demonstrating a high-level of knowledge may be more important than seeing the same practitioner. This was not highlighted in Practice B.

Receptionist 2 and FCP 4 hypothesised that patients would rather be seen earlier by the GP or FCP respectively, rather than wait to see the same practitioner:

> *"If they need seeing face-to-face, I'll do my best to see them face-to-face just for that continuity of care. I think most of the time people are just happy to be seen and seen quickly"* (FCP 4, Practice B)

Patient 9's response highlighted a weighing up of the advantages of seeing the same practitioner, with the amount of time having to wait:

> *"If it's the difference of a week then I'd wait to see the same person but if it was going to be the difference of a month I'd probably go and see somebody else."*
> (Patient 9, Practice B)

Patient 6 stated that she chose earlier access over continuity of the FCP:

> *"Well there's two different ones [FCPs] but that was only actually because I'd have had to have waited another 10 days or so for an appointment with the one I was going to see. She was fully booked up."* (Patient 6, Practice A)

Patients 7, 9 and 10 all stated that they would prefer to wait to be seen by the same practitioner, thus disagreed with FCP 4's hypothesis. However, there was an element of acceptance that continuity was not attainable. Patients 7 and 9 discussed their experiences of not being able to receive continuity of care with their GP and an acceptance that continuity is not always possible. When questioned on whether she would prefer continuity of care with HCPs, Patient 7 responded:

> "*Oh I think it's impossible to have it. I mean, it's something I would love to have but it just doesn't seem possible at the moment"* (Patient 7, Practice B)

7.4.4 Shared rival hypothesis 4 – The convenience of self-management

Patient responses did not support the staff hypothesis that patients valued the convenience of self-management exercises, particularly if in employment or a carer. Patients 5 and 6 expressed that although they would do their exercises, they did not express any specific benefits of home exercises:

> 'Interviewer*: "Ok, how would you have felt if you had been given self-management exercises by the musculoskeletal practitioner?*
>
> Patient 6: *Well, I'd probably have a go at them and if I could do 'em I'd do 'em and if I couldn't I wouldn't!"'* (Patient 6, Practice A)

None of the patients in Practice A referenced any proposed benefits relating to the convenience of being able to manage one's own condition. Whereas in Practice B, patients were overall not accepting of virtual assessments and did not want self-management advice in this way (see p.204). This may be due to the average age of the samples being close to, or past, retirement age and none of the patients highlighted roles as carers (see p.300 for the limitations of a sample with limited representation).

7.5 Summary of findings

This chapter presented Practice A and B's shared theory areas (n=10), shared overlap (n=4) and rival hypotheses (n=4). There were occasions when the CMOs had different contexts, which led to the same mechanisms and outcomes. There were also CMOs that were near-identical, with slight differences in a context or mechanism. The most overlapping shared CMO demonstrated how patients had negative experiences of GPs using jargon, consequently the patient perceived them as a specialist they could not waste the time of. This was contrasted to FCPs who were seen to listen and a rapport was able to build. Two of the rival theory areas that had the most amount of data highlighted: how communication may be more important than length of consultation; and how continuity is not essential for the FCP role.

In the following chapter, the findings from Chapter 5-7 will be interpreted using retroductive thinking and through consideration of theory areas collectively. Findings will be compared to the initial programme theory under test, and modification to theory will be explored.

8 Chapter 8: interpretation of Practice A and B's analyses

8.1 Chapter summary

This chapter will first highlight the CMOs that were shared by both Practices. There will be discussion on shared CMOs, and also how different contexts resulted in similar mechanisms. The chapter will then elucidate why for that Practice the mechanism worked (or did not work). There will then be a discussion on why the other Practice, with different contexts, may result in other mechanisms, leading to other outcomes (see Figure 8.1). There are several theory areas where Practice A had no unique CMOs; the following theory areas were therefore not presented individually: 'Promoting the role', 'Accessibility' and 'Continuity'.

The analysis overlap and rival sections will also be interpreted; they will be integrated within the interpretation of appropriate CMOs in order to provide support or alternative explanations.

The sections are titled to their corresponding CMOs. The chapter will conclude by comparing the Practices' findings to the initial hypotheses collectively.

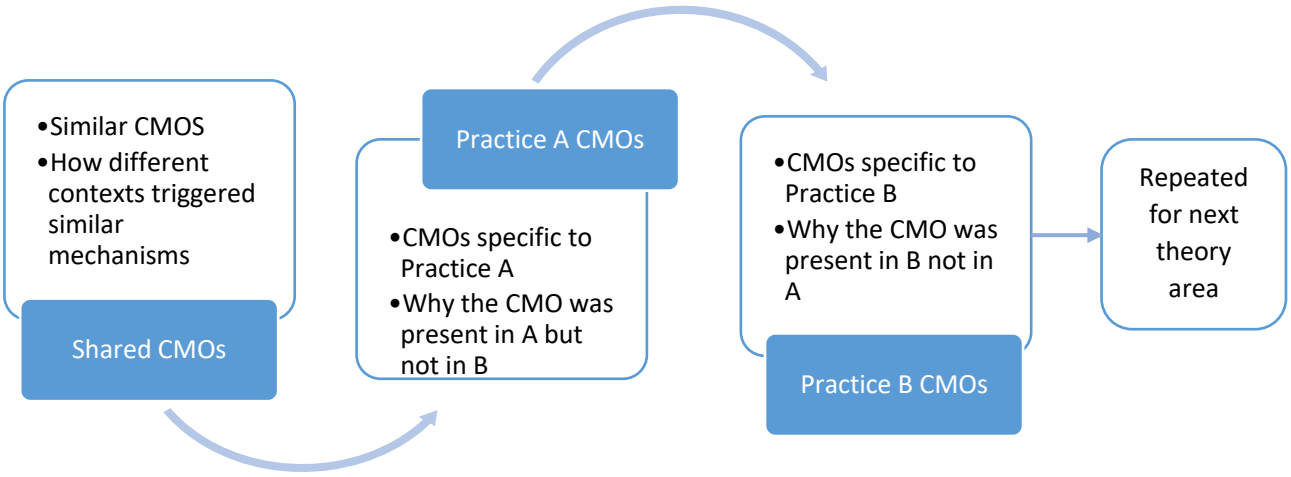


Figure 8.1 - Framework for the interpretation of Practice A and B's Analyses chapter

8.2 Patient previous experience of condition management

8.2.1 Shared CMOs

8.2.1.1 Patient perception of the GP as the norm/as the first step

Patients in Practice A had a longstanding expectation that the GP was the norm, this was due to patients being *'set in their ways'* (supported by Patient 1 and Medical Receptionist 1; see p.210). In Practice A, the greatest number of registered patients were between the ages 60-69, compared to 30-39 years in Practice B[28]. The average age of the patients interviewed from Practice B was 61.4, whilst Practice A's sample were more than 15 years older, at 76.8 years-of-age. FCP 4 (Practice B) felt that seeing the GP first was an expectation that predominantly was present in patients over the age of 50. In Practice B, there were 25 Practices that could access the role, all with their own models of access, with some stipulating that the patient had to access the GP first. It was this context that dictated whether patients had to access a GP first. The different Practice contexts highlight how the FCP could be wrongly perceived, or not accessed as first contact, due to varying mechanisms. For example, in Practices with older populations, a consideration may be how an ingrained patient expectation of GP roles can be challenged through the provision of education. When Practices can access FCPs that are co-located in another Practice, such as in PCNs, there needs to be consistent staff training on the aims of the FCP role, alongside a clear triage model.

In Practice B, Receptionists could encourage patients to access the FCP role, however, patients would only be receptive to this if they trusted the Receptionist's training (context). Furthermore, it was hypothesised from Practice B's findings that if the patient required a high-level of reassurance (context), the Receptionist would be unable to change the expectation of a GP consultation. These two contexts are pivotal in successful signposting by Receptionists.

8.2.1.2 Patient experiences of APs

Both Practices exhibited contrasting contexts, a positive/negative experience of a Community Pharmacist, resulting in polar mechanisms– trusting/distrusting of a FCP prescribing, and polar outcomes - accepting of a prescribing FCP/only access a GP for prescriptions. The data from both Practices supported one another through demonstrating that, if the context were changed, it would result in the opposite mechanism and outcome.

[28] Note, this it to demonstrate the contrast between Practice ages, however, only two out of five of the patients interviewed from Practice B were registered at Practice B.

Patient and staff interviews rejected the idea that the patient experience of APs had any influence on patient perceptions of FCPs. Nevertheless, predominantly the patients interviewed - who had all experienced the FCP role – had experienced an AP. Of the five participants in Practice A, only one had not had previous AP experience, and in Practice B, three patients out-of-five had this experience. It may be postulated that patients were unconsciously influenced by their experience with APs. However, as patients without FCP experience were not interviewed, it is not possible to test how many of these patients had AP experience; therefore, this hypothesis is formed mainly through retroductive thinking.

Overlap 2 created an association between 'Experience' and 'Promoting the role' theory areas. It elucidated a clear mechanism between patient experience of an AP (a diabetic nurse), and their subsequent access of an FCP.

8.2.2 Practice A CMOs

8.2.2.1 Patients indirectly evaluating the FCP role by comparing this experience to their experience of the GP

The FCP was a new role for patients, and they responded with hesitation when evaluating aspects of the role they had not experienced, and instead made parallels with their GP experiences; this was also hypothesised in the realist review. Practice B did not have this particular CMO in action; however, the theory areas 'Expectations', 'Communication' and 'Hierarchy' showed patients making comparisons between the GP and the FCP. As previously highlighted, patients interviewed from Practice B were younger than Practice A. Thinking retroductively, it may be that younger patients were more comfortable evaluating a role they had not experienced. This would be supported by the earlier discussed hypothesis of patients an older population perceiving GP's as the *'norm'* (see p.249).

Overlap 3 provides an example where patients may have been indirectly evaluating the FCP role. If patients have had continuity with the GP and preferred this, they may then expect FCP continuity. This association is not directly indicated in the findings and is instead formed through retroductive thinking.

8.2.3 Practice B CMOs

8.2.3.1 Patient experience of telephone calls with the GP

It was hypothesised (by staff responses only) that experiences of GPs ringing patients back resulted in patients being more accepting of FCP virtual assessments (see p.175). Practice A offered face-to-face FCP appointments only; thus, this mechanism was not present. However, Practice A's website stated that they offered virtual assessments with GPs; therefore, if FCP virtual assessments (resource mechanism) were introduced into Practice

A, it may have been successful. Nevertheless, virtual assessments were more positively discussed by the staff responses in Practice B, whilst patient responses highlighted reservations. It may be that although virtual assessments 'worked' in terms of the Practice aims, they may have never been fully accepted by patients.

Practice B's overlap 4 'Patient expectation of a face-to-face appointment' elucidated that, for patients who suspected they had a serious condition, a virtual assessment is inadequate.

8.2.4 Summary of 'Patient previous experiences of condition management'

The analysis of both Practices highlighted that previous experience of condition management did have an effect on patient acceptance of the FCP role. The two Practices have contrasting populations – an older and younger population; it may be inferred that the populations have differing levels of Primary Care experience due to their age. Although this was shown to affect patient expectations of the GP as the *'norm'*, overall the evaluation of the FCP role was similar. In both Practices, a negative/positive experience of a HCP role which patients associated with the FCP role, led to decreased/increased acceptance of the FCP.

8.3 Patient expectations of condition management

8.3.1 Shared CMO

8.3.1.1 The effect of the perception of a serious condition

A similar CMO was present in both Practices – the expectation of diagnosis and/or an onward referral or scan. Practice A's findings highlighted the response mechanism of patients expecting a scan from the FCP due to the perception of a serious condition. The analysis of Practice B's staff responses resulted in an association between patients wanting a diagnosis, and their expectation that the scan could provide this reassurance. However, the sample did not include those who perceived themselves to have a serious condition or those who expected a scan. Thinking retroductively, the FCP role may have been less acceptable to patients who were not aware that the FCP could request scans through the MSK service. The findings from both Practice support one another, as they both share the same context and similar mechanisms that lead to the same (unintended) outcome.

Shared overlap 3 'FCP reassuring patients that conditions are not serious' elucidates how 'Communication' can impact 'Expectations'. A shared Practice context was the perception of a serious condition and patients, therefore, expecting a GP consultation. In both Practices patients were dissatisfied with not being able to choose to see the GP (unintended outcome). Only in Practice A did the FCP provide an explanation on the patient's MSKD and its management (an outcome and resource mechanism) which resulted in acceptance of the FCP's management. The differences between the two Practices can be simply rationalised. The data from Practice B that applied to this hypothesis was from staff only; data did not have the patient response on their experience of attending a consultation they had not wanted to attend. Furthermore, only patients who accessed a FCP were interviewed, however, as Practice B's overlap 5 demonstrated, some patients were adamant that they access a GP (context). Those patients would not have accessed the FCP, therefore, the FCP would not have been able to explain their MSKD management.

Rivalling this hypothesis was Practice B's rival 3, which demonstrated that some patients would access a FCP for serious conditions. It was inferred that younger patients may be more accepting of accessing a FCP regardless of perceived condition severity. Practice B's overlap 4 also demonstrated how a perception of a serious condition may result in expectations of appointment type.

8.3.2 Practice A CMOs

8.3.2.1 Patient expectation that the FCP accesses the GP for prescriptions

Although staff responses highlighted that prescribing may have been a useful skill for the FCP role, none of the patients interviewed had required a prescription. Staff also hypothesised that patients who considered their condition 'serious' would expect a GP to prescribe. None of the patients had this perception, but if these patients had considered their condition as 'serious' and had needed prescriptions, then knowing that the FCP could access the GP may have been more pivotal in role acceptance.

This CMO was not demonstrated in Practice B findings, however, none of the patients in this Practice had required prescriptions from their FCP and neither FCPs felt that prescriptions were something that the role needed. In Practice B rival 2 'Threats to accessibility', FCP 3 expressed concerns that prescribing would use up consultation time. Consequently, the CMO active in Practice A would not have been possible in Practice B due to the FCP's personal views on physiotherapists prescribing.

8.3.2.2 Patient expectation that they can choose which profession injects

In Practice A, Patient 1 hypothesised that patients had an expectation of a choice on which professional carried out injection therapy. He felt that the expectation was present in patients who perceived GPs to have a higher level of training than other HCPs (context). The rationale for the difference is evident – a FCP in Practice A was able to inject, thus three patients received injections, whilst none of the FCPs in Practice B had this skill. However, there was less demand for injections in Practice B; only Patient 10 may have required an injection, compared to three patients (Patients 3, 4 and 5) in Practice A. Nevertheless, if there had been a higher demand for injection therapy, a similar CMO may have been active in Practice B. This was due to two patients (Patients 9 and 10) expressing the requirement to be aware of the training and qualifications of a FCP in order for them to inject.

The hypothesis should be interpreted with caution. The hypothesis is based only on data from one patient response and it is formed through Patient 1's conjecture on how other patients may feel about injection therapy.

Practice A's rival 1 'Issues of sustainability' highlighted that there could be overdemand of the FCP if patients accessed them primarily for injections, rather than accessing the GP injection therapy clinic. However, this concern was voiced by the Management Partner, who may have her own agenda to maintain a GP-funded clinic.

8.3.3 Practice B CMO

8.3.3.1 Patient expectation of an understanding of the care pathway

In Practice B, both patient and staff responses highlighted a patient expectation to understand the care pathway. This CMO was not present in Practice A and may be explained by a key contextual difference – the FCPs in Practice B could be accessed by multiple Practices. In some of these Practices, the GPs were insistent that patients accessed them first and sometimes set unrealistic patient expectations on waiting times or expectations of scans. It may be inferred that, due to all the patients in Practice A accessing a FCP first, they were less likely to be unsure of the care pathway.

8.3.4 Summary of 'Patient expectations of condition management'

Analysis of both Practices collectively supports the theory area and expands upon what patients expected if they perceived their condition to be 'serious' – namely, a GP referral, a diagnosis and/or diagnostic scan. When Receptionists explained why the FCP was the right professional to see, patients were accepting of their expectation not being met. There were CMOs unique to each Practice which may have been applicable to Practice B. However, it was hypothesised that there were CMOs that would not work in the other Practice; namely, virtual assessments were rendered as more likely to be unacceptable in Practice A due to contextual differences.

8.4 Professional hierarchy

8.4.1 Shared CMO

8.4.1.1 Patient perception of hierarchy independent of its existence

In both Practices patients and staff rejected the existence of hierarchy. Nevertheless, patients in both Practices demonstrated perceptions of hierarchy based upon the skill level of HCPs (see p.217). This indicates the need to break down deep-rooted perceptions of hierarchy so that patients understand the roles of different HCPs. Practice A overlap 1 expands upon this hypothesis, as it demonstrates how Receptionists were able to persuade patients to access the FCP through explaining their role and the benefits of FCP access. It may be inferred that Receptionists could also educate patients on role boundaries through promoting the role as a specialist service. However, Practice A's rival 2 highlights that a shortage of staff meant there was inadequate time to explain the role. A key consideration in Receptionists educating patients is the current Receptionist burden.

8.4.2 Practice A CMO

8.4.2.1 Perception of hierarchy due to access to services

It was postulated that patients may be more accepting of FCPs if they had more access to services (see p.147). GP 2's response stated that patients were incorrect in thinking that GPs were able to refer patients directly to orthopaedic surgery. Rather, the pathway required a physiotherapy assessment in a SPA service, regardless of GP or FCP contact. This indicates the importance of patients being educated on what services the FCP and GPs can access; as highlighted from Practice A's overlap 1 (above), Receptionists may be able to provide this.

8.4.3 Practice B CMO

8.4.3.1 Patient perception of the Receptionist's status

In Practice B, some patients perceived the Receptionist as not qualified to triage over the telephone (mechanism) and felt they should have seen a GP first (unintended outcome). This mechanism was dependent on the context of the patient's perception of the status of a Receptionist (see p.189). This CMO was <u>not</u> exhibited in Practice A; although the reasoning is not immediately apparent, it may be understood when analysed collectively with the theory area 'Promoting the role to patients'. Practice A's Receptionists were more consistent in their FCP role explanation comparative to Practice B. Practice B's FCPs were being accessed by multiple Practices, therefore there were multiple Receptionists providing varying detail on the role. It may be that to offset the idea that Receptionists are unqualified to triage, they could provide their rationale for the triage outcome.

Practice B's overlap 4 expands on this hypothesis through highlighting how experience of GPs results in an expectation of accessing a GP, and Receptionists may find it challenging to overcome this expectation if patients perceived them as unqualified. Thus, several theory areas overlapped to greater provide support for this hypothesis.

8.4.4 Summary of 'Professional hierarchy'

Although there were differing contexts and mechanisms across the Practices, they still resulted in a similar outcome of a deep-rooted belief of hierarchy. A CMO unique to Practice B related to a patient expectation of Receptionists not being qualified.

8.5 Promoting the role to patients

8.5.1 Shared CMO

8.5.1.1 Patient understanding of the FCP role prior to the consultation

The importance of the Receptionists in promoting the FCP role was underlined in the analysis of both Practices. Receptionists provided patients with a role description when they contacted the Practice to book a GP appointment. The explanations did differ – in Practice A FCPs were described as like physiotherapists, whereas in Practice B they were called a specialist service (resource mechanisms). There was a common unintended response mechanism; patients had not listened or had not understood, leading to role confusion, with patients erroneously believing they were accessing a traditional physiotherapist (see p.219). Thus, regardless of the differences between the Receptionists' role descriptions in both Practices, the outcome was the same.

Evidence from both Practices highlighted that patients wanted to be aware of the nuances between the FCP role and traditional physiotherapy. In Practice B, Patient 3 expressed wanting to be aware of the differences before attending the consultation, whilst in Practice B Patient 9 wanted to know if there would be treatment in the consultation. Overall, the analysis for both Practices supports the need for patients to receive more education on the role distinctions.

Unique to Practice A were patients having the correct understanding of the number of FCP appointments. Whereas in Practice B, experience of traditional physiotherapy resulted in patients expecting several FCP appointments. The rationale for this difference is not evident. Shared overlap 2 inferred that patients may expect an injection if they have had experiences of Secondary Care physiotherapists injecting in the past. None of the patients interviewed had required an injection but were unable to receive one; it would be interesting as to the response if the FCP was unable to inject when there was clinical need.

8.5.1.2 The use of media methods to promote the role

In both Practices media methods were highlighted to be ineffective in promoting the FCP role to patients. Methods discussed included the Practice website,[29] noticeboards and TV screens in the reception waiting area (see p.222). None of the patients interviewed

[29] The researcher was unable to find any information on the FCP role on Practice A's website.

expressed learning about the role via these methods, despite two patients in Practice A expressing that they would be more likely to learn about the role from TV screens. These findings suggest that media methods would not be an effective way of promoting the role to patients.

Findings highlighted limited promotion of the role; when analysed in conjunction with 'Accessibility' it may be inferred that this was a purposeful strategy to prevent over-demand. This may be particularly apparent in Practice A as there was an absence of FCP information on the Practice's website and the Management Partner had expressed concerns of over-demand.

8.5.2 Practice B CMO

8.5.2.1 The impact of multiple Practices accessing the role on patient role understanding

The FCPs in Practice B could be accessed by 25 Practices in total. This had a significant effect on staff and consequently patient understanding of the role in Practice B. There was limited communication between FCPs and GPs when they were based in different Practices; it was hypothesised that these GPs had a reduced understanding of the FCP, and encouraged patients to access GPs first. Patient responses highlighted that they perceived they were less likely to be made aware of the role if the FCP was not based in their Practice (see p.178). Due to delays in recruitment patients who accessed the FCP role after accessing the GP were included in Practice B's sample. This method of access of the FCP does not meet the definition of 'first contact' and therefore it did not meet the role's aim. However, the inclusion of this patient group aided the understanding of why some patients access the GP first and therefore aided this CMO's development.

It should be noted that the patients who were registered with Practice B did not know about the role in advance of accessing the Practice. This challenges the theory that Practice B had a better understanding than the other 24 Practices. As only members of staff from Practice B were interviewed, it is not possible to compare the role understanding of members of staff from the different Practices.

Practice B's rival 4 elucidated that patients did not discuss the FCP role with others. Consequently, if there is ineffective Practice promotion of the role, there is not an alternative method.

8.5.2.2 Patients require information on FCP's qualifications

In Practice B, patients wanted an understanding of the FCP's qualifications when they were practising a skill that was an extension of their capabilities, however, the FCPs did not have such skills (see p.181). This CMO was absent from Practice A, despite FCP 1 having specialist capabilities (injection therapy); it is not evident as to why.

8.5.3 Summary of 'Promoting the role to patients'

The findings from both Practices expanded upon the theory area, with particular emphasis on the role of the Receptionists in promoting the FCP. Receptionists were not always successful in educating patients on the role, however the analyses suggest that they were more effective in Practice A. It was hypothesised that this was a result of Receptionists having a more comprehensive understanding of the FCP role from their training. Whereas in Practice B, Receptionists from Practices other than Practice B were making patient bookings. Collective analysis suggests the requirement of standardised Receptionist training to provide patients with the correct FCP role understanding.

8.6 Accessibility

8.6.1 Shared CMOs

8.6.1.1 Decreased waiting times

In both Practices, the FCP's ability to decrease the wait for appointments was an important factor in patient acceptability. Responses demonstrated benefits in terms of the role offering a decreased wait for FCP appointments themselves, but also decreasing the wait for GP appointments and an expedited process for scans/onward referrals (see p.224).

The data from both Practices demonstrated factors that may increase waiting times. Practice A's Rival 1 highlighted staff concerns that patients with acute MSKDs – who would have ordinarily self-treated – would access the FCP, increasing waiting times. Although this was based only on staff data, Practice B's overlap 3 supported this hypothesis. Patient 8 discussed how his MSKD had nearly resolved by the time of this appointment three weeks later; consequently, he did not book the appointment for the physiotherapy referral. The Practices' data supports one another with the idea that patients may inappropriately access the FCP. Therefore, coinciding with the theory area 'Promoting the Role to Patients', this may indicate the need for patient education on when to access the role, or – if already educated –when to self-manage.

8.6.1.2 Meeting patient needs in one consultation

Overall, staff and patient responses in both Practices highlighted the importance of patient needs being met in one consultation. Nevertheless, if patients had knowledge of alternative routes on how to access their prescription, they were accepting of a FCP not being able to action this (see p.227). None of the patients had required prescriptions and thus this example is based upon staff responses only. However, Patients 8 and 9 perceived it as beneficial to be able to receive injection therapy in one appointment.

Both Practice findings highlighted rivalry of this hypothesis, as the data collectively suggest that prescribing is not a vital skill for the FCP role (p.244). Although patients were overall accepting of a prescribing FCP, there was limited requirement for it as only one patient (Patient 11) obtained a prescription for their MSKD.

The shared rival hypothesis 2 demonstrated that there were occasionally issues in the FCP accessing the GP as they were not always available (see p.244). It may be postulated that if the GP is predominantly available, there would be less of a requirement for the FCP to prescribe.

8.6.1.3 The convenience of self-management

Staff responses were supportive of this theory area yet patient responses demonstrated no perception of advantages of self-management exercises (see p.230). Patients were not primarily against self-management exercise, however, when this hypothesis is analysed in conjunction with Practice B's rival 1 it becomes apparent as to why self-management is unacceptable. It was inferred that self-management advice or exercises are unacceptable when provided over the telephone (see p.204). Thus, it may be permissible for self-management to be provided in a face-to-face capacity.

8.6.1.4 Length of consultations

Length of consultation was discussed in Practice A and B and they both also had the rival theory area of 'Accessibility' and 'Communication'. However, these findings were purposefully presented separately due to differences in their CMO configurations.

In Practice A, there was a greater emphasis on the length of the consultation itself and the benefits of this. Three of the four patients questioned on the GP length of consultation expressed that they were too short, and two patients discussed the advantages of having longer consultations with FCPs (see p.149). The patients in Practice B did <u>not</u> highlight the advantage of FCP consultations being longer than the GPs. Nearly all patients in Practice B (except Patient 11) perceived that they had long enough in the GP consultation. Rather than emphasising the time itself, patient responses underlined the way the FCP communicated and compared this to their experiences of GP's communication (see p.185). This rivalling of the theory area 'Accessibility' was also discussed in Practice A. However, Practice A's patient responses were inconclusive as to whether communication skills or length of consultation were more pivotal for patient acceptability of the FCP.

Thinking retroductively, it may be that the actual length of the consultation matters more to patients in Practice A due to their perception of short GP consultations. Interestingly, Practice A had scope for patients to be booked in for longer GP consultations if needed – a context absent from Practice B. This may appear quite surprising considering patients in Practice A, not B, perceived that they did not have long enough with the GP. It may be due to only Patient 1 in Practice A stating that they were aware of longer GP consultations available to him, whilst three patients (8, 9 and 10) in Practice B felt that GPs could take longer in consultations for them if required. Patients may put more emphasis on longer FCP consultations if they are not aware of the longer GP consultations that are available to them.

Responses from both Practices demonstrate it is too simplistic to set an ideal length of consultation. Collectively, the Practices highlighted the interconnected nature of: patient experience of GP consultation length; their experience of how the GP made them feel; and the individual skill of the FCP. These factors may all contribute to overall patient acceptability of FCP access.

8.6.2 Practice B CMOs

8.6.2.1 Appointments closer to patients' homes

Staff and patients in Practice B discussed the benefit of the FCP consultations being closer to patient homes and not having to travel into a city-centre hospital (see p.182). This was not highlighted in Practice A, which may be explained by Practice A having local community hospitals. The CMO may only be applicable to Practices that are situated near neighbouring city hospitals.

8.6.2.2 Availability of appointments outside of working hours

Patient 8 was the only patient response that highlighted the importance of having a sufficient number of appointments available outside of working hours (see p.184). Patient 8 had private experience, which, in Practice B overlap 3, the researcher theorises may have impacted upon his expectations for waiting times (see p.199). There were only two patients in Practice B's sample of working age and all the patient participants in Practice A were retired.

8.6.2.3 Accessibility of a female/male FCP or a language interpreter

FCP 4 discussed the importance of having female FCPs and interpreters available for the Practice as it was in a multi-cultural area (see p.187). Patient 8 confirmed that for cultural reasons there would be occasions where he would want to access a male practitioner; a CMO not identified in Practice A, as the area was not as multi-cultural. The 2011 census found that only 2.5% of the population in Practice A's region did not have English as their main language, compared to 8.2% of the population of Practice B's neighbouring city. A 2011 census demonstrated that only 0.4% of the Practice A's population were of Muslim faith compared to 5.4% of the city that Practice B neighboured[30]. These findings highlight the importance of assessing a Practice population's demographics and then ensuring there is capacity to meet the cultural needs of the population.

[30] Census information not provided to maintain confidentiality.

8.6.3 Summary of 'Accessibility'

Analysis of both Practices supported the theory area through underlining patient-placed importance on the FCP role in reducing waiting times and offering increased convenience. Practice A's analysis hypothesised a threat to waiting times regarding inappropriate access, supported by an example from Practice B. Specific to Practice B, FCPs were predominantly working in the virtual assessment role and, therefore, the wait times for face-to-face appointments were not as short as intended.

Support for FCPs prescribing was limited due to the availability of GPs, however, the use of GP's time in FCP's accessing them for on-the-day-scans was posited. Findings demonstrate the need for consideration of sufficient resources and skill of the FCP in order to meet the Practice's individual requirements.

8.7 Communication

8.7.1 Shared CMO

8.7.1.1 Explanation of their MSKD management and clinical-reasoning

The findings from both Practices elucidated how patient confidence in their MSKD management was increased through the FCP providing their clinical-reasoning (see p.232). Practice A's findings demonstrated a different mechanism of patients feeling that they were not given a choice in treatment and not accepting their MSKD management (unintended outcome). However, this was counteracted by FCPs explaining their clinical-reasoning. These findings highlight that patients should be able to make decisions in their care when possible, however the FCP must be able to instil confidence in their clinical opinion for the patient to make an informed decision.

8.7.2 Practice A CMOs

8.7.2.1 Patient feeling valued

It was highlighted by one patient that they felt valued when the FCP addressed them and not a computer screen (see p.152). The context in place was the use of EMIS Web in this Practice – an online system for patient notes. Although this CMO was not evident in Practice B, hypothetically a similar CMO could have been active in this Practice. Predominantly patients in Practice B had a virtual assessment prior to their consultation, therefore the FCP may have been familiarising themselves with the patient's notes prior to the consultation. It should be noted that this hypothesis is based only one patient response and that this hypothesis may not be widely true for patients.

8.7.2.2 Communication when prescribing

Neither FCPs were able to prescribe, however, Practice A's findings demonstrated that it may have been a useful skill for the FCP role. Patient responses suggested two different contexts of patient populations – those who are passive in their care, and those who want to be involved. This context influenced acceptability of FCP prescribing/de-prescribing; however, a prescribing FCP was a latent mechanism and therefore patients had not experienced this (see p.154). Using retroduction, it may be inferred that this could result in patients feeling valued (see above CMO interpretation). Without patients experiencing FCPs prescribing, the CMO could only be tested hypothetically, the patient responses may have lacked depth and the CMO is weaker.

In Practice B, FCP 3 had concerns that prescribing would use up the consultation time (see p.205). It may be inferred that this would be more of a challenge due to the shorter consultation time of 20 minutes in Practice B compared to 25 to 30 minutes in Practice A.

The FCPs were Band 6's in Practice B, but Band 7's in Practice A. A more experienced FCP may feel more comfortable in managing patients and prescribing in the allotted time. Patient 4 highlighted a similar hypothesis as she felt the individual patient could be considered in a shorter consultation if there was a skilled FCP in the role (see p.242).

Regardless of the skill of the individual, the findings demonstrate a limited requirement for a prescribing FCP as none of the patients had required prescriptions.

8.8 Practice B CMO

8.8.1.1 The communication skill of the individual practitioner

Responses highlighted several ways the FCP could communicate in a manner that relaxed the patient. A key context identified were negative experiences of GP communication which resulted in the patients comparing their experiences (see 190). Although this particular CMO was not identified in Practice A, it may be inferred that it could be relevant due to similar contexts. Shared overlap 1 highlighted that the way the GP communicated with patients (context) affected patient's evaluation of the FCP. Patient 6 perceived that the GP's communication skills negatively affected rapport and made comparisons with the preferred communication with the FCP (see p.235). Practice A's findings lacked depth into how the FCP communicated effectively, nevertheless, Practice B's responses are able to add depth to this resource mechanism.

8.8.2 Summary of 'Communication'

In summary, key to acceptability of the FCP was communication that provided patients with confidence in the FCP's ability. Both Practices had CMOs that were also unique to them, however similar contexts were highlighted and these CMOs may be transferable.

8.9 Continuity of the individual practitioner

8.9.1 Shared CMO

The theory area 'Continuity' had limited supporting data and there were no shared CMOs across the two Practices. However, the Practices did share rival hypothesis 3 – 'Continuity preferential but not essential' (see p.245). Staff perceived continuity to be unnecessary due to the FCP being an assessment role. It was hypothesised that patients have limited role understanding and this resulted in them expecting continuity.

8.9.2 Practice B CMO

8.9.2.1 Rationale for wanting continuity

A key difference in the Practices' models were the virtual assessments offered only by Practice B. Responses highlighted that patients preferred the virtual assessment and face-to-face appointment to be with the same FCP. However, there were 19 FCPs assessing virtually across the 25 Practices, but only three FCPs carrying out face-to-face appointments. FCP 3 did not virtually assess, as he did not feel personally feel confident to do so, thus none of FCP 3's patients were able to receive this continuity.

Continuity of the FCP when providing injection therapy was also highlighted as beneficial in Practice B, despite it being latent mechanism as neither FCPs were able to inject. In Practice A, FCP 1 was able to inject, nevertheless this CMO was not present. This finding is unexpected, as logic would suggest the Practice where the FCP was able to inject would highlight the benefit of continuity.

8.9.3 Summary of 'Continuity of the individual practitioner'

Overall, analysis indicates that continuity was preferential, but non-essential. In Practice B, patients put emphasis on a preference for continuity of the FCP. However, collective analysis of the Practice findings demonstrates that a correct understanding of the number of FCP appointments may undermine the emphasis put on continuity. It can be inferred that a shorter wait for an appointment is more pivotal in patient acceptance of the FCP role than continuity of the practitioner.

8.10 Comparison of findings to the initial hypotheses

This section will compare the Practices' findings to the initial hypotheses collectively. The title of each section is the initial hypothesis that has been tested. There will then be a discussion on how the study's CMOs relate to the initial hypotheses, including how they support, refine or rival. When appropriate, the statement for initial hypotheses are changed; discussion will focus on these hypotheses and why there are alterations. At the end of each hypothesis it will be stated if the hypothesis was supported, refined, had limited support, inconsistencies or if a new hypothesis was formed.

8.10.1 Previous experience of condition management

8.10.1.1 AP consultation can lead to the equivalent type of outcomes/treatments as a GP consultation.

In Practice A, patients were indirectly evaluating the FCP role by comparing this experience to their experience of the GP. In Practice B, patients were more comfortable with a FCP virtual assessment over the telephone if they had experiences of GPs assessing via this model.

However, findings also highlighted patients not wanting FCPs to deliver all interventions traditionally delivered by GPs. In Practice A, experience of GP's injecting resulted in patients expecting the FCP to inject, however, they wanted to maintain the choice as to who delivers the intervention. Patients in Practice A who perceived their condition to be serious expected the FCP to access the GP for the prescription. In both Practices, prescribing as a skill was not essential to patients if they had experience of prescriptions from a Community Pharmacist.

Findings have highlighted patients making comparisons made between the GP and FCP, nevertheless, they have also provided rivalry to this initial hypothesis as patients did not necessarily want FCPs to deliver some interventions. The initial hypothesis is not refined and receives limited support from the findings.

This hypothesis had limited support.

8.10.1.2 Previous experience of GP perceptions will influence the patient acceptability of the AP role.

In both Practices some patients perceived the FCP to be the norm, this was dependent on them being 'set in their ways' (Practice A) or due to some GPs insisting that patients accessed them first (Practice B). When patients did access the FCP, it was hypothesised that they evaluated the role through indirectly comparing it to their experience of the GP

(Practice A). This was also hypothesised in the realist review; thus, the responses coincide with the review findings. Across both Practices, patients discussed how GPs had spoken down to them and compared this to a preferred communication style of the FCP. Thus, highlighting how in both Practices how patients perceived the GP was paralleled to their experience of the FCP.

This initial hypothesis is refined to:

Patients indirectly evaluate the FCP role by making comparisons with their experience of the GP.

8.10.1.3 Limited prior experience of an FCP decreases patient acceptability of the role.

The responses depicted more than just experience of FCPs impacting upon the role's acceptance. Findings demonstrated the impact of wider HCPs, including physiotherapists in both Secondary Care and Private Care, on patient expectations regarding the number and length of appointments, and continuity of care. The effect of Private Care on FCP acceptability is limited to only one patient response, however, Secondary Care physiotherapy influence is well-supported, demonstrating influence on expectations of the number of appointments and treatments patients expected.

The initial hypothesis is refined:

Previous experience of other HCPs influences the acceptability of the FCP role.

8.10.1.4 Previous Experience of a prescribing AP increases patient acceptability of a prescribing AP in Primary Care.

There is limited data to support or rival this initial hypothesis as none of the FCPs were able to prescribe. The patient responses on a FCP prescribing were therefore hypothetical, however, they did suggest that experience of a Community Pharmacist prescribing did influence acceptability.

This hypothesis had limited support.

8.10.2 Expectations of condition management

8.10.2.1 Patient perceptions of 'serious' conditions affects acceptability of the AP consultation.

In both Practices, findings suggest that the perception of a serious condition had significant consequences on patient expectations, including the acceptability of a FCP prescribing.

This initial hypothesis is supported and remains unchanged.

8.10.2.2 Patients less accepting of the role if prescriptions are not checked by the GP.

This hypothesis was difficult to test, as none of the FCPs were able to prescribe and therefore the GP could not check their prescriptions. However, for patients to be able to receive their prescription, the FCPs could access the GPs in both Practices.

In Practice A, FCP 1 perceived that accessing the GP for prescriptions resulted in patients having more '*faith*' in the role, which was supported by Patient 1. Patients 1 and 6 had an expectation that only GPs would prescribe for serious conditions. In Practice B, patients were predominantly accepting of a prescribing FCP and did not state the need for GP input in prescribing. The rationale for the differences between the two Practices is not clearly evident.

There is a high-level of overlap with the preceding hypothesis, as the findings make associations between prescribing and severity of condition.

The hypothesis is refined to:

Patients who perceive their condition to be 'serious' are less accepting of the role if prescriptions are not checked by the GP.

8.10.2.3 Patients find the role more acceptable if they expect that an engagement with FCP will provide indirect access to other services.

This hypothesis had limited supporting data as only Patient 11 had required a scan, and he received this from his GP. Nevertheless, there are no grounds to reject it entirely and the hypothesis remains unchanged.

Initial hypothesis has limited support.

8.10.2.4 Lack of patient choice decreases patient acceptability of the FCP role.

The responses expanded upon this hypothesis through providing a rationale as to why patients wanted choice. In both Practices, if patients required more reassurance on their MSKD then they wanted to be able to choose a face-to-face appointment. In Practice B, staff hypothesised that frequent GP attenders were only satisfied if they had a face-to-face appointment; this was due to them requiring more reassurance. In Practice A one patient hypothesised that some patients may feel the FCP is not qualified to inject, but this was formed through conjecture, not experience. In Practice B, some patients' choice was removed when the patients were part of the network of Practices that could access the

FCPs, but not in Practice B. These patients expressed dissatisfaction with not being informed on the FCP role until they contacted the Practice to book a GP consultation.

The initial hypothesis is refined:

Lack of patient choice decreases patient acceptability of the FCP role. Choice is particularly important for patients who perceive their condition to be 'serious'.

8.10.3 Professional hierarchy

There were no initial hypotheses for the theory area on hierarchy, as it was a newly emerging theory based on only three studies. The themes that were apparent from the realist review included:

- GPs being viewed as superior in knowledge to other HCPs.
- Patients had internalised traditional role boundaries.
- GPs were perceived as the final authority.

Although both staff and patient interviews unanimously dismissed any hierarchy in the Practice, undercurrents of hierarchy were highlighted. In both Practices patients referred to some HCPs having *'higher qualifications'* (Patient 9) than others as a result of their level of skill. In Practice A, access to services such as scans was perceived as the HCP being *'higher up'* (Patient 3). In Practice B, findings suggested that experiences of GPs talking down to patients was an important context for patients finding the FCP more acceptable. These findings all coincide with the initial themes from the realist review.

New themes were also identified, including in Practice B where Receptionists were highlighted as important in convincing patients that the FCP is the correct HCP for MSKD management. A perception of Receptionists as 'unqualified' led to decreased acceptability of a triage to the FCP. This overlapped with the theory area 'Promoting the FCP role' (see p.271).

The following hypothesis is formed for this theory area:

Patients have a deep-rooted belief of a hierarchy irrespective of whether the Practice has an existing culture of professional hierarchy.

8.10.4 Promoting the role

8.10.4.1 Peer validation influences patient acceptability of the AP role.

Only Patient 7 stated that they had discussed the role with others, and none of the patients had been made aware of the role by other patients.

The initial hypothesis has limited support.

8.10.4.2 A greater understanding of the role increases patient acceptability of the role.

This hypothesis was well supported by both Practice findings. In Practice B patients called the role a physiotherapist, whereas in Practice A they did distinguish between the FCP and physiotherapy role through using different titles. It was hypothesised from Practice B's findings that if patients conflated the traditional physiotherapy role with the FCP role, this affected their expectation on the number of appointments. A greater understanding of the role title may have resulted in patients being able to differentiate between the roles and therefore satisfaction with one or two appointments.

It was hypothesised from Practice A's findings that experience of other APs could facilitate patients differentiating between the FCP and traditional physiotherapy.

The initial hypothesis is unchanged.

A second hypothesis is also formed for this theory area:

A greater understanding of the nuances between traditional physiotherapy and the FCP increases patient acceptability of the FCP role

8.10.4.3 GP Practice staff validation increases patient acceptability of the AP role.

Responses from both Practices demonstrated there was an influence on patients from both GP validation and Receptionist validation of the FCP role. In both Practices the role of the Receptionist was fundamental in encouraging patients to access the role. However, in Practice B, staff and patient responses stated that Receptionist validation of the role was not always effective due to some patients questioning their level of qualification to fulfil their triage role. Receptionists were able to increase the patients' awareness of the role, but not necessarily increase their understanding or acceptance of the role. This patient group would access the GP who would then provide validation of the FCP. There was limited patient evidence for this, as out of two patients whom accessed the GP, only one patient received an explanation on the role from the GP.

The initial hypothesis is unchanged.

A second hypothesis is formed:

Receptionist validation of the FCP role increases patient awareness of the role providing the patient is aware of and trusts the Receptionist's ability to triage.

8.10.5 Accessibility

8.10.5.1 Increased acceptability of the role if the service is more convenient to the patient.

In both Practices this hypothesis was predominantly supported by staff responses in relation to prescribing in one appointment and convenience of self-management. However, patients demonstrated limited acceptability of self-management entirely for MSKD management. None of the patients required a prescription from the MSKD which may suggest that there is a limited requirement for prescriptions in one appointment. A latent resource mechanism identified in Practice B was the ability for the FCP to inject, which Patients 8 and 9 perceived as beneficial for receiving an injection in one appointment. Injection therapy was an intervention delivered to three patients in Practice A, none of the patients in Practice B had required one but it was suggested as management for two patients.

The initial hypothesis is refined:

Increased acceptability of the role if patients can receive injection therapy in one appointment.

8.10.5.2 Longer consultation lengths increase patient acceptability of the AP role.

This hypothesis was supported by both staff and patient interviews in Practice A and B. Responses resulted in a debate as to what was more important for patient acceptability, the length of the consultation, or the FCP's communication skills. There was more of an emphasis on the length of the consultation in Practice A, whilst in Practice B patient responses predominantly supported communication as more significant. It was hypothesised that this was due to patients in Practice B perceiving that the GPs could spend longer with them in consultations if needed.

This hypothesis was inconsistent and it is therefore refined to reflect this:

Longer consultation length increases patient acceptability of the FCP role. This is predominantly true when patients perceive GP consultations to be limited.

8.10.5.3 A decrease in waiting times for services increases patient acceptability of the role.

In both Practices patient and staff responses highlighted the benefits of reduced waiting times to include reduction of patient anxiety and chronic MSKDs. In Practice B one patient expressed the need for a short wait and also appointments outside of working hours.

However, Practice A's findings highlighted concerns that reduced waiting times may not be sustained if the role was widely promoted and patients with acute MSKDs, who would have ordinarily self-treated, began to access the role.

A shared CMO from both Practices was that patients decide between whether they would rather be seen earlier, or if they would rather wait to see the same FCP for continuity.

The initial hypothesis is supported and remains unchanged.

8.10.6 Communication

8.10.6.1 The AP role is more acceptable to patients when the AP has an informal discussion with the patient.

This hypothesis was supported and expanded upon by findings from both Practices. FCP 2 and 3 discussed the importance of the FCP explaining the person's MSKD in a way they could understand. Four patient responses across the Practices highlighted that through the FCPs explaining their condition and treatment options, they had an increased level of trust with the FCP, and thus accepted their MSKD management. Across Practices three patients discussed the FCP's ability to listen to them and compared this to negative experiences with the GP. The responses therefore highlight the importance of the consultation being a discussion.

The initial hypothesis has been refined to:

<u>The FCP role is more acceptable to patients when the FCP explains the patient's musculoskeletal disorder in a way that they can understand, thus opening up a discussion.</u>

8.10.6.2 The role is more acceptable to patients when AP's are person-centred in their consultation style.

Both Practices' staff and patient responses highlighted the importance of the FCP communicating in a manner that made the patient feel the consultation was personalised. In Practice A, patient responses highlighted the importance of being listened to, resulting in them feeling valued. FCP 1 perceived that a prescribing FCP would also be able take into consideration the patient's holistic clinical presentation, however, this was hypothetical as the FCP was unable to prescribe. There was debate across both Practices as to whether the FCP needed longer in the consultation to deliver person-centred care, or if the skill of the FCP was more important.

The initial hypothesis has been supported and expanded upon, it has been refined to:

The role is more acceptable to patients when FCP's are person-centred in their consultation style as patients feel valued.

8.10.6.3 The AP role is more acceptable to patients when the AP demonstrates a high-level of knowledge.

Although patients did not always feel they had the final say in decisions, in both Practices they accepted the FCP's advice as they provided suitable clinical-reasoning, leading to trust in the FCP's expertise. There was an inconclusive debate across the Practices as to whether the FCPs needed longer consultations in order to convey their high-level of knowledge.

The initial hypothesis is supported and is refined:

The FCP role is more acceptable to patients when the FCP demonstrates a high-level of knowledge as it increases patient trust.

8.10.7 Continuity of the individual practitioner

8.10.7.1 Having continuity in the consultation increases patient acceptability of the AP role.

Continuity is the only theory area with a significant amount of rival data. Staff and patient responses across both Practices demonstrated continuity as preferential if a patient is having multiple contacts, but unessential for this assessment role. In Practice A, preference for FCP continuity was a result of experience of GP continuity. When patients in Practice B expressed their preference for continuity, they were not aware of the minimal number of appointments with the FCP.

This hypothesis was inconsistent and is it therefore refined to reflect this:

Having continuity in the FCP consultation is preferential, however it is not essential for role acceptability.

8.11 Chapter summary

This chapter has provided an interpretation of the study's findings, highlighting the similarities and differences between Practices, and a comparison between the findings and the initial hypotheses under test. When appropriate, hypotheses were refined and the justification was provided with a transparent presentation of CMOs. The subsequent section will explore the findings in relation to other literature, utilising an acceptability framework.

9 Chapter 9: Discussion

In this chapter the findings will be discussed as an overall programme theory that hypothesises the patient acceptability of the FCP role. Sekhon, Cartwright and Francis' (2017) framework is adopted, and the programme theory will be presented in a chronological order, with a discussion of the acceptability components shared by the Practices as well as individual acceptability components. The findings will be compared to existing literature throughout, including discussion on how the findings correspond with the NHS Long Term Plan (2019). Grey literature will be included in the discussion section, including information from the iCSP – the CSP's online forum for physiotherapists and the CSP's FCP email list. This was included after consulting a realist expert who highlighted the large amount of insight available from these sources, on an intervention that is continually evolving, with research not reflective of this (personal communication, Halls 2019). Realist inquiries recognise that academic journals often lack contextual information, thus, they place greatest value on the ability for evidence to create theory, rather than the methods (Pawson *et al.*, 2004).

9.1 Programme Theory

In the introductory chapter the importance of a shared consensus on acceptability was outlined. Consequently, the overall programme theory will be discussed through application of the findings to the acceptability framework of Sekhon, Cartwright and Francis (2017) (see Table 9.1). It was highlighted in the introduction that the framework had only been evaluated in-depth by a study of people who had experience and pre-existing relationships with the profession already and may, therefore, have a positive bias (Murphy and Gardner, 2019). This study only interviewed those who had experienced the role. It was theorised that there would be some patients who were adamant that they would not access the role, but as by definition they would not access the role, their views were not captured. Thus, the patients that did access the role had a positive bias from accessing the role alone and, consequently, the framework is able to capture their views.

Table 9.1 - Acceptability Framework

Acceptability construct	Definition of construct
Affective attitude	How an individual feels about the intervention. It relates to how the individual felt about the FCP role before experiencing it.
Burden	The perceived amount of effort that is required to participate in an intervention. The focus is on the burden associated with participating in an intervention, for instance the time, expense or cognitive effort indicated.
Ethicality	The extent to which the intervention fits the individual's value system.
Intervention coherence	The extent to which the participant understands both the intervention and how it works
Opportunity costs	The extent to which benefits, profits or values must be given up in order to engage in the intervention
Perceived effectiveness	The extent to which the intervention is perceived as likely to achieve its purpose
Self-efficacy	The participant's confidence that they can carry out the behaviour(s) required for participation in the intervention

9.1.1 Affective Attitude

In both Practices patients were not able to form this affective attitude (a feeling about the intervention) until they contacted the Practice to book a GP appointment. Patients were not being made aware of the role until they spoke to the Receptionist. NHSE's (2019f) pilot evaluation and Goodwin's (2019) realist evaluation (that explored stakeholder's responses to the FCP role, a PhD thesis) concluded that there was limited patient awareness of the FCP role, hindering access to the service. However, the theory area 'Accessibility', hypothesised that it was intentional that patients were not made aware of the role due to concerns that there could be service over-demand. This hypothesis aligns with Holdsworth, Webster and McFadyen's (2006) study which highlighted that patients who self-referred to physiotherapy had their MSKD for a shorter period and had less severe symptoms. Nevertheless, this study demonstrated that these patients required fewer contacts and had increased adherence to treatment (Holdsworth, Webster and McFadyen, 2006). This suggests that an initial demand from an acute population could be countered by reducing the need for multiple contacts. This is further supported by the Physiotherapy UK update

on the NHS FCP pilot evaluation which highlighted that patients who accessed the FCP were predominantly low/medium risk (30/58%) on the Keele StTarT MSK tool, with only 12% high risk (Bishop, 2019). The tool is used to stratify patients into prognostic groups that can be matched to treatment options (Dunn et al., 2017). A study exploring the tool found that patients consulting a GP for their MSKD were medium risk (51%) or high risk (19%) (Dunn et al., 2017). This would also suggest that the patients who access an FCP have a greater prognosis than those who access a GP.

Although in Practice B they were carrying out virtual assessments with a short wait, there were not enough FCPs to undertake face-to-face consultations and waiting times were at two weeks. If Practices continued to join the network, the wait for a face-to-face consultation may increase. An audit of the FCP role in Cheshire highlighted that the waiting times for the new service were two weeks for a virtual assessment and four weeks for a face-to-face consultation (Chartered Society of Physiotherapy, 2019). This wait totals six weeks which is longer than the national GP wait for an appointment. In May 2019, a majority of patients received a GP appointment on the day (37%), followed by 30% waiting eight to 30 days; only 6% waited for upwards of 28 days (NHS Digital, 2019a). The Cheshire audit concluded that increased funding may need to be secured to aid services (Chartered Society of Physiotherapy, 2019). It has been confirmed that PCNs will be receiving more funding for the FCP in 2021/22, this may allow services to expand whilst still meeting capacity (The King's Fund, 2019a).

The theory area 'Expectations' related to patients' affective attitudes. Frequently, patients perceived the GP to be the *'norm'* or first step and needed persuading in the FCP consultation that they were the right HCP. Findings from Goodwin and Hendrick (2016) highlighted the patient perception of the GP as the *'legitimate choice'* and the requirement for patient education as to why the FCP was the right professional for their MSKD (Moffat, Goodwin and Hendrick, 2018, p.124).

Specific to Practice B, some of the multiple Practices had the GP as first contact as an ingrained protocol due to '*older school practitioners'* (FCP 4). This does not correspond with evidence that suggests that GPs are accepting of the FCP role, with over 96% (n=70) confident in physiotherapists accurately diagnosing and appropriately managing MSKDs (Holdsworth, Webster and McFadyen, 2008). Evidence suggests that GP acceptance of the role is more complex than simply role confidence, with GP protectionism of their role influencing their views (Goodwin, 2019; Moffatt, Goodwin and Hendrick, 2018; Turner,

Keyzer and Rudge, 2007). Goodwin (2019) found that some GPs felt threatened by the FCP role and had concerns that their workload would become more complex as they would no longer see the less complex patients who returned for flare-ups of MSKDs. Consequently, some GPs were telling the Receptionists to book everything through them. To counteract this GP resistance, Goodwin (2019) underlined the importance of communication between GPs and FCPs, including the open door policy, shared local systems for communication and Practice team meetings. However, it was highlighted that these communication strategies require co-location of both GP and FCP (Goodwin, 2019). This finding supports this evaluation, which hypothesised that in Practice B communication was deficient due to the multi-Practice access. Goodwin (2019) concluded that once the FCP role became more embedded in the Practice, it would become more visible to patients, Receptionists would become more confident in signposting and GPs would have greater confidence in FCPs' competency. A key consideration for Practices where FCPs are not co-located is how Practices can foster strong inter-professional relationships and embed the role.

In both Practices Receptionists were highlighted as the intended source of information on the FCP. Goodwin's (2019) evaluation found that staff perceived Receptionist signposting as the most effective method of facilitating access to the FCP, and Receptionists as best situated to educate patients on the role. However in Practice A, Receptionists faced time challenges in explaining the role due to staff shortages. A qualitative project, published as two studies, explored the Receptionist's role in new consultation methods and demonstrated that a key reason for adopting alternative methods was to alleviate some of Receptionists' demands (Atherton *et al.*, 2018; Brant *et al*., 2018). Nevertheless, the Receptionists' workload actually increased; for example, Receptionists were required to now record a reason for the telephone consultation (Atherton *et al.*, 2018). Receptionists were inconsistent in offering alternative consultation methods and it was inferred this was due to their increased workload (Atherton *et al.,* 2018; Brant *et al.*, 2018). Goodwin (2019) hypothesised that without Receptionist experience and adequate training, signposting may increase the pressures on Reception staff. This evidence strengthens this evaluation's findings which hypothesises that Receptionists had inadequate time to provide the intended FCP role explanation and require rigorous signpost training.

The acceptability of virtual assessments is a key consideration in Receptionists being able to promote this form of access to patients. Practice B's staff perceived patients as more accepting of FCP virtual assessments when they had experiences of GPs telephoning them. The NHS Long Term Plan (2019) outlined plans for all patients, in the next five years, to

have access to 'digital-first Primary Care' – telephone or online consultations with GPs. As such, patients may become increasingly used to this type of assessment, and more accepting of Receptionists signposting to this method of FCP assessment.

Coinciding with this evaluation's findings, Goodwin (2019) also found methods of marketing the FCP role to be ineffective and the public awareness of the role to be limited. The CSP created a care navigation pathway for Receptionists to follow when booking appointments, which included the intended role explanation (Chartered Society of Physiotherapy, 2019). An automated 'welcome' is used in some Practices to inform patients that Receptionists' questioning ensures that they access the right clinician [Anonymous FCP, 2018a]. This realist evaluation's findings have highlighted the variation in Practice staff understanding of the FCP role when FCPs are not co-located at the Practice. As there is to be an expansion of PCNs, this may become a challenge for the FCP role. Utilisation of the standardised resources outlined may help promote consistency across Practices in PCNs.

In Practice B, Receptionists triaging to the FCP was not always accepted by patients resulting from the patient perception of their status. It is widely reported that Receptionists are undervalued despite their vital role as the point of entry into the healthcare system (Hammond *et al.*, 2013; Moffatt, Goodwin and Hendrick, 2018). Moffatt, Goodwin and Hendrick (2018) found that the Receptionists felt patients perceived them as having limited authority and, therefore, the Receptionists concluded that this led to challenges in them affecting the change of signposting to a FCP. However, the FCP email thread and iCSP forum data demonstrated that physiotherapists viewed Receptionists as key in promoting the role [Anonymous FCP, 2016a, 2016b; 2019a], with one respondent stating *'We felt that reception held the key to making first contact work or fail'* [Anonymous FCP, 2019a]. Nevertheless, without Receptionist's being able to affirm the appropriateness of FCP access in the first place, patients would not have the initial contact with a FCP and there would be no opportunity for FCPs to change the patient's perception of the Receptionist. Hammond *et al.*, (2013) highlighted that although some GPs undervalued Receptionists, others demonstrated to patients their faith in Receptionists' abilities which was successful in appeasing complaining patients. However, it is simplistic to suggest that GPs, with high workloads and short consultations, are able to spend time realigning patient perceptions of Receptionists.

When this realist evaluation's findings and wider evidence is analysed in conjunction with the NHS Long Term Plan (2019e), the importance of Receptionists in promoting the role is

disputed. Over a period of two years, 51% of Practices utilised online technologies to improve administration efficiencies. It may be that patients will increasingly change to booking appointments online. Nevertheless, this study's findings suggest that patients were not accessing either individual practice websites or networked sites, therefore, Receptionists were the primary method of FCP role promotion.

9.1.2 Burden

Several theory areas influenced the patient perceived 'burden' or effort of accessing the FCPs. In the 'Expectations' theory area it was theorised that receiving a 'hands-on' treatment alongside a physiotherapy referral would appease patients who may be resistant to exercise, thus reducing the perceived intervention 'burden'. Nevertheless, exercise and self-management were the predominant management of patients. In four CCGs 30% of patients were provided with exercises; the second most frequent outcome after patients receiving advice (69%) (NHSE, 2019). There was variation between these Practices, between 82%, to 89% in the four CCGs. Downie *et al.* (2019) highlighted 60% of patients receiving advice, and Moffatt, Goodwin and Hendrick (2018) concluded that self-management was the predominant outcome of FCP consultations. These outcomes reflect the aim of the role, which is set out in the very introductory statement of the HEE framework: *'MSK first-point-of-contact practitioners support and encourage individuals to self-manage their condition and to make behaviour changes'* (HEE and NHSE, 2018a, p.21). Referral to physiotherapy was highlighted by this study to be a perceived 'burden'; this was an outcome in 16% cases of NHSE's (2019) pilot evaluation, but only 2.9% of the Downie *et al.*'s (2019) pilot.

Both Practices' findings highlighted that previous negative experiences could affect adherence to future physiotherapy and self-management. Barron, Moffett and Potter (2007) discussed how expectations of physiotherapy are formed and the effect of this on outcomes. They hypothesised that if a patient had a past negative experience of physiotherapy – a context present in this study – then they would be unlikely to be cooperative in a subsequent physiotherapy consultation – again, observed in this study as dissatisfaction with exercise/physiotherapy as an outcome. However, they claimed that a physiotherapist having a high standard of communication skills could overcome the patient's negative attitudes (Barron, Moffett and Potter, 2007). Their work supported Brewer and Rimer (1997), who highlighted the importance of early assessment of both positive and negative expectations in order for them to be identified and addressed. When considered with other literature, this study's findings underlines the importance of

assessing the patient's perceived burden of exercise/physiotherapy and realigning expectations based upon physiotherapy experience.

Findings from both Practices highlighted a patient preference for all their needs being met in one appointment, relating to the theory area 'Accessibility'. Staff responses stated the importance of prescriptions in one appointment; however, patient experience of Community Pharmacists prescribing resulted in them being satisfied with the FCP not prescribing. Nevertheless, patients did express the benefits of receiving injection therapy in the FCP appointment. This difference in staff and patient responses can be explained by no patients requiring a prescription in either Practices, thus opening up a discussion on which skills are required for the role. NHSE's evaluation (2019b) of the FCP pilot demonstrated that across six CCGs only 6% of patients on average required prescriptions, with a range of 1% to 13%, while Downie *et al.* (2019) found 12% of patients required prescriptions.

It may be that this variation in prescribing numbers is a result of variation of Practice staffing, as the findings of this study demonstrated Community Pharmacists reducing the need for prescribing FCPs. However, Community Pharmacists are only able to carry out repeat prescriptions and an independent prescriber would be required initially; therefore, patients may access their GP and receive prescriptions in this appointment, as well as access the FCP – as was the case with Patient 11. This was similar to the finding of Moffatt, Goodwin and Hendrick (2018), which highlighted patients accessing the GP for medical conditions, with MSKDs being an *'add on'* in GP consultations (p.125). Furthermore, a paper under peer-review by Halls *et al.* (2019) had 102 responses to their survey from service managers and FCPs; findings demonstrated that 41% of FCPs were independent prescribers and 67% were able to inject. This supports this study's findings which suggests that injection therapy is a more important skill for FCPs to obtain than prescribing.

In both Practices, patients perceived it as beneficial if the FCP could inject, as they could receive an injection in one appointment, with a reduced wait. Consequently, they felt their MSKD would be resolved earlier. Three-out-of-five patients in Practice A received an injection from FCP 1, suggesting that there is a need for the skill. There is limited evidence into corticosteroids injections as an outcome. An unpublished audit in a Windermere Practice demonstrated a 93% increase in injections once an injecting FCP was introduced (Hensman-Crook, 2016). Downie *et al.* (2019) found 9.9% of patients received an injection and an evaluation of MATS demonstrated injection rates of 13% (n=8,417) (Roddy *et al.*, 2013). This evidence implies that an injecting FCP could reduce the need for injection in

Secondary Care or an interface service such as MATS. However, findings suggested resistance from Practice A's Management Partner as the Practice already had a GP injection clinic. The BMA (2019) highlighted how the provision of steroid injections by FCPs may be funded by local CCGs whereby GP Practices are paid per an injection and Hensman-Crook (2016) suggested the advantage of bringing in extra income for the Practice. However, if a GP injection clinic was already commissioned, then the Management Partner may have had concerns about losing this Practice income. This agenda may act as a barrier to FCPs in other Practices being permitted to inject within the Practice, and thus, patients receiving an injection in one appointment.

In both Practices the FCPs could access the GP for prescriptions, however, this was not always possible if the GP was busy. Wider evidence highlighted GP concerns that if less experienced physiotherapists were placed in the FCP role, more work would be *'bounced back'* to them (Moffatt, Goodwin and Hendrick, 2018, p.126). In Practice B, extended access evening appointments were outside of GP hours and thus limited FCPs access to GPs. However, discussion on the iCSP forum and Goodwin (2019) demonstrated no issues in FCPs being able to access the GP for on-the-day prescriptions, and the use of EMIS notes/Systm One facilitated this [Anonymous FCP, 2015a]. The findings and wider evidence elucidate key considerations when evaluating the need for prescribing, which include: number of patients who make GP appointments only for prescriptions; ability for FCPs to access GPs for prescriptions; and capacity for patients to be placed on a Community Pharmacist list. Goodwin (2019) presented an interesting consideration not evident in this evaluation, that physiotherapists were aware that specialist capabilities were more expensive and could negatively impact commissioning decisions, but they still felt they should not be *'diluting'* the role to simply offer a cheaper service (p.225). The NHS Long Term Plan (2019) discussed how PCNs will from 2020/2021 be able to assess their local population by risk of unwarranted health outcomes, to predict which groups of people will benefit from different interventions. This assessment may elucidate the need for targeted MSKD interventions.

Practice B's findings highlighted a perceived burden of attending an appointment that did not fit around the patient's working hours. There were two strands to this: the limited number of FCP morning and evening appointments; and appointments being in Practices that were some distance from the patient's place of work. A SLR into patient satisfaction with MSKD care highlighted similar themes of the importance of convenient clinic hours and location, and the NHS Long Term Plan's (2019) objectives included flexibility to

maintain patients in employment (Hush, Cameron and Mackey, 2011). Due to the importance of these mechanisms, the patient had a longer wait for an appointment that fit around his schedule and he had to cancel an appointment. It may be postulated that this would lead to wasted appointments and result in it being increasingly challenging for patients to receive an earlier appointment. This burden was only based upon one patient response and it was hypothesised from the findings that he had higher expectations of the NHS due to his private physiotherapy experience. A mixed-methods study comparing public and private healthcare sectors demonstrated that private care users were able to receive appointments earlier and appointment hours were more agreeable to patients, and a King's Fund project (2018) highlighted that private healthcare wants to cultivate a patient demand for improved access, which they can then deliver (Owusu-Frimpong, Nwankwo and Dason, 2010). The King's Fund concluded that regardless of private healthcare delivery, the public had lowered their expectations of the NHS as despite satisfaction rates being low, expectations were met (The King's Fund, 2018). In this evaluation, Patient 8's dissatisfaction of the FCP role may have been influenced by his private experience; however, his expectations of the NHS may have been low irrespectively.

In Practice B several patients[31] perceived the FCP role to reduce their burden of travel. Even though patients potentially had to access a Practice other than their own, it was still perceived as more convenient than accessing an inner-city hospital for physiotherapy as they had in the past. The NHS Long Term Plan (2019) set out plans to offer community-based services that are locally accessible; this study suggests that PCNs would still be able to deliver services with acceptable distance to travel.

9.1.1 Ethicality

The findings highlighted acceptability in terms of ethicality, that is, how the FCP as an intervention met the person's values. This is a key tenet of the NHS Long Term Plan (2019) which states the importance of '*what matters to someone',* with HCPs taking into account patient values, preferences and choice. Patient responses highlighted that they felt they should be listened to and valued by means of a longer consultation or a more experienced practitioner who were able to communicate effectively. A survey by Halls *et al.* (2019) demonstrated that 71% of FCP and service manager respondents stated that their FCP consultations were 20 minutes long. Langridge (2019) highlighted that FCP consultations were shorter than traditional MSKD physiotherapy and, consequently, FCPs needed to have

[31] None of whom had private physiotherapy experience.

rapid speed of thought when making safe and clinically-effective decisions. Moffatt, Goodwin and Hendrick (2018) interviewed General Practice staff in order to understand the challenges of FCP role implementation. The GP participants held a belief that the FCP role should only be delivered by a clinician working at an advanced level with specialist training and the authors concluded that GPs may have greater confidence in the role if they were to receive information on the FCP's training and if they were to have personal experience working with a physiotherapist. Discussion on length of the consultation and FCP Banding has been erroneously conflated with financial saving. A FCP highlighted that if a Band 8a was in the role, then GP Partners would want appointments to be 10/15 minutes for cost-savings [Anonymous FCP, 2017]. The forum also highlighted Practices in which a FCP had only 15 minutes, which they felt was inappropriate for safe and effective practice, and another FCP stating the pressure from the Practice Manager for 10 minute appointments. In response to whether the consultations could be 15 minutes or under, an FCP highlighted the requirement for 20 minutes to carry out a safe assessment, whilst also providing advanced skills such as injection therapy [Anonymous FCPs, 2018b]. Another FCP felt 30 minutes was required to empower patients to self-manage [Anonymous FCP, 2018c]. Shorter consultations would reduce the role to a GP substitution, rather than what it can offer, a specialist MSKD service which provides appropriate patients improved outcomes. As highlighted in a CSP Frontline article: *'we're not suggesting that physios replace GPs. This is about collaboration, best use of resources, and a focus on what's best for patients. MSK physios make a specialist contribution. They're more expert on muscle, bone and joint issues than the average GP so they are usually the more appropriate clinician to see for MSK issues.'* (Yeldham, 2019, p.5). Inevitably, experience is gained whilst in the role; newly appointed FCPs may need to be provided with longer consultations, which over time may be reduced (to a minimum of 20 minutes) as their experience increases.

The NHS Long Term Plan (2019) highlighted the potential to increase the appeal of working within the NHS through offering flexibility and professional development opportunities. The FCP role could, theoretically, provide this for physiotherapists (Chartered Society of Physiotherapy, 2018a). However, the FCP pilot evaluation highlighted issues in recruiting sufficiently qualified physiotherapists (NHSE, 2019b). A 9% shortage of physiotherapists is predicted after the UK leaves the European Union (Dolton *et al.*, 2018). Recently the funding of higher education support for clinical undergraduates changed, resulting in an increase of overly subscribed student places by 34% since 2015 (Fahie, 2019). The physiotherapy workforce will be injected with junior practitioners, thus the shortage of

specialists will not be resolved for around ten years, at which point the new workforce's experience will have developed (Dolton *et al.*, 2018). A reasonable concern would be that experienced physiotherapists would be removed from Secondary Care, therefore de-skilling this workforce. A CSP Frontline article highlighted an FCPs concerns on the sustainability of widely rolling out the role in terms of staffing and future funding (Cole, 2019). The NHS (2019b) has outlined interim plans as to how the future AHP roles will be filled. They make it evident that there must be retention and supply of AHPs, to ensure there is the right workforce, with the right skills, in the right place to deliver high quality care (NHS, 2019b).

Across both Practices there was an expression of a sense of patient guilt for using up the GP's time which patients did not feel when accessing a FCP due to the way the FCP communicated with them. This hypothesis demonstrated the complexity of how patients feel when they access services and why they feel that way, through linking together four theory areas: 'Hierarchy', 'Experience', 'Communication' and 'Accessibility'. It suggests a patient awareness of the finite amount of Primary Care resources, a concept which is further built upon by findings of this study that were not presented in the analyses chapters[32]. However, this data highlights a patient awareness of the NHS' challenges, a sense of guilt of using services and the need to justify why they are accessing services. Moffat *et al.* (2016) identified a common reason for patients being deterred from accessing the GP was *'worry about wasting the doctor's time'* (p.4). It was inferred that this attitude may relate to patient concerns of appropriate use of health services; alternatively, it was highlighted that not wanting to *'fuss'* related to the use of GP's time (Moffat *et al.*, 2016, p.4). It is challenging to extrapolate whether it is the perception of GP hierarchy, or the challenge of GP access that results in patients valuing GPs' time. If appropriate use of resources is the primary concern, then the emphasis on the FCP as a specialist may transfer the same sense of 'guilt' for service access. If the concern is not wanting to use the in-demand HCP's time, then the hypothesised increase in FCP waiting times could equally result in patient worries and not accessing the role.

9.1.2 Intervention Coherence

There was variation in the title attributed to the role, suggesting a fundamental lack of role coherence for patients. In Practice A, patients used several titles, and it was highlighted that experience of other AP roles did not facilitate their understanding of what title to use for the FCP. Whereas in Practice B, patients referred to the role as a physiotherapist, which

[32] Due to limited relevance directly to a CMO and insufficient detail to form a new CMO, some data was not presented that may still be of interest and is therefore highlighted in this discussion.

had potential repercussions on patient expectations of treatment. Since embarking on this study, frameworks for both the AP and FCP roles have been produced that provide greater clarification on the roles (Chartered Society of Physiotherapy, 2018a; HEE and NHSE, 2018; NHSE, 2017a). The CSP now recommends that the term *'physiotherapist'* is used in the role's title, i.e. '*First Contact Physiotherapist'* (Chartered Society of Physiotherapy, 2018a). The CSP perceives this title facilitates patient understanding of the role, without the need for a complex explanation of the Practitioner's background, whilst also highlighting the shift of physiotherapy into Primary Care (Chartered Society of Physiotherapy, 2018). The FCP email list included a long discussion regarding the use of *'physio'* in the role's title, with several FCPs stating it gave patients incorrect expectations of what they would receive in the clinic [Anonymous FCPs, 2018d]. This evidence supports the findings from this evaluation, which suggested that due to the role being entitled '*physiotherapist'*, patients in Practice B had expectations of a greater number of appointments and ongoing treatment. Due to the connotations attached to the title*,* there was discussion of the role being referred to as a *'MSK Practitioner'*, however, some shared concerns about losing professional identity [Anonymous FCPs, 2018d]. Nevertheless, it was felt that the role could be introduced to patients as a *'MSK Practitioner'* when booking the appointment, and in the consultation the practitioner could explain their physiotherapy background [Anonymous FCPs, 2018d]. The professional discussion does not align with the CSP's recommendations for the title, which provides support for realist evaluation's inclusion of grey literature.

There was patient confusion across both Practices as to the skills of the FCPs. Practice B's findings highlighted that patients would be more confident in the FCP if they were aware of their skills and qualifications. As the core capabilities framework highlights, the required skills of FCPs will be dependent on the needs of the locality (HEE and NHSE, 2018). This suggests that each Practice may need its own role descriptor to provide to patients.

A challenge unique to Practice B that resulted from multiple Practices accessing the FCP, was mixed patient understanding of the role. Although this multi-Practice access was not formed through a PCN, its premise of combining resources to offer extended access hours does echo that of a PCN. Refreshing NHS Plans for 2018-2019 set out the goal for all Practices to be part of a PCN (NHSE, 2018c). If PCNs are established, access to FCPs in one Practice would be extended to wider Practices, in a similar manner to Practice B. Although Practice A's FCPs were not being accessed as part of a PCN, the CCG had formed a PCN. An evaluation of the Bristol, North Somerset and South Gloucestershire PCN stressed the

importance of shared objectives between Practices, working together from the offset, with continual communication fundamental to service improvement (NHSE, 2018d). They highlighted the importance of a shared intranet system to develop communications across the area, and to allow Practices to share promotional materials to encourage consistent offering of appointments to patients (NHSE, 2018d). The limited communication between the Practices that could access FCPs in Practice B was suggested to influence why there was variation in staff and patient understanding on the role. The communication across Practices must be consistent, as the MSK Core Capabilities Framework highlighted the need for FCPs to be continually developing their skills to reflect the changing needs of the locality (HEE and NHSE, 2018). In Practice A, this development is exemplified by FCP 1 undergoing her prescribing qualification during the study. The FCP role is not static; previous information on the role will become dated and staff must be informed on the role as it evolves so that patients can then be provided with the correct understanding.

9.1.3 Opportunity Costs

Both Practices' patients were considering the acceptability of waiting longer to see the same FCP for continuity, or accessing any practitioner to be seen sooner. Turner *et al.* (2007) highlighted that tradeoffs patients made relating to continuity, thus coinciding with this study's findings. But in addition to this, Turner *et al.* (2007) estimated the relative importance of patients receiving continuity of care in Primary Care compared to other aspects of the consultation. They highlighted that the type of consultation was an important consideration, with patients who were unsure on a new condition willing to wait for 2.4 days for relational continuity in comparison to 0.9 days for minor familiar symptoms (Turner *et al.,* 2007). This suggests that the perceived severity of the condition may affect how long patients will wait. This hypothesis was not highlighted in the findings of this study, however, perceived seriousness of the condition was a key factor in patient acceptability. Nevertheless, the findings of this study hypothesised that continuity is not essential for the FCP role as it is intended as an assessment role with minimal contact. It was inferred that if patients had the correct understanding of the role then earlier access would be the patient's priority and not having continuity would be an accepted opportunity cost.

9.1.4 Perceived Effectiveness

All interviewed patients were satisfied with the management of their MSKD by the FCP and perceived their intervention to be the correct clinical decision. Findings highlighted the FCP's planned care pathway was not always wanted by patients. For instance, it was

hypothesised by staff that patients often expected unnecessary scans. Thus, FCPs had to realign expectations for the patient to view their MSKD management as effective. Stenner, Palmer and Hammond, (2018) identified what mattered most to patients in MSKD consultations. They claimed that it was essential for clinicians to identify a patient's agenda or *'issues of importance',* this facilitated the trusting relationship and allowed the clinician to engage in a person-centred manner. This corresponds with this study's findings, in which it was perceived as important to identify agendas for specific treatments in order for patients to feel valued. Stenner, Palmer and Hammond (2018) underlined the importance of patients understanding their MSKD, which allowed patients to be able to communicate their issues and requests more coherently, and take an active role in their own care management (Stenner, Palmer and Hammond, 2018). This specific mechanism was not identified in this study; however, it was not dissimilar to the mechanism that identified information as facilitating patients in making choices in their care.

In both Practices it was hypothesised by staff that a prescribing FCP would be able to have a conversation with patients as to why they should not be on medications that patients could make informed choices regarding prescriptions, resulting in de-prescribing. The mechanism in this study is supported by Reeve *et al.*'s (2013) finding that the first step in patients agreeing medication cessation is a discussion with a HCP to understand why. The prescribing of multiple medicines is often referred to as polypharmacy and is associated with adverse outcomes including mortality and falls (Masnoon *et al.*, 2017; Milton, Hill-Smith and Jackson, 2008; Caughey *et al.*, 2010). Polypharmacy is more common in an older population due their higher multimorbidity rate, and is thus an important public health issue considering the aging population (The King's Fund, 2016; Masnoon *et al.*, 2017). Further, a CSP Frontline article highlighted that one in 11 patients were prescribed a potentially addictive drug in 2017 (Millet, 2018). A physiotherapist supplementary prescriber highlighted their profession as well-placed to question patients on medication use – particularly if signs of opioid misuse – and they could suggest discussions with their GP regarding de-prescribing (Millet, 2018).

Reeve *et al.*'s (2013) study found that a barrier to deprescribing was the lack of time available in the GP consultation to be able to cease a medication. FCP 3 stated concerns that prescribing could reduce the time that they needed in the consultation to a level unacceptable for the FCP. Nevertheless, none of the FCPs could prescribe or therefore deprescribe; as the theory area 'Experience' hypothesised, patients were not comfortable

evaluating what they had not experienced, preventing them from evaluating a hypothetical FCP experience.

9.1.5 Self-Efficacy

Overall, patients perceived themselves as capable to take part in the FCP's exercise and self-management interventions. The only caveat to this was a patient in Practice A who had reservations about exercises due to past experiences of physiotherapy. Within the theory area 'Expectations', staff commonly hypothesised that some patients required a higher-level of reassurance that their MSKD was not serious. A SLR of treatment-related and patient-related expectations of MSKDs stated that self-efficacy is situation-specific and that its measurement has weak predictive value unless the context is considered (Van Hartingsveld *et al.*, 2010; Bandura, 1997). It is vital that FCPs assess patient-specific contexts of previous physiotherapy experience and level of reassurance required.

Relating to the theory area 'Accessibility', the shorter the wait for an appointment, the earlier patients were reassured that they could 'keep moving' without causing harm. Wider evidence shows that patients with acute MSKDs were generally more optimistic about outcomes of care but had unformed expectations about the physical therapy experience (Hush, Cameron and Mackey, 2011). A CSP Frontline article supports this, as a FCP considered it important to have early conversation with patients before their conditions became chronic, so they could offer more treatment options, realign patient expectations, and the patient could make an informed choice (Cole, 2019). Early FCP intervention may be important in cultivating a positive patient self-efficacy.

9.2 Support for CMOs

9.2.1 Theory area overlap

There was a high-level of overlap between theory areas in which similar themes were present in two or more theory areas (see Appendix 58 and Appendix 59). It is felt that this increased the theoretical validity of the hypotheses as there was mutual agreement across several lines of theory inquiry. The most highly-overlapping theory area was 'Expectations', which was in eight of the twelve overlap sections; Continuity had only one overlap (see Table 9.2). The researcher was unable to find literature on theory area overlap; anecdotally she was aware of it as an issue extending to colleagues using realist inquiry (personal communication Halls, 2019; personal communication Jagosh, 2018). The number of overlaps is reflective of what the researcher would expect for each theory area; Continuity was rivalled frequently and Hierarchy (the theory area with the second lowest overlaps) was a novel, relatively unformed theory area.

Table 9.2 - Theory area overlap in CMOs

Theory area	Number of CMO overlaps
Expectations	8
Experience	7
Promoting the role	6
Accessibility	6
Hierarchy	2
Communication	2
Continuity	1

9.2.2 Patient responses

Table 9.3 outlines the CMOs that were evidenced by limited supporting patient data, as well as the retroductive thought-process when theorising. The limitations of these hypotheses are recognised in section 10.5.

Table 9.3- Hypotheses with limited supporting patient data

Theory area/ overlap/ rival	Practice/ shared	Hypothesis	Patient responses related to hypothesis (indirect)	Description of retroduction
Expectation	A	Patient expectation that they can choose which profession injects for their MSKD	1	Patient hypothesised that some patients may feel they want a choice.
Continuity	A	Patient preference for FCP continuity due to GP experience	0	Hypothesis weak. Large inference made between patients wanting GP continuity and therefore wanting FCP continuity. Based upon no patient data, but staff data and the researcher's retroductive thinking.
Experience	B	Patient experience of telephone calls with GPs	0	Hypothesis weak. Based upon FCP 4's response with them hypothesising through conjecture – how they think patients will feel.
Accessibility	B	Availability of appointments outside of working hours	1	Hypothesis has limited supported as based upon only Patient 8's response.
Overlap 2	B	Expectations on the number of appointments based upon experience of traditional physiotherapy	0 (5)	All patient responses highlighted what title was used for the FCP and their previous experience of physiotherapy, but no patient or staff responses discussed the relationship between this and expectations of the FCP. Retroduction predominantly forms this hypothesis.

Overlap 3	B	The effect of patients' private physiotherapy experience	1	There is limited supporting data as this is based only on Patient 8's response. However, it is hypothesised that private physiotherapy influenced expectations on access; only Patient 8 had private experience.
Overlap 4	B	Patient expectation of face-to-face appointments	1	FCP 4 and Patient 7 were the only responses that evidenced this hypothesis. However, the hypothesis stated that this mechanism/outcome was present in patients who were particularly anxious about their MSKD (only Patient 7).
Rival 2	B	Threats to accessibility	0	Only supported by staff responses. This is unsurprising as staff have a greater understanding of hidden mechanisms relating to how the service runs.
Rival 3	B	Acceptability of accessing a FCP for serious conditions	0 (2)	Although two patients did accept GP access for a serious condition, there was no clear association between this and age. The connection was formed through retroduction and reference to other hypotheses.
Accessibility	Shared	Meeting patient needs in one appointment	2	Staff responses stressed the importance of prescriptions in one appointment, however no patient responses highlighted this. They only highlighted injections in one appointment.
Accessibility	Shared	The convenience of self-management	0	Weak hypothesis. Only staff perceived self-management as beneficial; patient responses provided a rival hypothesis (shared rival hypothesis 4).
Shared rival hypothesis 2	Shared	Meeting patient needs in one consultation	0	This hypothesis regarded threats to meeting patient needs in one consultation. It is unsurprising as staff have a greater understanding of hidden mechanisms relating to how the service runs.

9.3 Chapter Summary

This chapter has provided an understanding of how the findings of this study align with Sekhon's (2017) acceptability Framework. Wider literature was included in the discussion to aid the retroductive process, and to compare the findings to relevant NHS policy. The evidence that supported the CMOs were also highlighted for transparency.

10 Chapter 10: Discussion of the Thesis

Chapter 10 will include a discussion on how this study contributes to the field, the recommendations it makes for practice and suggestions for future research. Strengths and limitations will be discussed, beginning with aspects specific to the realist review. Finally, the chapter will end with an overall conclusion

10.1 Contribution to the field

As well as supporting other AP literature, findings from this study have contributed novel hypotheses. This study was able to offer qualitative evidence regarding sustainability for a rapidly developing and expanding role. To the researcher's knowledge, this study is novel as it provides an in-depth understanding of patient acceptability of the FCP role, elucidating micro and macro contexts, and their complex influence on patient evaluation of the role. These findings provide the first qualitative data that supports evidence that self-referral patients have their MSKDs for shorter periods of time (Holdsworth, Webster and McFadyen, 2006). It is thought to be the first study that provides managerial perspectives on how this may increase waiting times, with novel inferences on preventing an increase in waiting times. Although neither Practices were part of PCNs, Practice B was in a similar partnership with 24 other Practices and thus the findings were related to PCNs. To the researcher's knowledge, no policy or research has specifically explored the FCP role in PCNs due to the novelty of the model, a vision has only been outlined for pharmacy teams (NHS, 2019h). It was inferred from this study's findings that PCNs must ensure consistent implementation of the role across Practices and consider their capacity to meet demand. This may be achieved most effectively through consistent Practice communication and shared aims, in line with the wider evidence on PCNs (NHSE, 2018d).

This is the first study that highlights patients making tradeoffs between continuity and access specifically with the FCP role. Only one study was identified that demonstrated a similar finding, but this referred to the NP role in Primary Care (Turner *et al.*, 2007).

Findings added to the discussion on GP confidence in the FCP and how this may influence patient views on the FCP role (Moffatt, Goodwin and Hendrick, 2018; Holdsworth, Webster and McFadyen, 2008). The outcomes from FCPs accessing GPs for prescriptions were compared to evidence that questions the ability for the role to unburden GPs (Moffatt, Goodwin and Hendrick, 2019). Findings contributed to the discussion on the necessary skill and experience of the FCP and how this impacts the time needed in the consultation (Langridge, 2019; Moffatt, Goodwin and Hendrick, 2018). Lastly, it contributes to the

discussion on ensuring there is capacity for these roles to be filled with experienced physiotherapists (NHSE, 2019f; Fahie, 2019; Dolton *et al.*, 2018).

10.2 Recommendations for Practice

The initial hypotheses formed in the realist review were tested and refined through staff and patient interviews of two Practice case study sites and are presented with either high, moderate or limited support from this study's findings (see Table 10.1). The decision as to where to categorise a hypothesis was determined in part through a process similar to retroduction, with the researcher using their judgement based upon their in-depth understanding of the concepts and their representation in the wider literature. Other considerations that also informed the researcher's decision included:

- The number of patient responses (minimum of three for high support).
- The number of staff responses that supported patient responses.
- The number of CMOs supporting the hypothesis (four or more considered high).
- Whether there were rival hypotheses; if this rivalling was inconclusive then the hypothesis may have been moderately supported.
- If the testing of the concept was hypothetical i.e. not based on patient experience, but consideration of an idea. E.g. a prescribing FCP was not experienced by patients.
- If the theory area was a novel theory area in the realist review.

Table 10.1 - Level of support for hypotheses

	High support	**Moderate Support**	**Low support**
Theory area	Hypothesis		
Experience	Patients indirectly evaluate the FCP role by making comparisons with their experience of the GP.		FCP consultation can lead to the equivalent type of outcomes/ treatments as a GP consultation.
			Previous experience of a prescribing FCP increases patient acceptability of a prescribing FCP in Primary Care.
	Previous experience of other HCPs increases the acceptability of the FCP role.		
Expectations	Patient perceptions of 'serious' conditions affects acceptability of the FCP consultation.	Patients who perceive their condition to be 'serious' are less accepting of the role if prescriptions are not checked by the GP.	
	Lack of patient choice decreases patient acceptability of the FCP role. Choice is particularly important for patients who perceive their condition to be 'serious'.		
	A greater understanding of the nuances between traditional physiotherapy and the FCP increases patient acceptability of the FCP role.		
	GP Practice staff validation increases patient acceptability of the role.		

Key: Green box = refined hypothesis. Blue box= new hypothesis. White box = hypothesis unchanged.

Theory area	High support	Moderate support	Low support
Hierarchy		Patients have a deep-rooted belief of a hierarchy irrespective of whether the Practice has an existing culture of professional hierarchy.	
Promoting the role	A greater understanding of the role increases patient acceptability of the role.	Receptionist validation of the FCP role increases patient awareness of the role providing the patient is aware of and trusts the Receptionist's ability to triage.	Peer validation influences patient acceptability of the FCP role.
Accessibility	A decrease in waiting times for services increases patient acceptability of the role.	Increased acceptability of the role if patients can receive injection therapy in one appointment.	Patients find the role more acceptable if they expect that an engagement with FCP will provide indirect access to other services.
		Longer consultation length increases patient acceptability of the FCP role. This is predominantly true when patients perceive GP consultations to be limited.	
Communication	The FCP role is more acceptable to patients when the FCP explains the patient's MSKD in a way that they can understand, thus opening up a discussion.	The role is more acceptable to patients when FCP's are person-centred in their consultation style as patients feel valued.	
	The FCP role is more acceptable to patients when the FCP demonstrates a high-level of knowledge as it increases patient trust.		
Continuity			Having continuity in the consultation is preferential, however, it is not essential for the FCP role.

10.2.1 Recommendations for implementation planning

Figure 10.1 outlines recommendations for Practice; these may improve patient acceptability of the FCP role in certain contexts.

- Practices should ensure staff use a consistent role title.
- First Contact Practitioners (FCPs) should not be called 'physiotherapists' when patients book their consultations, but 'Musculoskeletal practitioner'. FCPs must explain their physiotherapy background in the consultation.
- Primary Care Networks (PCNs) which are considering shared FCP roles must plan for meeting patient capacity before expanding the network further.
- Practices within PCNs must ensure clear and consistent communication in order for the FCP role to be accessed as intended.
- In Practices where online-booking is not widely utilised, Receptionists are key in promoting the FCP role and they must be given sufficient time to explain the role to patients.
- When deciding the specialist capabilities of the FCP, the skill-mix of the Practice's multi-disciplinary team should be considered.
- The length of the FCP consultation should be decided based on the skill and experience of the FCP. Physiotherapists who are new to the role will require longer in consultations; over time this may be reduced.
- FCPs should undertake an early assessment of patient expectations of the consultation; this should include assessment of previous physiotherapy, AP and GP experience for their MSKDs.
- FCPs should educate patients on their MSKD to give them an understanding that will allow them to make choices regarding their care.

Figure 10.1 - Recommendations for Practice Managers and Practitioners

10.3 Future research

This study has identified gaps in the evidence base which promotes the need for further research, these include:

1. With the transition to PCNs, it is vital that there is research into how Practices within the network implement and embed the FCP into the 'host' surgery, and how equitable access is achieved across all participating practices.
2. Future research must further explore the role of the Receptionist. This could include from the patient perspective as to whether it is acceptable for Receptionists to triage. Furthermore, there needs to be an understanding as to whether this is even achievable, owing to evidence demonstrating that reception staff already experience high-workload pressures. It may also be appropriate for this to be explored from a Receptionist's perspective, in order to determine their perceived capability and acceptability of delivering a triage and navigation role.
3. It would be beneficial to be further understand the impact of FCP prescribing medications. A mixed-methods study could identify the prescribing and de-prescribing effect, as well as provide a greater insight into the patient acceptability of the non-medical FCP prescribing role.
4. Future research may also explore the effect of shifting services from Secondary Care into Primary Care, including an evaluation of Secondary Care waiting times for appointments, impact on skill-mix and demographics of those attending appointments.
5. Finally, there are areas of the realist evaluation methodology that could be furthered. Guidelines could be created on how to robustly and transparently manage theory area overlap, and how to best interpret and represent this common methodological dilemma

10.4 Strengths and limitations of the realist review

The nature of realist reviews means that whilst robust, they are not repeatable as they follow realist principles, rather than set rules and protocol (Pawson, Greenhalgh, Harvey, & Walshe, 2005). However, it is commonly believed that in order to rely on reviews they must be reproducible (Higgins and Green, 2011). The evaluation was informed by a realist review, which tracked and recorded the judgements of the reviewer to demonstrate how particular empirical studies led to judgments (Pawson, Greenhalgh, Harvey, & Walshe, 2005). Even with the best intentions, it is not possible to make all these decisions fully transparent due to the vast number of decisions made and the influence of intuition

(Pawson, Greenhalgh, Harvey, & Walshe, 2004). The involvement of an expert team, stakeholders and patient partner – who all bring their own assumptions and epistemological positions – influenced the formation of the realist review's hypotheses, which shaped the basis of the realist evaluation's topic guides. However, a realist inquiry should not be compared to these traditional measures of quality assurance; a realist review produces recommendations, not generalisable effect sizes as its conclusions are bound by context (Pawson *et al.*, 2005). The inclusion of key stakeholders ensured that the hypotheses were formed in collaboration with those who understand the complexities of the role and had first-hand experience of FCPs. A key strength of the review is its creation of hypotheses that can be readily tested in a realist evaluation; as a method of literature review it was more conducive to the subsequent study.

10.5 Strengths and limitations of the realist evaluation

Slow recruitment did result in changes to the study's protocol, as such the recruitment strategy was altered, the sampling matrix was not adhered to and the interview schedule was changed. The intention was to sample: patients who had accessed the FCP as well as those who had not had any contact with the FCP; patients under/over 65; and patients with other secondary criteria. As recruitment was slow, the researcher had to prioritise the responses once they were received. From pre-interview telephone calls with patients, the researcher became cognisant of the limited insights into the FCP role offered by patients who had not experienced the role. Consequently, the decision was made to interview only those who had experienced the role. On occasion this did affect ability to test hypotheses. For instance, it was hypothesised that patients who had FCP experience may have been more likely to have accessed an AP previously. However, there was no comparable group of those who had not experienced the role to fully test this hypothesis. Asking participants to retrospectively consider their views on the FCP role prior to contact may decrease the interpretative validity of the findings.

Providing patients were over 18 years-of-age, they were eligible for interview. However, wider evidence suggests that there are age-related differences in evaluation of physiotherapy. A SLR proposed that older people are more satisfied with particular aspects of physiotherapy care and also have lower expectations of care in general (Hush, Cameron and Mackey, 2011). Findings from this study suggested that age was a contextual factor that influenced mechanisms and outcomes. For example, it was hypothesised that older patients may be more likely to expect to see a GP first. This hypothesis was tested with a younger population in Practice B as three patients under the age of 65; however, the

youngest patient in Practice A was 66. Non-English speakers were excluded due to pragmatic reasons, despite Practice B's multi-cultural locality. Inclusion of younger participants and non-English speakers would have increased how representative the sample was of the general population, therefore increasing the transferability of the findings.

In Practice A, members of staff were interviewed first, following the recommendation of Manzano (2016). However, due to delays in recruiting patients and concerns regarding the project timeline, Practice B's staff and patient participants were interviewed as they became available. It is not possible to understand how – if at all – this affected hypothesis formulation. It is possible that the researcher had less of an understanding of the programme's mechanisms when interviewing patients ahead of members of staff. Consequently, patients may not have been questioned on mechanisms hidden from them, thus hindering theory development.

Predominantly the researcher was able to analyse interviews ahead of the next interview, consequently, hypotheses that needed refining could be identified, and the topic guides altered. Emergent findings were built upon in this way, reflecting the realist process of moving back and forth between evaluation stages to construct and test theory (Salter & Kothari, 2014; Westhorp, 2014; Pawson & Tilley, 1997). This process was achieved through respondent validation as participants were provided with a summary of the interpretation of their interview and their refinement of theory influenced subsequent lines of questioning. There was investigator triangulation of codes in this study to allow for additional insights in the process of making sense of the data (Rothbauer, 2008). Investigator triangulation was therefore conducive to retroduction, a process which utilises insights, expertise, imaginative thinking, intelligence and common sense (The RAMESES II Project, 2017).

As this study was informed by hypotheses that were formed in a realist review that is not reproducible, this study could be repeated with a different team and result in new hypotheses. However, this would not undermine this study's findings, instead it would add to the understanding of contextual influences. The two Practices offered analysis of two diverse contexts, in terms of age, levels of deprivation and the Practice models. Further, the FCP model itself varied, with Practice B offering virtual assessments and variation in consultation lengths. These differing programme strategies were explored to understand

why strategies adopted differed. The contrasting Practices increase the likeliness of some relevance of the study to other Practices nationally.

There is potential sampling bias of the patient population for several reasons. Only patients who had experienced the role were interviewed which means it is more likely that there will be self-selection bias. This type of bias is unavoidable and is present when participants choose to participate, as their decision may be based upon particular behaviours or attributes under study (Olsen, 2008). It was hypothesised in the theory area 'Expectations' that some patients would be adamant that they wanted to see the GP. Evidence shows that self-referred patients were more satisfied and more supportive of being able to self-refer than those who were referred by their GP or at the suggestion of their GP (Webster *et al.*, 2008). It may be inferred that those who would not access the FCP role would have had lower satisfaction. Sekhon's (2017) acceptability framework categorises acceptability of an intervention before, during and after. Without exploring why patients chose not to access the FCP, there is no understanding of prospective acceptability in patients that it affects the most in terms of role access.

The staff interviewed were not always the most appropriate to be interviewed. In Practice B, staff were slow to respond to scheduling interviews which consequently extended the data collection period. As a result, Receptionist 2 (interviewed in November 2018) was the Practice Manager by the time of interview of this role (February 2019). As she had only been in the Practice Manager role for a limited time, the experiences and perspectives of both of these roles may have been similar.

Observations in the clinic resulted in informal conversations with the FCPs which did offer insights into the service; ethical reasons prevented inclusion of potentially sensitive information that was shared confidentially. The researcher is aware of this information but unable to disclose it, nonetheless it will inevitably influence hypothesis formulation.

There were a limited number of interviews carried out due to the pragmatics of only one researcher carrying out the fieldwork with limited time available. The researcher was unable to carry out the recommended repeat interviews for the same rationale (Manzano, 2016). The study may have benefited from further interviews which would have provided further contexts and insights. The study only interviewed members of staff based in Practice B and did not interview staff from the multiple Practices that could access the role. Findings inferred differences in how other Practices were promoting the role to patients as well as ingrained expectation of the GP as the first contact. Without interviews with these

members of staff, hypothesis formulation is formed through speculation of Practice B's staff.

Realist interviewing was a new skill to the researcher and, therefore, earlier interviews may not have applied the realist principles as consistently. The researcher learnt throughout the process how to apply the teacher-learner cycle, introducing theory gradually to reduce the risk of being leading. The researcher's question is presented alongside the participant's response in order to increase transparency.

In the realist review and evaluation it was challenging to define whether a component of a hypothesis was a context or mechanism – a common experience of many realist evaluators (Salter and Kothari, 2014; Rycroft-Malone *et al.*, 2010; Astbury and Leeuw, 2010; Jagosh, 2019). This can cause conflation of the concepts and a confused analysis, particularly if there are large evaluation teams (Punton, Vogel and Lloyd, 2016; Rycroft-Malone *et al.*, 2012; McCormack *et al.*, 2013; Dalkin *et al.*, 2018). However, there was primarily one researcher analysing the data and therefore disagreement in the team was only flagged when triangulating.

A key strength of the evaluation was the project's varied team and co-opted team members, including experienced researchers with physiotherapy and nursing backgrounds, with some expertise in realist evaluation, FCPs, and a Patient Partner. This offered diverse insights that were conducive to retroduction, the challenging of assumptions and the accessibility of the research to different audiences (The RAMESES II Project, 2017).

There were aspects of the findings that were of interest but either not within the scope of this patient acceptability study, or were unable to sufficiently evidence a CMO configuration. Nevertheless, some of these aspects were incorporated into the discussion of the analysis and the patient partner was involved in validating the relevance of hypotheses.

There was a high-level of overlap between theory areas in which hypotheses connected to support one another; it is felt that this increased the hypotheses theoretical validity. It was challenging to decide where to place some hypotheses if there was overlap, resulting in shifting of hypotheses and complex and time-consuming restructuring of the analyses. Changes were frequently discussed with the team, which highlighted varying opinions and the subjectivity of these decisions.

On occasion there were hypotheses which had limited supporting data which may cause concern when making conclusions from the findings. However, findings from realist inquiries are not claims that aim to be generalisable, but hypotheses that are entirely contingent on the context (Pawson *et al.*, 2005). Providing the hypotheses transparently discloses the context that is essential for the outcome, the recommendations do not have to be interpreted with caution (Wong *et al.*, 2016). Throughout the thesis there was increased trustworthiness of the hypotheses through presentation of the supporting data.

10.6 Conclusion

This thesis makes a valuable contribution to our understanding of patient acceptability of the FCP role as well as the complexity of the Primary Care environment the role operates in. It has created, tested and refined hypotheses regarding patient acceptability of the FCP role to answer the questions: *'what works, for whom, how and under what circumstances?'* (Pawson *et al.*, 2004). Fundamentally, the thesis has depicted the need for patient acceptance of the FCP role in order for it to be accessed as intended, and offer one solution to Primary Care's challenges. Theory areas which were widely evidenced and expanded upon included: 'Patient previous experience of condition management'; 'Patient expectations of condition management'; 'Professional hierarchy'; 'Promoting the role' to patients; 'Accessibility'; 'Communication'. 'Continuity' was less well-supported and interpretation of the analysis highlighted the complex relationship between this theory area with others. The initial hypotheses were categorised into high, moderate, or low support and new hypotheses that arose from the findings were formed. There was a variation of mechanisms and outcomes due to Practice contextual differences, and also differences on a micro (individual) patient level. This highlights the requirement for consideration of contexts when implementing complex programmes such as the FCP role. Thus, the study provides support for a realist inquiry and its principle of the context being inherent to the outcome and its process. Recommendations were formed from the findings; nevertheless, it was clearly stipulated that the Practice's context must be considered when applying the recommendations.

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iCSP/email list

2015

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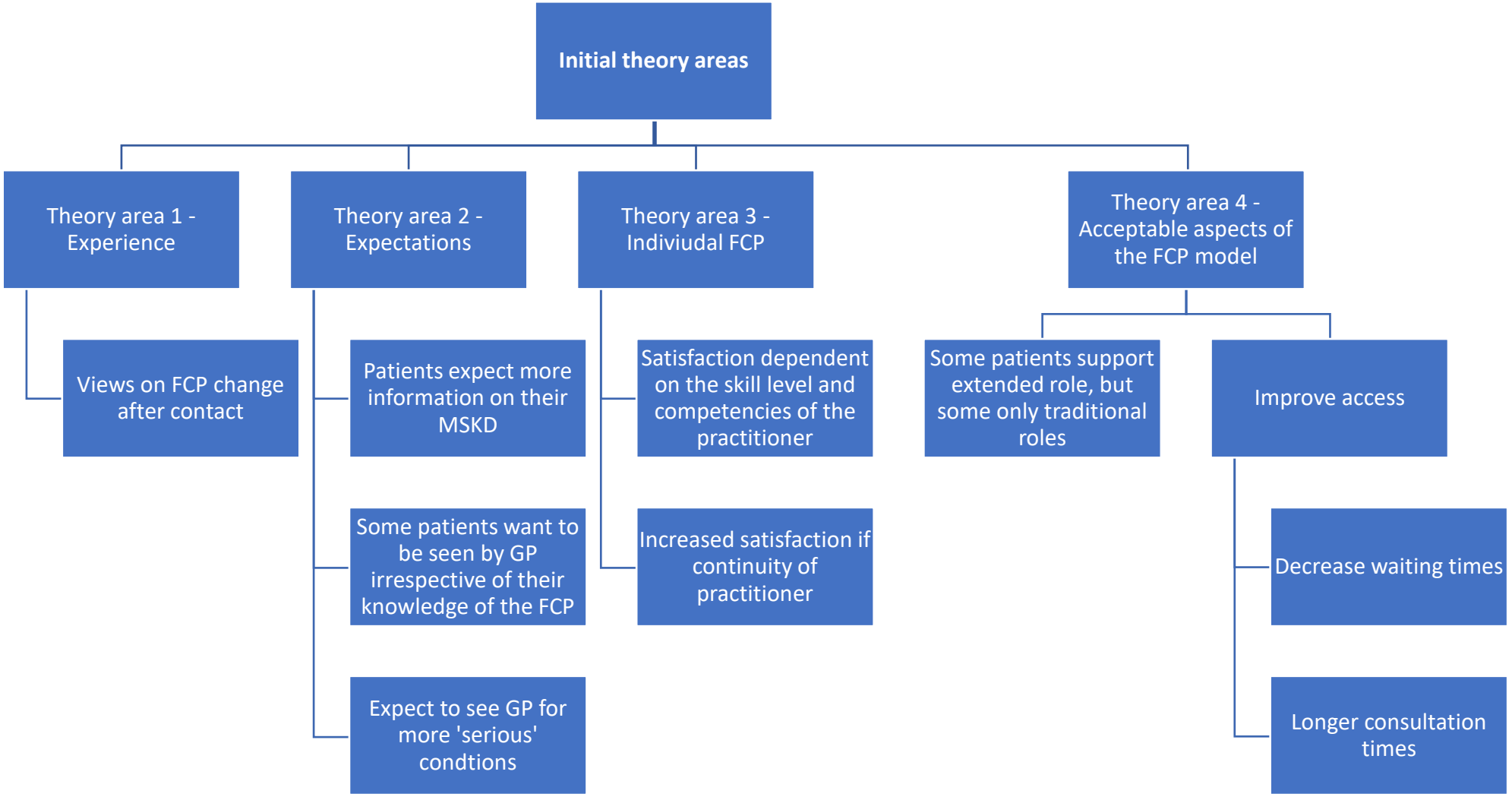
12 Appendices

Appendix 1 Initial theory areas



Appendix 2 FCP information sheet

Project aim

To evaluate the patient acceptability of the First Contact Practitioner (FCP) role.

Methods

I will be interviewing patients who have not had any contact with a FCP, in order to understand their views on the role. I will then interview patients who have had contact with a FCP, to see if the views are any different. I will collect data from three General Practices in the South-West region.

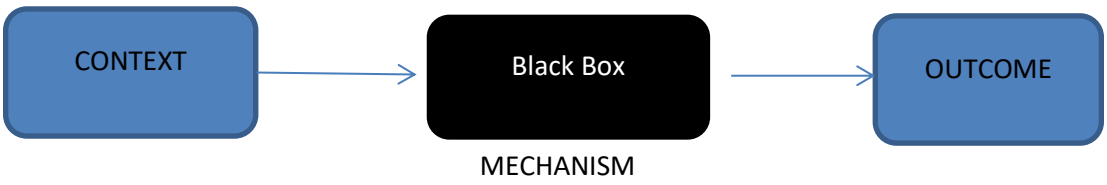
Project Design

The research design is vital as it ensures that the evidence obtained enables the researcher to effectively address the identified research problem logically and as unambiguously as possible. Research design can be thought of as the structure of research.

- The project will take a realist approach, a theory-driven method of evaluation (Pawson and Tilley, 2004).
- The evaluator wants to work out: 'what works for whom in what circumstances, and in what respects, and how?' (Pawson and Tilley, 2004, p.2).
- The researcher comes up with a theory of what makes FCP acceptable to patients, and keeps testing the theory through different stages of the project, and refining it throughout the process. The aim is for the researcher to be able to conclude with an idea of why FCP works, where it will work and who it will work for.
- This theory will explain why FCPs may be accepted in one practice, and not in another.

In more detail (not necessary to understand this bit:

- Research can oversimplify how they arrived at the outcome e.g. at practice X (context), there was patient acceptability (outcome). Realist approach asks *why* and *how* did this practice have patient acceptability of FCP?
- Realist approach unpacks the 'black box', to unearth the mechanisms for patient acceptability of the FCP role.
- Mechanisms are the processes that bring about any effect. The context is the foundations essential for the mechanism to work. Together, they lead to the outcome - patient acceptability of the FCP role.



Pawson, R., and Tilley, N. (2004) Realist Evaluation. British Cabinet Office.

Current Stage of the Project, and where your Contribution comes in:

Before I collect any data, I will review the literature. This will inform my data collection e.g. what questions I ask my participants in interviews.

Appendix 3 Patient partner information sheet

Project aim: To evaluate the patient acceptability of the First Contact Practitioner (FCP) role.

What is the First Contact Practitioner (FCP) Role?

The FCP role is a physiotherapist working in Primary Care as a musculoskeletal expert. Traditionally, when patients have a musculoskeletal disorder they see their General Practitioner (GP) first, who may then refer to other services, most often to physiotherapy. However, FCPs are able to assess patients in Primary Care first. FCPs can vary in their skill sets, depending on their training. Some FCPs may have extended scope skills if they have undergone extra training.

Project Design

- The project will take a realist approach, a theory-driven method of evaluation (Pawson and Tilley, 2004).
- The evaluator wants to work out: 'what works for whom in what circumstances, and in what respects, and how?' (Pawson and Tilley, 2004, p.2).
- The researcher comes up with a theory of what makes FCP acceptable to patients, and keeps testing the theory through different stages of the project, and refining it throughout the process. The aim is for the researcher to be able to conclude with an idea of why FCP works, where it will work and who it will work for.
- This theory will explain why FCPs may be accepted in one practice, and not in another.
- Research can oversimplify how they arrived at the outcome e.g. at practice X (context), there was patient acceptability (outcome). Realist approach asks *why* and *how* did this practice have patient acceptability of FCP?
- Realist approach unpacks the 'black box', to unearth the mechanisms for patient acceptability of the FCP role.
- Mechanisms are the processes that bring about any effect. The context is the foundations essential for the mechanism to work. Together, they lead to the outcome - patient acceptability of the FCP role.

MECHANISM

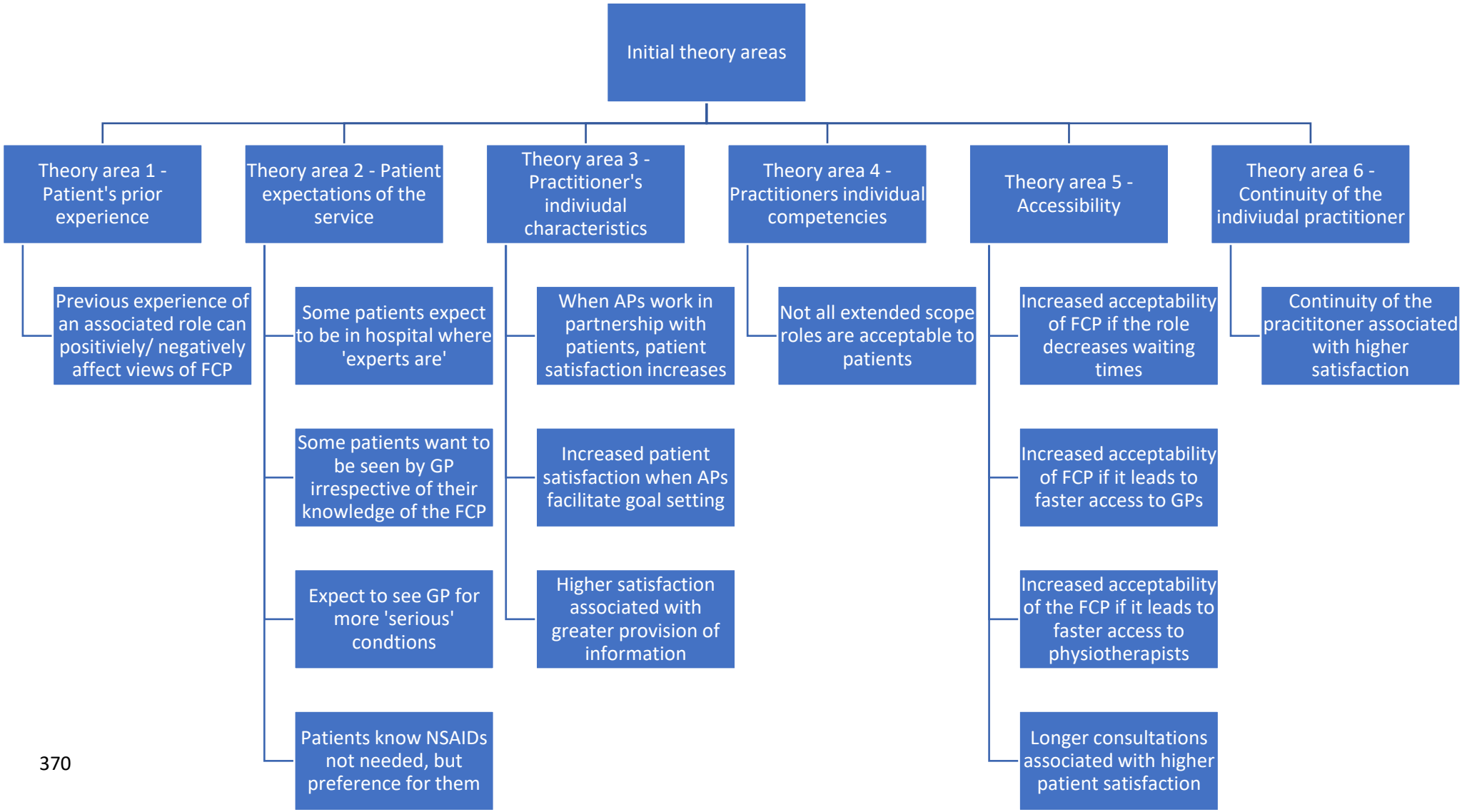
e.g. physiotherapist able to prescribe

Convenience for patient as able to receive medication and exercise in one appointment

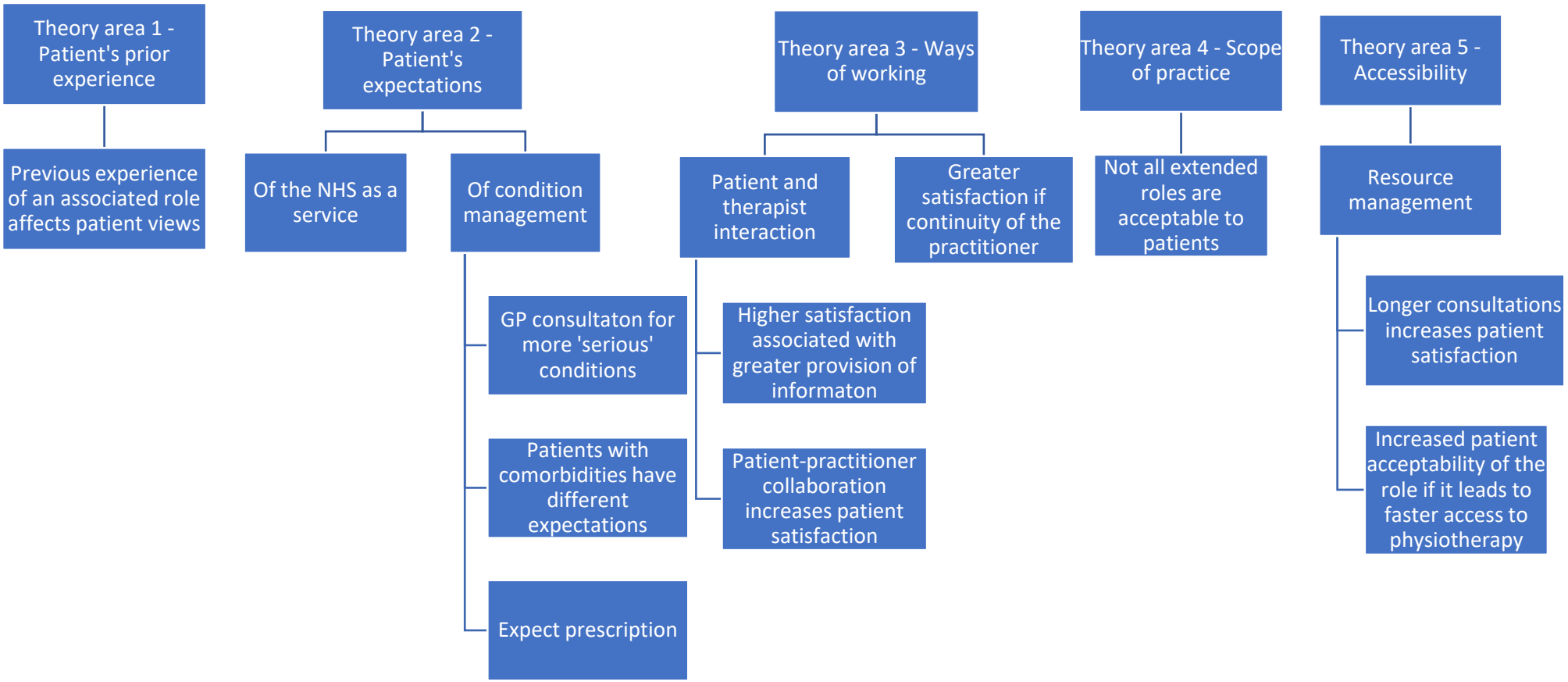
Increased patient acceptance FCP role

Pawson, R., and Tilley, N. (2004) Realist Evaluation. British Cabinet Office.

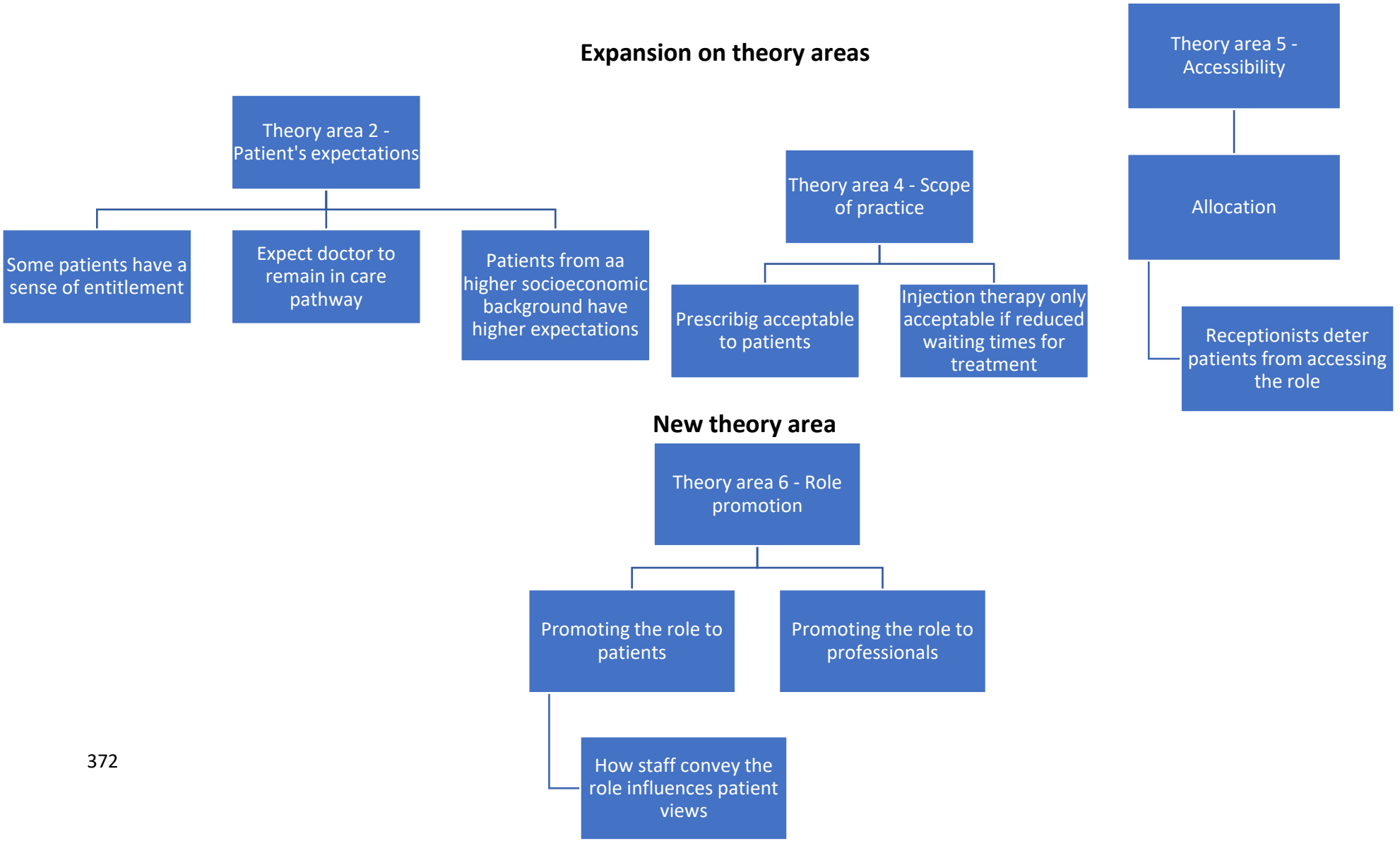
Appendix 3 Second iteration of the theory area flowchart



Appendix 4 Third iteration of the theory framework (derived from the literature)



Appendix 5 Third iteration of the theory framework



Appendix 6 Piloting data extraction sheets

There were no major discrepancies between the two sets of sheets, the minor differences highlighted were:

- The second reviewer had 'knowledge of the issues they [patients] are consulting for' as part of the question 'what are the origins of the expectations that influence patient views of the AP role?' The lead researcher did not extract this.
- Both the second reviewer and the lead researcher highlighted that the nurse practitioner (NP) gives more advice/education, and that this may affect future access of the role as patients may prefer this greater level of advice/ education. However, this was highlighted to be a difference in a biomedical or psychosocial consultation by the second reviewer only.
- The second reviewer and researcher did not always extract data into the same boxes, however, identical information was still extracted; therefore, the data extraction method achieved predictive validity (see glossary).

Appendix 7 Data extraction sheets

Full reference:
Theory area 1 – Patient's Previous Experience
What profession was the patient experiencing? What roles were the profession carrying out: practising within scope; extended scope; what skills or competencies did they have?
What are the characteristics of the previous experience (negative/positive experience)?
What impact does the previous experience have on patient views' of the AP role?
Do the patients have characteristics that may be relevant to our understanding of their views of the AP role? If so, what are they?
What is the interaction between the patient characteristics and their views of the AP role?
Is the evidence provided in this theory area good and relevant enough to be included in the synthesis (consider issues of sample size, data collection, data analysis and claims made)

Full reference:
Theory area 2 – Patient's Expectations
What profession was the patient experiencing? What roles were the profession carrying out: practicing within scope; extended scope; what skills or competencies did they have?
What is the nature of the patient expectations that influence patient views of the AP role (Service-related expectations, or expectations of condition management)?
What are the origins of the expectations that influence patient views of the AP role?
Did the patients have characteristics that may be relevant to our understanding of their views of the AP role? If so, what were they?
What is the interaction between the patient characteristics and their views of the AP role?
Is the evidence provided in this theory area good and relevant enough to be included in the synthesis (consider issues of sample size, data collection, data analysis and claims made)

Full reference:
Theory area 3 – Communication
What profession was the patient experiencing? What roles were the profession carrying out: practising within scope; extended scope; what skills or competencies did they have?
What practitioner's ways of working have an impact on patient views of the AP role?
What impact do these ways of working have on patient views of the AP role?
Did the patients have characteristics that may be relevant to our understanding of their views of the AP role? If so, what were they?
What is the interaction between the patient characteristics and their views of the AP role?
Is the evidence provided in this theory area good and relevant enough to be included in the synthesis (consider issues of sample size, data collection, data analysis and claims made)

Full reference:
Theory area 4 – Continuity of the Practitioner
What profession was the patient experiencing? What roles were the profession carrying out: practising within scope; extended scope; what skills or competencies did they have?
What characteristics of the continuity of the practitioner have an impact on patient views of the AP role?
What impact do these characteristics have on patient views of the AP role?
Did the patients have characteristics that may be relevant to our understanding of their views of the AP role? If so, what were they?
What is the interaction between the patient characteristics and their views of the AP role?
Is the evidence provided in this theory area good and relevant enough to be included in the synthesis (consider issues of sample size, data collection, data analysis and claims made)

Full reference:
Theory area 5 – Practitioner's Scope of Practice
What profession was the patient experiencing? What roles were the profession carrying out: practising within scope; extended scope; what skills or competencies did they have?
What practitioner competencies have an impact on patient views of the AP role?
What impact do these practitioner competencies have on patient views of the AP role?
Do the patients have characteristics that may be relevant to our understanding of their views of the AP role? If so, what are they?
What is the interaction between the patient characteristics and their views of the AP role?
Is the evidence provided in this theory area good and relevant enough to be included in the synthesis (consider issues of sample size, data collection, data analysis and claims made)

Full reference:
Theory area 6 – Accessibility
What profession was the patient experiencing? What roles were the profession carrying out: practising within scope; extended scope; what skills or competencies did they have?
What are the aspects of accessibility that influence patient views of the AP role?
What impact do these aspects of accessibility have on patient views of the AP role?
Did the patients have characteristics that may be relevant to our understanding of their views? If so, what were they?
What is the interaction between the patient characteristics and their views of the AP role?
Is the evidence provided in this theory area good and relevant enough to be included in the synthesis (consider issues of sample size, data collection, data analysis and claims made)

Full reference:
Theory area 7 – Promoting the AP role to patients
What profession was the patient experiencing? What roles were the profession carrying out: practising within scope; extended scope; what skills or competencies did they have?
What aspects of role promotion have an impact on patient views of the AP role?
What impact do these aspects of role promotion have on patient views of the AP role?
Did the patients have characteristics that may be relevant to our understanding of their views of the AP role? If so, what were they?
What is the interaction between the patient characteristics and their views of the AP role?
Is the evidence provided in this theory area good and relevant enough to be included in the synthesis (consider issues of sample size, data collection, data analysis and claims made)

Is there any information that is not relevant to this, or an, programme theory, that may contribute to new hypotheses formation and the programme theory? Provide this information below:
*This box was at the end of each theory area's data extraction sheet.

Appendix 8 Search strategy

Theory Area 1 Search Strategy

(1) previous experience' OR 'prior experience' AND 'patient' AND 'extended scope practitioner' OR 'ESP' OR 'nurse practitioner' OR 'practice nurse' OR 'first contact practitioner' OR 'general practice nurse' OR 'advanced nurse practitioner' OR 'first-point-of-contact' OR 'direct access' AND 'Primary Care' OR 'general pract* views OR accept* OR understanding OR satisfaction OR perceptions OR preferences OR expectations

Theory Area 2 Search Strategy

(1) patient AND expectations AND doctor OR 'general practitioner' OR physician AND 'Primary Care' OR 'general practice' AND 'extended scope practi*' OR 'ESP' OR 'nurse practitioner' OR 'practice nurse' OR 'first contact practitioner' AND 'nurse practitioner-led' AND 'general practice nurse' AND 'first-point-of-contact' AND 'direct access' AND views OR accept* OR understanding OR satisfaction OR perceptions OR pref*

(2) patient AND entitle* 'Primary Care' OR 'general practice' AND 'extended scope practi*' OR 'ESP' OR 'nurse practitioner' OR 'practice nurse' OR 'first contact practitioner' OR 'general practice nurse' OR 'first-point-of-contact' OR 'direct access' AND 'Primary Care' OR 'general practice'

(3) patient AND pref* OR expectations OR entitle* AND 'Primary Care' OR 'general practice' AND 'extended scope practi*' OR 'ESP' OR 'nurse practitioner' OR 'practice nurse' OR 'first contact practitioner' AND 'general practice nurse' AND 'first-point-of-contact' AND 'direct access' AND socioeconomic views OR accept* OR understanding OR satisfaction OR perceptions OR pref*

(4) patient AND expectations AND 'Primary Care' OR 'general practice' AND 'extended scope practi*' OR 'ESP' OR 'nurse practitioner' OR 'practice nurse' OR 'first contact practitioner' AND 'nurse practitioner-led' AND 'general practice nurse' AND 'first-point-of-contact' AND 'direct access' OR serious OR chronic AND condition OR disease

(5) patient AND pref* OR expectations OR entitle* AND 'Primary Care' OR 'general practice' AND 'extended scope practi*' OR 'ESP' OR 'nurse practitioner' OR 'practice nurse' OR 'first contact practitioner' AND 'nurse practitioner-led' AND 'general practice nurse' AND 'first-point-of-contact' AND 'direct access' AND 'hospital'

Theory Area 3 Search Strategy

'patient AND expectations AND 'Primary Care' OR 'general practice' AND 'extended scope practi*' OR 'ESP' OR 'nurse practitioner' OR 'practice nurse' OR 'first contact practitioner' OR 'nurse practitioner-led' AND 'general practice nurse' OR 'first-point-of-contact' OR 'direct access' AND 'provision information' OR education OR 'social support' OR 'collaborative working' OR communication OR 'inter-personal skills' OR 'explanatory skills'

OR 'clinician patient interaction' OR holistic OR enable* views OR accept* OR understanding OR satisfaction OR perceptions OR pref*

Theory Area 4 Search Strategy

'patient AND views OR accept* OR satisfaction OR perceptions OR preferences AND 'Primary Care' OR 'general practice' AND 'extended scope practi*' OR 'ESP' OR 'nurse practitioner' OR 'practice nurse' OR 'first contact practitioner' AND 'nurse practitioner-led' AND 'general practice nurse' AND 'first-point-of-contact' AND 'direct access' AND continuity

Theory Area 5 Search Strategy

'scope of practice' OR 'extended scope' OR skills OR competencies OR inject* OR prescribing AND 'patient' AND 'extended scope practitioner' OR 'ESP' OR 'nurse practitioner' OR 'practice nurse' OR 'first contact practitioner' OR 'general practice nurse' OR 'advanced nurse practitioner' OR 'first-point-of-contact' OR 'direct access' AND 'Primary Care' OR 'general pract* AND views OR accept* OR understanding OR satisfaction OR perceptions OR pref*

Theory Area 6 Search Strategy

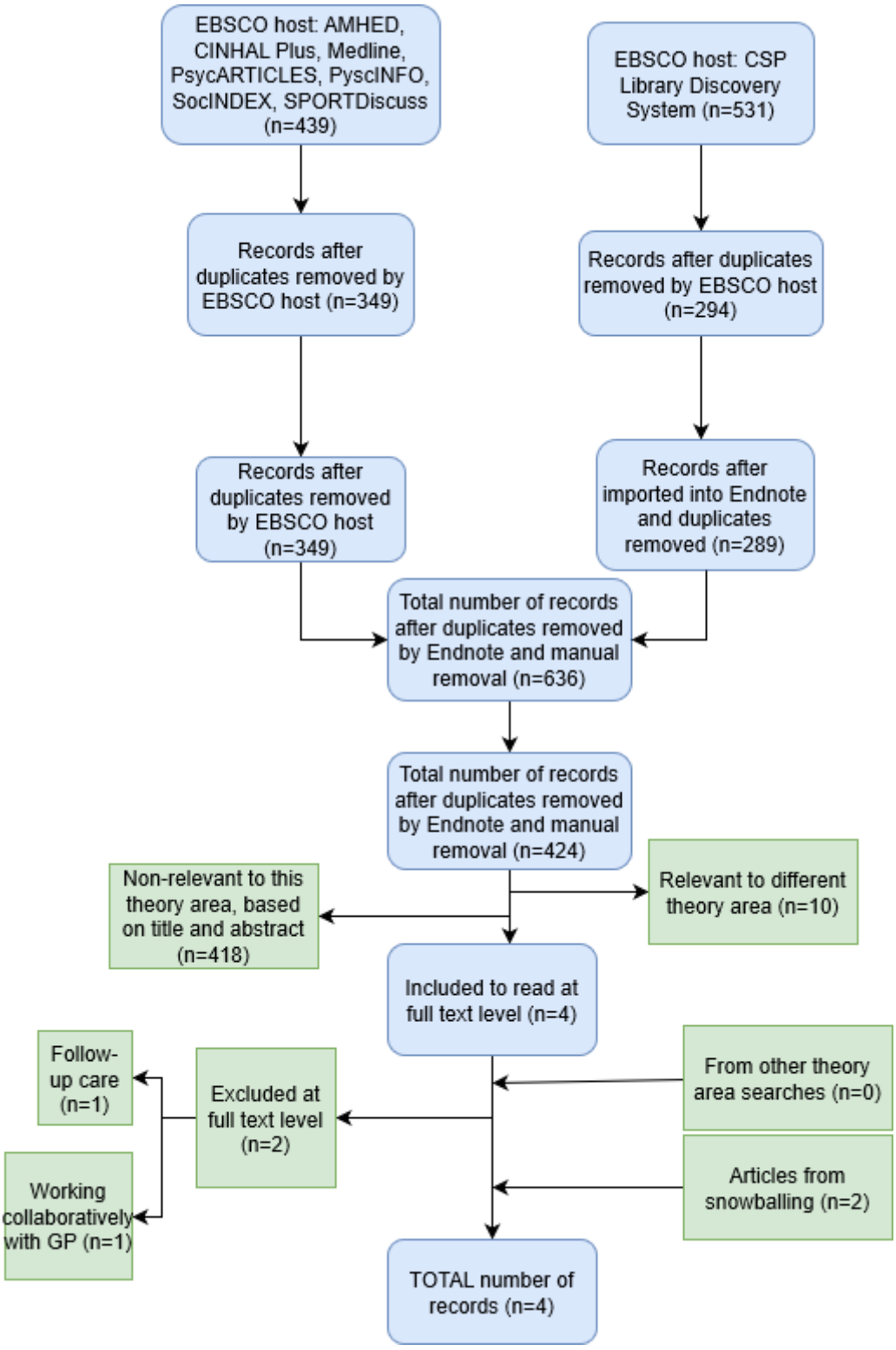
'patient' AND 'extended scope practitioner' OR 'ESP' OR 'nurse practitioner' OR 'practice nurse' OR 'first contact practitioner' OR 'nurse practitioner-led' OR 'general practice nurse' OR 'advanced nurse practitioner' OR 'first-point-of-contact' OR 'direct access' AND 'physiotherap*' OR 'nurse*' AND 'Primary Care' OR 'general pract* views OR accept* g OR satisfaction OR perceptions OR preferences AND access* OR 'time with patients' OR 'consultation time' OR 'length' AND appointment OR consultation OR assessment

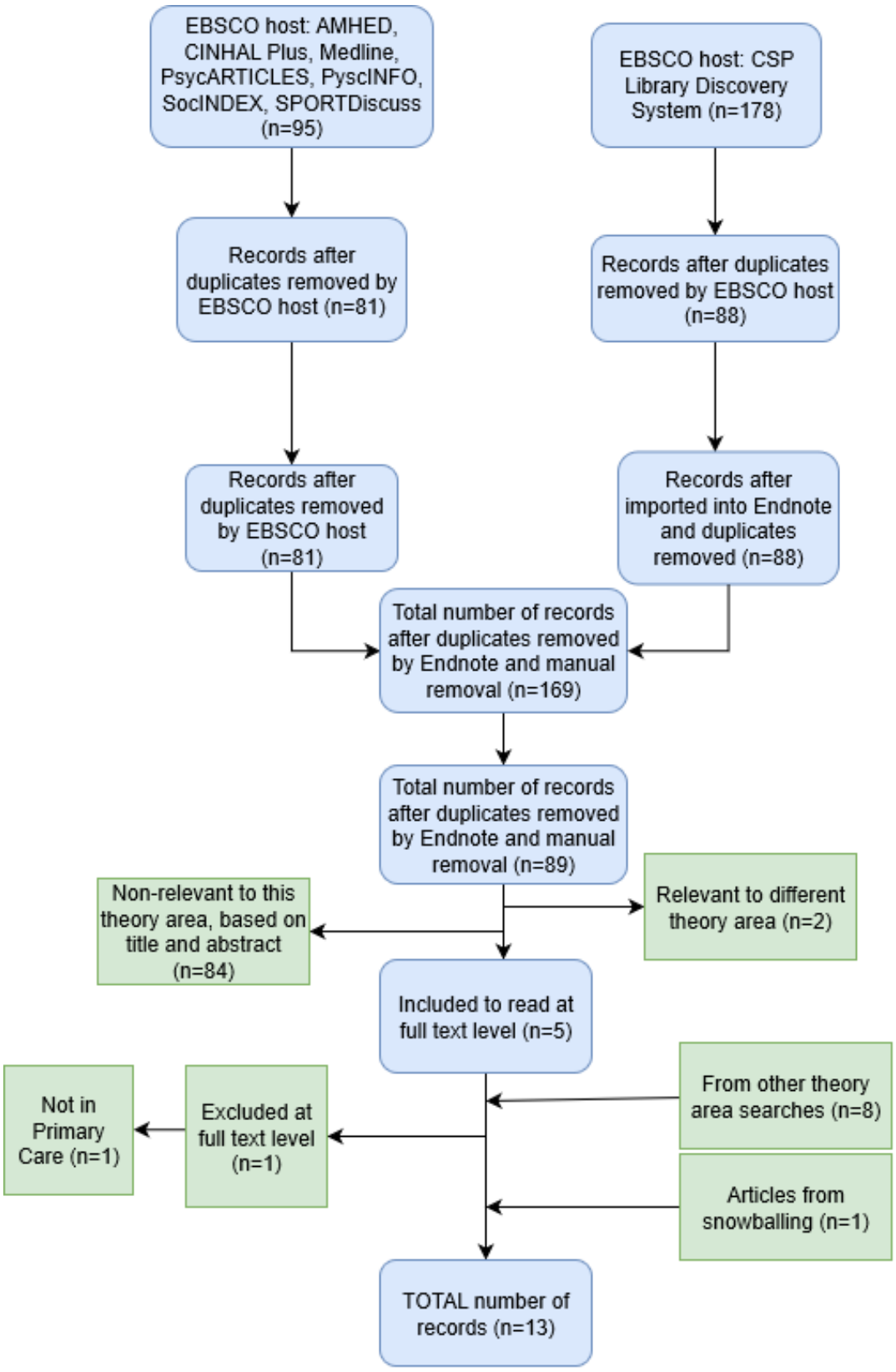
Theory Area 7 Role Promotion

'patient AND expectations AND 'Primary Care' OR 'general practice' AND 'extended scope practi*' OR 'ESP' OR 'nurse practitioner' OR 'practice nurse' OR 'first contact practitioner' OR 'nurse practitioner-led' AND 'general practice nurse' OR 'first-point-of-contact' OR 'direct access' AND views OR accept* OR understanding OR satisfaction OR perceptions OR pref* AND role AND promotion OR awareness NOT 'health promotion

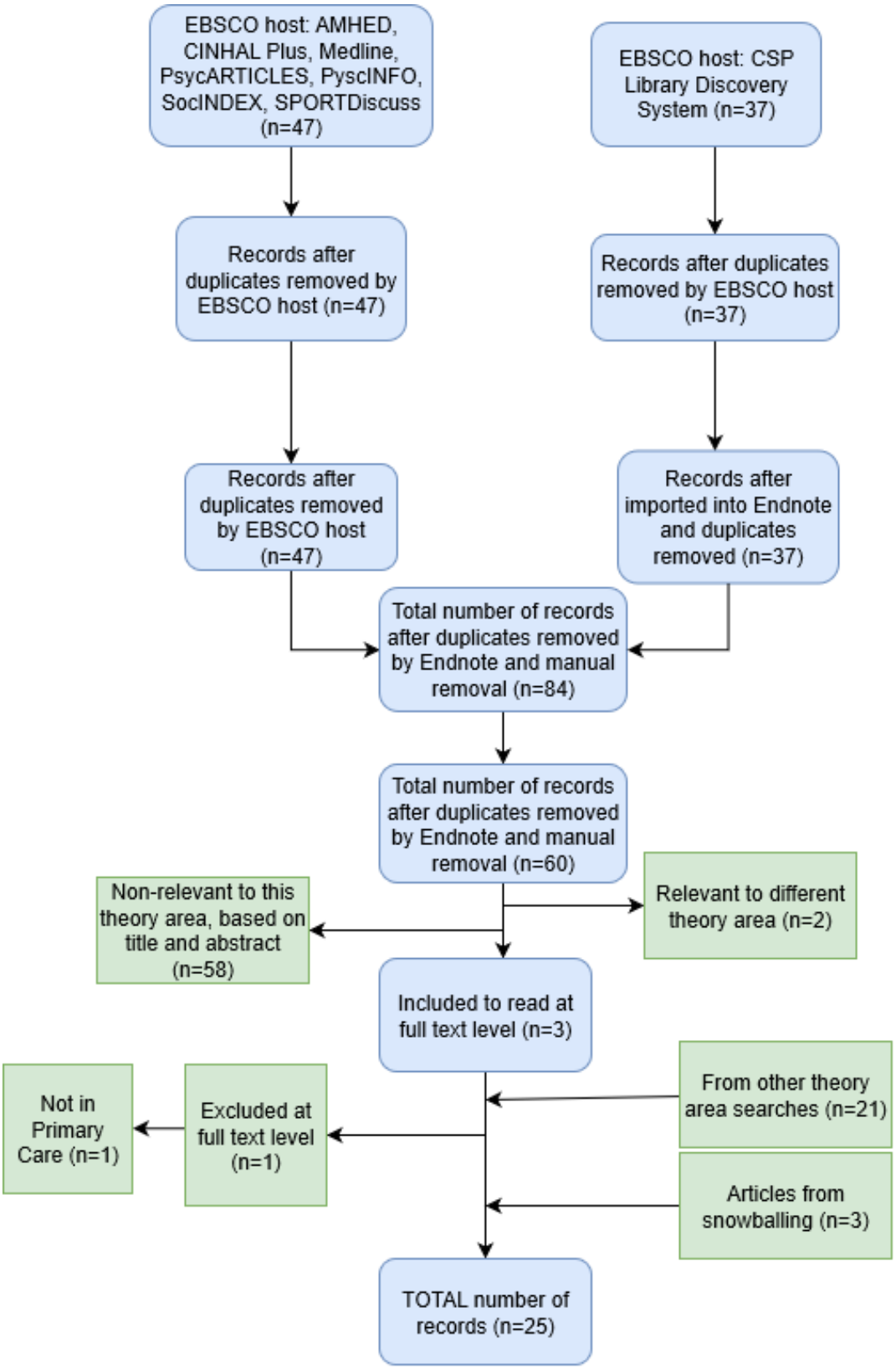
Appendix 9 Process of screening literature

Screening for Theory Area 1, Experience

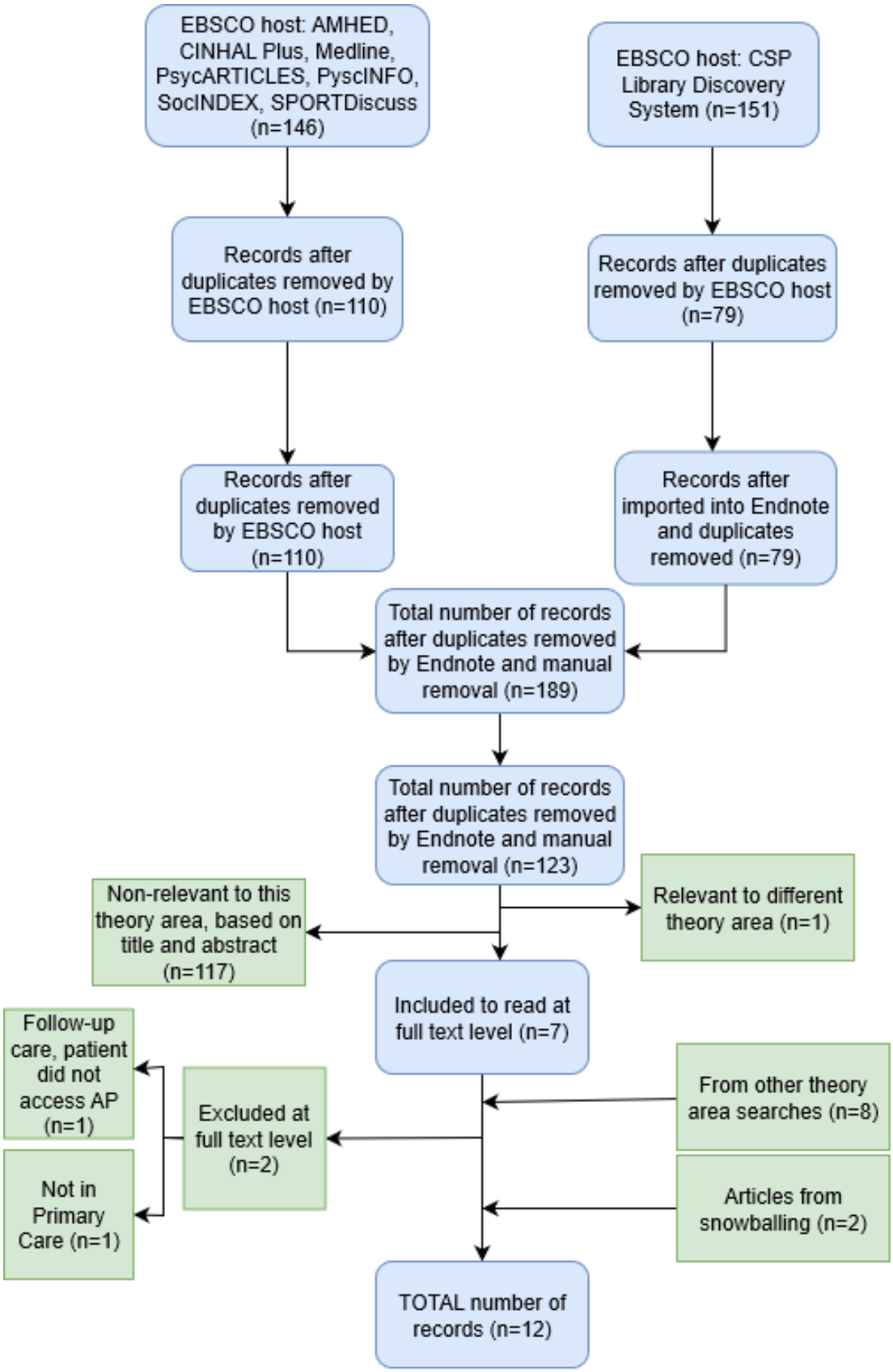



EBSCO host: AMHED, CINHAL Plus, Medline, PsycARTICLES, PsycINFO, SocINDEX, SPORTDiscuss (n=95)
EBSCO host: CSP Library Discovery System (n=178)
Records after duplicates removed by EBSCO host (n=81)
Records after duplicates removed by EBSCO host (n=88)
Records after duplicates removed by EBSCO host (n=81)
Records after imported into Endnote and duplicates removed (n=88)
Total number of records after duplicates removed by Endnote and manual removal (n=169)
Total number of records after duplicates removed by Endnote and manual removal (n=89)
Non-relevant to this theory area, based on title and abstract (n=84)
Relevant to different theory area (n=2)
Included to read at full text level (n=5)
Not in Primary Care (n=1)
Excluded at full text level (n=1)
From other theory area searches (n=8)
Articles from snowballing (n=1)
TOTAL number of records (n=13)

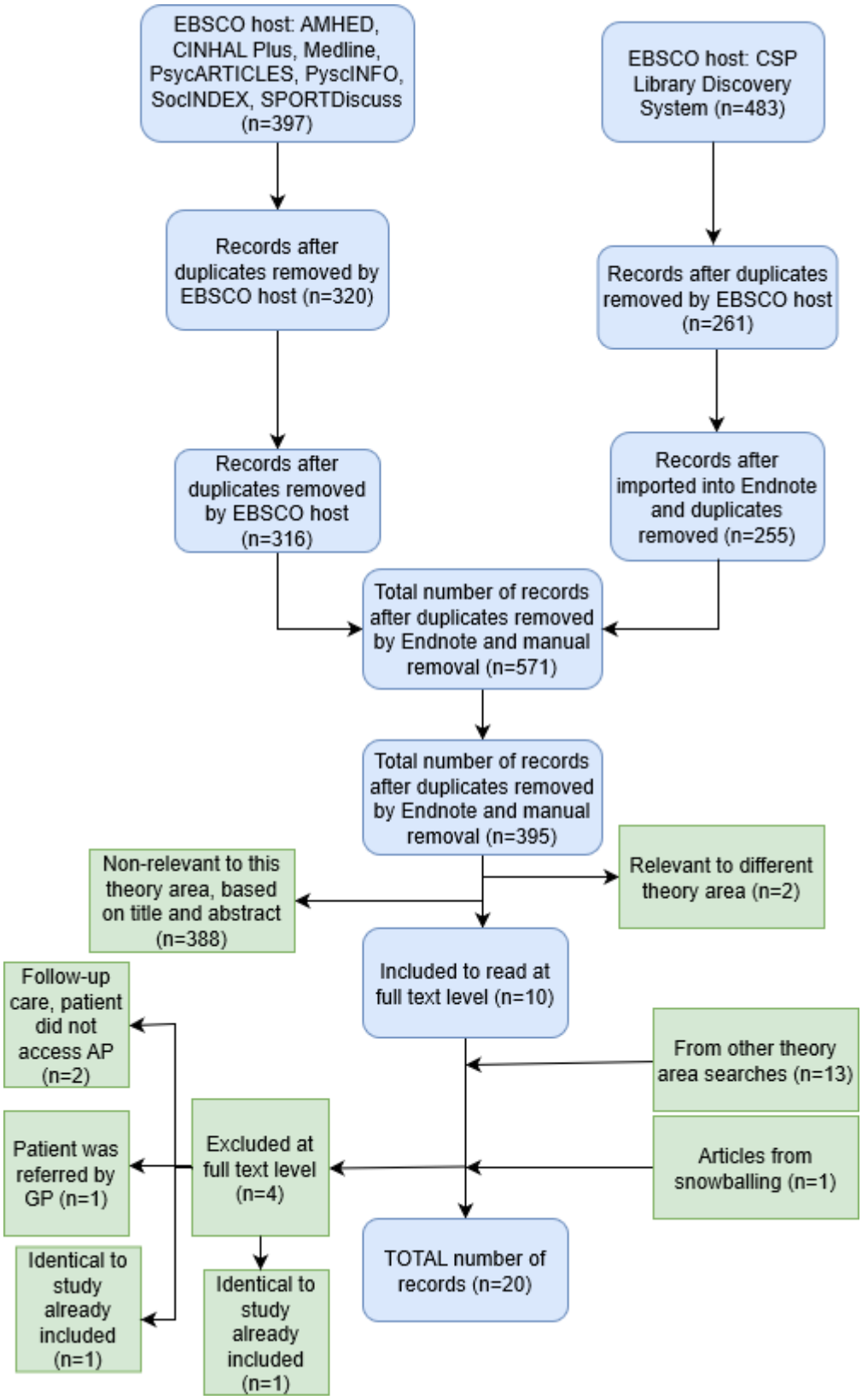
Screening for Theory Area 3, Communication



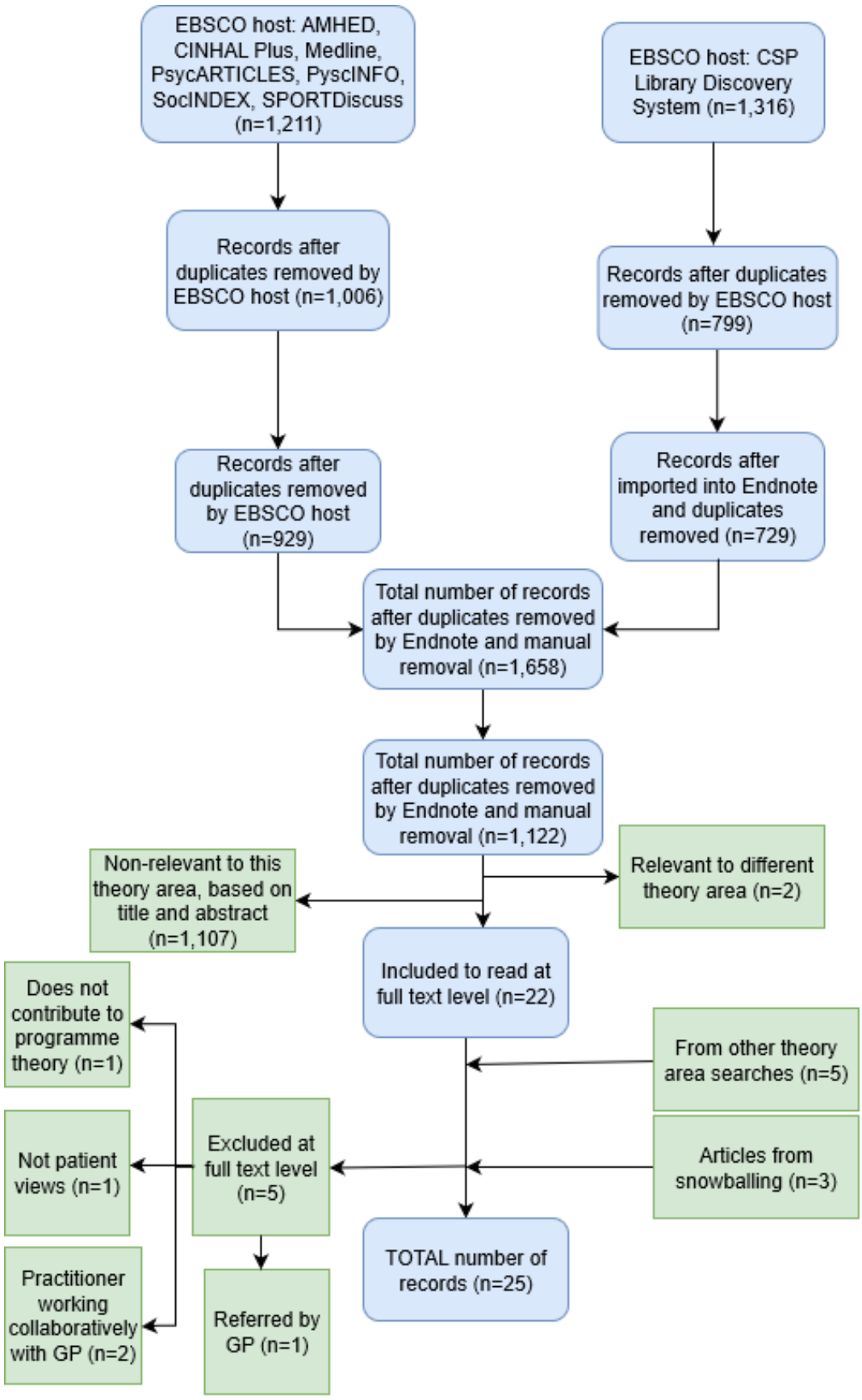
Screening for Theory Area 4, Continuity



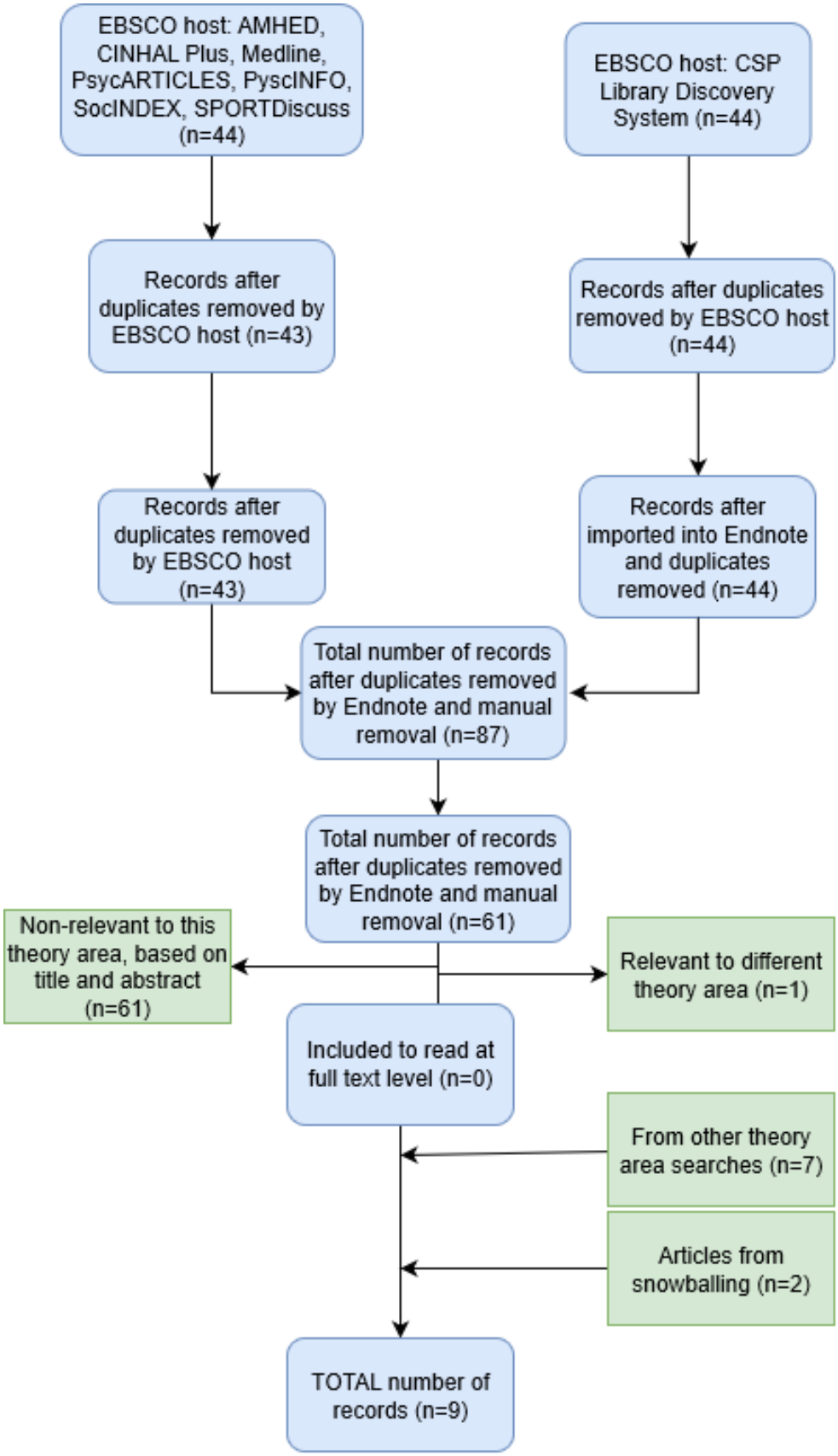
Screening for Theory Area 5, Scope of Practice



Screening for Theory Area 6, Accessibility



Screening for theory area 7, Promoting the Role



Appendix 10 Study list

Study Number	Full Reference	Searches that Included this Study	Theory Area(s) it relates to
1	Halcomb, E.J., Peters, K. and Davies, D. (2013) A qualitative evaluation of New Zealand consumers perceptions of general practice nurses. BMC Family Practice [online]. 14 (26), pp. 1-7. [Accessed 18 November 2019].	Scope	Expectations, Communication, Continuity, Accessibility
2	Phillips, D. and Brooks, F. (1998) Women users' views on the role and value of the practice nurse. *Health and Social Care in the Community.* 6 (3), pp. 164–171.	Expectations, role promotion, Communication, experience	Communication, Continuity, Accessibility
3	Young, J., Eley, D., Patterson, E. and Turner, C. (2016) A nurse-led model of chronic disease management in general practice: Patients ' perspectives. *The Royal Australian College of General Practitioners*. 45 (12), pp. 912–916.	Scope	Expectations, Communication, Accessibility
4	Brooks, N., Otway, C., Rashid, C., Kilty, L. and Maggs, C. (2001) Nurse prescribing: what do patients think? *Nursing Standard*. 15 (17), p. 33-38.	Scope, Experience, Access	Communication, Continuity, Scope, Accessibility
5	Edwall, L. and Danielson, E. (2008) The lived experience of the diabetes nurse specialist regular check-ups , as narrated by patients with type 2 diabetes. *Journal of Clinical Nursing*. 17, pp. 772-781.	Continuity, Experience, Access	Communication, Continuity
6	Fortin, M., Hudon, C., Gallagher, F., Ntetu, A.L., Maltais, D. and Soubhi, H. (2010) Nurses joining family doctors in Primary Care practices: perceptions of patients with multimorbidity. BioMed Central Family Practice. 11 (84), pp.1-9.	Expectations, Access	Expectations, Continuity, Role Promotion
7	Roblin, D.W., Becker, E.R., Adams, E.K., Howard, D.H. and Roberts, M.H. (2004) Patient Satisfaction With Primary Care. *Medical Care*. 42 (6), pp. 579–590.	Experience	Accessibility
8	Mahomed, R., John, W.S. and Patterson, E. (2012) Understanding the process of patient satisfaction with nurse-led chronic disease management in general practice. *Journal of Advanced Nursing*. 68 (11), pp. 2538-2549.	Continuity, Scope, Access	Expectations, Communication, Continuity, Accessibility

9	Bergman, K., Perhed, U., Eriksson, I., Lindblad, U. and Fagerström, L. (2013) Patients' satisfaction with the care offered by advanced practice nurses: A new role in Swedish Primary Care. *International Journal of Nursing Practice*. 19 (3), pp. 326–333	Continuity, Access	Experience, Expectations, Continuity, Scope, Accessibility
10	Redsell, S., Stokes, T. and Baker, R. (2007) Patients' expectations of ' first-contact care ' consultations with nurse and general practitioners in Primary Care. *Quality in Primary Care*. 15, pp. 5–10.	Experience, Expectations, Scope, Access	Experience, Communication,
11	Desborough, J., Bagheri, N., Banfield, M., Mills, J., Phillips, C. and Korda, R. (2016) The impact of general practice nursing care on patient satisfaction and enablement in Australia: A mixed methods study*. International Journal of Nursing Studies*. 64, pp. 108–119.	Continuity, Scope, Access	Scope, Role Promotion
12	Gerard, K., Tinelli, M. and Latter, S., Smith, A., and Bleinkinsopp, A. (2014) Patients ' valuation of the prescribing nurse in Primary Care: a discrete choice experiment. *Health Expectations*. 18, pp. 2223-2235.	Experience, Access, Scope, Expectations	Experience, Communication,
13	Dhalivaal, J. (2011) Patients ' perspectives on prescribing by nurses in general practice. *Practice Nursing*. 22 (1), pp. 41-46.	Experience, Access	Communication, Scope, Accessibility
14	The EROS Team (1999) Training nurse practitioners for general practice. *British Journal of General Practice.* 49, pp. 531–535.	Experience	Expectations, Communication,
15	Redsell, S., Stokes, T.,M Jackson, C., Hastings, A., and Baker, R. (2006) Patients' accounts of the differences in nurses' and general practitioners' roles in Primary Care. *Journal for Advanced Nursing*. 57 (2), pp. 172-180.	Continuity, Access	Communication, Continuity, Accessibility, Hierarchy
16	Kernick, D.P., Watson, M., Baker, H., Sanders, T., Manley, C., Sawkins, J. and Kernick, V. (1999) An audit of practice nurse specialist clinics for minor illness. *Clinical Effectiveness in Nursing.* 3 (3), pp. 132–135.	Scope, Experience, Access	Communication, Accessibility
17	Tinelli, M., Blekinsopp, A., Latter, S., Smith, A., and Chapham, S. R. (2013) Survey of patients' experiences and perceptions of care provided by nurse and pharmacist independent prescribers in Primary Care. *Health Expectations*, 18, pp. 1241–1255.	Experience, Access	Communication, Accessibility
18	Maul, T.M., Zaidi, A., Kowalski, V., Hickey, J., Schnug, R., Hindes, M. and Cook, S. (2015) Patient Preference and Perception of Care Provided by Advance Nurse Practitioners and Physicians in Outpatient Adult Congenital Clinics. *Congenital Heart Disease*. 10, pp. 225–229.	Experience	Expectations, Communication, Role Promotion

19	Parker, R., Forrest, L., Mccracken, J., Mcrae, I., and Cox, D. (2012) What primary health-care services are Australian consumers willing to accept from nurse practitioners ? A National Survey. *Health Expectations*. 17, pp. 733–740	Communication, Expectations	Expectations, Scope
20	Shum, C., Humphreys, A., Wheeler, D., Cochrane, M., Skoda, S., and Clement, S. (2000) Nurse management of patients with minor illnesses in general practice: multicentre, randomised controlled trial. *General Practice*. 320, pp.1038-1043.	Access	Communication, Accessibility
21	Langer, S. R. (1995) Patient satisfaction with outpatient human immunodeficiency virus care as delivered by nurse practitioners and physicians. *Holistic Nursing Practice*. 10, pp. 54-60.	Continuity, Access	Accessibility
22	Chapple, A., Rogers, A., Macdonald, W. and Sergison, M. (2000) Patients ' perceptions of changing professional boundaries and the future of ' nurse-led ' services. *Primary Care Research and Development.* 1 (1), pp. 51–59.	Snowball (see glossary)	Experience, Communication, Continuity, Role Promotion, Hierarchy
23	Baldwin, K.A., Sisk, R.J., Watts, P., McCubbin, J., Brockschmidt, B., Marion, L.N. (1996) Acceptance of Nurse Practitioners and Physician Assistants in Meeting the Perceived Needs of Rural Communities. *Public Health Nursing*. 15 (6), pp. 389–397.	Snowball	Experience, Accessibility, Role Promotion
24	Myers, P. C., Lenci, B, and Sheldon, M.G. (1997) A nurse practitioner as the first-point-of-contact for urgent medical problems in a general practice setting. *Family Practice*. 14 (6), pp.492-497.	Snowball	Expectations, Communication,
25	Caldow, J., Bond, C., Ryan, M., Campbell, N. C., San Miguel, F., Kiger, A., and Lee, A. (2006) Treatment of minor illness in Primary Care: a national survey of patient satisfaction , attitudes and preferences regarding a wider nursing role. *Health Expectations*. 10, pp. 30–45.	Expectations, Access, Communication	Expectations, Communication, Scope, Accessibility, Role Promotion
26	Perry, C., Thurston, M., Killey, M. and Miller, J. (2005) The nurse practitioner in Primary Care: alleviating problems of access? *British Journal of Nursing*. 14 (50), pp.255-259.	Access, Experience, continuity	Communication,
27	Reveley, S. (1998) The role of the triage nurse practitioner in general medical practice: an analysis of the role. *Journal of Advanced Nursing*. 28 (3), pp.584-591.	Access	Communication, Accessibility, Role Promotion

28	Williams, A. and Jones, M. (2006) Patients' assessments of consulting a nurse practitioner: the time factor. *Issues and Innovation in Nursing Practice*. 53 (2) pp.188-195.	Access	Communication, Continuity, Scope, Accessibility, Role Promotion
29	Holdsworth, L.K. and Webster, V.S. (2004) Direct access to physiotherapy in Primary Care: Now? - And into the future? *Physiotherapy*. 90 (2), pp. 64–72.	Access	Expectations
30	Wasylkiw, L., Gould, O.N. and Johnstone, D. (2009). Exploring women's attitudes and intentions to seek care from nurse practitioners across different age groups. *Canadian Journal on Aging*. 28 (2), pp.177-183.	Continuity, Experience, Scope	Experience, Role Promotion
31	Luker, K., A., Austin, L., Hogg, C., Ferguson, B. and Smith, K. (1998) Nurse-patient relationships: the context of nurse prescribing. *Journal of Advanced Nursing*. 28 (2), pp. 235-242.	Access	Expectations, Communication, Continuity, Accessibility
32	Chartered Society of Physiotherapy (2016b) Physiotherapy First; Direct Access Physiotherapy Service. Available from: https://casestudies.csp.org.uk/case-studies/physiotherapy-first-direct-access-physiotherapy-service. [Accessed: 8th February 2017].	CSP database	Communication, Accessibility
33	Chartered Society of Physiotherapy (2017a) GP MSK Pilot. Available from: https://casestudies.csp.org.uk/case-studies/gp-msk-pilot. [Accessed: 8th February 2017].	CSP database	Experience
34	Heale, R., and Pilon, R. (2012) An exploration of patient satisfaction in a nurse practitioner-led clinic. *Nursing Research*. 25 (3), pp.43-55.	Experience, access	Scope of Practice, Accessibility
35	Barratt, J. (2016) *A case study of the nurse practitioner consultation in Primary Care: communication processes and social interactions.* PhD, London South Bank University.	Experience, expectations, Communication, access	Expectations, Communication, Continuity, Scope, Accessibility, Role Promotion, Hierarchy
36	Webster, V. S., Holdsworth, L. K., McFayden, A. K. and Little, H. (2008) Self-referral, access and physiotherapy attitudes – results of a national trial. *Physiotherapy*. 94 (2), pp. 141-149.	Snowball	Communication, Scope, Accessibility, Role Promotion
37	Catherine Mary Wynne (2016) *A Service Evaluation of physiotherapists with advanced practice skills, assessing patients with musculoskeletal conditions as an alternative to their general practitioner (GP).* MSc Dissertation, Bangor University.	Snowball	Accessibility

Appendix 11 Data extraction tables

Theory Area	**Full reference:** Bergman, K., Perhed, U., Eriksson, I., Lindblad, U. and Fagerström, L. (2013) Patients' satisfaction with the care offered by advanced practice nurses: A new role in Swedish Primary Care. *International Journal of Nursing Practice.* 19 (3), pp. 326–333.			**Article number:** 9 **Country:** Sweden
	Characteristics of theory area and their impact on patient views	**Themes**	**Chains of Inference**	**Chains of Inference Articles**	**Hypotheses**
2 **Patient Expectations of Condition Management**	Patients had the same expectations for an advanced nurse practitioner consultation as they did for a GP consultation. There was an expectation from some patients that nurses should be able to prescribe (this APN was unable to) to save the time having to find a GP. Although some patients happy with nurse consulting with the doctor regarding their prescription, in order to ensure they don't take any risks by making a wrong diagnosis.	Same expectations AP as GP Expectation AP prescribe Risk of AP prescribing Variation in patient expectations for prescribing	Previous experience of GP impacting upon patient expectations of an AP consultation Prescribing	6, 12, 10 35, 9, 4, 25, 13, 34, 16, 31, 28, 19, 17, 10	(7) Patients less accepting of the role if prescriptions are not checked by the GP.
4 **Continuity of the Individual Practitioner**	Patients liked knowing who works in the practice, rather than a new GP every time. Patients associated concepts of increased availability and continuity in healthcare to the APN role.	Experience of a lack of GP continuity Associated concept of continuity with the AP role	Experience of GP shortfalls	9, 12, 35, 13, 22, 25, 26, 28, 13	(12) Having familiarity in the consultation increases patient acceptability of the AP.
5 – **Scope of Practice …**					

Theory Area	**Full reference:** Caldow, J., Bond, C., Ryan, M., Campbell, N. C., San Miguel, F., Kiger, A., Lee, A. (2006) Treatment of minor illness in Primary Care: a national survey of patient satisfaction, attitudes and preferences regarding a wider nursing role. *Health Expectations*. 10, pp. 30–45				**Article number:** 25 **Country:** Scotland
	Characteristics of theory area and their impact on patient views	**Themes**	**Chains of Inference**	**Chains of Inference Articles**	**Hypotheses**
2 – **Patient Expectations of Condition Management**	The nature of the illness as the deciding factor for patients when deciding whether to consult with a NP. Patients' perceived severity of the condition may be related to preferences for seeing a PN or GP. An expectation that PNs could deal with what they thought was a minor problem, and make simple diagnoses (common colds, coughs and headaches…). Although some patients expressed concerns about misdiagnosis. An expectation that PNs should be able to prescribe certain medicines for certain conditions. The study claims that 'patients are changing too, in knowledge of their own condition and knowledge of service available consequently increasing demands on primary health care.' (p.44) The study postulates that patient expectations of healthcare are increasing. There was an expectation to be seen by a GP rather than a PN if the patient had high positive attitude for the GP.	Perceived severity of condition related to practitioner preference Minor problem Concerns about misdiagnosis Prescribe certain conditions Increasing patient expectations Expectation seen by GP Good relationship with GP	Perceived severity of condition Prescribing Existing relationship with GP	1, 3, 4, 8, 9, 10, 14, 16, 18, 19, 24, 25, 31, 35 35, 9, 4, 25, 13, 34, 16, 31, 28, 19, 17, 10 9, 6, 15, 22, 28	(5) Patient perceptions of 'serious' conditions affects acceptability of the AP consultation. (7) Lack of patient choice decreases patient acceptability of the FCP role.
3- **Practitioner's Ways of Working..**					

Appendix 12 Overview of study's for theory area 1, Experience

Study number	Citation	Professional (terminology used in study)	Country of origin	Study design	Data collection method	Sampling method	Number of practices/ clinics	sample size	data analysis methods	Summary of Key findings
9	Bergman *et al.* (2013)	Advanced NPs (APN)	Sweden	Mix.	Q.	Conv.	5 primary health care centres	223	Inf.	Patients had the same expectations for an advanced nurse practitioner consultation as they did for a GP. Previous experience of a GP resulted in an expectation that NPs should be able to prescribe.
10	Redsell *et al.* (2007)	First Contact Care Nurse	UK, 1 city	Qual.	Semi-struc.	Conv.	2 practices	18	TA	Patient experience of previous GP consultations, and the outcome of this consultation influences their expectations. These outcomes may be, for instance: prescriptions, answers to questions, examination or self-referral to another care provider; recognising they had a serious illness. Patient experience of previous GP consultations, and the outcome of this consultation influences their expectations.

Key for Study Tables

Study design:

Mix. = mixed methods

Qual. = qualitative

Quant. = quantitative

Observ. = observational

Quasi = quasi experimental

Data Collection Method

Q. = questionnaire

Semi-struc. = semi-structured interview

Surv. = survey

Sampling Method

Conv. = convenience

Purp. = purposive

Snowb. = snowballing

Data analysis method

Inf. = inferential statistics

Descrip. = descriptive statistics

TA = thematic analysis

Compar. = comparative analysis

Framew. = framework analysis

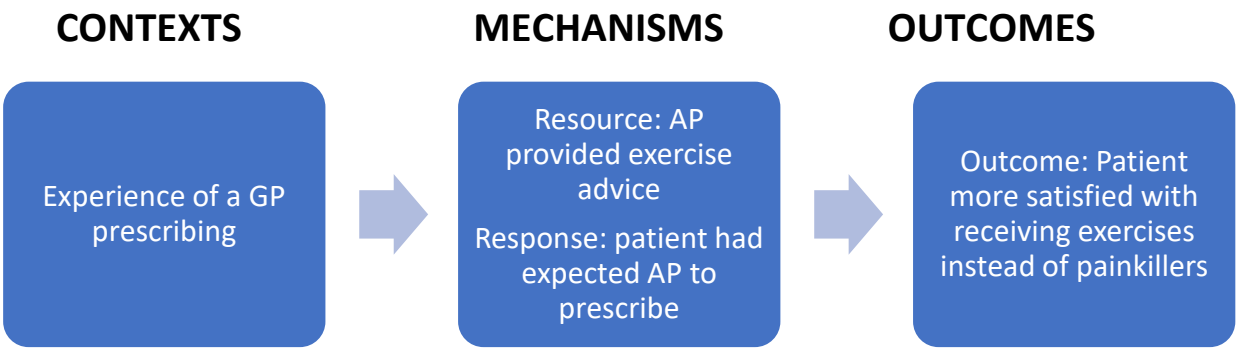
12	Gerard *et al.* (2014)	Prescribing Nurse Practitioner	UK, 5 practices geograp-hically spread out	DCE	Q.	Conv.	5 General Practices	451	Infer.	Patients with experience of a nurse prescribing more likely to access a nurse prescriber in Primary Care for a minor illness than 'do nothing'. Preference was still for GP. Previous experience of negative GP attributes, influences patient views. Negative attributes can be offset by experience of positive nurse attributes. Patients have limited exposure, therefore experience, of prescribing nurses. Patients expressed strong preference for 'appearing to listen to your views about your problems/ medicines'. Previous experience of negative GP attributes, influences views. Negative attributes can be offset by experience of positive nurse attributes – inlcuding the lowest utility consultations styles: Doctor (See next day, 10-min consult, not pay attention, diagnosis & advice) 1.0 in utility Doctor (see 2 days alter. 10-min consult, not pay attention, diagnosis & advice) 0.9 utility. NIP score higher, e.g. 15 minute walk-in nurse consultation during which the nurse pays attention to the patient's views on their condition/medicines and offers diagnosis/advice, preferred to GP styles.

22	Chapple *et al.* (2000)	Nurse-led clinic	UK	Observ.	in-depth interviews and Q.	Conv.	1 General Practice	49	Compar.	Patient reported on an experience in the hospital as a cardiac patient. The participant observed that people consulted the nurses on the ward and not the doctor for problems. The participant reported this had led to a personal high-level of respect for nurses.
23	Baldwin *et al.* (1996)	Nurse Practitioners and Physician Assistants	USA, mid-western	qualitative	5 focus groups	purp., conv. and snowb.	Unclear, but 5 different areas	30	TA	This study highlights a lack of prior experience to NP and physician assistants (PAs), and patients therefore not being able to form expectations. Patients reported that they would not feel uncomfortable if they understood the scope in which the nurse was qualified to practice.
30	Wasylkiw, Gould and Johnstone, (2009)	Nurse Practitioner	USA, New Brunswick	Descriptive Quant. study	Q.	Conv.	Not applicable	196	Descript.	Preventative health care is carried out by the wider nursing profession, and not just NPs. Women's experience of wider nursing professions' preventative care was associated with likelihood of seeking help from NPs, but not associated with seeking help from physicians.

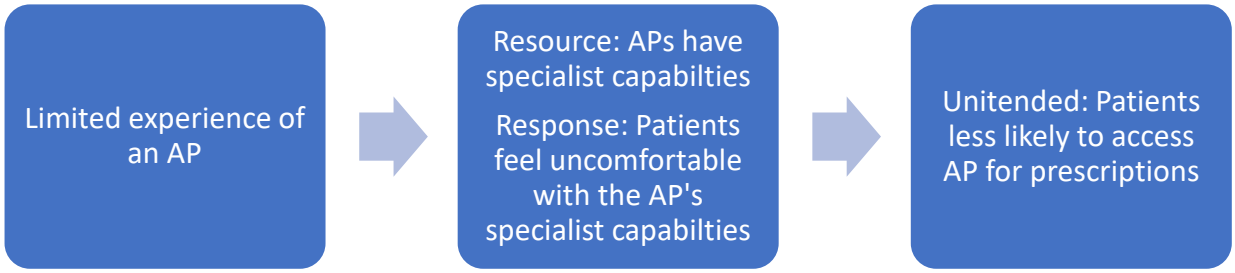
33	Chartered Society of Physiotherapy (2017a)	FCP	UK	mixed method, observational, audit	satisfaction Surv.	Conv.	1 GP surgery	70	Descript. and quail. extracts	The specialist physiotherapist is able prescribe and reer for imaging or secondary care. A participant expressed that they had expected to leave with the usual painkillers, but instead went home with helpful advice. They felt the consultation was successful. The study highlighted that advice was key theme across participant interviews. Participants were positive about advice and exercises received. They were particularly positive about receiving this advice quickly and it reassuring them. One participant stated they were happy with the useful advice rather than the usual painkillers. 985 rated assessment advice given as 8 and above.

Appendix 13 Experience CMOs

(2) Patient perceptions of GPs formed from previous GP consultations will influence the patient acceptability of the AP role.

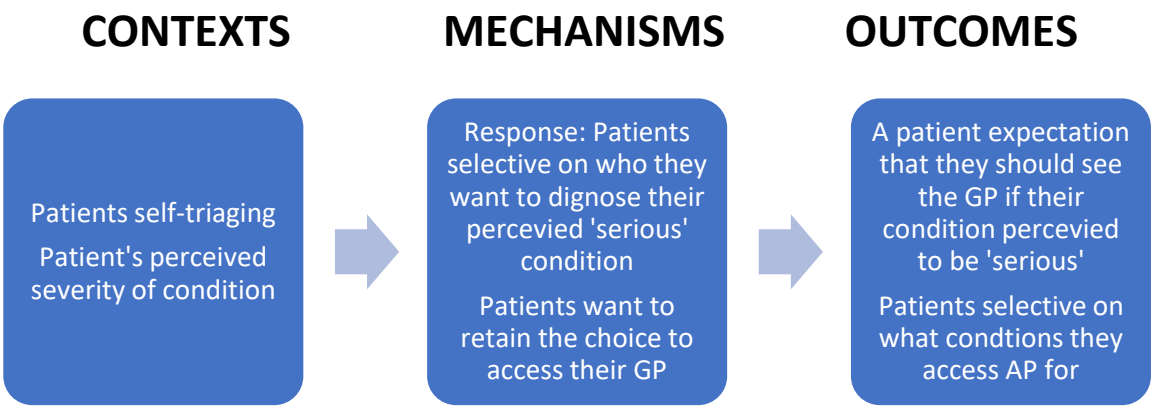


(3) Limited prior experience of an AP decreases patient acceptability of the role.

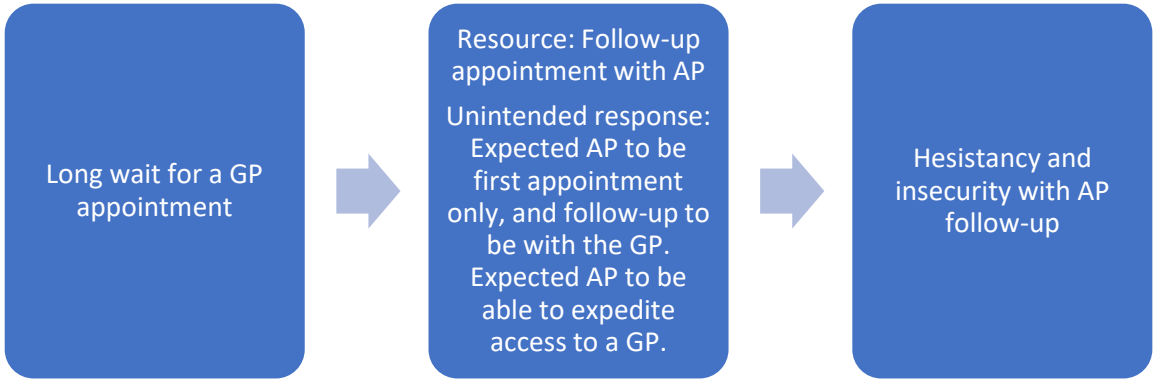


Appendix 14 Expectation CMOs

(7) Lack of patient choice decreases patient acceptability of the FCP role.

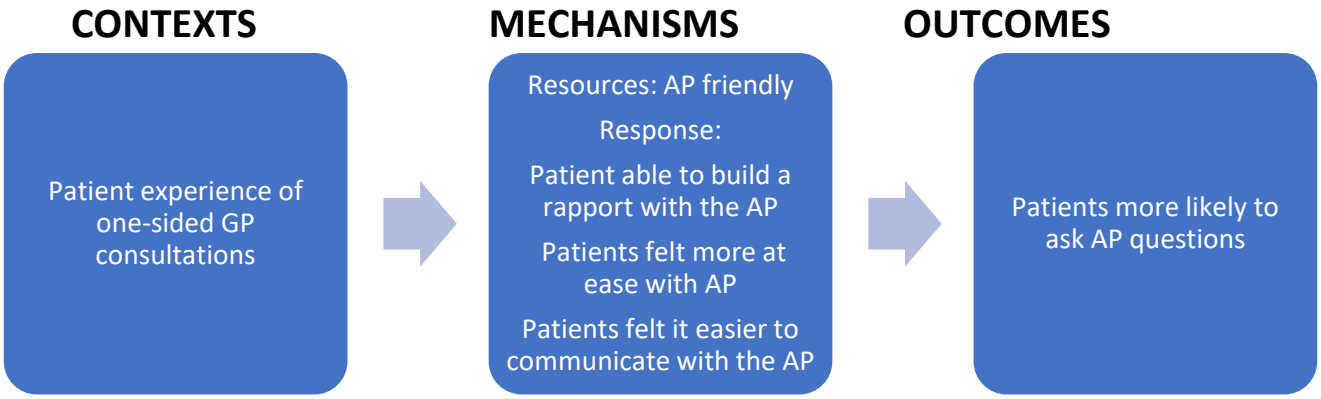


(8) Patients find the role more acceptable if they expect that an engagement with FCP will provide indirect access to other services.

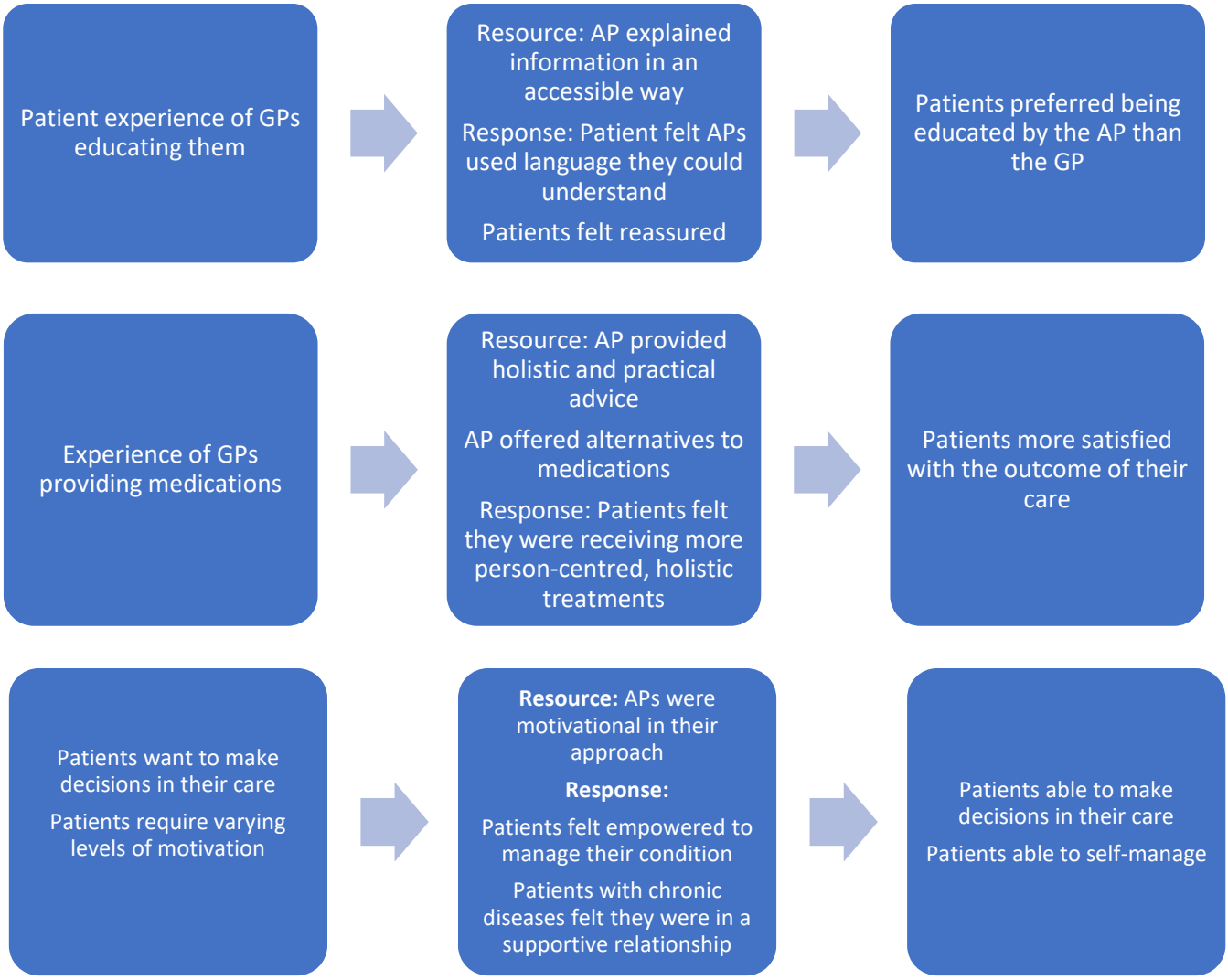


Appendix 15 Communication CMOs

(9) The AP role is more acceptable to patients when the AP has an informal discussion with the patient.

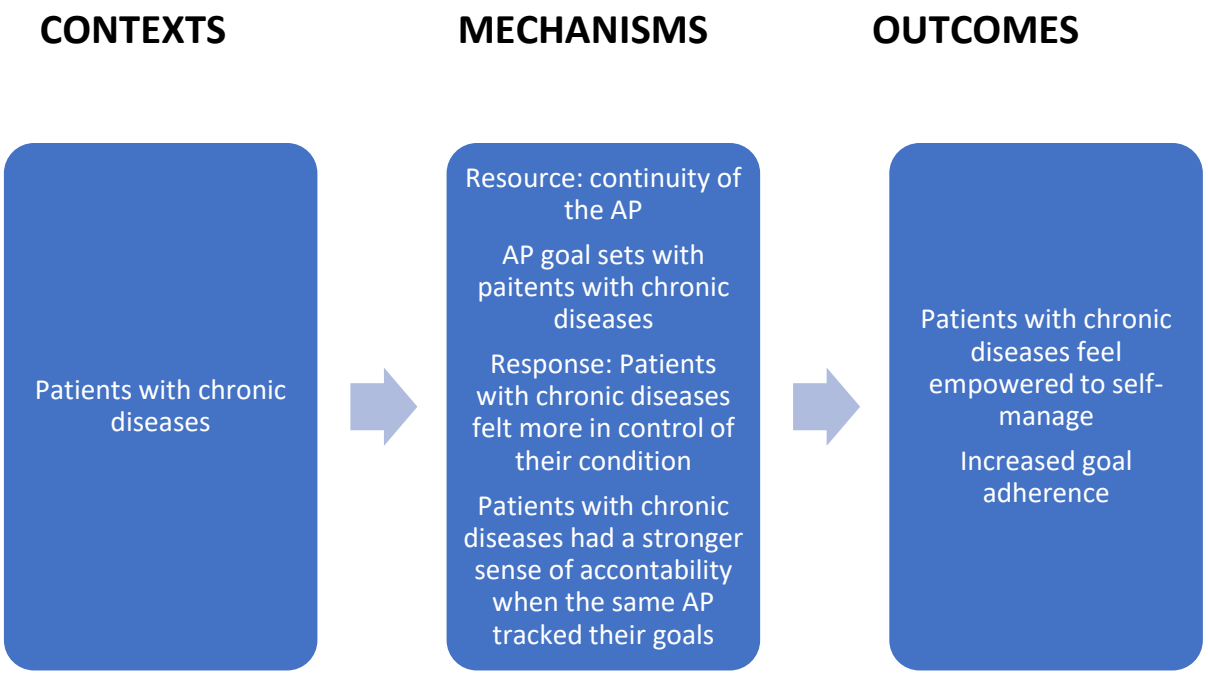


(10) The role is more acceptable to patients when AP's are person-centred in their consultation style.



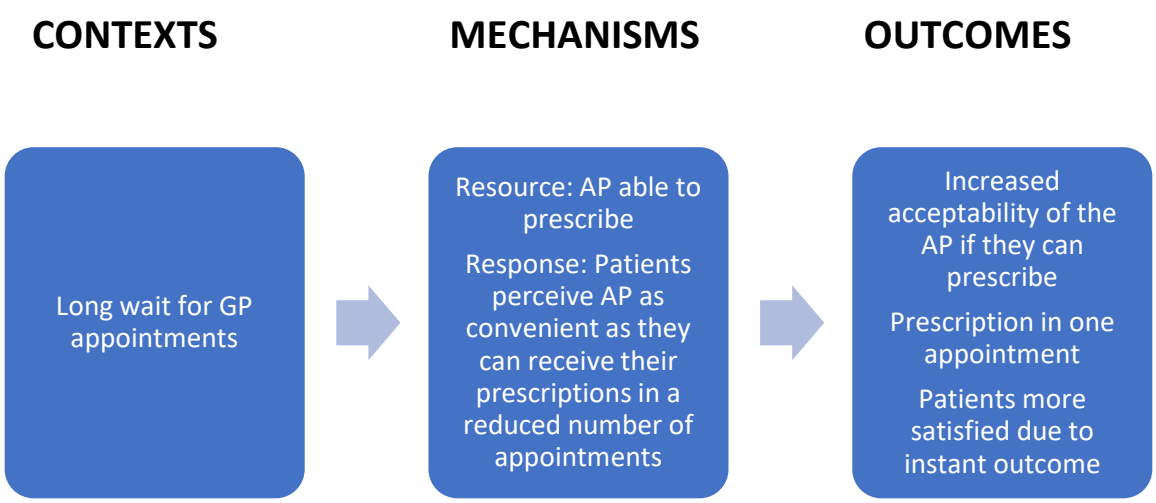
Appendix 16 Continuity CMO

(12) Having familiarity with the practitioner in the consultation increases patient acceptability of the AP role.

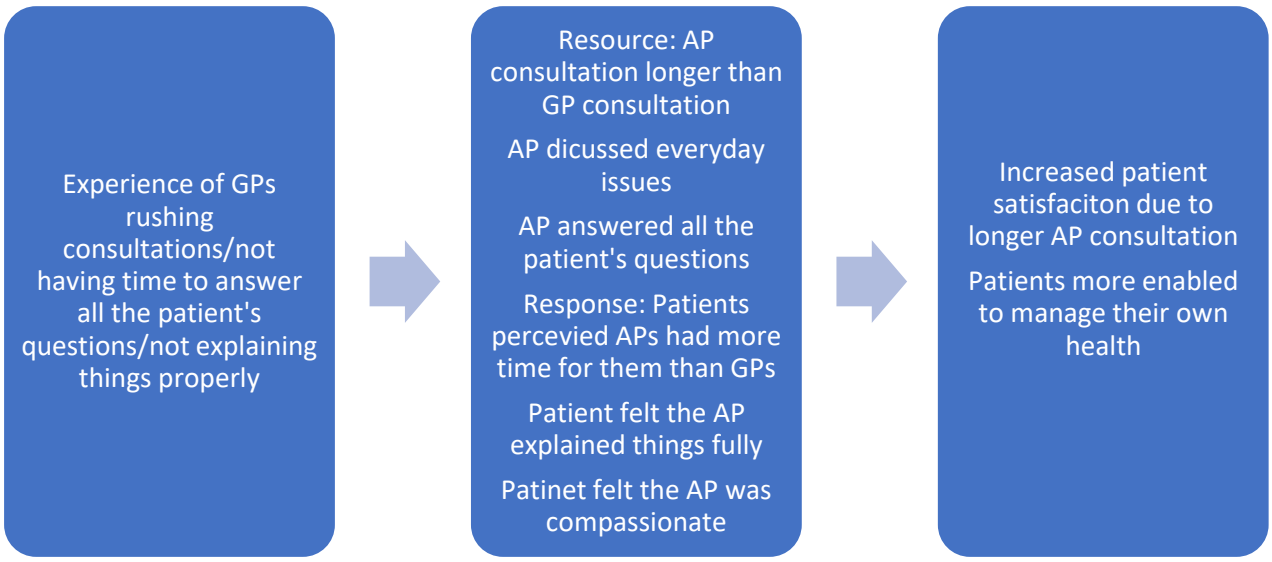


Appendix 17 Accessibility CMOs

(13)Increased acceptability of the role if the service is more convenient to the patient.

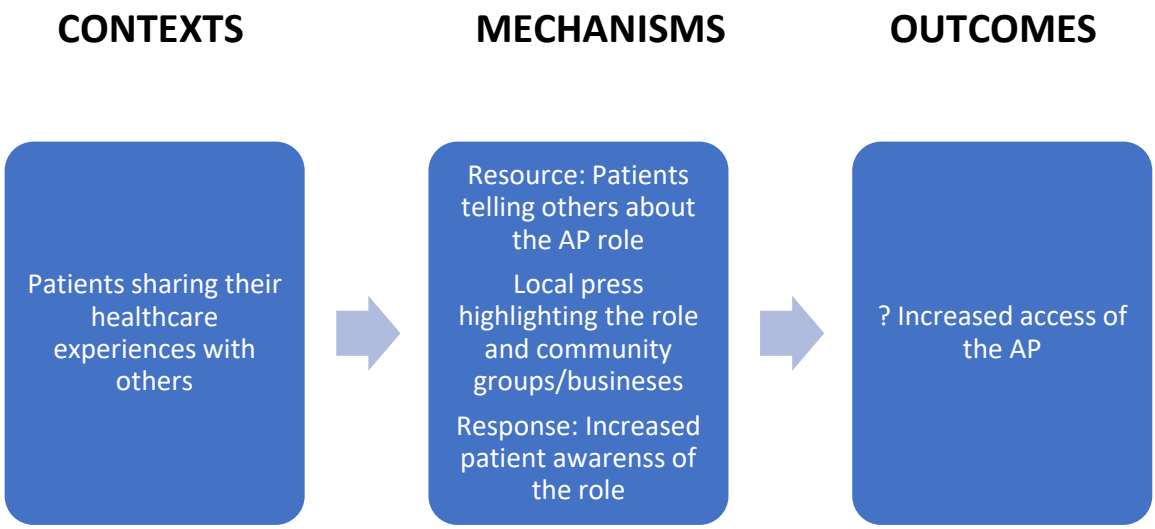


(14)Longer consultation lengths increase patient acceptability of the AP role.

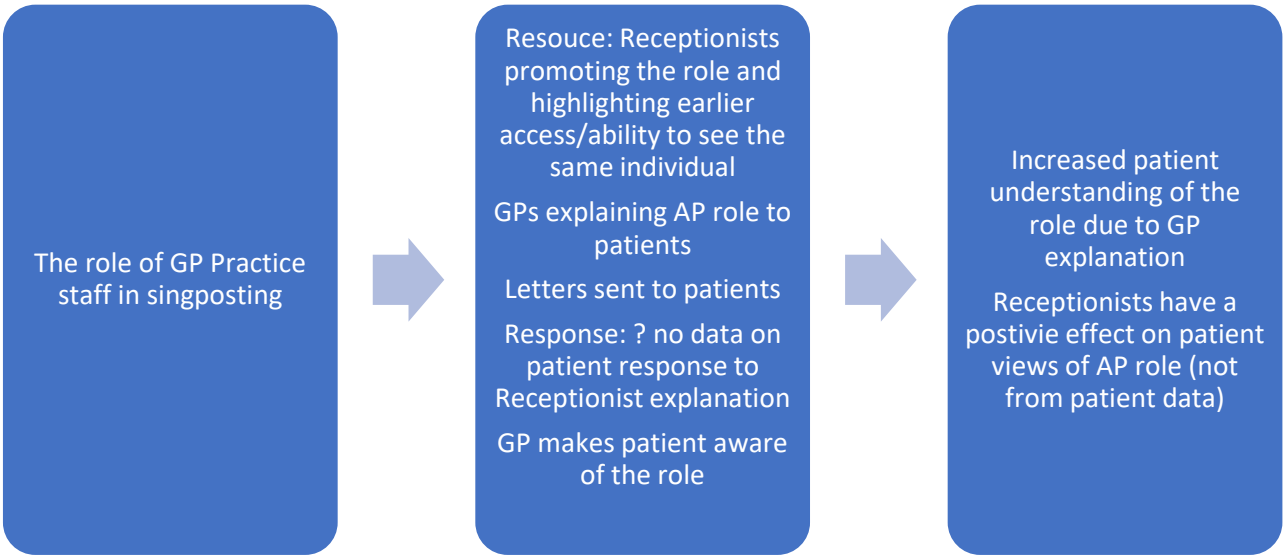


Appendix 18 Promoting the FCP CMOs

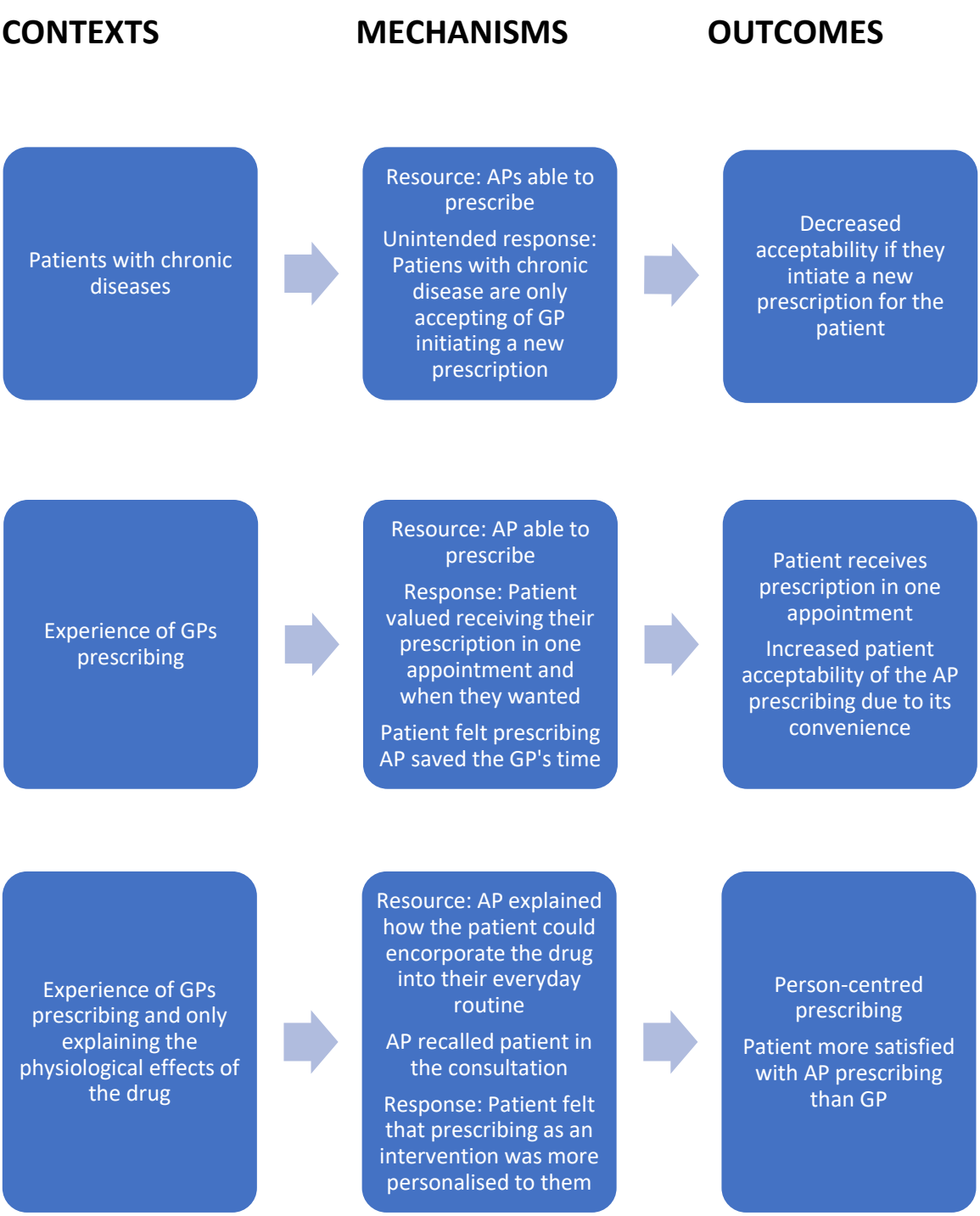
(14)Peer validation influences patient acceptability of the AP role.



(15) GP practice staff validation increases patient acceptability of the AP role.



Appendix 19 - Prescribing CMOs



Appendix 20 Overview of studies for theory area 2, Expectations

Study number	Full citation	Professional	Country of origin	Study design	Data collection method	Sampling method	Number of practices/ clinics	sample size	Data analysis methods	Summary of Key findings in Relation to Expectations
1	Halcomb *et al.* (2013)	General Practice Nurses	NZ	Quali.	semi-structured telephone interviews and patient Surv.	Conv.	Surv. across 20 practices, unclear how many practices had patient interview participants	1505 surveyed, 18 interviewed	Descript. and narrative Quali. data	This study demonstrated that patients found it comforting to be able to access the doctor, and would like to retain this choice. Patients happy to see nurse as they have the expectation the nurse will access the doctor if needed. Patients particularly would like to access doctor for 'serious incidents', as they felt doctors had more knowledge on diagnosis.
3	Young, *et al.* (2016)	Nurse-led chronic disease management	Australia	mixed methods	semi-struc.	purp. (gender, chronic disease, practice location)	3 General Practices	10	Framew.	These patients were chronic disease patients, who had stable conditions. Some patients expressed NP limitations in being able to offer advice and expected they still needed to discuss certain conditions with GPs.

6	Fortin *et al.* (2010)	Nurse practitioners (assessing and treating multi-morbidities)	Canada	Quali.	semi-struc.	purposeful (5+ more chronic diseases as well as other criteria)	two different Primary Care providers - a family medicine unit and a local community centre	18	TA	An expectation that accessing a nurse would lead to contact with a doctor afterwards, and faster. Follow-up would be with a doctor, and not a nurse. The possibility of having a follow-up visit with the nurse instead of the doctor raised feelings of hesitation and insecurity. Expectation that nurses assist doctors, and carry out traditional roles rather than extended. Patients described nursing role activities as: facilitating the doctor's tasks, making a preliminary assessment of the health problem and reporting it to the doctor, prioritizing cases to determine the order of patient consultations, taking blood samples, and performing lab tests requested by the doctor. An expectation that there should be good communication between nurse and doctor (confidential), so that the doctor is aware of all the decisions made by the nurse. An expectation that the nurse would be able to facilitate contact with the doctor, and their doctor would therefore be more readily accessible. Patients perceived this role to be able to free-up appointments with the doctor, for those who had more 'serious' conditions.

8	Mahomed John and Patterson (2012)	Nurse-led chronic disease management	Australia	Quali. - GT underpinned by a relativist ontological position	semi-struc.	theoretical sampling	3 General Practices	38	TA and compar.	Participants assessed for themselves whether NP was suitable, and felt NP could see stable conditions. Patient's assessed the severity of their condition through self-monitoring. Patients wanted to choose who managed their chronic condition. Expect to be able to access the GP if they want to. Expect NP communicate with the GP. Patients liked a friendly communication style, in which NPs shared with the patient their own lives, and also listened to patients. Important aspects of communication included: receiving advice, receiving encouragement, and being accountable. Patients wanted to make own decisions about their health.
9	Bergman *et al.* (2013)	Advanced NPs (APN)	Sweden	Mixed methods	Q.	Conv.	5 primary health care centres	223	Infer. and TA	Patients had the same expectations for an advanced nurse practitioner consultation as they did for a GP There was an expectation from some patients that nurses should be able to prescribe to save the time having to find a GP. Some patients happy with nurse consulting with the doctor regarding their prescription, to ensure they don't take any risks.

10	Redsell *et al.* (2007)	First Contact Care Nurse	UK, 1 city	Quali.	semi-struc.	Conv.	2 practices	18 paired interviews	TA	Patient experience of previous GP consultations, and the outcome of this consultation influences their expectations. These outcomes may be, for instance: prescriptions, answers to questions, examination or self-referral to another care provider; recognising they had a serious illness. Patient experience of previous GP consultations, and the outcome of this consultation influences their expectations. Participants were unsure what to expect from nurse consultations, and therefore found it harder to evaluate the role, and were therefore cautious about criticising them. Expectation that nurse would make a follow-up appointment with the doctor if it is something more serious.
14	EROS Team (1999)	Nurse Practitioners in training	UK	observational study	patient Q., recording of assessments	Conv.	4 General Practices	400	Descript.	Expectation to see a GP – 38% patients would have preferred to see a GP. Patients prefer to see a GP for 'more serious' conditions, 60% stating they would be selective about the problems they would be willing to take to training nurse practitioners (TNPs). Expectation from female patients that they should be able to access a female practitioner. 69% participants that consulted TNPs were female. Reduced number of prescriptions, and instead, an increase in health education. However, study does not demonstrate the effect of this on patients' views. Patients appreciated the time nurses

										spent listening, explaining and putting them at ease. Perceived nurses as caring. Study concludes that NPs are hybrids, synthesising nursing and medical skills. These attributes increase the chances of patients consulting a NP again. The study highlights that the aim of the role was to provide same-day consultations, however, between ¼ to 1/3 of patients consulting a TNP had made an appointment more than two days in advance. Female NPs can meet the needs of female patients who would like to access a female practitioner.
18	Maul *et al.* (2015)	Advanced Nurse Practitioners	UK	A prospective cross-sectional study	Q.	Conv.	adult congenital heart disease clinics in Pittsburgh and Ohio	371 patients	Infer.	The CHD patients expected the NP to discuss with the doctor medical problems that are likely to include important changes, such as changing in medical therapies, transcatheter interventions, and potential surgical therapies. An expectation that the physician should remain in the care pathway, highlighted by: Patients in the physician-managed clinic had higher perceived satisfaction responses for: (1) delivery of safe medical are ($P < 0.05$)… (4) Quality of care received ($P < 0.05$)… there was a trend towards lower confidence/ trust ($P < 0.01$) in the NP-managed practices.

19	Parker *et al.* (2012)	Nurse Practitioners	Australia	national Surv.	patient Surv.	Conv.	multiple	1,784	Infer. and descript.	Expectation that GP should diagnose serious conditions: 44% felt NP could diagnose a serious acute problem. 38% felt NP could diagnose a serious acute condition. 37% felt they could diagnose a chronic or continuing condition. Patients with chronic disease expected GP to initiate a prescription and interpreting a condition, as they found it less acceptable for nurses to carry out these competencies.

24	Myers, Lenci and Sheldon (1997)	Nurse Practitioner	UK	X – sec.	patient Q.	Conv.	6 Strategic Health Authorities	294	Infer.	Expectation that the nurse is for problems that are 'not serious' and therefore could be dealt with adequately by a nurse.The study concluded that patients were 'self-triaging' i.e. the patients had preconceived ideas as to whom it was more appropriate to see with their acute problem. The nurse saw a greater number of patients with general or ill-defined conditions, skin infections and respiratory problems. 99% of patients said they were satisfied with the management of their condition and would see the NP with similar problems. NPs issued fewer prescriptions than GPs (79% versus 64%). The NP perceived this to as she used a more holistic approach for her consultation, offering alternatives to medication. Patients stated they found it easy to communicate with the NP. A higher number of patients with respiratory problems, particularly asthma and COPD, presented to the NP rather than the GP. The study states that this may be due to the established asthma clinic run by the nurse and the corresponding pre-existing relationship with asthmatic patients. Patients perceived that seeing the NP would mean that they would be seen sooner. 40% patients with urgent problems were male, and 60% were female. Some patients preferred to be seen by a female practitioner.

25	Caldow *et al.* (2006)	Nurse practitioner led management of minor illness	UK, Scotland	mixed methods	cross-sectional postal Surv. and semi-structured phone interviews	random	11 General Practices which had the least amount of NPs with extended scopes, and 11 General Practices which had NPs with the most extended scope of practice	1,886 Q. and 48 interviews	Infer. and TA	Patients perceived seriousness of the condition may be related to preferences for seeing a PN or GP. An expectation that PNs could deal with what they thought was a minor problem, and make simple diagnoses (common colds, coughs and headaches…). Although some patients expressed concerns about misdiagnosis. The study postulates that patient expectations of healthcare are increasing (data does not prove this claim). Older patients were less likely to prefer being seen by a NP. There was an expectation to be seen by a GP rather than a PN if the patient had high positive attitude for the GP. Interviews demonstrated that patients perceived the nurses to listen to them, understood them, and were interested and more involved with the patient. Patients thought they gave holistic advice and care.

29	Holdsworth and Webster (2004)	FCP	UK, Dundee, Scotland	Quasi.	Patient Surv.s	Conv.	1 General Practice	1,784	Infer.	The study suggests that direct access patients are 'more pro-active, autonomous and compliant'. (p.70) and that they had an expectation that they are able to influence the course of recovery, and therefore perceived severity of condition. These direct access patients tended to be: male; younger; suffering with their conditions for a shorter duration; in paid employment with less work absence; more compliant with attendance; had fewer physiotherapy contacts; lower reporting of symptom severity at discharge; more highly satisfied physiotherapy care; experienced less general practice consultations.
31	Luker *et al.* (1998)	Prescribing Nurse Practitioner	UK	Quali.	semi-struc.	Conv.	8 General Practices	305	TA	Patients expected to see GP for conditions the considered more 'serious', and to discuss only minor complaints with the nurse. The participants in the study were all regular users of the nursing services. There was an expectation that GPs should not be seeing trivial things as they are very busy. Participants sought the nurses' knowledge with the expectation that they would refer to the GP if medical intervention was required.

35	Barratt (2016)	Nurse Practitioner	UK	observational study	Patient Q., recorded consultations, semi-struc.	Conv.	1 urban General Practice	71 patient questionnaire responses, 30 recorded consultations, 11 interviews	Descript. stats and TA and roter interacti-on analysis	Patients expected NPs to carry out many roles, however, despite this knolwdge,52.9% of patients still expected NP to discuss their condition with the GP: History taking – 85.95 Clinical examination – 91.2% Medical investigations – 83.1% (such as blood tests or an X-ray) Diagnose problem – 73.2% Prescribe medication – 88.6% Case to be discussed with a doctor – 52.9% Onward referral 83.1% Satisfaction was greater for patients who expected the NP to be able to diagnose, than those who did not. All patients who completed post-consultation questionnaire (30.3%) agreed or strongly agreed (69.7%) that their overall expectations of seeing the NP were met. Patients expected to be seen by GP for more 'serious' conditions. A patient stated something less serious for the NP would be a throat or chest infection. A patient expressed that experience of NPs has removed the expectation that the patient had before, that she had to see her GP.

Appendix 21 Overview of studies for theory area 3, Communication

Study number	Full citation	Professional	Country of origin	Study design	Data collection method	Sampling method	Number of practices/ clinics	sample size	data analysis methods	Summary of Key findings
1	Halcomb *et al.* (2013)	General Practice Nurses	NZ	Quali.	semi-structured telephone interviews and patient Surv.	Conv.	Surv. across 20 practices, unclear how many practices had patient interview participants	1505 surveyed, 18 interviewed	Descript. and narrative	Nurses listened to patients, and patients felt more valued because of this. Patients also found nurses calm. Better at explaining things, which puts the patient at ease as they feel the nurse is knowledgeable. Patients with chronic conditions particularly appreciated nurses explanations on their condition and treatments. Patients felt doctors did not have the time to explain. Half of the patents had chronic conditions.
2	Phillips and Brooks (1998)	NP	UK, Sheffield	mixed methods, 3 year longitudinal	patient postal questionnaire and semi-struc.	Conv.	Unclear, but multiple in one city	1251	Descript.	Patients compared NP to GP, highlighting that they found the NP more approachable and gave them more time, which relaxed the patient.

3	Young *et al.* (2016)	Nurse-led chronic disease management	Australia	mixed methods	semi-struc.	purp. (gender, chronic disease, practice location)	3 General Practices	10	Framew.	These patients were chronic disease patients, who had stable conditions. Some patients expressed NP limitations in being able to offer advice and expected they still needed to discuss certain conditions with GPs. Patients saw the NP as caring, friendly, and valuing the patient; this was understood in relation to having the NP having more time than the GP. Reported PNs also had the time to explain information to them. Patients felt more relaxed around NPs. PN enquired about the patient's health, which patients felt made the consultation more personal. Patients expressed they felt they were working alongside the NP, and the NP was motivational

4	Brooks *et al.* (2001)	Health Visitors, District Nurses and Practice Nurses	UK, Leicster	Quali.	semi-struc., face to face or telephone	Conv.	one Primary Care group	50	TA and descript.	Patients saw the NP as caring, friendly, and valuing the patient; this was understood in relation to having the NP having more time than the GP. Reported PNs also had the time to explain information to them. 'The participants said nurse prescribers knew the system and best methods of delivery to make sure that they got maximum benefit from the prescription.' Patients felt more relaxed around NPs. PN enquired about the patient's health, which patients felt made the consultation more personal. Patients expressed they felt they were working alongside the NP, and the NP was motivational. The patients had chronic conditions, potentially increasing the need for motivation for long-term management.
5	Edwall and Danielson (2008)	Diabetes specialist nurse	Sweden	Quali.	semi-strcutured interviews	purp.	2 nurse-led clinics	20	phenomenological-hermeneutic	Being 'confirmed' was an improved patient-practitioner relationship - this means the person is seen as an individual who is listened to and remembered. This created a supportive relationship with trust and respect. Patients felt guided in the disease process and management of the condition. This empowered patients. Patients therefore felt regular check-ups were less necessary. The participants had diabetes, which is a long-term condition and therefore self-management is vital.

										Patients felt like they were not alone in disease management, and felt the nurse calmed them down, decreasing their anxiety.
8	Mahomed, John and Patterson (2012)	Nurse-led chronic disease management	Australia	Quali. - GT underpinned by a relativist ontological position	semi-struc.	theoretical sampling	3 General Practices	38	TA .and compar.	Expect NP communicate with the GP. Patients liked a friendly communication style, in which NPs shared with the patient their own lives, and also listened to patients. Important aspects of communication included: receiving advice, receiving encouragement, and being accountable. Patients wanted to make own decisions about their health. Firm communication needed for self-management, gave patients a sense of accountability. Patients felt valued when listened to. This was facilitated by the NP focusing on them with no distractions.
10	Redsell, Stokes and Baker (2007)		UK, 1 city	Quali.	semi-struc.	Conv.	2 practices	18 paired interviews	TA	Patients more satisfied as nurse consultation seemed thorough. Patients satisfied with the high level of information from the nurse.

12	Gerard, *et al.* (2014)	Prescribing Nurse Practitioner	UK, 5 practices geographically spread out	Discrete Choice Experiment	patient questionnaire DCE	Conv.	5 General Practices	451	multinomial logit model, regression results	Patients expressed strong preference for 'appearing to listen to your views about your problems/ medicines'. Previous experience of negative GP attributes influences patient views. These negative attributes can be offset by experience of positive nurse attributes – these include the lowest utility consultations styles: Doctor (see next day, 10-min consult, not pay attention, diagnosis & advice) 1.0 in utility Doctor (see 2 days alter. 10-min consult, not pay attention, diagnosis & advice) 0.9 utility. NIP score higher than these consultation styles, e.g. 15 minute walk-in nurse consultation during which the nurse pays attention to the patient's views and offers diagnosis and advice, is preferred to the above GP styles.
13	Dhalivaal (2011)	Prescribing Nurse Practitioner	UK, Birmingham	mixed methods	semi-struc.	Conv.	3 General Practices	15	Descript. and narrative	Patients perceived the nurse to be skilled and competent, providing holistic and quality care. Information provided was thorough and comprehensive, more so than what the GP provided. Nurses provided them with better information/ explanations regarding their condition/ medication/ follow-up advice than their GP. Information provision was particularly valued by patients with long-term conditions. The nurse was seen as friendly, and that they could 'open up'

										with her more. Patients found nurse prescribing convenient; saving them time as they only needed one appointment. All 15 participants satisfied with nurses prescribing. Participants felt more informed on medications by their nurse than their GP. Patients wanted to know the nurse was qualified and appropriately trained.
14	The EROS Team (1999)	Nurse Practitioners in training	UK	observational study	patient Q., recording of assessments	Conv.	4 General Practices	400	Descript.	Reduced number of prescriptions, and instead, an increase in health education. However, study does not demonstrate the effect of this on patients' views. Patients appreciated the time nurses spent listening, explaining and putting them at ease. Perceived nurses as caring. Study concludes that NPs are hybrids, synthesising nursing and medical skills. These attributes increase the chances of patients consulting a NP again.
15	Redsell *et al.* (2006)	Nurse Practitioners	UK	Quali.	semi-struc.	Conv.	2 large General Practices	28	Compar.	Nurses seen as having 'less authority' than GP, and patients perceived this made it easier to build a rapport. However, some patients perceived this friendliness to mean the nurses had spare rime, because their conversations moved into everyday issues. One participant felt friendliness masked getting to the root problem and could result in misdiagnosis. Nurse seen as caring due to having more experience than GPs and locums.

16	Kernick *et al.* (1999)	Practice Nurse Specialists for minor illnesses	UK, Devon	observational study	patient Q.	Conv.	1 General Practice	186	Descript.	Practice nurses gave reassurance that certain conditions are not as serious as patients thought (the service was minor illness clinic run by specialist nurses). Nurses listened to patients and a patient stated they felt the nurse was genuinely interested in what they had to say. A participant stated that the nurse was helpful and professional.
17	Tinelli *et al.* (2013)	Prescribing Nurse Practitioner and Pharmacist independent prescribers	UK	cross-sectional study	patient Surv.	Conv.	6 General Practice case study sites from 6 different Strategic Health Authorities	294	Infer.	The study demonstrated no difference between number of patients who felt more informed by the doctor or IP, and concluded that IP were valued highly. Patients reported having a good relationship with their prescribing nurse (PN) or pharmacist independent prescribers (PIP) (89% and 79% respectively SA/A; P , 0.01). Patients were involved in the decision making process about the medicines prescribed for them. Overall, patients felt explanations were the same from both IP and doctor: 'I am better informed about my treatment by the…' independent prescriber 25.6%, doctor 25.6%, no difference 64%. However, patients felt: 'I am more likely to be asked how I can fit medicines into my routine by the…' IP 24.4%, doctor 11%, no difference 50.75 Also, patients found PIPs more approachable: 'I feel

										more able to ask questions about my medicines with the…' IP 27/65 and doctor 21.6%, no difference 52.2% But: 'I am more likely to be told how medicine will help me' by the IP 21.2%, by the doctor 30.9%, no difference 52.2% And: 'I am more likely to be told about the possible side effects of a new medicine' by the IP 16.3%, by the doctor 29.65%, no difference 54.1%
18	Maul *et al.* (2015)	Advanced Nurse Practitioners	UK	A prospective cross-sectional study	patient questionnaire	Conv.	adult congenital heart disease clinics in Pittsburgh and Ohio	371 patients	Infer.	The study demonstrated little difference between MD and NP in patient's satisfaction of their style of working. It concludes that patient satisfaction was high regardless of whether care was provided by NP or MDs. No significant difference was found between physician and the NP for: - Friendliness of the provider - Ability to discuss private thoughts - Opportunity to ask questions about care/ health condition by provider - Quality of education materials provided to the patient - Patient comprehension of provider explanations - Lack of feeling rushed by the provider NP scored slightly higher for opportunities to ask questions (78% versus 75%) but not significant. There was significant difference between MD and NP for: Confidence/ trust in provider strongly agree (91.3% for MD vs

										85% NP clinic) Courtesy provider excellent (94% vs 87%)
20	Shum *et al.* (2000)	Nurse Practitioners managing minor illnesses	UK, London and Kent	RCT	patient Q.	Conv.	5 General Practices	1,815	Infer.	The study demonstrated patients were significantly more satisfied with their consultations with nurses than with doctors (786% vs 76.4% respectively). Similar number prescriptions written (nurses 65.4%, vs doctors 63.5%), but nurses reported providing more self-medication and general self-management advice than doctors. The study states that it does not explore the consultation content in detail. But the study demonstrated that, once the longer consultation time was compensated for, patients still preferred nurses over GPs. The study therefore hypothesises that the style of the different style of a nursing consultation may be the cause of the higher satisfaction rates. Nurse consultations spent about two minutes longer on each consultation (mean 10,2 minutes vs 8.3 minutes for doctors). There is an association between longer consultation length and patient satisfaction; however, once consultation length was factored in, linear regression demonstrated satisfaction scores were still higher than doctors. Variation between each nurse

										consultation length (mean length 7.9, 8.9, 10.8, 11.7 and 128 minutes; P , 0.01) showing that some nurses seemed to be as fast as doctors.

22	Chapple et al (2000)	Nurse-led clinic	UK	Observational study	in-depth interviewing and questionnaire	Conv.	1 General Practice	49	Compara.	Patient reported on an experience in the hospital as a cardiac patient. The participant observed that people consulted the nurses on the ward and not the doctor for problems. The participant reported this had led to a personal high-level of respect for nurses. Patients were almost always satisfied with the advice and treatment they received from the nurse. Patients' needs being met mattered more than the provider. The study demonstrated that some patients felt the knowledge of a nurse was no lesser than a doctor. Patients valued social support they received, which the study highlighted as particularly important to this case study (high unemployment rate). Patients felt listened to, and that the nurse discussed with them what the problem might be.
24	Myers, Lenci and Sheldon (1997)	Nurse Practitioner	UK	cross-sectional study	patient Q.	Conv.	6 Strategic Health Authorities	294	Infer.	The study found that 99% of patients said they were satisfied with the management of their condition and would see the NP with similar problems. NPs issued less prescriptions than GPs (79% versus 64%). The NP perceived this to as she used a more holistic approach for her consultation, offering alternatives

										to medication. Patients stated they found it easy to communicate with the NP.
25	Caldow *et al.* (2006)	Nurse practitioner led management of minor illness	UK, Scotland	mixed methods	cross-sectional postal Surv. and semi-structured phone interviews	random sampling	11 General Practices which had the least amount of NPs with extended scopes, and 11 General Practices which had NPs with the most extended scope of practice	1,886 Q. and 48 interviews	Infer., DCE and T.	There was an expectation to be seen by a GP rather than a PN if the patient had high positive attitude for the GP. Interviews demonstrated that patients perceived the nurses to listen to them, understood them, and were interested and more involved with the patient. Patients thought they gave holistic advice and care. Patient comments including feeling more comfortable and at ease with the nurse, Female nurses seen as much more understanding of female problems. Doctors were perceived as not having an interaction with the patient, but telling the patient things.

26	Perry *et al.* (2005)	NP	UK, Cheshire	Observ.	Semi-struc.	Conv.	15	1 General Practice	GT	Patients described reassurance after NP a consultation. Patients felt NP was thorough in their examinations. NP seen as more through in the amount of questions they asked, their explanations, and the level of information and advice given. NPs were described as 'understanding' and 'caring'. Patients reported issues in NP not being able to sign prescriptions. Patients found this an inconvenience, and made them more reluctant to see the NP again in case it happened again. Patients perceived that the NP role had reduced the wait for an appointment. Patients compared the wait now with having to wait 2 weeks before. GPs at the practice were male. Patients felt it was beneficial having a female clinician available for consultation, as females felt more at ease during examinations and being able to talk more freely about personal problems without being embarrassed. 10 participants were females, 4 were males. The choice of female clinician was not specifically related to the NP role. Aspects of satisfaction were related to the NP as a person, the study states that this highlights the caring dimension of the NP role.

27	Reveley (1998)	Nurse practitioner	UK	Observational study	questionnaire and semi-struc.	Conv.	20 General Practices	286	infer.	The study highlighted a case where a woman had belief's about her child's illness, these were not confirmed by the NP and the mother therefore felt she ought to see a GP. However, one patient reported that the NP had not given information very well, and three consulting the NP had stated they had not been given any information. There were 4 NPs, so there may have been variation between the individuals. Limited to only one sentence for this theory area: 'she asked to see the NP because "she only wanted a prescription". 93.3% of patients had a same-day appointment. Those who saw the NP were satisfied at being able to get an appointment so quickly. A patient requested to see the NP as she felt he NP had the time to explain and put things in a way she could understand.

28	Williams and Jones (2006)	Nurse Practitioner	UK	Quali.	semi-struc.	Purp.	1 General Practice	10	TA	Participants were appreciative of the high level of information provided by the NP. Regular attendees felt NP could consider the complexity of their emotional needs as they did not feel rushed. Patients expressed that the doctor commonly would prescribe but NPs had other ways of managing their condition. This was seen as in relation to the GPs not having the time. Patients felt that the NP was more up-to-date with recent treatments that are more person centred. They felt the NP was a mine of information. She expressed the NP saved the participant having to look through the internet to get information, and acted as a filter. Patients felt more at ease with the nurse, like having a chat. The participant stated feeling nervous going to the doctor, rushed, and worried about saying things that are silly, so not saying them.

31	Luker *et al.* (1998)	Prescribing Nurse Practitioner	UK	Quali.	semi-struc.	Conv.	8 General Practices	305	TA	This study highlighted positive attitudes towards the nurses' ways of working, nonetheless, 87% of patients did not single the nurse out for special praise. A patient described the nurse explaining how their asthma drugs work, and the patient felt much clearer about asthma from this. The participant stated that the nurse appeared to have more time to explain. Another patient described the same, but for a catheter explanation. A participant described the HV information as practical; they felt this was due to the HV being a mother. She felt more relaxed around the HV. Nurses' approachability was linked to personal qualities e.g. equal social footing and nurses forming warm and friendly relationships with patients.

32	Chartered Society of Physiotherapy (2016b)	FCP	UK, West Cheshire	observational study	Patient, GP and FCP Q.	Conv.	5 General Practices with an FCP, but inclusive of 10 General Practices	1,897 patients responded to questionnaire	Descript. and qual. extracts	This study is limited in its contribution to theory areas as it is an audit with no analysis of findings. There were several positive patient comments about the advice received from the specialist MSK physiotherapist, in particular, patients were satisfied with immediate advice and self-management strategies rather than just a long wait. One patient expressed the advice left them feeling relieved and confident as they had been given a leaflet that described their symptoms and exercises they were hopeful would improve their condition. A participant commented that they felt the assessment was thorough and the therapist was efficient and listened to the. They therefore reported being more than happy with the outcome. Several patient comments regarded them feeling the physiotherapist had a high level of knowledge and were thorough in their assessment. This increased patient confidence. This study highlighted that 98% of patients reported their issues addressed and their appointments convenient. It is unclear what is meant by 'convenient'. Patients were satisfied with not needing a further referral to physiotherapy, and also not having a long wait to be seen by a physiotherapist.

										Patients were positive about receiving instant advice. They were also positive about instant identification of the issues, which increased patient confidence.

35	Barratt (2016)	Nurse Practitioner	UK	observational study	Patient Q., recorded consultations, semi-struc.	Conv.	1 urban General Practice	71 patient questionnaire responses, 30 recorded consultations, 11 interviews	Descript. , Roter Interacti-on Analysis. and TA	The study highlighted many positive ways of working from patient interviews. However, there was no significant difference in general satisfaction score or communication score for any of the three interaction style variables (patients/ carers verbally dominant or nurse verbally dominant; patient-centred interactions predominated or biomedical interactions predominated; congruent interactions occurred or incongruent interactions occurred). Coding categories for biomedical interactions were: all biomedical information and counselling; doctor's closed questions and instructions. The study's' questionnaire highlighted that communication satisfaction with high, most common codes: 'showing agreement or understanding'; 'back-channel responses' which can be interpreted as practitioner's interest, listening or encouragement; 'personal remarks and social conversations'.Quali. interviews support the questionnaire. Patients reported that the NP's body language, such as the way they talk and look at the patient, made the patient feel more valued. Patients reported they felt listened to, and like the NP wanted to listen. Comparison of consultations showed that NPs asked

										more questions. A patient interview supported this in stating that the NP asked what the patient thought. The study concludes that this sense of comfort allows for patients to express ideas/ concerns/ expectations which leads to negotiations to occur, allowing patients to retain some control over their treatment plans. Patients reported that the NP was friendly and they felt more comfortable and at ease with them. A comparison was made with GPs who were seen as more official. One patient commented that they felt more able to talk to the NP as she was a woman. The patient stated this was due to particular attributes females possess, and stating that male doctors can be more 'severe' (p.179) One patient stated the importance of the personality of the individual practitioner. Patient stated that they say things to the NP that they thought they would not have said, as the NP calms them down. A patient stated that the NP uses language they can understand, unlike the doctor. One patient stated they were advised on medication usage in a 'nice' way (p.166)Patients stated that NP advice relieves them, and they feel they know better how to make it better. Some

										patients liked discussion of life world problems (general health/ life concerns) as it is related to their condition and they felt NPs sensitively addressed it. Some patients stated they would not be able to discuss life world problems with their GPs. Some patients cautious about life world discussions as feel it wastes time.

36	Webster *et al.* (2008)	FCP	UK, Scotland	Mixed methods	Patient questionnaire	Conv.	26 General Practices	2,177	Infer.	Interviews showed that patients expect greater collaboration with GP and physiotherapists. They also expect greater role promotion in order to reduce the risk of influx of referrals (a patient concern expressed in interviews). Patients expressed that physiotherapist appeared to be very knowledgeable. One patient expressed that they felt physiotherapists just look at the problem and not the whole person. Not able to relate the data to a patient demographic. One patient commented: “better if see the same physiotherapist throughout” (p.147). The study highlighted a patient questioning whether the physiotherapist have the experience on a condition that the GP has.

Appendix 22 Overview of studies for theory area 4, Continuity

Study number	Full citation	Professional	Country of origin	Study design	Data collection method	Sampling method	Number of practices/ clinics	sample size	data analysis methods	Summary of Key findings in Relation to Theory Area 4
1	Halcomb *et al.* (2013)	General Practice Nurses	NZ	Quali.	semi-structured telephone interviews and patient Surv.	Conv.	survey across 20 practices, unclear how many practices had patient interview participants	1505 surveyed, 18 interviewed	Descript. and narrative	Half of the patents had chronic conditions. Patients appreciated being able to build up a rapport with the nurse, which increased their confidence in them. Patients particularly valued nurses remembering their names. Negative views were expressed when patients were not able to have continuity of practitioner.
2	Phillips and Brooks (1998)	NP	UK, Sheffield	mixed methods, 3 year longitudinal	patient postal questionnaire and semi-struc.	Conv.	Unclear, but multiple in one city	1251	Descript.	8 out of 1251 participants were highly negative about the NP, and this was mainly due to a lack of continuity and having to see a different NP all the time.
4	Brooks *et al.* (2001)	Health Visitors, District Nurses and Practice Nurses	UK, Leicester	Quali.	semi-struc., face to face or telephone	Conv.	one Primary Care group	50	TA and descript.	These patients were chronic disease patients, who had stable conditions. Patients expressed they felt they were working alongside the NP, and the NP was motivational. The patients had chronic conditions.

5	Edwall and Danielson (2008)	Diabetes specialist nurse	Sweden	Quali.	semi-struc.	purp.	2 nurse-led clinics	20	phenomenological-hermeneutic	Patients felt like they were not alone in disease management, and felt the nurse calmed them down, decreasing their anxiety. Continuity led to increased patient confidence in the nurse, and increased respect and trust in them. Patients felt more confident as the nurse knew their history. Patients only felt able to self-manage if they had a continuous relationship with the same nurse who they trusted. Patients felt more in control of their condition, and safe and secure in self-managing it, only if they had continuity of the practitioner.
6	Fortin *et al.* (2010)	Nurse practitioners (assessing and treating multi-morbidities)	Canada	Quali.	semi-struc.	purposeful (5+ more chronic diseases as well as other criteria)	two different Primary Care providers - a family medicine unit and a local community centre	18	TA	Patients expected to be able to build a long-term relationship with their nurse, similar to they had with their doctor. Patients dislike having to repeat their story. As patients have multi-morbidities, their cases are complex, and therefore, they have a long history. The study highlights that continuity is more important for these patients, as chronic conditions

										require more information and psychological support. The study also highlights that as patients have chronic conditions they have built up a relationship with a long-term doctor, which the nursing role threatens.
8	Mahomed, John and Patterson (2012)	Nurse-led chronic disease management	Australia	Quali. - GT underpinned by a relativist ontological position	semi-struc.	theoretical sampling	3 General Practices	38	TA and compar.	Continuity improved the practitioner patient relationship, and a patient experience highlighted a 'shock' from having an unexpected practitioner. Continuity worked best when working towards goals, and increased patient's sense of accountability.
9	Bergman *et al.* (2013)	Advanced NPs (APN)	Sweden	Mixed methods	questionnaire	Conv.	5 primary health care centres	223	Infer. and TA	Patients liked knowing who works in the practice, rather than a new GP every time. Patients associated concepts of increased availability and continuity in healthcare to the APN role. Patients expressed that they felt APN were competent and skilful enough to provide quality care.

11	Desborough *et al.* (2016).	General Practice Nurses	Australia	Mixed methods study - Quant. underpinned by a critical realist perspective. Quali.- GT	questionnaire	Conv.	678 Q.. Interviews: 23 patients, 16 nurses, 9 Practice Managers	21 General practices	GT and Multilevel mixed effects models	Patients who made an appointment with a particular nurse were more likely to be satisfied than those who did not (or = 2.23, 95% CI: 1.26-3.96). However, only 10% made an appointment for a particular nurse. Patients who had seen the nurse 1-5 times and more than six times were more likely to be satisfied that those who had never seen then nurse before.
15	Redsell *et al.* (2006)	Nurse Practitioners	UK	Quali.	semi-struc.	Conv.	2 large General Practices	28	Compar.	The study discusses the importance of continuity has highlighted by the patients who saw a GP, and concludes that the new nursing roles were not sufficiently established in the UK for patients to have internalized the possibility of having such relationships with nurses.
22	Chapple *et al.* (2000)	Nurse-led clinic	UK	Observational study	in-depth interviewing and questionnaire	Conv.	1 General Practice	49	Compar.	Patients felt listened to, and that the nurse discussed with them what the problem might be. Patients missed continuity, as there was a longstanding GP who has been replaced by locums. The study highlighted that continuity mattered more

										in this context where it is a lower socio-economic community.
28	Williams and Jones (2006)	Nurse Practitioner	UK	Quali.	semi-struc.	Purp.	1 General Practice	10	TA	Discusses continuity in relation to the GP. Patients remarked on never seeing the same doctor twice unless they requested, and having to explain their problem to a new GP.

31	Luker, *et al.* (1998)	Prescribing Nurse Practitioner	UK	Quali.	semi-struc.	Conv.	8 General Practices	305	TA	This study highlighted that participants reported that knowing their HV from day one contributes to them feeling like they can talk to them. Also, participants reported that seeing the same HV regularly allowed for them to have a closer relationship, which they don't have with their GP as they see different GPs. Participants also perceived continuity of care to be advantageous in regards to prescribing. This is due to patients feeling that that the nurse can remember the patient as they have had more contact with them, are closer with them and therefore are more personal with them when prescribing. The patients in this study were all regular users of the nursing service, and are therefore more likely to access the service regularly.

35	Barratt (2016)	Nurse Practitioner	UK	observational study	Patient Q., recorded consultations, semi-struc.	Conv.	1 urban General Practice	71 patient questionnaire responses, 30 recorded consultations, 11 interviews	Descript., Video: Roter Interaction Analysis. and TA	Patient interviews highlighted that some patients appreciated that the NP was familiar with them and remembered them. Patients felt more able to participate in consultation if the practitioner knew them. The study states that: 'being a general practice clinic all the patients are registered there and so attend there on a repeated basis, which facilitates the nurse practitioners and patients/ carers remembering and knowing each other' (p.174).

Appendix 23 Overview of studies for theory area 5, Scope of practice

Study number	Full citation	Professional	Country of origin	Study design	Data collection method	Sampling method	Number of practices/ clinics	sample size	data analysis methods	Summary of Key findings in Relation to Theory Area 5
4	Brooks *et al.* (2001)	Health Visitors, District Nurses and Practice Nurses	UK, Leicester	Quali.	semi-struc., face to face or telephone	Conv.	one Primary Care group	50	TA and descript.	These patients had stable chronic diseases. Most patients accepted NPs prescribing. They perceived the NP to be able to prescribe in a person centred way. Patients did express the need to know that the NP was competent to prescribe. However, some patients felt nurses should be limited in prescribing for certain conditions, and the doctor should prescribe for more serious things. Some patients had not realised that the NP had prescribed for them. 69% of participants were new users with 1-3 prescriptions.
6	Fortin *et al.* (2010)	Nurse practitioners (assessing and treating multi-morbidities)	Canada	Quali.	semi-struc.	purposeful (5+ more chronic diseases as well as other criteria)	two different Primary Care providers - a family medicine unit and a local community centre	18	TA	Most patients perceived nurses to carry out traditional roles, assisting GPs. Patients expected that they could: facilitate GP' tasks; make a preliminary assessment which they would report to the GP; prioritise cases; take blood samples; perform lab tests ordered by GP. Participants were confident in the nurse's ability, training and qualifications, however not for their particular situation, or

										certain tasks. Patients preferred GP did their prescription.
9	Bergman *et al.* (2013)	Advanced NPs (APN)	Sweden	Mixed methods	questionnaire	Conv.	5 primary health care centres	223	Infer. and TA	There was an expectation from some that nurses should prescribe to save the time having to find a GP. Some patients happy with nurse consulting with the doctor regarding their prescription, to ensure they don't take any risks. Patients liked knowing who works in the practice, rather than a new GP every time. Some patients would like APN to be able to prescribe, as it takes APN, GP and their time for the nurse to find a GP. Some patients however were happy with the APN consulting a GP regarding prescription, to ensure they were not taking a risk. Patients appreciated faster access to care through accessing the nurse.

11	Desborough et al, (2016)	General Practice Nurses	Australia	Mixed methods study - Quant. underpinned by a critical realist perspective. Quali.- GT	questionnaire	Conv.	678 Q.. Interviews: 23 patients, 16 nurses, 9 Practice Managers	21 General practices	GT and multilevel mixed effects models	Higher satisfaction for chronic disease management than preventative health care. Patients who attended practices where nurses worked a broad scope of practice and high levels of autonomy were more satisfied than those attending practices with low levels. Patients felt more enabled in practices where nurses had broad scopes of practice. .
13	Dhalivaal (2011)	Prescribing Nurse Practitioner	UK, Birmingham	mixed methods	semi-struc.	Conv.	3 General Practices	15	Descript. and narrative	All 15 participants satisfied with nurses prescribing. Participants felt more informed on medications by their nurse than their GP. Patients expressed the need to know the nurse was qualified and appropriately trained, on the whole, they felt they were.
19	Parker *et al.* (2012)	Nurse Practitioners	Australia	national Surv.	patient Surv.	Conv.	multiple	1,784	Infer. and descript.	Patients with chronic disease expected GP to initiate a prescription and interpreting a condition, as they found it less acceptable for nurses to carry out these competencies. High level of patient acceptability for repeat prescriptions (89%) but only 50% acceptability for initiating a new prescription. 85% acceptability for

										nurses ordering diagnostic tests. The more acceptable competencies are taking medical history 91%, and triaging 89%. These are assessment skills that may lead to seeing a GP. Older patients found the following more acceptable: - Taking a medical history - Interpreting diagnostic tests - Suturing superficial lacerations - Diagnosing and managing chronic or continuing conditions - Diagnosing significant health events Patients with chronic diseases found nurses interpreting diagnostic tests and initiating new prescriptions as less acceptable. Women found most activities more acceptable than male participants, except triage, initiating new prescriptions, suturing superficial lacerations, diagnosing chronic or continuing conditions and diagnosing serious acute illness.

25	Caldow *et al.* (2006)	Nurse practitioner led management of minor illness	UK, Scotland	mixed methods	cross-sectional postal Surv. and semi-structured phone interviews	random sampling	11 General Practices which had the least amount of NPs with extended scopes, and 11 General Practices which had NPs with the most extended scope of practice	1,886 Q. and 48 interviews	Infer., DCE and TA	Some patients expressed concerns in nurses' academic ability, as doctors have more qualifications. However, a patient stated they felt their experience compensated for their lesser qualifications, and sometimes the nurse knew better than the doctor. The NP can prescribe certain drugs for certain conditions. A patient gave the example of flue as acceptable, and antibiotics or inhalers for asthma. Repeat prescriptions were stated as more acceptable by this patient. Most interviewees thought PNs could prescribe some drugs, but they were limited in what they could do, and they should recognise their limitations and seek help from the GP if necessary. There was no significant difference in patient satisfaction between practices with an extended nursing role and those with a traditional nursing role, with one exception: patient satisfaction with time spent at the surgery, including arranging the appointment, was significantly better when visiting the PN (56%) compared with the GP (45%) in practices where the PN had an extended role ($P < 0.05$).' (p.36)

28	Williams and Jones (2006)	Nurse Practitioner	UK	Quali.	semi-struc.	Purp.	1 General Practice	10	TA	A patient requested to see a prescribing nurse due to her past experiences of having to wait for a nurse to have a prescription signed off by the GP, and having to come back for a second appointment to get their prescription which they cannot always do during practice hours due to work. The patient stated NP prescribing saved them worry and time. Patients expressed that they welcomed the time the NP was able to spend discussing not just their health problems, but factors affecting on, and affected by their problems and symptoms.
34	Heale and Pilon (2012)	Nurse Practitioner	USA, Ontario	Evaluation	Patient Surv.	Conv.	1 nurse-led clinic	1,585	Infer.	Patients reported having to make a second appointment with the GP as the NP was limited by the drug list they could prescribe from.

35	Barratt (2016)	Nurse Practitioner	UK	observational study	Patient Q., recorded consultations, semi-struc.	Conv.	1 urban General Practice	71 patient questionnaire responses, 30 recorded consultations, 11 interviews	Descript., Roter Interact-on Analysis, TA	Patients expected NPs to carry out many roles, however, despite this knolwdge,52.9% of patients still expected NP to discuss their condition with the GP:History taking – 85.95Clinical examination – 91.2%Medical investigations – 83.1% (such as blood tests or an X-ray)Diagnose problem – 73.2%Prescribe medication – 88.6%Case to be discussed with a doctor – 52.9%Onward referral 83.1% Satisfaction was greater for patients who expected the NP to be able to diagnose, than those who did not. All patients who completed post-consultation questionnaire (30,.3%) agreed or strongly agreed (69.7%) that their overall expectations of seeing the NP were met. The study states that: 'being a general practice clinic all the patients are registered there and so attend there on a repeated basis, which facilitates the nurse practitioners and patients/ carers remembering and knowing each other' (p.174).Satisfaction was higher for those who expected the NP to diagnose than those who did not. Another patient stated that they

										expected the doctor to have more knowledge than the nurse, just as the role is higher respected.

36	Webster and Holdsworth. (2008)	FCP	UK, Scotland	Mixed methods	Patient questionnaire	Conv.	26 General Practices	2,177	Infer.	A participant stated that they felt 'fitness for work' should be decided in liaison with a doctor, as there might be other medical problems. However, ¼ of all respondents expressed no opinion about who should make decisions about their fitness to work. The study concludes that 'Perhaps they did not feel strongly about who actually made these decisions, and were accepting of the appropriateness of either physiotherapists or doctors undertaking these roles.' (p.175) Self-referred patients were more confident with the physiotherapist's ability and had stronger positive attitudes about the advantages of adopting autonomous behaviours. 'Self-referral patients were more likely to be supportive of being able to self-refer, agreeing that self-referral could save time and they would use the service again in the future' (p.145) Some participants however stated they felt rushed during the physiotherapy intervention. Participants highlighted limitations in a system that only runs during office hours.

										Some participant interviews demonstrated concerns that introducing self-referral without a parallel public education/ awareness campaign would result in inappropriate presentations and longer waiting lists. Participants stated that they would like a telephone advice line/ help desk in order to provide and or clarify information or advice. Patient comments included: - Access easier - Speedier recovery - Self-referral saves a lot of time and pain - As the physiotherapist had other patients on the go the patient felt the physiotherapist could not fully attend to their needs and was rushed - More treatment sessions needed - The consultation was too short (20 minutes) (p.147)

Appendix 24 Overview of studies for theory area 6, Accessibility

Study	Author and Year	professional	Country of origin	Study design	Data collection method	Sampling method	Number of practices/ clinics	sample size	data analysis methods	Summary of Key findings
1	Halcomb *et al.* (2013)	General Practice Nurses	NZ	Quali.	semi-structured telephone interviews and patient Surv.	Conv.	Surv. across 20 practices, unclear how many practices had patient interviews	1505 surveyed, 18 interviewed	descript. and narrative Quali. data	Patients see NP as calmer, and go through their problems more slowly. Whereas they perceive doctors to rush them to get to the problem. Quicker for an appointment than seeing a doctor. NP ring patients back within the hour, with some patients reporting same day appointments. Cheaper for a patient to see the nurse than the doctor (New Zealand study). Patient highlights that receptionists may not be promoting the NP role, as they do not make it clear the NP is available. Patient stated they only knew as they have a healthcare background.

3	Young *et al.* (2016)	Nurse-led chronic disease management	Australia	mixed methods	semi-struc.	purp. (gender, chronic disease, practice location)	3 General Practices	10	Framew.	The patients had chronic conditions, potentially increasing the need for motivation for long-term management. Patients found the GPs rushed them PNs had the time to discuss patient's problem, and therefore appeared more caring, and patients feel more valued. NP seen as more approachable, as perceived sense of more time resulted in patients feeling more relaxed, and able to discuss more of their problems. Patients appreciated quicker access to care from seeing a PN. Perceived accessing a PN saved doctor appointments for those who need them.
4	Brooks *et al.* (2001)	Health Visitors, District Nurses and Practice Nurses	UK, Leicester	Quali.	semi-struc., face to face or telephone	Conv.	one Primary Care group	50	TA and descript.	Patients found the GPs rushed them PNs had the time to discuss patient's problem, and therefore appeared more caring, and patients feel more valued. NP seen as more approachable, as perceived sense of more time resulted in patients feeling more relaxed, and able to discuss more of their problems. Patients appreciated quicker access to care from seeing a PN. Perceived accessing a PN saved doctor appointments for those who need them.

7	Roblin *et al.* (2004)	physician assistant or nurse practitioner	Atlanta, USA	retrospective observation study over 4 years	patient satisfaction Surv.	random sampling	A large Primary Care delivery system	41,209	Infer.	PA/NPs were, on average more likely to attend visits for minor acute illness (e.g., acute pharyngitis) and MD visits for chronic disease (e.g., diabetes). The study stated that triaging patients by presenting conditions could create patient expectations that specific types of conditions will be attended by one practitioner type. Patients may be less satisfied if seen by the practitioner type other than the one who normally attends to them; patients were less satisfied on diabetes visited by PA/ NPs. Satisfaction with practitioner interaction was highest when visits were 26 to 45 minutes long. Postulates that variance in satisfaction levels has more to do with practitioner characteristics rather than the type of the practitioner
8	Mahomed *et al.* (2012)	Nurse-led chronic disease management	Australia	Quali. - GT underpinned by a relativist ontological position	semi-struc.	theoretical sampling	3 General Practices	38	TA, and compare.	Concept of time was critical in building rapport - some patients required only one or two appointments, some multiple.

9	Bergman *et al.* (2013)	Advanced NPs (APN)	Sweden	Mixed methods	questionnaire	Conv.	5 primary health care centres	223	Infer. and TA	Patients associated concepts of increased availability and continuity in healthcare to the APN role. Patients expressed that they felt APN were competent and skilful enough to provide quality care. Some patients would like APN to be able to prescribe, as it takes APN, GP and their time for the nurse to find a GP. The study is limited in that it does not describe how patients were informed on the role. Longer consultations (26 to 45 minutes) resulted in higher patient satisfaction for patient-practitioner interaction. Satisfaction still greater with a doctor for the same appointment length. However, shorter appointments (25 minutes or less) resulted in the greatest satisfaction for care access. Care access satisfaction greater with nurse than doctor (only a 2% difference) Access is determined by the practice characteristics. Unexpectedly, patient satisfaction with care access was significantly lower on a visit attended by the requested practitioner.

11	Desborough *et al.* (2016)	General Practice Nurses	Australia	Mixed methods study - Quant. underpinned by a critical realist perspective. Quali.- GT	questionnaire	Conv.	678 Q.. Interviews: 23 patients, 16 nurses, 9 Practice Managers	21 General practices	GT used, Multilevel mixed effects models	Patients were more likely to be satisfied, and feel enabled, when consultations with the nurse were over 15 minutes, than those who's consultations were 1-5 minutes.
13	Dhalivaal (2011)	Prescribing Nurse Practitioner	UK, Birmingham	mixed methods	semi-struc.	Conv.	3 General Practices	15	Descript. and narrative	Patients satisfied with the role as easier to make an appointment, and do not have to get up early to make one. Patients satisfied as avoid being refused an appointment by the receptionist. 73% patients found it convenient to receive their prescription in one appointment.
15	Redsell *et al.* (2006)	Nurse Practitioners	UK	Quali.	semi-struc.	Conv.	2 large General Practices	28	Compar.	Participants perceived that nurses spent longer with them. Some felt this was due to longer consultations, while others felt the nurses had made more time for them as they discussed everyday issues. Patients perceived nurses as more compassionate than GPs because of perceived more time available for patients.

16	Kernick *et al.* (1999)	Practice Nurse Specialists for minor illnesses	UK, Devon	observational study	patient Q.	Conv.	1 General Practice	186	descript.	Quali. data highlighted that nurses not being to prescribe was seen as a problem due to time keeping; the nurse had to get a GP to sign off the prescription. Patients were positive about being able to get an appointment quicker, as they would have had to wait for a GP appointment. This quicker access reassured patients about their problem. Patients valued this role, as they perceived it freed up GP appointments for more urgent cases.

17	Tinelli *et al.* (2013)	Prescribing Nurse Practitioner and Pharmacist independent prescribers	UK	cross-sectional study	patient Surv.	Conv.	6 General Practice case study sites from 6 different Strategic Health Authorities	294	Infer.	The participants all had long-term conditions, as the study states it focuses on adherence to clinical outcomes based on how well patients report their conditions are managed. The study concluded that there was some evidence that patients of NIPs who had a longer therapeutic relationship than those of PIPs (for whom IP was more recently introduced) generally tended to give more positive ratings. This study highlighted that patients reported it to be slightly easier and faster to get prescription from IPs, however, most stated no difference. Patients marginally felt they could get prescriptions quicker with their IP (21.6% IP, doctor 14.2%, no difference 64.2%) 'Generally, getting my prescriptions is easier from the…' IP 20.1%, doctor 15.7%, no difference 64.2% A greater difference between the IP and doctor's prescribing was demonstrated in how the prescription was given: 'I am more likely to be asked how I can fit medicines into my routine by the…' IP 24.4%, doctor 11.1%, no difference 50.7% . Most patients did NOT feel like they got longer appointments with their NIP or PIP than with their doctor (38.3% and 39.4% respectively). Patients did NOT want longer appointments with their NIP or PIP (24% and 23% SA/A they would have liked a longer appointment; $P < 0.01$) respectively. Participants stated that they feel they have the same number of appointments with their IP as

										they did their GP. Patients marginally felt they could get prescriptions quicker with their IP (21.6% IP, doctor 14.2%, no difference 64.2%) 'Generally, getting my prescriptions is easier from the…' IP 20.1%, doctor 15.7%, no difference 64.2%.

20	Shum et al, (2000)	Nurse Practitioners managing minor illnesses	UK, London and Kent	RCT	patient Q.	Conv.	5 General Practices	1,815	Infer.	The study demonstrated patients were significantly more satisfied with their consultations with nurses than with doctors (786% vs 76.4% respectively). Similar number prescriptions written (nurses 65.4%, vs doctors 63.5%), but nurses reported providing more self-medication and general self-management advice than doctors. The study states that is it does not explore the consultation content in detail. But the study demonstrated that, once the longer consultation time was compensated for, patients still preferred nurses over GPs. The study therefore hypothesises that the style of the different style of a nursing consultation may be the cause of the higher satisfaction rates.
21	Langer (1995)	Nurse practitioners	USA, Philadelphia	Surv.	patient Surv.	Conv.	1 Urban medical HIV clinic	52	descript.	22 (75.9%) participants felt waiting time for NP was just right compared with 7 (36.8%) for physicians. Ability to access NP in between appointments: 27 (93.1%) of patients felt they could access the NP between visits, compared to 12 (63.2%) who felt this about physicians.
23	Baldwin *et al.* (1996)	Nurse Practitioners and Physician Assistants	USA, mid-western	Quali.	5 focus groups	purp., Conv. and snowb.	unclear, but 5 different areas	30	TA	Some patients perceived that accessing a NP could lead to a NP doing an onward referral; leading to faster access to other services that patients may not be able to access otherwise. Patient stated they thought people would be interested in improved access if it was easier to access a nurse than a physician. Participants expressed that they preferred NP and PA services to be offered closer to their homes.

										Patients expressed preference for a 7 day week availability of the service as the ideal. 40 office hours per week was seen as acceptable, 8 to 16 would not be.
24	Myers, Lenci and Sheldon (1997)	Nurse Practitioner	UK	cross-sectional study	patient Q.	Conv.	6 Strategic Health Authorities	294	Infer.	Patients perceived that seeing the NP would mean that they would be seen sooner. 40% patients with urgent problems were male, and 60% were female. Some patients preferred to be seen by a female practitioner. More females saw NP than GP (64% versus 56%). Some patients perceived the nurse to have more time to offer than the doctor, as they were less busy.
25	Caldow *et al.* (2006)	Nurse practitioner led management of minor illness	UK, Scotland	mixed methods	cross-sectional postal Surv. and semi-structured phone interviews	random sampling	11 General Practices which had the least amount of NPs with extended scopes, and 11 General Practices which had NPs with the most	1,886 Q. and 48 interviews	Infer.	The combination of a reduced waiting time, an increased length of consultation and continuity of the PN makes the role more acceptable: 'patients obtain higher utility if they see a PN instead of a GP when their waiting time is reduced from 4 days to the same day, the length of consultation is increased from 5 days to 20 mon and they see the same PN rather than an unknown GP' (P.39) There was no significant difference in patient satisfaction between practices with an extended nursing role and those with a traditional nursing role, with one exception: patient satisfaction with time spent

							extended scope of practice			at the surgery, including arranging the appointment, was significantly better when visiting the PN (56%) compared with the GP (45%) in practices where the PN had an extended role (P < 0.05).' (p.36)Some patients expressed concerns in nurses' academic ability, as doctors have more qualifications. However, a patient stated they felt their experience compensated for their lesser qualifications, and sometimes the nurse knew better than the doctor. The NP can prescribe certain drugs for certain conditions. A patient gave the example of flue as acceptable, and antibiotics or inhalers for asthma. Repeat prescriptions were stated as more acceptable by this patient. Most interviewees thought PNs could prescribe some drugs, but they were limited in what they could do, and they should recognise their limitations and seek help from the GP if necessary. There was no significant difference in patient satisfaction between practices with an extended nursing role and those with a traditional nursing role, with one exception: patient satisfaction with time spent at the surgery, including arranging the appointment, was significantly better when visiting the PN (56%) compared with the GP (45%) in practices where the PN had an extended role (P < 0.05).' (p.36)Third most important attribute (behind seeing GP and continuity) was waiting time, followed by likelihood of having the illness cured and the

										length of the consultation. Respondents were willing to see a NP if their waiting time was reduced to 4 days.
26	Perry *et al.* (2006)	Nurse Practitioner	UK, Cheshire	observational study	semi-struc.	Conv.	15	1 General Practice	GT	Patients perceived that the NP role had reduced the wait for an appointment. Patients compared the wait now with having to wait two weeks before the introduction of the role. (The role did not, however, lead to faster access to a GP). The GPs at the practice were male. Patients interviews demonstrated that they felt it was beneficial having a female clinician available for consultation, as females felt more at ease during physical examinations and being able to talk more freely about personal problems without being embarrassed. 10 participants were females, 4 were males.
27	Reveley (1998)	Nurse practitioner	UK	Observational study	questionnaire and semi-struc.	Conv.	20 General Practices	286	infer.	'She asked to see the NP because "she only wanted a prescription". 93.3% of patients had a same-day appointment. Those who saw the NP were satisfied at being able to get an appointment so quickly.

28	Williams and Jones (2006)	Nurse Practitioner	UK	Quali.	semi-struc.	Purp.	1 General Practice	10	TA	The study postulates that previous dissatisfaction may have increased satisfaction with the accessibility of the NP. Patients remarked that longer consultations allowed for them to go through all their problems, and therefore they felt they needed less appointments. A diabetic explained that seeing the NP fits in better with their lifestyle; they are not in the waiting room long, and receive quality lifestyle advice from the NP, and feeling like all their problems have been dealt with. There were patient concerns that increased popularity of the role could lead to a demand the service cannot meet, and long waiting lists again. A patient remarked that more NPs are needed. A patient suggested the role might be helpful in remote areas.

31	Luker *et al.* (1998)	Prescribing Nurse Practitioner	UK	Quali.	semi-struc.	Conv.	8 General Practices	305	TA	The participants were regular users of the nursing services, which may impact on the knowledge-level of the professionals' scopes' and expertise. Patient interviews highlighted that patients did not feel the nurse was better than the GP, but that they are able to ask them more as they are able to access the HV more regularly. Patients stated that they felt the nurse had more time than the doctor to explain their long-term condition/ new products. A mother reported it was quicker to see the HV as she did not have to make an appointment, could have her baby weighed and could point out a problem which the HV could write a prescription for on the spot. Patients also reported that the did not want to waste doctor's time, and that they felt there may be patients with more urgent need of a GP who appointments should be saved for. The study highlighted the common theme of patients accessing the nurse rather than 'bothering' the GP, for the nurse to then act as a gatekeeper and telling the patient to see the GP. Some patients expressed preference for a female practitioner for sensitive female issues. Patients felt that they were able to raise issues with the nurse that they would not necessarily raise with the GP.

32	Chartered Society of Physiotherapy (2016b)	FCP	UK, West Cheshire	observational study	Patient, GP and FCP Q.	Conv.	5 General Practices with an FCP, but inclusive of 10 General Practices	1,897 patients responded to questionnaire	descript. and quail. Extracts	This study is limited in its contribution to theory areas as it is an audit with no analysis of findings. There were several positive patient comments about the advice received from the specialist MSK physiotherapist, in particular, patients were satisfied with immediate advice and self-management strategies rather than just a long wait. One patient expressed the advice left them feeling relieved and confident as they had been given a leaflet that described their symptoms and exercises they were hopeful would improve their condition. A participant commented that they felt the assessment was thorough and the therapist was efficient and listened to the. They therefore reported being more than happy with the outcome. Several patient comments regarded them feeling the physiotherapist had a high level of knowledge and were thorough in their assessment. This increased patient confidence. This study highlighted that 98% of patients reported their issues addressed and their appointments convenient. It is unclear what is meant by 'convenient'. Patients were satisfied with not needing a further referral to physiotherapy, and also not having a long wait to be seen by a physiotherapist.Patients were positive about receiving instant advice. They were also positive about instant identification of the issues, which increased patient confidence.

34	Heale and Pilon (2012)	Nurse Practitioner	USA, Ontario	Evaluation	Patient Surv.	Conv.	1 nurse-led clinic	1,585	Infer.	The study is limited in its' contribution to this theory area, as it does not report on how this effects satisfaction or acceptability. The study demonstrated that patients were more satisfied if they were able to make a same day appointment – 38.9% felt they were not able to attain one. Younger people were less satisfied with the ability to make a same day appointment. Those aged over 70 also expressed lower-levels of satisfaction for same day appointments also. Middle-aged participants were most satisfied. Satisfaction was greater when patients waited less than 15 minutes from their scheduled appointment time.
35	Barratt (2016)	Nurse Practitioner	UK	observational study	Patient Q., recorded consultations, semi-struc.	Conv.	1 urban General Practice	71 patient questionnaire responses, 30 recorded consultations, 11 interviews	Descript., Roter Interact-on Analysis, TA	Patients perceived the NP to have more available time for them. The mean time of consultation was 10.97 minutes. The median time for a 10 minute consultation was 9.3 minutes, and for 15 minutes slots were 13.4 minutes. Therefore, NP were not creating more time, but made patients feel they had more time. However, the study found there was no significant association between consultation lengths and satisfaction scores. Patient expressed that they raised a second agenda in the consultation, felt slightly guilty, but the NP did not mind. Patients did not feel rushed and were not dismissed. A patient reported feeling rushed by the doctor because

										they have so many people to see and their time is therefore limited.
36	Webster *et al.* (2008) .	FCP	UK, Scotland	Mixed methods	Patient questionnaire	Conv.	26 General Practices	2,177	Infer.	'Self-referral patients were more likely to be supportive of being able to self-refer, agreeing that self-referral could save time and they would use the service again in the future' (p.145) Some participants however stated they felt rushed during the physiotherapy intervention. Participants highlighted limitations in a system that only runs during office hours. Some participant interviews demonstrated concerns that introducing self-referral without a parallel public education/ awareness campaign would result in inappropriate presentations and longer waiting lists.

37	Wynne (2016)	FCP	UK, Wales	Service Evaluation	Patient Surv.s	purp.	8 General Practices	76	Infer.	The MSc dissertation is limited in its' analysis and therefore contribution to programme theories. It demonstrates a correlation between choice of treatment options given, and the physiotherapist being seen as just as effective as the GP.It postulates that this may be as the physiotherapists are able to offer as wide a variety of treatment options as the GP. However, there is no evidence to support this claim. The lowest satisfactions score was in relation to 'I had enough time with the physiotherapist' which was mean 4.1 however, this is out of 5, so it is still relatively high. The study postulates that this lower satisfaction may be due to patients in the study not understanding that the service is not routine physiotherapy, but an assessment and triage service (service runs as 20 minute slots, but usual physiotherapy is 45 minutes)

Appendix 25 Overview of studies for theory area 7, Promoting the role

Study number	Full citation	Professional	Country of origin	Study design	Data collection method	Sampling method	Number of practices/ clinics	sample size	data analysis methods	Summary of Key findings in Relation to Theory Area 7
18	Maul *et al.* (2015)	Advanced Nurse Practitioners	UK	A prospective cross-sectional study	patient Q.	Conv.	adult congenital heart disease clinics in Pittsburgh and Ohio	371 patients	Infer.	Limited patient understanding of the difference between a NP and a registered nurse, and how they are trained. 73% reported an understanding. States the importance of consultants encouraging patients to build a relationship with the NPs. Need for patient education into the team-based approach of care that includes physicians and experienced cardiovascular advance NPs. States the importance of the consultant encouraging patients to build a relationship with the NPs. The study concludes that there is a lack of patient knowledge of the nurses' medical training and role in the outpatient setting; this may negatively affect their perception of the quality of care received from NP-managed practices. Concludes that strategies need to be in place to introduce the role and its' skill-mix from a patient perspective. Patient views can be influenced by multimedia such as info leaflets, patients' experience or a letter describing the multidisciplinary nature of the programme. No evidence to back up that this is the correct method.

22	Chapple *et al.* (2000)	Nurse-led clinic	UK	Observational study	in-depth interviewing and questionnaire	Conv.	1 General Practice	49	Compar.	A patient stated that they had heard of NPs twice in the newspaper; they believed that the NP had experience and could do 70% of the things doctors could. A letter was sent to patients' homes stating that the NP was 'specially trained' and able to diagnose and treat diseases and illness in general practice. This resulted in patients perceiving them as highly qualified members of the nursing profession. A patient reported than an interaction with a member of the practice team made it more acceptable to see the NP, as they explained what the role was and that they are able to examine and write prescriptions, and that he was similar to a doctor. Some patients were confused by the suggestion NPs are like doctors. Some patients forgot the service was nurse-led, others thought the service was run by a doctor (the nurse running the practice was male). Patients often thought of the nurse as a doctor, even though some of them were aware they were not doctors. Patients stated this was due to the nurse's high-level of knowledge, and not due to him being a man. Other patients stated that they perceive the nurse to be a doctor as they are in charge.

23	Baldwin *et al.* (1996)	Nurse Practitioners and Physician Assistants	USA, mid-western	Quali.	5 focus groups	purp., Conv. and snowb.	unclear, but 5 different areas	30	TA	Participants expressed the need for public education on the qualifications and roles of the NPs and PAs. Suggestions included 'spreading the word' in the local community, for instance, asking ministers to speak about the role, hold town meetings, and putting up posters in businesses. Some patients stated they had never heard of the role.
25	Caldow *et al.* (2006)	Nurse practitioner led management of minor illness	UK, Scotland	mixed methods	cross-sectional postal Surv. and semi-structured phone interviews	random sampling	22 (11 high level of Extended scope, 11 low level Extended Scope)	1,886 Q. and 48 interviews	infer. DCE, and narrative	The study makes conclusions about the need for role promotion, these conclusions are based on patient's reporting a lack of understanding of the role, and NOT on patient is directly stating they want education. The study concludes that increased patient education, particularly regarding awareness of skills learned in modern nurse training programmes, which would inform on specialist skills and increase patients' confidence in PNs to develop further.
27	Reveley (1998)	Nurse practitioner	UK	Observational study	questionnaire and semi-struc.	Conv.	20 General Practices	286	infer.	This study highlights lack of role promotion. More than three times as many patients accessing the GP requested information about the role than those seeing the NP. They wanted information on who the NP cares for, her training, qualification, and general information about her work.

28	Williams and Jones (2006)	Nurse Practitioner	UK	Quali.	semi-struc.	Purp.	1 General Practice	10	TA	There were patient concerns that increased popularity of the role could lead to a demand the service cannot meet, and long waiting lists again. A patient remarked that more NPs are needed. A patient suggested the role might be helpful in remote areas.
30	Wasylkiw, Gould, Johnstone (2009)	Nurse Practitioner	USA, New Brunswick	Descriptive Quant. study	Patient Q.	Conv.	Not applicable - participants were recruited from a University, and the student's family and friends	196	Descript.	This study demonstrated that, although there was an overall tendency for respondents to be willing to access help from family physicians, participants were more willing to seek help from NPs for preventative concerns, instead of acute. The study postulates that this may be due to a lack of understanding of the scope of practice for NPs, as preventative care falls under the domain of care for other nursing professions, and participants may not be distinguishing between other health care providers. A limited number of participants accessed NPs (93%) and only 44% of participants indicated that they knew NPs were in this area (p.181). The study postulates that these two findings indicate that there is a need to increase the public's awareness of the NP and their scope of practice. The study concludes that a lack of education and publicity are acting as a barrier to acceptability of the NP role.

35	Barratt (2016)	Nurse Practitioner	UK	observational study	Patient Q., recorded consultations, semi-struc.	Conv.	1 urban General Practice	71 patient questionnaire responses, 30 recorded consultations, 11 interviews	Descript., Roter Interact-on Analysis, TA	This study highlighted that some patients' put an emphasis on status. One patient stated: "Not precisely, no I don't [know what the nurse practitioners actually are]. I do know there's a high level of learning involved for them and obviously [they are] not doctor status… but I mean quite almost I think, they must do as much studying. It seems to be more on the job rather than go to hospitals, university…" (p.187). Another patient stated "I know nurses have very good knowledge as well, but obviously there's a reason why a nurse is a nurse and a doctor is a doctor" (p.178). There was no difference in satisfaction scores across patient groups, except those who lived with their partner. Patients who lived with their partner had significantly lower levels of satisfaction with NP communication.

36	Webster *et al.* (2008)	FCP	UK, Scotland	Mixed methods	Patient questionnaire	Conv.	26 General Practices	2,177	Infer.	The study highlights the methods currently used for role promotion, and suggestions form participants on how to improve role promotion. 63% of self-referred patients expressed they had been made aware of the service through word-of-mouth or local press (P.144)37% of GP referred patients were made aware of the service by their GP, or poster displays (31%) (p.144)'Some were concerned that introducing self-referral without a parallel public education/awareness campaign would result in inappropriate presentations and longer waiting lists. Suggestions for improvement included: increased level of physiotherapy provision; what physiotherapy could offer and to whom; greater collaboration between physiotherapists and GPs; timing of service delivery; and providing a help desk/telephone advice line to provide and/or clarify information/advice' (p.145-146). Lack of promotion: not well publicised (p.147). 'it is essential that the physiotherapy profession uses effective modern marketing strategies to enhance the public's awareness and confidence in physiotherapy-led services, and to publicise how access to these services can be achieved.' (p.148)GP referral 37% of patients, GP-suggested referral 37%, self-

										referral 34%. Self-referral patients more satisfied : 'Despite there being a significant association between satisfaction and referral group (P<0.001), the majority of all respondents were either satisfied or very satisfied with their physiotherapy intervention: 79% of self-referred patients; 73% of patients referred at the suggestion of their GP; and 74% of patients referred by their GP)' (p.144).Role promotion by GPs may therefore be the most important, as this is the top method a patient becomes aware of the role through.
6	Fortin *et al.* (2010)	NP	Canada	Quali.	semi-struc.	purposeful (5+ more chronic diseases as well as other criteria)	1 Primary Healthcare clinic	18 Primary Healthcare patients, 6 family doctors	TA	Doctors and nurses both should play a role in making sure patients properly understand the role of each care provider. Nurses' competency must be demonstrated to and acknowledged by clients with multiple chronic diseases. The success of preventive approaches, systematic follow-up, and continuity of care is due notably to the integration of nurses and other professionals into medical teams (concluded by study, but not based on patient data).

11	Desborough *et al.* (2016)	NP	Australia	Mixed methods study – Quant. underpinned by a critical realist perspective. Quali.- GT	Q., semi-struc.	Q. - Conv. sampling. Interviews - theoretical sampling through constant comparative analysis	21 Practice	678 completed Q.; 23 patient interviews; 16 nurse interviews; 9 Practice Manager interviews	GT, Multilevel mixed effects models	Postulates that receptionists could play a role in promoting seeing the same NP (concluded by study, but not based on patient data).

Appendix 26 Overview of studies for theory area 8, Hierarchy

Study number	Full citation	Professional	Country of origin	Study design	Data collection method	Sampling method	Number of practices/ clinics	sample size	data analysis methods	Summary of Key findings
15	Redsell *et al.* (2006)	Nurse Practitioners	UK	Quali.	semi-struc.	Conv.	2 large General Practices	28	Compar.	Nurses seen as having 'less authority' than GP, and patients perceived this made it easier to build a rapport. However, some patients perceived this friendliness to mean the nurses had spare rime, because their conversations moved into everyday issues. One participant felt friendliness masked getting to the root problem and could result in misdiagnosis. Nurse seen as caring due to having more experience than GPs and locums, as patients believe they have learnt a lot in hospitals.

22	Chapple et al (2000)	Nurse-led clinic	UK	Observational study	in-depth interviewing and questionnaire	Conv.	1 General Practice	49	Compar.	Patient reported on an experience in the hospital as a cardiac patient. The participant observed that people consulted the nurses on the ward and not the doctor for problems. The participant reported this had led to a personal high-level of respect for nurses. Patients were almost always satisfied with the advice and treatment they received from the nurse. Patients' needs being met mattered more than the provider. The study demonstrated that some patients felt the knowledge of a nurse was no lesser than a doctor. Patients valued social support they received, which the study highlighted as particularly important to this case study (high unemployment rate). Patients felt listened to, and that the nurse discussed with them what the problem might be.

35	Barratt (2016)	Nurse Practitioner	UK	observational study	Patient Q., recorded consultations, semi-struc.	Conv.	1 urban General Practice	71 patient questionnaire responses, 30 recorded consultations, 11 interviews	Descript., Roter Interact-on Analysis, TA	.The study highlighted many positive ways of working from patient interviews. However, there was no significant difference in general satisfaction score or communication score for any of the three interaction style variables (patients/ carers verbally dominant or nurse verbally dominant; patient-centred interactions predominated or biomedical interactions predominated; congruent interactions occurred or incongruent interactions occurred). Coding categories for biomedical interactions were: all biomedical information and counselling; doctor's closed questions and instructions. The study's' questionnaire highlighted that communication satisfaction with high, most common codes: 'showing agreement or understanding' ; 'back-channel responses' which can be interpreted as practitioner's interest, listening or encouragement; 'personal remarks and social conversations'. Quali. interviews support the questionnaire. Patients reported that the NP's body language, such as the way they talk and look at the patient, made the patient feel more valued. Patients reported they felt listened to, and like the NP wanted to listen. Comparison of consultations showed that NPs asked more questions. A patient interview supported this in stating that the NP asked what the patient thought. The study concludes that this

										sense of comfort allows for patients to express ideas/ concerns/ expectations which leads to negotiations to occur, allowing patients to retain some control over their treatment plans. Patients reported that the NP was friendly and they felt more comfortable and at ease with them. A comparison was made with GPs who were seen as more official. One patient commented that they felt more able to talk to the NP as she was a woman. The patient stated this was due to particular attributes females possess, and stating that male doctors can be more 'severe' (p.179) One patient stated the importance of the personality of the individual practitioner. Patient stated that they say things to the NP that they thought they would not have said, as the NP calms them down. A patient stated that the NP uses language they can understand, unlike the doctor. One patient stated they were advised on medication usage in a 'nice' way (p.166) Patients stated that NP advice relieves them, and they feel they know better how to make it better. Some patients liked discussion of lifeworld problems (general health/ life concerns) as it is related to their condition and they felt NPs sensitively addressed it. Some patients stated they would not be able to discuss lifeworld problems with their GPs. Some patients cautious about lifeworld discussions as feel it wastes time.

Appendix 27 Overview of studies for Prescribing theme

Study number	Author and year	Professional	Country of origin	Study design	Data collection method	Sampling method	Number of practices/ clinics	sample size	data analysis methods	Summary of Key findings
4	Brooks *et al.* (2001)	Health Visitors, District Nurses and Practice Nurses	UK, Leicester	Quali.	semi-struc., face to face or telephone	Conv.	one Primary Care group	50	TA. and descript.	'The participants said nurse prescribers knew the system and best methods of delivery to make sure that they got maximum benefit from the prescription.'
9	Bergman *et al.* (2013)	Advanced NPs (APN)	Sweden	Mixed methods	questionnaire	Conv.	5 primary health care centres	223	Infer. and TA	There was an expectation from some patients that nurses should be able to prescribe to save the time having to find a GP. Some patients happy with nurse consulting with the doctor regarding their prescription, to ensure they don't take any risks. Some patients would like APN to be able to prescribe, as it takes APN, GP and their time for the nurse to find a GP. Some patients however were happy with the APN consulting a GP regarding prescription, to ensure they were not taking a risk.
10	Redsell, Stokes and		UK, 1 city	Quali.	semi-struc.	Conv.	2 practices	18 paired interviews	TA	Patient experience of previous GP consultations, and the outcome of this consultation influences their

	Baker (2007)									expectations. These outcomes include prescriptions.
13	Dhalivaal (2011)	Prescribing Nurse Practitioner	UK, Birmingham	mixed methods	semi-struc.	Conv.	3 General Practices	15	Descript. and narrative	Nurses provided them with better information/ explanations regarding their condition/ medication/ follow-up advice than their GP. Information provision was particularly valued by patients with long-term conditions. Patients found nurse prescribing convenient, saving them time as they only needed one appointment. All 15 participants satisfied with nurses prescribing. Participants felt more informed on medications by their nurse than their GP. Patients expressed the need to know the nurse was qualified and appropriately trained, on the whole, they felt they were.
16	Kernick *et al.* (1999)	Practice Nurse Specialists for minor illnesses	UK, Devon	observational study	patient Q.	Conv.	1 General Practice	186	descript.	Quali. data highlighted that nurses not being to prescribe was seen as a problem due to time keeping; the nurse had to get a GP to sign off the prescription.
17	Tinelli *et al.* (2013)	Prescribing Nurse Practitioner and Pharmacist	UK	cross-sectional study	patient Surv.	Conv.	6 General Practice case study sites from 6 different Strategic	294	Infer.	The study demonstrated no difference between number of patients who felt more informed by the doctor or IP, and concluded that IP were valued highly. Patients reported having a good relationship

		independent prescribers					Health Authorities			with their prescribing nurse (PN) or pharmacist independent prescribers (PIP) (89% and 79% respectively SA/A; P , 0.01). Patients were involved in the decision making process about the medicines prescribed for them. Overall, patients felt explanations were the same from both IP and doctor: 'I am better informed about my treatment by the…' independent prescriber 25.6%, doctor 25.6%, no difference 64%. However, patients felt: 'I am more likely to be asked how I can fit medicines into my routine by the…' IP 24.4%, doctor 11%, no difference 50.75 Also, patients found PIPs more approachable: 'I feel more able to ask questions about my medicines with the…' IP 27/65 and doctor 21.6%, no difference 52.2% But: 'I am more likely to be told how medicine will help me' by the IP 21.2%, by the doctor 30.9%, no difference 52.2% And: 'I am more likely to be told about the possible side effects of a new medicine' by the IP 16.3%, by the doctor 29.65%, no difference 54.1%

19	Parker *et al.* (2012)	Nurse Practitioners	Australia	national Surv.	patient Surv.	Conv.	multiple	1,784	Infer., descript.	Patients with chronic disease expected GP to initiate a prescription and interpreting a condition, as they found it less acceptable for nurses to carry out these competencies. High level of patient acceptability for repeat prescriptions (89%) but only 50% acceptability for initiating a new prescription. 85% acceptability for nurses ordering diagnostic tests. The more acceptable competencies are taking medical history 91%, and triaging 89%. These are assessment skills that may lead to seeing a GP. Older patients found the following more acceptable: - Taking a medical history - Interpreting diagnostic tests - Suturing superficial lacerations - Diagnosing and managing chronic or continuing conditions - Diagnosing significant health events Patients with chronic diseases found nurses interpreting diagnostic tests and initiating new prescriptions as less acceptable. Women found most activities more acceptable than male participants, except triage, initiating new prescriptions, suturing superficial lacerations, diagnosing chronic or continuing conditions and diagnosing serious acute illness.

25	Caldow *et al.* (2006)	Nurse practitioner led management of minor illness	UK, Scotland	mixed methods	cross-sectional postal Surv. and semi-structured phone interviews	rando m sampl ing	11 General Practices which had the least amount of NPs with extended scopes, and 11 General Practices which had NPs with the most extended scope of practice	1,886 Q. and 48 interviews	Infer., DCE, and TA	Some patients expressed concerns in nurses' academic ability, as doctors have more qualifications. However, a patient stated they felt their experience compensated for their lesser qualifications, and sometimes the nurse knew better than the doctor. The NP can prescribe certain drugs for certain conditions. A patient gave the example of flue as acceptable, and antibiotics or inhalers for asthma. Repeat prescriptions were stated as more acceptable by this patient. Most interviewees thought PNs could prescribe some drugs, but they were limited in what they could do, and they should recognise their limitations and seek help from the GP if necessary.
28	Williams and Jones (2006)	Nurse Practitioner	UK	Quali.	semi-struc.	Purp.	1 General Practice	10	TA	Patients expressed that the doctor commonly would simply prescribe, but the NP explained there are other ways of dealing with the condition other than drugs. This was seen as in relation to the GPs not having the time to do this. Patients felt that the NP was more up-to-date with recent developments of treatments that are more person centred. The patient

										reported that they felt the GP prescribed things just as they had been for years, and did not update their practice. However, they felt the NP was a mine of information who moved with the times.
31	Luker *et al.* (1998)	Prescribing Nurse Practitioner	UK	Quali.	semi-struc.	Conv.	8 General Practices	305	TA	This study highlighted positive attitudes towards the nurses' ways of working; nonetheless, 87% of patients did not single the nurse out for special praise. A patient described the nurse explaining how their asthma drugs work, and the patient felt much clearer about asthma from this. The participant stated that the nurse appeared to have more time to explain.
34	Heale, R., Pilon, R. (2012)	Nurse Practitioner	USA, Ontario	Evaluation	Patient Surv.	Conv.	1 nurse-led clinic	1,585	Infer.	Patients reported having to make a second appointment with the GP as the NP was limited by the drug list they could prescribe from.

35	Barratt (2016)	Nurse Practitioner	UK	observational study	Patient Q., recorded consultations, semi-struc.	Conv.	1 urban General Practice	71 patient questionnaire responses, 30 recorded consultations, 11 interviews	Descript., Roter Interact-on Analysis, TA	A patient stated that the NP uses language they can understand, unlike the doctor. One patient stated they were advised on medication usage in a 'nice' way (p.166). %, 88.6%, expected to be prescribed medication by the NP

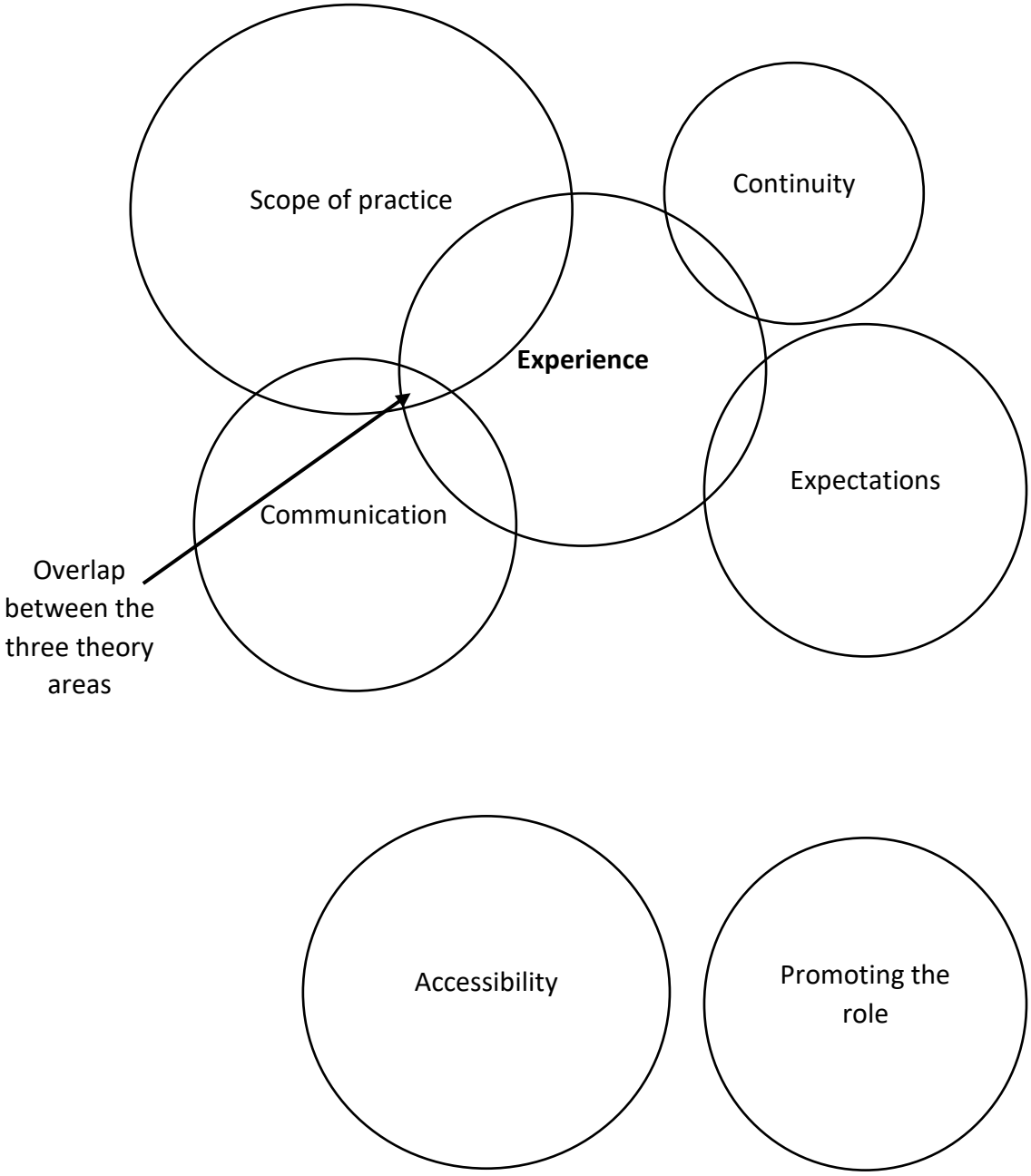
Appendix 28 Themes shared by theory areas

THEORIES OVERLAPPING	THEME
T1 + T5	Experience of roles increases chance accessing prescribing AP
T1 + T3	Experience of GPs not listening to them
T2+T1	Experience GPs recognising they had a serious illness resulted in patients having preconceived ideas about their condition management
T2 + T6	Felt an AP would be able to expedite access to a GP
T4 +T3	Able to build up a rapport from continuity
T4 + T1	Experience of several GPs due to locums
T5 + T1	Less accepting of extended scopes if limited experience of roles
T6 + T5	More convenient to get prescriptions in one appointment
T6 + T3	Longer consultation lengths result in APs being able to communicate more effectively
T6 + T3	Refuting T6 – perception of more time available for them through body language, not length of consultation is the most important
T6 + T2	Patients wanted to be able to see a GP sooner when they expected their condition to be 'serious'
T7 + T4	Receptionist promoting continuity
T5 + T2	If patients perceived their condition to be 'serious' then they expected their GP to prescribe for them
T5 + T6	Patients valued the convenience of getting their prescriptions in one appointment
T5 + T3	APs seen as person-centred when they prescribed
T5 + T3 + T4	APs person-centred when prescribing as they remembered them from a previous consultation
T5 + T1 + T3	Expectation that the AP should prescribe as patients had experience of GPs prescribing
T5 + T2 + T7	Patients expected that APs should have their prescribing competencies limited to 'simple things' due to concerns of the AP's academic ability
T7 + T6	Patient concerns that introducing the role without proper public education could lead to an over-demand of the service
T7 + T5	Patients wanted reassurance on the AP's training and qualifications
T7 + T4	Receptionists highlighted that continuity of the practitioner is available with the AP

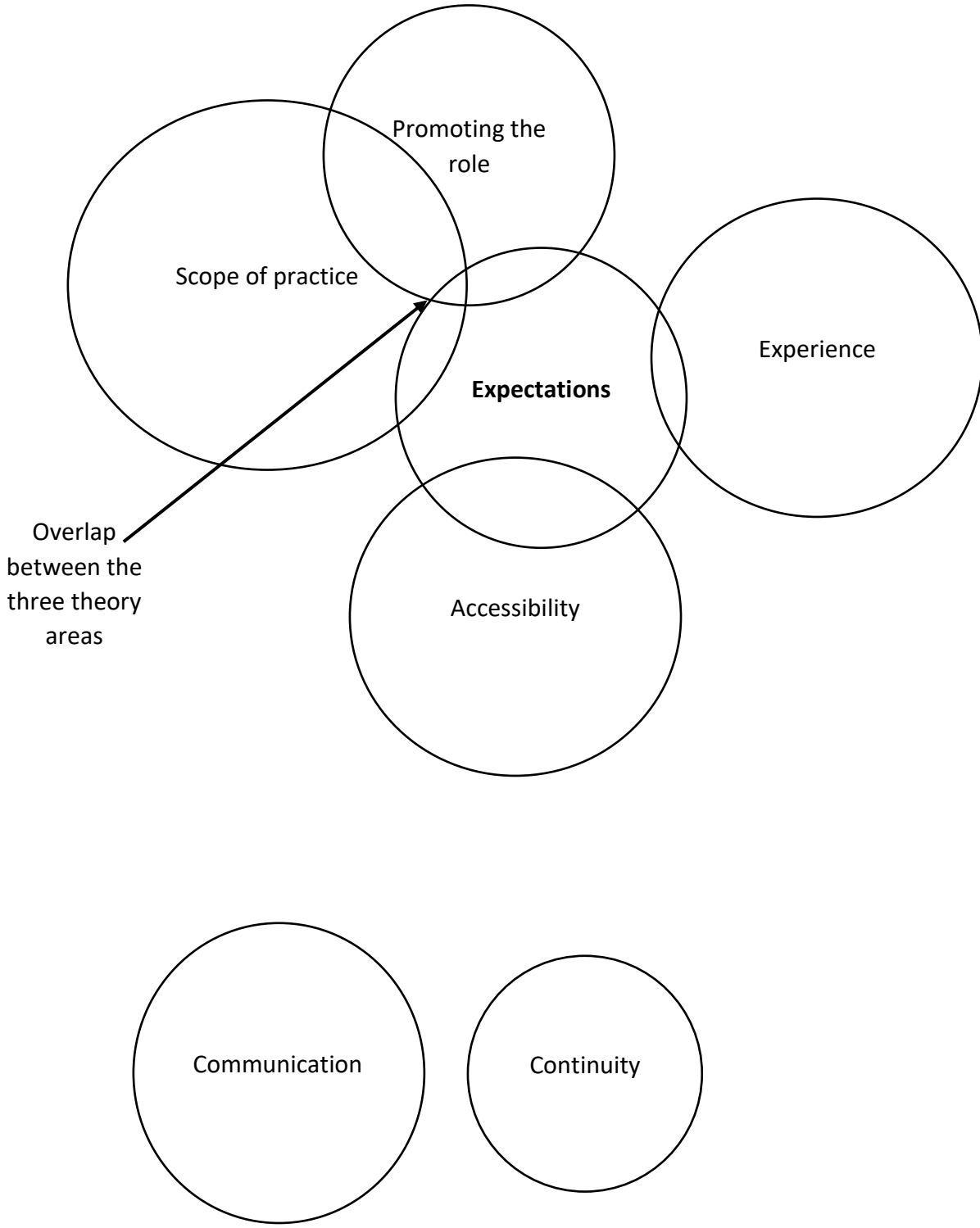
Appendix 29 Experience theory area overlaps

Key for Appendix 30-Appendix 35 Promoting the role theory area overlaps:

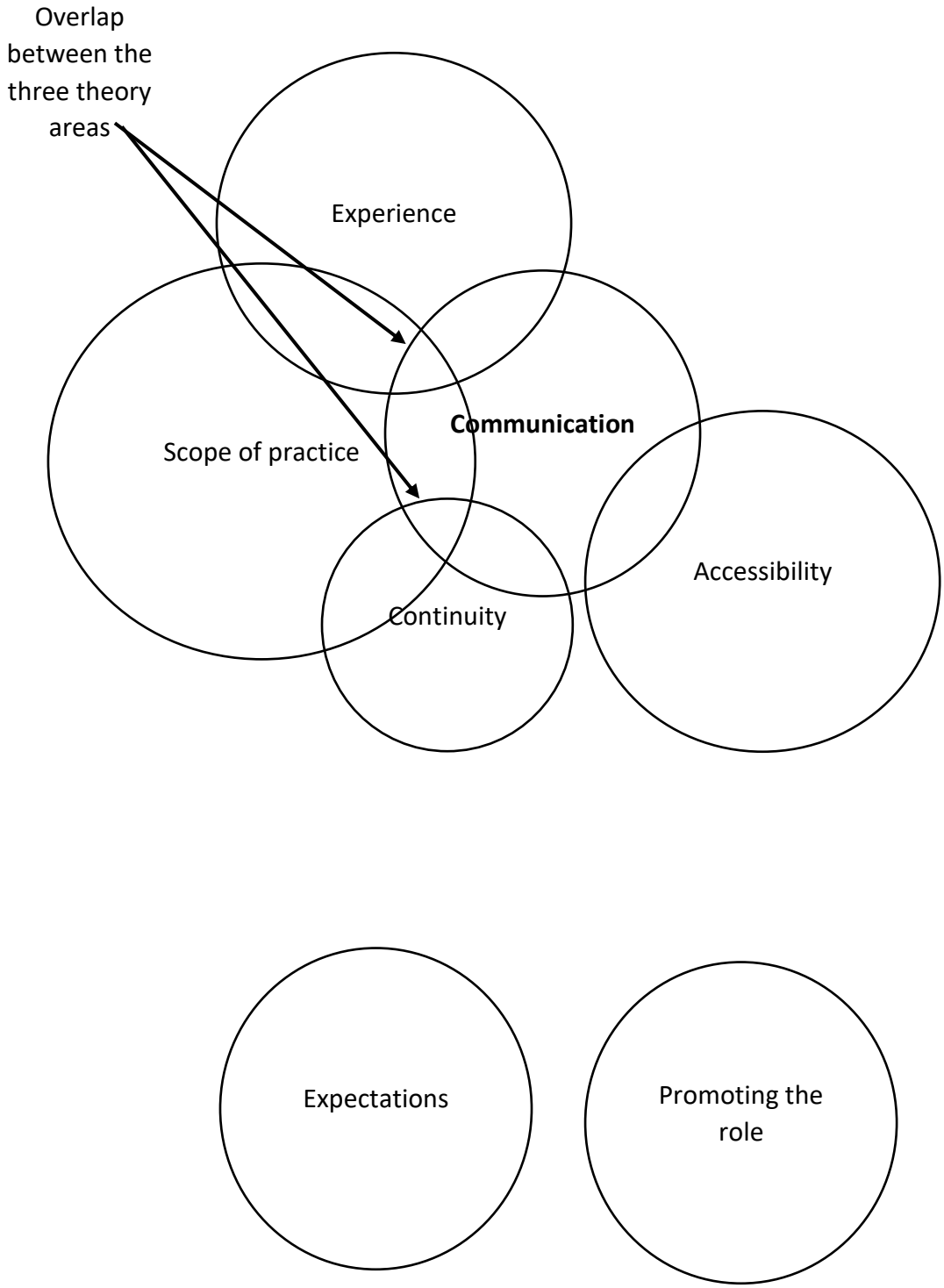
- The size of each circle corresponds with the number of theories the theory area overlaps with i.e. a theory area with three overlaps is half the size of a theory area with six overlaps.
- The more overlaps with a theory area, the greater the circles crossover.



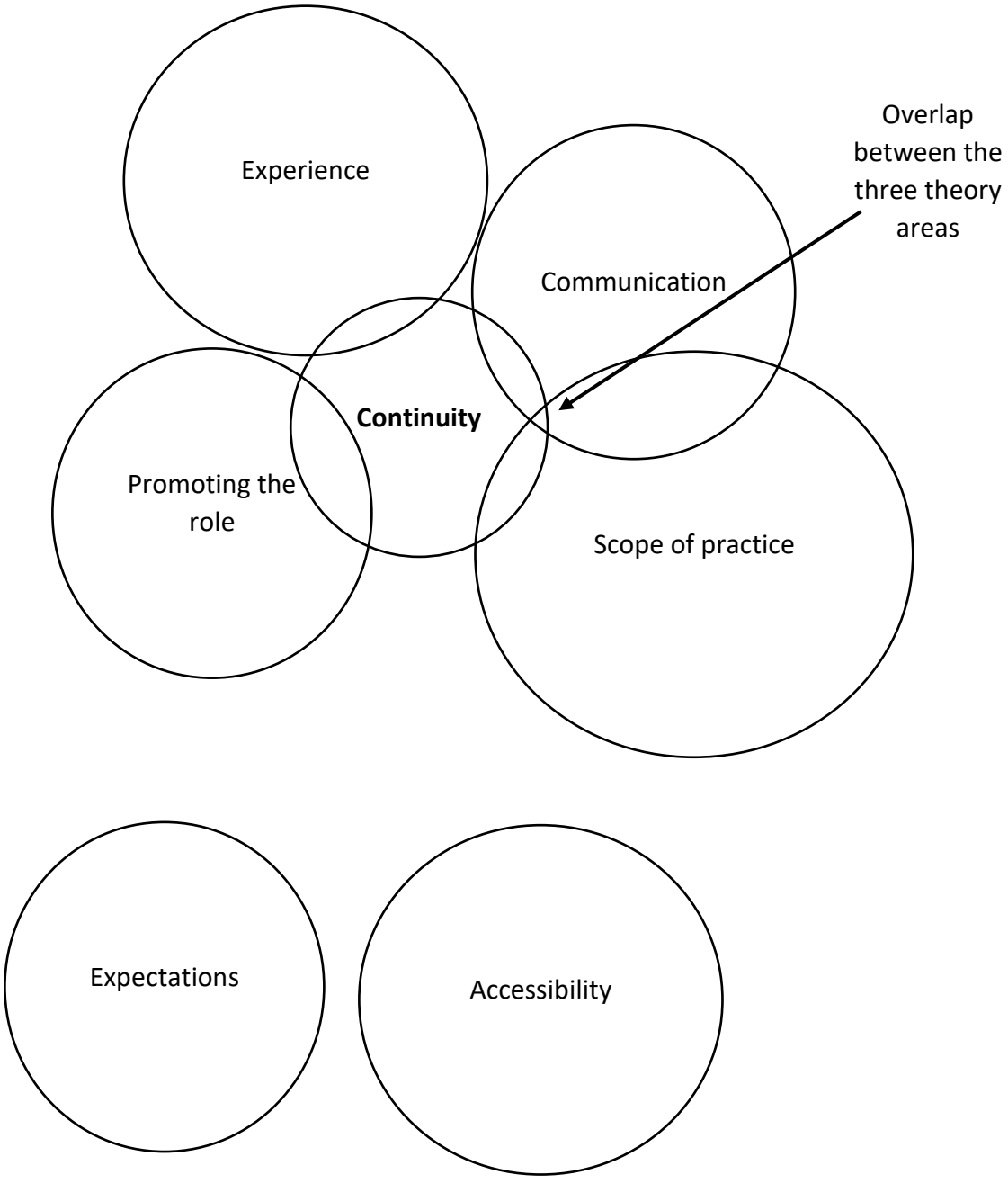
Appendix 30 Expectations theory area overlap



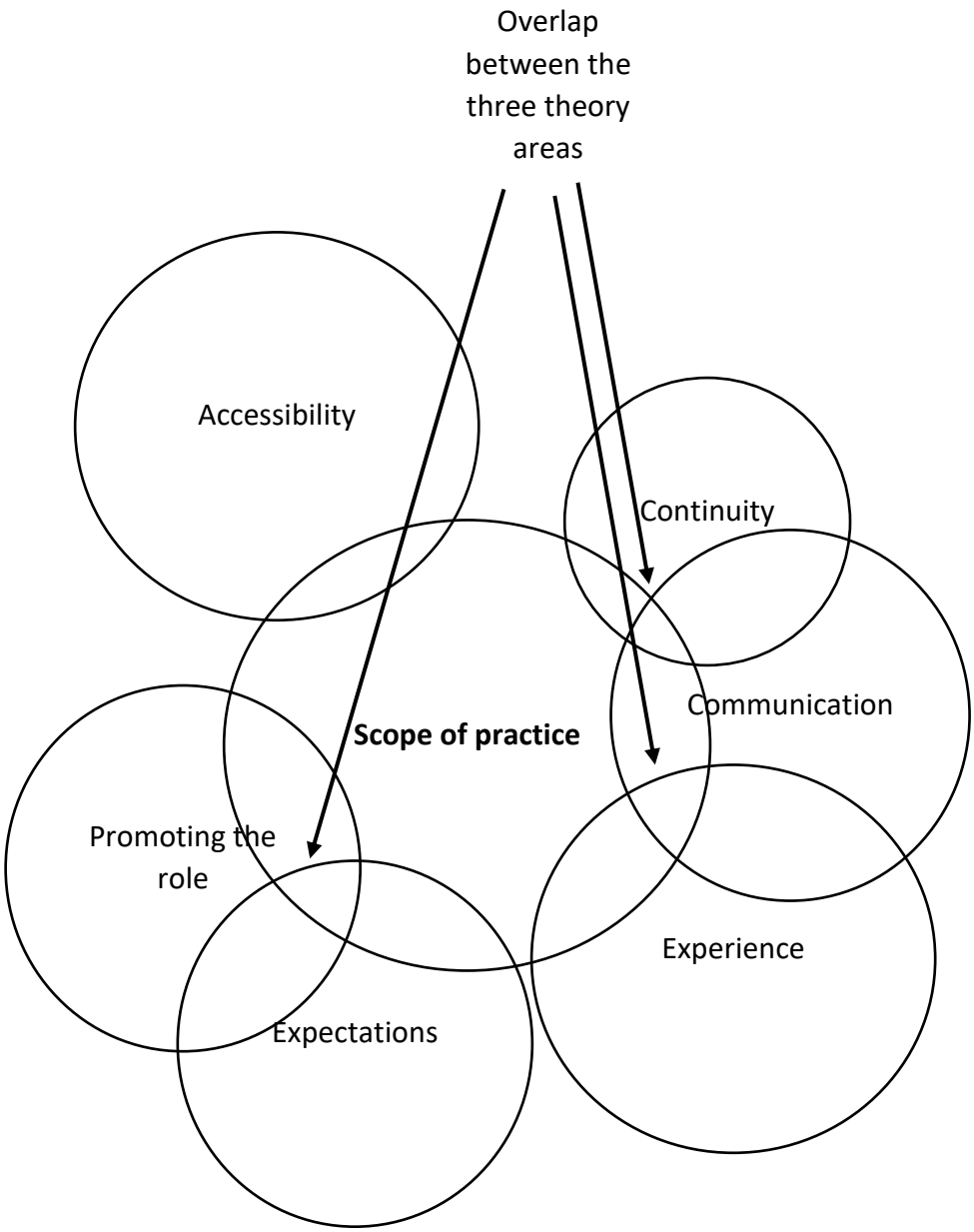
Appendix 31 Communication theory area overlaps



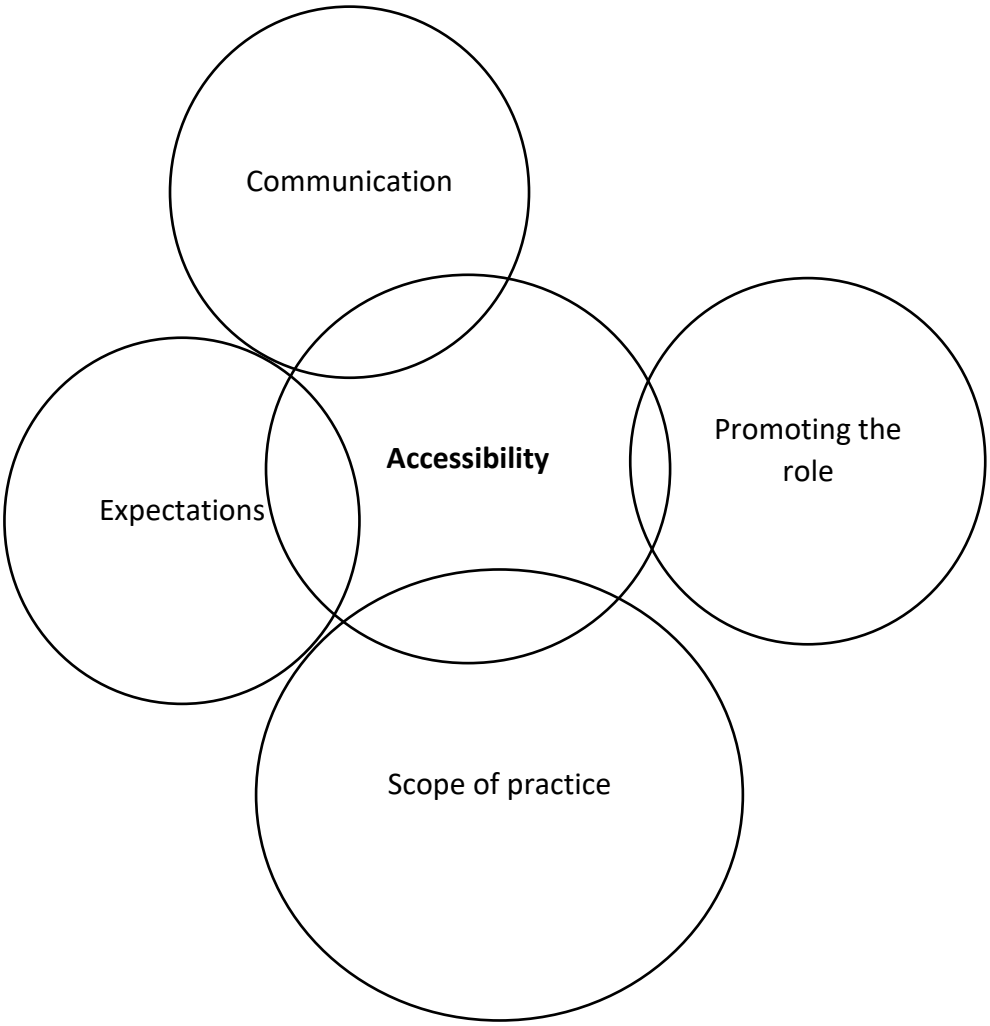
Appendix 32 Continuity theory area overlaps



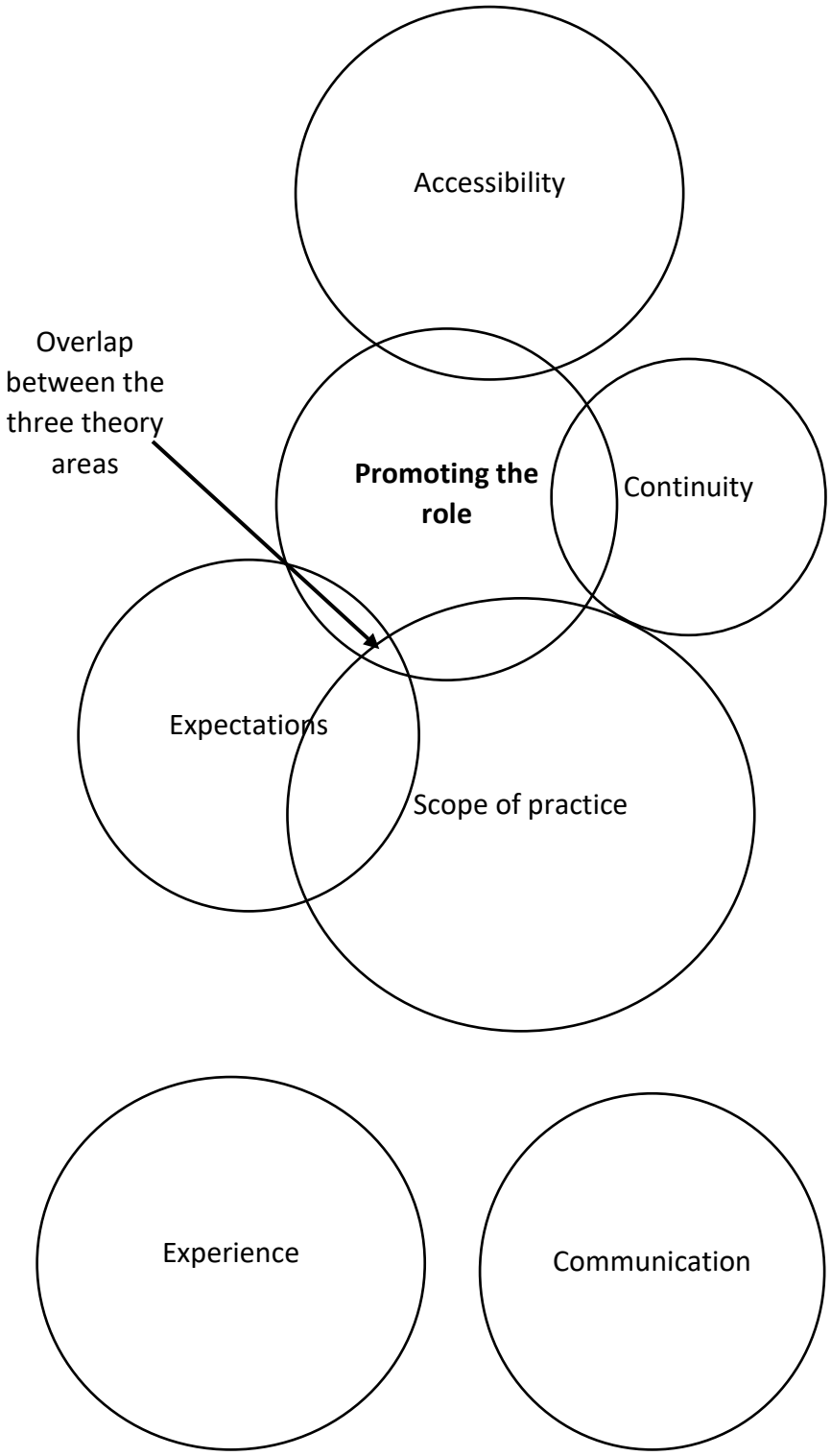
Appendix 33 Scope of practice theory area overlaps



Appendix 34 Accessibility theory area overlaps



Appendix 35 Promoting the role theory area overlaps



Appendix 36 - REC approval letter

Health Research Authority

London - Westminster Research Ethics Committee

4 Minshull Street
Manchester
M1 3DZ

Telephone: 0207 104 8012

Please note: This is the favourable opinion of the REC only and does not allow you to start your study at NHS sites in England until you receive HRA Approval

06 April 2018

identifiers removed

Dear Professor Walsh

Study title:	**The Patient Acceptability of the First Contact Practitioner (FCP) Role for Musculoskeletal Disorders (MSKDs) in Primary Care: A Realist Evaluation.**
REC reference:	**18/LO/0337**
IRAS project ID:	**239857**

Thank you for your submission, responding to the Proportionate Review Sub-Committee's request for changes to the documentation for the above study.

The revised documentation has been reviewed and approved by the Chair.

We plan to publish your research summary wording for the above study on the HRA website, together with your contact details. Publication will be no earlier than three months from the date of this favourable opinion letter. The expectation is that this information will be published for all studies that receive an ethical opinion but should

you wish to provide a substitute contact point, wish to make a request to defer, or require further information, please contact please contact hra.studyregistration@nhs.net outlining the reasons for your request.

Under very limited circumstances (e.g. for student research which has received an unfavourable opinion), it may be possible to grant an exemption to the publication of the study.

Confirmation of ethical opinion

On behalf of the Committee, I am pleased to confirm a favourable ethical opinion for the above research on the basis described in the application form, protocol and supporting documentation as revised.

Conditions of the favourable opinion

The REC favourable opinion is subject to the following conditions being met prior to the start of the study.

[Insert additional conditions, if applicable]

Management permission must be obtained from each host organisation prior to the start of the study at the site concerned.

Management permission should be sought from all NHS organisations involved in the study in accordance with NHS research governance arrangements. Each NHS organisation must confirm through the signing of agreements and/or other documents that it has given permission for the research to proceed (except where explicitly specified otherwise).

Guidance on applying for HRA Approval (England)/ NHS permission for research is available in the Integrated Research Application System, www.hra.nhs.uk or at http://www.rdforum.nhs.uk.

Where a NHS organisation's role in the study is limited to identifying and referring potential participants to research sites ("participant identification centre"), guidance should be sought from the R&D office on the information it requires to give permission for this activity.

For non-NHS sites, site management permission should be obtained in accordance with the procedures of the relevant host organisation.

Sponsors are not required to notify the Committee of management permissions from host organisations.

Registration of Clinical Trials

All clinical trials (defined as the first four categories on the IRAS filter page) must be registered on a publically accessible database. This should be before the first participant is recruited but no later than 6 weeks after recruitment of the first participant.

There is no requirement to separately notify the REC but you should do so at the earliest opportunity e.g. when submitting an amendment. We will audit the registration details as part of the annual progress reporting process.

To ensure transparency in research, we strongly recommend that all research is registered but for non-clinical trials this is not currently mandatory.

If a sponsor wishes to request a deferral for study registration within the required timeframe, they should contact hra.studyregistration@nhs.net. The expectation is that all clinical trials will be registered, however, in exceptional circumstances non registration may be permissible with prior agreement from the HRA. Guidance on where to register is provided on the HRA website.

It is the responsibility of the sponsor to ensure that all the conditions are complied with before the start of the study or its initiation at a particular site (as applicable).

Ethical review of research sites

The favourable opinion applies to all NHS sites taking part in the study, subject to management permission being obtained from the NHS/HSC R&D office prior to the start of the study (see
"Conditions of the favourable opinion" above).

Approved documents

The documents reviewed and approved by the Committee are:

Document	Version	Date
Copies of advertisement materials for research participants [Poster]	3	11 January 2018
Evidence of Sponsor insurance or indemnity (non NHS Sponsors only)		15 July 2017
GP/consultant information sheets or letters [Research information sheet STAFF]	4	09 March 2018
Interview schedules or topic guides for participants [FCP topic guide]	2	26 January 2018
Interview schedules or topic guides for participants [GP Topic guide]	2	02 February 2018
Interview schedules or topic guides for participants [PM Topic guide]	2	03 February 2018
Interview schedules or topic guides for participants [Receptionist topic guide]	2	03 February 2018
Interview schedules or topic guides for participants [Patient topic guide (with and withoout contact)]	2	31 January 2018
IRAS Application Form [IRAS_Form_27032018]		27 March 2018
Letter from sponsor [Indemnity letter 1]	1	15 July 2017
Letters of invitation to participant [Reply slip]	2	24 January 2018
Participant consent form [Patient consent]	2	31 January 2018
Participant consent form [staff consent]	1	31 January 2018
Participant information sheet (PIS) [Research information sheet 0.5]	5	09 March 2018

Research protocol or project proposal [Protocol final version]	0.7	07 February 2018
Summary CV for Chief Investigator (CI)	1	25 January 2018
Summary CV for supervisor (student research) [Professor Walsh]	1	26 January 2018
Summary CV for supervisor (student research) [Dr Pearson]		08 February 2018
Summary CV for supervisor (student research) [Pamela Moule]		

Statement of compliance

The Committee is constituted in accordance with the Governance Arrangements for Research Ethics Committees and complies fully with the Standard Operating Procedures for Research Ethics Committees in the UK.

After ethical review

Reporting requirements

The attached document "After ethical review – guidance for researchers" gives detailed guidance on reporting requirements for studies with a favourable opinion, including:

- Notifying substantial amendments
- Adding new sites and investigators
- Notification of serious breaches of the protocol
- Progress and safety reports
- Notifying the end of the study

The HRA website also provides guidance on these topics, which is updated in the light of changes in reporting requirements or procedures.

Feedback

You are invited to give your view of the service that you have received from the Research Ethics Service and the application procedure. If you wish to make your views known please use the feedback form available on the HRA website: http://www.hra.nhs.uk/about-the-hra/governance/quality-assurance

We are pleased to welcome researchers and R & D staff at our RES Committee members' training days – see details at http://www.hra.nhs.uk/hra-training/

18/LO/0337	**Please quote this number on all correspondence**

With the Committee's best wishes for the success of this project.

Yours sincerely

identifiers removed

identifiers removed

Appendix 37 HRA letter of ethical approval

identifiers removed

Email: hra.approval@nhs.net

Health Research Authority

10 April 2018

Dear Professor Walsh

Letter of HRA Approval

Study title:	**The Patient Acceptability of the First Contact Practitioner (FCP) Role for Musculoskeletal Disorders (MSKDs) in Primary Care: A Realist Evaluation.**
IRAS project ID:	**239857**
REC reference:	**18/LO/0337**
Sponsor	**The University of the West of England**

I am pleased to confirm that **HRA Approval** has been given for the above referenced study, on the basis described in the application form, protocol, supporting documentation and any clarifications received. You should not expect to receive anything further from the HRA.

How should I continue to work with participating NHS organisations in England?
You should now provide a copy of this letter to all participating NHS organisations in England, as well as any documentation that has been updated as a result of the assessment.

Following the arranging of capacity and capability, participating NHS organisations should **formally confirm** their capacity and capability to undertake the study. How this will be confirmed is detailed in the "*summary of HRA assessment*" section towards the end of this letter.

You should provide, if you have not already done so, detailed instructions to each organisation as to how you will notify them that research activities may commence at site following their confirmation of capacity and capability (e.g. provision by you of a 'green light' email, formal notification following a site initiation visit, activities may commence immediately following confirmation by participating organisation, etc.).

It is important that you involve both the research management function (e.g. R&D office) supporting each organisation and the local research team (where there is one) in setting up your study. Contact details of the research management function for each organisation can be accessed here.

How should I work with participating NHS/HSC organisations in Northern Ireland, Scotland and Wales?
HRA Approval does not apply to NHS/HSC organisations within the devolved administrations of Northern Ireland, Scotland and Wales.

If you indicated in your IRAS form that you do have participating organisations in one or more devolved administration, the HRA has sent the final document set and the study wide governance report (including this letter) to the coordinating centre of each participating nation. You should work with the relevant national coordinating functions to ensure any nation specific checks are complete, and with each site so that they are able to give management permission for the study to begin.

Please see IRAS Help for information on working with Northern Ireland, Scotland and Wales.

How should I work with participating non-NHS organisations?
HRA Approval does not apply to non-NHS organisations. You should work with your non-NHS organisations to obtain local agreement in accordance with their procedures.

What are my notification responsibilities during the study?
The document "*After Ethical Review – guidance for sponsors and investigators*", issued with your REC favourable opinion, gives detailed guidance on reporting expectations for studies, including: Registration of research

- Notifying amendments
- Notifying the end of the study

The HRA website also provides guidance on these topics, and is updated in the light of changes in reporting expectations or procedures.

I am a participating NHS organisation in England. What should I do once I receive this letter? You should work with the applicant and sponsor to complete any outstanding arrangements so you are able to confirm capacity and capability in line with the information provided in this letter.

The sponsor contact for this application is as follows:

Name:

Tel:

Email:

Who should I contact for further information?
Please do not hesitate to contact me for assistance with this application. My contact details are below.

Your IRAS project ID is **239857**. Please quote this on all correspondence.

Yours sincerely

identifiers removed

List of Documents

The final document set assessed and approved by HRA Approval is listed below.

Document	*Version*	*Date*
Contract/Study Agreement template [Template Agreement]	1	07 February 2018
Copies of advertisement materials for research participants [Poster]	3	11 January 2018
Evidence of Sponsor insurance or indemnity (non NHS Sponsors only)		15 July 2017
GP/consultant information sheets or letters [Research information sheet STAFF]	4	09 March 2018
HRA Schedule of Events	1	06 April 2018
Interview schedules or topic guides for participants [Patient topic guide (with and without contact)]	2	31 January 2018
Interview schedules or topic guides for participants [FCP topic guide]	2	26 January 2018
Interview schedules or topic guides for participants [GP Topic guide]	2	02 February 2018
Interview schedules or topic guides for participants [PM Topic guide]	2	03 February 2018
Interview schedules or topic guides for participants [Receptionist topic guide]	2	03 February 2018
IRAS Application Form [IRAS_Form_27032018]		27 March 2018
IRAS Application Form XML file [IRAS_Form_27032018]		27 March 2018
Letter from sponsor [Indemnity letter 1]	1	15 July 2017
Letters of invitation to participant [Reply slip]	2	24 January 2018
Participant consent form [Patient consent]	2	31 January 2018
Participant consent form [staff consent]	1	31 January 2018
Participant information sheet (PIS) [Patient Research Information Booklet]	6.0	10 April 2018
Research protocol or project proposal [Protocol final version]	0.7	07 February 2018
Summary CV for Chief Investigator (CI)	1	25 January 2018
Summary CV for supervisor (student research) [Professor Walsh]	1	26 January 2018
Summary CV for supervisor (student research) [Dr Pearson]		08 February 2018
Summary CV for supervisor (student research) [Pamela Moule]		

Summary of HRA assessment

The following information provides assurance to you, the sponsor and the NHS in England that the study, as assessed for HRA Approval, is compliant with relevant standards. It also provides information and clarification, where appropriate, to participating NHS organisations in England to assist in assessing, arranging and confirming capacity and capability.

HRA assessment criteria

Section	HRA Assessment Criteria	Compliant with Standards	Comments
1.1	IRAS application completed correctly	Yes	No comments
2.1	Participant information/consent documents and consent process	Yes	The PIS has been updated to version 6.0 date 10/04/2018 to comply with HRA standards. The update does not impact upon the REC FO which is already in place.
3.1	Protocol assessment	Yes	No comments
4.1	Allocation of responsibilities and rights are agreed and documented	Yes	An unmodified mNCA is the intended agreement for participating organisations to participate in the study.
4.2	Insurance/indemnity arrangements assessed	Yes	No comments
4.3	Financial arrangements assessed	Yes	The study is funded by a fellowship/ personal award/ research training award. There is no funding available for participating organisations as per the mNCA.
5.1	Compliance with the Data Protection Act and data security issues assessed	Yes	No comments
5.2	CTIMPS – Arrangements for compliance with the Clinical Trials Regulations assessed	Yes Not Applicable	No comments
Section	**HRA Assessment Criteria**	**Compliant with Standards**	**Comments**

5.3	Compliance with any applicable laws or regulations	Yes	No comments
6.1	NHS Research Ethics Committee favourable opinion received for applicable studies	Yes	No comments
6.2	CTIMPS – Clinical Trials Authorisation (CTA) letter received	Not Applicable	No comments
6.3	Devices – MHRA notice of no objection received	Not Applicable	No comments
6.4	Other regulatory approvals and authorisations received	Not Applicable	No comments

Participating NHS Organisations in England

This provides detail on the types of participating NHS organisations in the study and a statement as to whether the activities at all organisations are the same or different.
There is one site type, a Patient Identification Centre (PIC). The participating organisations will undertake the activities as detailed in the IRAS application and protocol. The Chief Investigator or sponsor should share relevant study documents with participating NHS organisations in England in order to put arrangements in place to deliver the study. The documents should be sent to both the local study team, where applicable, and the office providing the research management function at the participating organisation. For NIHR CRN Portfolio studies, the Local LCRN contact should also be copied into this correspondence. For further guidance on working with participating NHS organisations please see the HRA website. If chief investigators, sponsors or principal investigators are asked to complete site level forms for participating NHS organisations in England which are not provided in IRAS or on the HRA website, the chief investigator, sponsor or principal investigator should notify the HRA immediately at hra.approval@nhs.net. The HRA will work with these organisations to achieve a consistent approach to information provision.

Principal Investigator Suitability

This confirms whether the sponsor position on whether a PI, LC or neither should be in place is correct for each type of participating NHS organisation in England and the minimum expectations for education, training and experience that PIs should meet (where applicable).
A Local Principal Investigator is required for this type of study and has been identified at the participating NHS site. GCP training is not a generic training expectation, in line with the HRA/MHRA statement on training expectations.

HR Good Practice Resource Pack Expectations

This confirms the HR Good Practice Resource Pack expectations for the study and the pre-engagement checks that should and should not be undertaken
It is expected that the principles of the HR Good Practice Pack are followed for researchers working in Primary Care. Researchers are advised to follow the processes of the local Primary Care management function.

Other Information to Aid Study Set-up

This details any other information that may be helpful to sponsors and participating NHS organisations in England to aid study set-up.
The applicant has indicated that they do not intend to apply for inclusion on the NIHR CRN Portfolio.

Appendix 38 UWE letter of ethical approval

identifiers removed

Our ref: JW/lt

13th April 2018

Miss Leah Morris
Address removed

Dear Leah

Application Number: HAS.18.04.145
Application title: The Patient Acceptability of the First Contact Practitioner (FCP) Role for Musculoskeletal Disorders (MSKDs) in Primary Care: A Realist Evaluation
NHS Application Number: 18/LO/0337

Your NHS Ethics application and approval conditions have been considered by the Faculty Research Ethics Committee on behalf of the University. It has been given ethical approval to proceed with the following conditions:

- You comply with the conditions of the NHS Ethics approval.
- You notify the Faculty Research Ethics Committee of any further correspondence with the NHS Ethics Committee.
- You must notify the Faculty Research Ethics Committee in advance if you wish to make any significant amendments to the original application.
- If you have to terminate your research before completion, please inform the Faculty Research Ethics Committee within 14 days, indicating the reasons.
- Please notify the Faculty Research Ethics Committee if there are any serious events or developments in the research that have an ethical dimension.
- Any changes to the study protocol, which have an ethical dimension, will need to be approved by the Faculty Research Ethics Committee. You should send details of any such amendments to the committee with an explanation of the reason for the proposed changes. Any changes approved by an external research ethics committee must also be communicated to the relevant UWE committee.
- Please note that any information sheets and consent forms should have the UWE logo. Further guidance is available on the web: https://intranet.uwe.ac.uk/tasks-guides/Guide/writing-and-creating-documents-in-the-uwe-bristol-brand
- Please note that the University Research Ethics Committee (UREC) is required to monitor and audit the ethical conduct of research involving human participants, data and tissue conducted by academic staff, students and researchers. Your project may be selected for audit from the research projects submitted to and approved by the UREC and its committees.

Please note that your study should not commence at any NHS site until you have obtained final management approval from the R&D department for the relevant NHS care

organisation. A copy of the approval letter(s) must be forwarded to Leigh Taylor in line with Research Governance requirements.

Please remember to populate the HAS Research Governance Record with your ethics outcome.

We wish you well with your research.

Yours sincerely

identifiers removed

Appendix 39 Patient research information booklet

PATIENT RESEARCH INFORMATION BOOKLET

The Patient Acceptability of Physiotherapists in General Practice Surgeries

You are being invited to take part in a research study that aims to improve access to NHS physiotherapy services. Before you decide, it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully and discuss it with others if you wish. Please take time to decide whether or not you wish to take part.

Leah Morris is the Principal Investigator in this study, Leah is undertaking the project as part of her PhD studies

What is the Purpose of the Study?

- General Practice surgeries have an increasing number of patients and waiting lists are growing.
- Up to 30% of General Practitioner (GP) consultations are for a joint or muscle problem.
- Physiotherapists are experts in joint and muscle problems, and they are able to diagnose and treat your condition without the need to see a GP first in a First Contact Practitioner (FCP) role.
- Early access to physiotherapy leads to better patient outcomes.
- There is very limited research into the FCP role.
- This research will increase the amount of patient impact on the shaping of services for a better patient experience.

IRAS Project ID: 239857

Version 4, 9th March 2018

UWE Bristol | University of the West of England

Why have I been Invited to Take Part?

- We are looking for patients who have, or have had, joint or muscle problem.
- You may have had, or are having physiotherapy, but this is not essential.
- You can also take part if you have experienced the FCP role.
- You must be over 18 years old to take part.
- There may be some reasons you will not be able to take part; this is because participants are selected who can best increase our understanding of the research field.

Do I Have to Take Part?

- No. It is up to you to decide whether or not to take part.
- If you have received this information booklet directly from the researcher, please ensure you take at least 48 hours to consider participation before making a decision. You do not need to contact the researcher if you do not want to take part.
- If you do decide to take part, you will be asked to sign a consent form that states you have read this information sheet and understand what the research involves.

If you decide to take part, you are still free to withdraw at any time and without giving a reason. A

- decision to withdraw at any time, or a decision not to take part, will not affect the care you receive.

What will happen to me if I take Part and what do I have to do?

- Preferably, you will be interviewed in a face to face interview with Leah in your home. If this is not suitable, you may have a telephone interview instead.
- The interview will last around 30-60 minutes.
- The interviews (face to face or telephone) will be recorded via a digital device.
- This transcript will be sent back to you. This is done so that you can check that what you meant by yours words has been interpreted correctly by the researcher.
- Once the research is completed, **you will be sent a summary of the findings**

What are the Possible Disadvantages and Risks of Taking Part?

- The research may not immediately benefit you, but instead it is expected that the findings will improve your Practice over time.
- There are no known risks in taking part.

What if Something Goes Wrong?

- If you have any concerns about this study, please contact Leah.
- If, after you have spoken to Leah, you wish to make a formal complaint, you can contact Professor Nicola Walsh, the research supervisor, or you can contact The Complaints and Appeals Team. Both of these contacts are at the end of the sheet.

Will my Taking Part in the Study be Kept Confidential?

- The interviews will immediately be transferred onto a secure online data management software, and deleted from the digital device. They will be saved under a title unidentifiable to you.
- All information which is collected about you will have your name and address removed so that you cannot be recognised from it.
- Information will be stored securely for five years after data collection is finished, it will then be professionally disposed of.

What will happen to the Results of the Study?

- The results will be written up into professional publications and will be presented at meetings and conferences.
- You will not be identified in any of the reports or publications.

Who is Organising and Funding the Research?

- The research is being funded by The University of the West of England.
- The primary researcher is Leah Morris, a PhD student at The University of the West of England.

Contact Information

Feel free to ask any questions that you may have about the research.

Please return the inserted reply slip to Leah via the pre-paid envelope, or contact Leah if you would like to take part.

Leah Morris
Primary Researcher

Phone: 07801259876

Email:
leah.morris@uwe.ac.uk

Address:
UWE Glenside Campus
Blue Lodge
Blackberry Hill
Stapleton
Bristol
BS16 1DD

Professor Nicola Walsh
Research supervisor

Phone: 0117 32 88801

Email:
Nicola.Walsh@uwe.ac.uk

Address:
UWE Glenside Campus
Blackberry Hill
Stapleton
Bristol, BS16 1DD

The Complaints & Appeals Team

Phone: 0117 32 83371

Email:
complaints@uwe.ac.uk

Address:
Academic Services
UWE Frenchay Campus
Coldharbour Lane
Bristol, BS16 1QY

Appendix 40 Staff information booklet

STAFF RESEARCH BOOKLET

Research Exploring the Role of Physiotherapists in General Practice Surgeries

UWE Bristol | University of the West of England

You are being invited to take part in a research study that aims to improve access to NHS physiotherapy services. Before you decide, it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully and discuss it with others if are deciding whether or not you wish to take part.

Leah Morris is the Principal Investigator in this study, Leah is undertaking the project as part of her PhD studies.

What is the Purpose of the Study?

General Practice has an increasing number of patients and waiting times are growing. In order to cope, GP consultation lengths are shortening; leading to dissatisfied patients and overworked GPs. Up to 30% of General Practitioner (GP) consultations are for musculoskeletal disorders (MSKDs).

New models of care mean physiotherapists can see patients within the GP surgery without the need for patients to see a GP first, this is the First Contact Practitioner (FCP) role. This role could result in patients seeing the right professional at the right time; reducing the risk of an acute MSKD becoming a more complex and chronic and improving GP access for those most in need. There is very limited research into the FCP role. This research will increase the amount of patient impact on the shaping of services for a better patient experience.

Why have I been Invited to take Part?

Evidence regarding roles that are similar to the FCP role highlight how instrumental Practice staff are in the operation of these roles. As a receptionist, GP, or physiotherapist, you play a vital part in the implementation of the role. Consequently, you have a unique insight into how the FCP role is received by patients. This study will provide you with an opportunity to discuss your experiences of this, which will result in a holistic understanding of patient acceptability. Your experiences will provide a highly valuable contribution to this study.

If there is multiple interest in the study, unfortunately not everyone would be able to take part due to budget and time limitations. The project has the scope for up to five staff interviews only.

Do I Have to Take Part?

No. It is up to you to decide whether or not to take part. If you do decide to take part, you will be asked to sign a consent form that states you have read this information sheet, understand what the research involves and confirming you are happy to participate

If you decide to take part, you are still free to withdraw at any time and without giving a reason.

What will happen to me if I take Part and what do I have to do?

You will be invited to discuss your experiences of patient responses to the FCP role. This will take place via a telephone interview with the Principal Investigator. You can do this from the surgery, at a time that suits you. The interview will last around 15-20 minutes. The interview will be recorded via a digital device.

A summary of the transcript's themes will be sent back to you. This is done so that you can check that what you meant by yours words has been interpreted correctly by the researcher. Once the research is completed, **you will be sent a summary of the findings.**

What are the advantages of Taking Part?

The findings of this research will result in recommendations for service improvements that can be implemented in your Practice, that may improve patient experience.

We do not perceive there to be any risks in taking part.

What if Something Goes Wrong?

If you have any concerns about this study, please contact the Primary Investigator (details at the end of this document)

If, after you have spoken to the Primary Investigator, you wish to make a formal complaint, you can contact Professor Nicola Walsh, or you can contact The Complaints and Appeals Team. Both of these contacts are at the end of the sheet.

Will my Taking Part in the Study be Kept Confidential?

All information which is collected about you which leaves the Practice will have your name and any identifiable information removed so that you cannot be recognised from it. Any data used for publication purposes will be anonymised and not be identifiable in any way

What will happen to the Results of the Study?

The results will be written up in peer reviewed publications and will be presented at meetings and conferences.

You will not be identified in any of the reports or publications.

Who is supporting the Research?

The research is being sponsored by The University of the West of England and funded by UWE Bristol and Avon Primary Care Research Collaborative.

Contact Information

Feel free to ask any questions that you may have about the research. Please speak to your Practice Manager or contact Leah if you would like to take part.

Leah Morris
Principal Investigator

Phone: 07801259876

Email:
leah.morris@uwe.ac.uk

Address:
UWE Glenside Campus
Blue Lodge
Blackberry Hill
Stapleton
Bristol
BS16 1DD

Professor Nicola Walsh
Research supervisor

Phone: 0117 32 88801

Email:
Nicola.Walsh@uwe.ac.uk

Address:
UWE Glenside Campus
Blackberry Hill
Stapleton
Bristol, BS16 1DD

The Complaints & Appeals Team

Phone: 0117 32 83371

Email:
complaints@uwe.ac.uk

Address:
Academic Services
UWE Frenchay Campus
Coldharbour Lane
Bristol, BS16 1QY

UWE Bristol | University of the West of England

Appendix 41 Patient recruitment poster

Do you have a muscle or joint problem?

We want to know your views on different ways of accessing physiotherapy.

Are you interested in how physiotherapy services may be delivered in the future, and willing to discuss your ideas?

Please pick up a **leaflet from reception** for more information. Thank you.

521

Appendix 42 Patient reply slip

Reply Slip for Physiotherapy Research

Thank you for reading the information booklet. If you would like to take part in this research, please fill in this reply slip.

☐ I am happy to be contacted by the researcher via the phone

☐ I understand that returning this slip does not commit me to taking part in this research

If you have ticked yes to the above, you would be a suitable candidate to take part in the research. Please fill in the following (**Please note, all of this information will be kept completely confidential):**

Full name: ……..

Telephone: …….

Please return this slip either via the pre-paid envelope enclosed.

Your interest is greatly appreciated!

Many thanks,

January 2018, version 2

IRAS Project ID: 239857

Leah Morris
Postgraduate Researcher,
University of the West of England

Appendix 43 Acceptance for non-substantial amendment

New Site Amendment, Implementation Information

Dear Professor Walsh

IRAS Project ID:	239857
Short Study Title:	Patient Acceptability of the First Contact Practitioner Role
Date complete amendment submission received:	5 June 2018
Sponsor Amendment Reference Number:	NSA 1
Sponsor Amendment Date:	05 June 2018
Amendment Type:	Non-substantial
For new sites in Northern Ireland and/or Scotland:	Please start to set up your new sites. Sites may not open until NHS management permission is in place.
For new sites in England and/or Wales:	For studies which already have HRA and HCRW Approval: **This email also constitutes HRA and HCRW Approval for the amendment, and you should not expect anything further**. Please start to set up your new sites. Sites may not open until the site has confirmed capacity and capability (where applicable). For studies which do not yet have HRA and HCRW Approval: **HRA and HCRW Approval for the initial application is pending**. You can start the process of setting up the new site but cannot open the study at the site until HRA and HCRW Approval is in place and the site has confirmed capacity and capability (where applicable). For studies with HRA Approval adding Welsh NHS organisations for the first time. Please take this email to confirm your **original HRA Approval letter is now extended to cover NHS organisations in Wales. You now have HRA and HCRW Approval.** Please start to set up your new sites. Sites may not open until the site has confirmed capacity and capability (where applicable).

Thank you for submitting an amendment to add one or more new sites to your project. This amendment relates solely to the addition of **new sites**.

What should I do next?

Please set up the new site(s) as per the guidance found within IRAS. **Please note** that processes change from time to time so please use the most up to date guidance about site set up.

If your study is supported by a research network, please contact the network as early as possible to help support set up of the new site(s).

If you have listed new sites in any other UK nations **we will** forward the information to the national coordinating function(s) for nations where the new site(s) are being added. In Northern Ireland and Scotland, NHS/HSC R&D offices will be informed by the national coordinating function.

Note: you may only implement changes described in the amendment notice.

Who should I contact if I have further questions about this amendment?

If you have any questions about this amendment please contact the relevant national coordinating centre for advice:

- England – hra.amendments@nhs.net
- Northern Ireland – research.gateway@hscni.net
- Scotland – nhsg.NRSPCC@nhs.net
- Wales – research-permissions@wales.nhs.uk

Additional information on the management of amendments can be found in the IRAS guidance.

User Feedback

We are continually striving to provide a high quality service to all applicants and sponsors. You are invited to give your view of the service you have received and the amendment procedure. If you wish to make your views known please use the feedback form available at: http://www.hra.nhs.uk/about-the-hra/governance/quality-assurance/.

Please do not hesitate to contact me if you require further information.

Appendix 44 Staff consent form

Study Number FREC **HAS.18.04.145**
Participant ID Number

STAFF CONSENT FORM

Title: **The Patient Acceptability of the First Contact Practitioner (FCP) Role for Musculoskeletal Disorders (MSKDs) in Primary Care: A Realist Evaluation.**

Chief Investigator: Leah Morris (Nicola Walsh)

	Please read this information carefully	Please initial box
1	I confirm that I have read and understand the information sheet (Dated 01/03/18, version 4) for the above study and have had the opportunity to ask questions.	
2	I understand that my participation is voluntary and that I am free to withdraw at any time, without giving any reason and without consequence, and any identifiable data will be deleted.	
3	I agree to my anonymised data being used for the purpose of this study	
4	I agree to anonymised information being used for presentations and publications.	
5	I agree to take part in the above study.	

Name of Participant **Date**
Signature

……

Researcher **Date**
Signature

……

Appendix 45 Patient consent form

Study Number FREC HAS.18.04.145
Participant ID Number

PATIENT CONSENT FORM

Title: **The Patient Acceptability of the First Contact Practitioner (FCP) Role for Musculoskeletal Disorders (MSKDs) in Primary Care: A Realist Evaluation.**

Chief Investigator: Leah Morris (Nicola Walsh)

	Please read this information carefully	Please initial box
1	I confirm that I have read and understand the information sheet (Dated January 2018, version 4) for the above study and have had the opportunity to ask questions.	
2	I understand that my participation is voluntary and that I am free to withdraw at any time, without giving any reason and without consequence, and any identifiable data will be deleted.	
3	I agree to my anonymised data being used for the purpose of this study	
4	I agree to anonymised information being used for presentations and publications.	
5	I agree to take part in the above study.	

Name of Participant **Date**
Signature

……

Researcher **Date**
Signature

……

Appendix 46 Receptionist topic guide after expert team input

1. Check tape recorder works.
2. Introduce self.
3. Explain the purpose of the interview.
4. Confirm the patient has read and understood the patient information booklet
5. Invite participant to ask any questions they may have.
6. Reconfirm they are in control of the interview and can stop at any time.
7. Obtain recorded verbal/written consent.

Opening:

- Can you tell me what your role in the Practice is?
- How long have you been at this Practice for?
- When did you know there was a First Contact Practitioner in the Practice?
- What do you understand about the role?

Theory 1 – Patient Experience of Roles Associated with the FCP Role

(1) Have you ever discussed the role of physiotherapists with patients?
(2) If yes, what kind of role description or information do you provide?
(3) How do you find patients respond to this?

Theory 2 – Patient Expectations of Condition Management

(4) Have patients with musculoskeletal disorders ever expressed not wanting to see a physiotherapist?
Prompts: *why do they not want to see a physiotherapist, perceived severity of condition, what conditions do they consider 'serious'*

Theory 4 – Continuity of Professional

(5) Have patients ever expressed to you a preference to see the same practitioner regarding an ongoing issue?
(6) If so, did the patient explain this preference?
Prompts: *continuity, knowing the practitioner, the practitioner knowing them, familiarity*

Theory 5 – Scope of Practice

(7) Have patients with MSKDs ever expressed limitations in FCP consultations, for instance, receiving prescriptions?
(8) What's the feedback from patients?
Prompts: *wanting to see a GP, dissatisfied if FCP can't prescribe due to needing GP to sign off/ prescribing FCP not acceptable for reasons of competency*
(9) Have patients with MSKDs ever expressed wanting any other particular treatments or interventions in their consultation?
Prompts: *injection therapy, wanting special tests e.g. bloods, X-rays*

Theory 6 – Accessibility

(10) Could you tell me your views on whether the waiting time for an appointment impacts on patient satisfaction for both GP and FCP consultations?

(11) Could you tell me your views on whether the length of GP consultations impacts on patient satisfaction with the service?
Prompts*: experience of patients expressing their views, whether reducing waiting times/ increasing consultation length would increase satisfaction*

Theory 7 – Role Promotion

(12) What are your views on how the First Contact Practitioner role is promoted to staff in the Practice?
Prompts: *how well informed on the role, methods of promoting if any*

(13) What are your views on how the First Contact Practitioner role is promoted to patients in the Practice?
Prompts: *how well informed patients are on the role, methods of informing them, leaflets, posters, other methods, staff promoting the role, which professionals are more/ less effective in promoting the role*

Theory 8 – Hierarchy

(14) How has the role been assimilated into the Practice?

(15) Is there anything that is working well in the Practice, or not working well?
Prompts: *how the role is working in the Practice team, interaction between HCPs, sharing of knowledge.*

Appendix 47 Practice Manager topic guide after expert team input

1. Check tape recorder works.
2. Introduce self.
3. Explain the purpose of the interview.
   Thank you for agreeing to the interview. **I have some ideas** from what I have read and from speaking to others about how the physiotherapy first contact practitioner works in General practice, in particular, what makes it more acceptable to patients. I'm **really interested in what your ideas are** about the first contact practitioner role (or FCP role which I will shorten it to). What I will do is introduce these ideas throughout the interview, **please take your time to consider them, and don't feel obliged to answer straight away.** Please answer honestly if **you agree or disagree, or even if you don't particularly have an opinion, that's all absolutely fine.**
4. Confirm the patient has read and understood the patient information booklet
5. Invite participant to ask any questions they may have.
6. Reconfirm they are in control of the interview and can stop at any time.
7. Obtain recorded verbal/written consent.

Opening:

- Can you tell me what your role in the Practice is?
- How long have you been at this Practice for?
- Can you tell me what your personal understanding of the First Contact Practitioner role in Primary Care is?
- Can you tell me how the FCP role started in the Practice?

Theory 1 – Patient Experience of Roles Associated with the FCP Role

(16) What do you think the role offers compared to what GPs offer?
Prompts: *different/ same clinical outcomes, cost of employing*

Theory 2 – Patient Expectations of Condition Management

(1) Which conditions do FCPs see?
Prompts: *serious conditions, what type of patients considered higher risk*

(2) How have you determined who FCPs can/can't see?
Prompts: *reception triage, reviewing role descriptions, health care professionals (HCP) sharing knowledge*

(3) Do patients get any choice on who they see?
Prompts: *how they evaluate what patients want, priority to see their chosen HCP/ any HCP*

Theory 5 – Scope of Practice

(4) Which practitioner skills or interventions do you think are important?
Prompts*: prescribing, injection therapy, ordering special tests, training for these*

(5) Why did you feel these in particular would be important?
Prompts*: patient choice, convenience, save GP time*

(6) Are there any barriers or challenges to the FCPs being able to deliver these interventions or skills?
Prompts: *how did you overcome?*

Theory 6 – Accessibility

(7) How long are both the GP and the FCP consultations?

(8) Have you seen any changes to waiting times for GP or FCP appointments?
Prompts: *wait for a FCP appointment, wait for a GP appointment, an increase in the number of people with MSKDs accessing service*

Theory 7 – Role Promotion

(9) Is the FCP role promoted to patients in the Practice?

(10) If yes, could you tell me how the FCP role is promoted to patients in your Practice?
Prompts*: posters, leaflets, letters, online, receptionists, GPs, media*

(11) How do you think this has gone?
Prompts: *methods of promoting the role, barriers/ challenges to promoting role, ways of overcoming challenges.*

(12) How was the role introduced to staff members?
Prompts: *receptionists,* GPs

(13) How do you think this has gone?
Prompts*: what they feel to be a 'success', barriers/ challenges to staff understanding the role, methods of overcoming barriers, what other methods could promote the role/ increase staff understanding of the role*

(14) In an ideal world, is there anything you would have done differently?

Theory 8 – Hierarchy

(15) How has the role been assimilated (integrated) into the Practice?

(16) Is there anything that is working well in the Practice, or not working well?
Prompts: *how the role is working in the Practice team, interaction between HCPs, sharing of knowledge*

Appendix 48 GP topic guide altered after expert team input

1. Check tape recorder works.
2. Introduce self.
3. Explain the purpose of the interview.
4. Confirm the patient has read and understood the patient information booklet
5. Invite participant to ask any questions they may have.
6. Reconfirm they are in control of the interview and can stop at any time.
7. Obtain recorded verbal/written consent.

Opening:

- Can you tell me what your role in the Practice is?
- How long have you been at this Practice for?
- Before taking part in this research, did you know there was a First Contact Practitioner in the Practice?
- If yes, what did you know about the role?

Theory 1 – Patient Experience of Roles Associated with the FCP Role

(17) Have you ever discussed the role of physiotherapists with patients?
(18) If yes, what kind of role description or information do you provide?
(19) How do you find patients respond to this?
Prompts: *need to persuade patients that the role is effective, or patients easily influenced*

Theory 2 – Patient Expectations of Condition Management

(1) Have patients with musculoskeletal disorders ever expressed not wanting to see a physiotherapist?
Prompts: *why do they not want to see a physiotherapist, perceived severity of condition, what conditions do they consider 'serious'*

Theory 3 – Communication

(1) Do you perceive patients to have a 'favourite style' of consultation?
Prompts: *providing information, person centred care, demonstrating a high level of knowledge*

Theory 4 – Continuity of Professional

(1) Have patients ever expressed to you a preference to see the same practitioner regarding an ongoing issue?
(2) If so, did the patient explain this preference?
Prompts: *continuity, knowing the practitioner, the practitioner knowing them, familiarity*

Theory 5 – Scope of Practice

(1) Do patients with MSKDs ever express what Scope of Practice they expect FCPs to have, compared to the Scope they expect to you have as a GP?
Prompts: particular interventions or skills, *when would a physiotherapist be preferential to a patient over a GP/ when would a GP be preferential to a physiotherapist*

Theory 6 – Accessibility

(1) Could you tell me your views on whether the length of GP consultations impacts on patient satisfaction with the service?
(2) Could you tell me your views on whether the waiting time for an appointment impacts on patient satisfaction with the service?
Prompts*: experience of patients expressing their views, whether reducing waiting times/ increasing consultation length would increase satisfaction*

Theory 7 – Role Promotion

(1) What are your views on how the First Contact Practitioner role is promoted to staff in the Practice?
Prompts: *how well informed on the role, methods of promoting if any*
(2) What are your views on how the First Contact Practitioner role is promoted to patients in the Practice?
Prompts: *how well informed patients are on the role, methods of informing them, leaflets, posters, other methods, staff promoting the role, which professionals are more/ less effective in promoting the role*

Theory 8 – Hierarchy

(1) As a Practice team, how well do you think the role has been accepted?
Prompts: *interaction between HCPs, sharing of knowledge*

Appendix 49 FCP topic guide altered after expert team input

1. Check tape recorder works.
2. Introduce self.
3. Explain the purpose of the interview.
4. Confirm the patient has read and understood the patient information booklet
5. Invite participant to ask any questions they may have.
6. Reconfirm they are in control of the interview and can stop at any time.
7. Obtain recorded verbal/written consent.

Opening:

- Can you tell me what your role in the Practice is?
- Find out about any extended scope skills (injection therapy, prescribing, ordering special tests, ordering MRIs)
- How long have you been in this Practice?
- What is your background as a practitioner?
- How do you think the FCP role works within your Practice?

Theory 1 – Patient Experience of Roles Associated with the FCP Role

(20) Do you find patient prior experience of GPs affects what they expect from a FCP consultation?
Prompts: *equivalent or higher type of outcomes/ treatments as a GP consultation*

(21) Do patients ever see any similarities between you and other Advanced Practitioner roles?
Prompts: *if so, how has this experience impacted on their views of FCP role, AP nurse*

(22) How does patient prior experience affect their views of the FCP role?

Theory 2 – Patient Expectations of Condition Management

(23) Do patients ever express a preference for seeing you or the GP?
Prompts: *why do they not want to see a physiotherapist, perceived severity of condition, what conditions do they consider 'serious'*

Theory 4 – Continuity of Professional

(24) Have patients ever expressed a preference to see the same practitioner regarding an ongoing issue?

(25) If so, did the patient explain this preference?
Prompts: *continuity, knowing the practitioner, the practitioner knowing them, familiarity*

Theory 5 – Scope of Practice

(26) Do patients with MSKDs ever express particular interventions that they expect from you as a FCP?

(27) Have you ever been asked for a particular intervention that you cannot deliver?

(28) What skills do you think are required for this role?
Prompts: particular interventions or skills, need to explain/ reassure Scope/ training, *when would a physiotherapist be preferential to a patient over a GP/ when would a GP be preferential to a physiotherapist, how they meet deficiencies e.g. how they make the role work if unable to prescribe*

Theory 6 – Accessibility

(29) Could you tell me your views on whether the waiting time for an FCP appointment impacts on patient satisfaction with the service?

(30) Could you tell me your views on whether the length of FCP consultations impacts on patient satisfaction with the service?

Prompts*: experience of patients expressing their views, whether reducing waiting times/ increasing consultation length would increase satisfaction*

Theory 7 – Role Promotion

(31) What are your views on how the First Contact Practitioner role is promoted to staff in the Practice?

Prompts: *how well informed on the role, methods of promoting if any*

(32) What are your views on how the First Contact Practitioner role is promoted to patients in the Practice?

Prompts: *how well informed patients are on the role, methods of informing them, leaflets, posters, other methods, staff promoting the role, which professionals are more/ less effective in promoting the role*

Theory 8 – Hierarchy

(33) How has the role been assimilated into the Practice?

(34) Is there anything that is working well in the Practice, or not working well?

Prompts: *how the role is working in the Practice team, interaction between HCPs, sharing of knowledge*

Appendix 50 Patient topic guide after expert team input

1. Check tape recorder works.
2. Introduce self.
3. Explain the purpose of the interview.
4. Confirm the patient has read and understood the patient information booklet
5. Invite participant to ask any questions they may have.
6. Reconfirm they are in control of the interview and can stop at any time.
7. Obtain recorded verbal/written consent.

Opening:

- Confirm that they have had any experience of FCPs for their MSKD
- Confirm that the patient has, or has had in the past, a MSKD
- The type of MSKD
- Length of time had the MSKD
- Explore what the patient thinks a First Contact Practitioner physiotherapist is
- Identify how long ago this experience was
- Who have you seen in the past?
- How have you come to see a FCP?

Theory 1 – Experience of Roles Associated with the FCP Role

1. Other than seeing your GP, do you have experiences of consulting other healthcare professionals at your GP practice?

   Prompts: *tell me about this experience, what were the outcomes, differing/ similar experience with different professionals*

2. How did the experience differ to your experience with your GP?

   Prompts: *treatments/ outcomes, equivalent outcomes as GP*

3. Has your GP discussed the First Contact Practitioner roles in the Practice with you?

   Prompts: *positive/ negative views, influence on your views, discussed other healthcare roles in Primary Care*

Theory 8 – Hierarchy

4. Have health care professionals in the Practice, or in Secondary Care ever expressed their views on physiotherapists which you feel have impacted on yours?
5. Have the Practice receptionists ever expressed their views on physiotherapists that you feel have impacted on yours?

   Prompts: *negative/ positive views, health care professional of choice, best health care professional to be seen by*

Theory 2 – Expectations

6. Which professional would you rather see and why?

   Prompts: for your MSKD; *health conditions that you consider to be more serious than others; multiple conditions; who would you access for the conditions you consider to be more serious;* do *you feel different Health care professions have different diagnosis skills; views on FCPs prescribing*

7. How do you feel about having a choice on seeing a range of different professionals in your GP practice?

Prompts*: lack of patient choice, FCP leading to indirect access to GP*

Theory 3 – Communication

8. Can you tell me what about your GP's consultation [or other professionals they have experienced] that you liked/disliked?

Prompts: *communication skills, explaining information, personable, demonstrate knowledge*

Theory 4 – Continuity of Professional

9. Can you tell me what your views are on seeing the same one practitioner, instead of having consultations with several practitioners?

Prompts: *for your MSKD; familiarity, knowing the practitioner, practitioner knowing the patient's name*

Theory 5 – Scope of Practice

10. Can you tell me what sort of services or treatments you would like from your physiotherapist in your General Practice surgery?

Prompts: *compared to GP, prescriptions*

11. What are your views on physiotherapists being able to prescribe?

Prompts: *independently prescribe, GPs check prescriptions, serious condition*

Theory 6 – Accessibility

12. Can you tell me whether the length of consultations affects your consultation experience, if at all?

13. Could you tell me what your views on physiotherapists working in GP practices are if this service was able to reduce waiting times for appointments?

Prompts: *reduced wait for GP consultation, reduced wait for a physio appointment, convenience of appointment*

Theory 7 – Role Promotion

18. Prior to this interview, had you heard about physiotherapists in a First Contact Practitioner role?

19. If yes, where had you heard about the role?

Prompts: *family/ friends that may have shared experiences, GPs/ staff discussing role, media, the internet*

20. Do you feel like you need any more information about the role?

Prompts: *understanding*

Appendix 51 Patient topic guide altered after Patient Partner input

8. Check tape recorder works.
9. Introduce self.
10. Explain the purpose of the interview.
11. Confirm the patient has read and understood the patient information booklet
12. Invite participant to ask any questions they may have.
13. Reconfirm they are in control of the interview and can stop at any time.
14. Obtain recorded verbal/written consent.

Opening:

- In lay terms, what do you think a musculoskeletal disorder is?
- Confirm that they have had any experience of FCPs for their MSKD
- Confirm that the patient has, or has had in the past, a MSKD
- The type of MSKD
- Length of time had the MSKD
- Explore what the patient thinks a First Contact Practitioner physiotherapist is
- Identify how long ago this experience was
- Who have you seen in the past?
- How have you come to see a FCP?

Theory 1 – Experience of Roles Associated with the FCP Role

(1) Other than seeing your GP, do you have experiences of consulting other healthcare professionals at your GP practice?

Prompts: *tell me about this experience, for conditions other than MSKDs also, what were the outcomes, differing/ similar experience with different professionals*

(2) How did the experience differ to your experience with your GP?

Prompts: *treatments/ outcomes, equivalent outcomes as GP*

(3) Has your GP discussed the First Contact Practitioner roles in the Practice with you?

Prompts: *positive/ negative views, influence on your views, discussed other healthcare roles in Primary Care*

Theory 8 – Hierarchy

(4) Have health care professionals in the Practice, or in hospitals ever expressed their views on physiotherapists which you feel have impacted on yours?

(5) Have the Practice receptionists ever expressed their views on physiotherapists that you feel have impacted on yours?

Prompts: *negative/ positive views, health care professional of choice, best health care professional to be seen by*

Theory 2 – Expectations

(6) Which professional would you rather see and why?

Prompts: for your MSKD; any particular MSKDs you wouldn't see your FCP for, *health conditions that you consider to be more serious than others; multiple conditions; who would you access for the conditions you consider to be more serious;* do *you feel different Health care professions have different diagnosis skills; views on FCPs prescribing*

(7) How do you feel about having a choice on seeing a range of different professionals in your GP practice?

***Prompts**: lack of patient choice, FCP leading to indirect access to GP*

Theory 3 – Communication

(8) Can you tell me what about your GP's consultation [or other professionals they have experienced] that you liked/disliked?

***Prompts:** communication skills, explaining information, personable, demonstrate knowledge*

Theory 4 – Continuity of Professional

(9) Can you tell me what your views are on seeing the same one practitioner, instead of having consultations with several practitioners?

***Prompts:** for your MSKD; familiarity, knowing the practitioner, practitioner knowing the patient's name*

Theory 5 – Scope of Practice

(10) Can you tell me what sort of services or treatments you would like from your physiotherapist in your General Practice surgery?

***Prompts:** compared to GP, prescriptions*

(11) What are your views on physiotherapists being able to prescribe?

***Prompts:** independently prescribe, GPs check prescriptions, serious condition*

Theory 6 – Accessibility

(12) Could you tell me what your views on physiotherapists working in GP practices are if this service was able to reduce waiting times for appointments?

(13) Can you tell me whether the length of consultations affects your consultation experience, if at all?

***Prompts:** reduced wait for GP consultation, reduced wait for a physio appointment, convenience of appointment*

Theory 7 – Role Promotion

(1) Prior to this interview, had you heard about physiotherapists in a First Contact Practitioner role?

(2) If yes, where had you heard about the role?

***Prompts:** family/ friends that may have shared experiences, GPs/ staff discussing role, media, the internet*

(3) Do you feel like you need any more information about the role?

***Prompts:** understanding*

Appendix 52 Realist interviewing topic guide

Introducing Theory

- There is this idea that… is there any truth in this?
- In your experience, has this been true?
- Do you think some people may feel X?

Pull out context or mechanism

- What is it about X that makes a difference?
- Why do you think that?
- What makes you think that?
- Cold you describe to me what the outcome of this was?
- Do you think that worked for your colleagues? Why do you think that was?

Clarification

- I see, so are you saying that XYZ (CMO)… is that correct?
- Disagreeing with my theory → If I understand what you're saying…
  Rather than xyz (my theory) then is it abc (what they are hinting at/ tweaking theory/ disproving etc)

Appendix 53 Further iteration of patient topic guide after Practice A's analysis of staff interviews

1. Check tape recorder works.
2. Introduce self.
3. Explain the purpose of the interview.
4. Confirm the patient has read and understood the patient information booklet
5. Invite participant to ask any questions they may have.
6. Reconfirm they are in control of the interview and can stop at any time.
7. Obtain recorded verbal/written consent.

Opening:

- In lay terms, what do you think a musculoskeletal disorder is?
- In this study I refer to a FCP, but I think in your practice it is known as something else. Do you know what the title is?
- Confirm that the patient has, or has had in the past, a MSKD
- The type of MSKD
- Length of time had the MSKD
- Identify how long ago this experience was
- Confirm that they have had any experience of FCPs for their MSKD
- * have you previously seen your GP regarding a MSKD?
- Explore what the patient thinks a First Contact Practitioner physiotherapist is
- How have you come to see a FCP?

Theory 1 – Experience of condition management

(1) Other than seeing your GP, do you have experiences of consulting other healthcare professionals at your GP practice?

Prompts: *tell me about this experience, for conditions other than MSKDs also, what were the outcomes, differing/ similar experience with different professionals*
****Primary Care practitioners***

(2) There is an idea that patient experience of roles similar to a FCP e.g. NP, PCP, increases their acceptability of the FCP role. Views?

(3) Did the experience with X differ to your experience with your GP?

Prompts: *how/ treatments/ outcomes, equivalent outcomes as GP*

(4) Has your GP discussed the First Contact Practitioner roles in the Practice with you?

Prompts: *positive/ negative views, influence on your views, discussed other healthcare roles in Primary Care*

Theory 8 – Hierarchy

(5) Have health care professionals in the Practice, or in hospitals ever expressed their views on physiotherapists which you feel have impacted on yours?

(6) Have the Practice receptionists ever expressed their views on physiotherapists that you feel have impacted on yours?

Prompts: *negative/ positive views, health care professional of choice, best health care professional to be seen by*

(7) *what are your views on the uniforms (or lack of) for professions, does this have any impact on your perception of them?

Prompts: knowing who they are, thinking once is more specialist than the other

(8) * I have read that there may be a hierarchy that exists between members of staff in GP surgeries. Have you ever observed this?

Prompts: some members of staff having more authority than others/ the final word/ does this affect your opinion on certain professions

Theory 2 – Expectations

(9) Which professional would you rather see and why for your MSKD?

(10) Are there any times you would not want to access a FCP for your MSKD?

Prompts: for your MSKD; any particular MSKDs you wouldn't see your FCP for, *health conditions that you consider to be more serious than others; multiple conditions; who would you access for the conditions you consider to be more serious;* do *you feel different Health care professions have different diagnosis skills; views on FCPs prescribing*

(11) How do you feel about having a choice on seeing a range of different professionals in your GP practice?

Prompts*: lack of patient choice, FCP leading to indirect access to GP*

Theory 3 – Ways of Working

(12) Can you tell me what about your FCP's consultation [or other professionals they have experienced] that you liked/disliked?

Prompts: *communication skills, explaining information, personable, demonstrate knowledge *if you understand your condition, what impact does this have in the consultation – shared decision-making, agreeing with treatment*

***What impact does X have?

Theory 5 – Scope of Practice

(13) Can you tell me what sort of services or treatments you would like from your physiotherapist in your General Practice surgery?

Prompts: *compared to GP, prescriptions, injections – go to physio or GP? **were there any differences in how the FCP and the GP injected?

(14) What are your views on physiotherapists being able to prescribe?

Prompts: *independently prescribe, GPs check prescriptions, serious condition*

*there is an idea that a benefit of a FCP who could prescribe would be removing patients off medications that they do not need to be on. What are your views on this?

*Are you aware that in your Practice the FCP is not able to prescribe, but is able to access the GP for prescriptions?

What would your view be if the FCP could not prescribe, but could access the GP for prescriptions? **Prompts:** benefits of this, any requirements – in one appointment, 'lose faith' in the role, patients being aware of this

Theory 6 – Accessibility

(15) Could you tell me what your views on physiotherapists working in GP practices are if this service was able to reduce waiting times for appointments? ***Prompts:*** *reduced wait for GP consultation, reduced wait for a physio appointment, what would the benefits of a reduced wait for an appointment be for you – reduction in chronic conditions*

*What do you expect the number of appointments with a FCP to be? ***Prompts:*** *patients may perceive it to be treatment role, and not an assessment role – increase in waiting times*

(16) Can you tell me whether the length of consultations affects your consultation experience, if at all? ***Prompts: ****there is an idea that the way the practitioner communicates with the patient is more important than how long they have in the consultation. What are your views on this?*

Theory 4 – Continuity of Professional

(17) Can you tell me what your views are on seeing the same one practitioner, instead of having consultations with several practitioners?
Prompts: *familiarity, knowing the practitioner, practitioner knowing the patient's name, did they have a rapport with their GP*

(18) *There is an idea that continuity is not important for this particular role. What are your views on this? ***Prompts:*** *because the role is assessment based, mainly self-management, reading of notes – did the FCP know the patient's history already*

Theory 7 – Role Promotion

(19) Prior to this interview, had you heard about physiotherapists in a First Contact Practitioner role?

(20) If yes, where had you heard about the role?
Prompts: *receptionists – what info had they given you – did the receptionist make you aware you could see the FCP sooner? Did they explain the role to be 'like a physiotherapist' – if so, how did this affect your understanding?*

(21) Had family or friends ever discussed the role with you? Would you discuss the role with them?

Do you feel like you need any more information about the role?
Prompts: *understanding*

(22) Have you ever confused the role with the GP? ***Prompts:*** *why, uniform, being based in the Practice.*

(23) *Do you think there are differences between the physio role and the FCP role?

(24) *Do you find you get information at what's going on in the Practice whilst you are in the waiting area?

Appendix 54 Refinement of coding

Due to the large number of codes produced across all theory areas (initial coding n = 707, refined coding n = 690), only one coding refinement example is presented. Practice A's theory area 3, Communication was selected as there were significant number of codes repeated and nodes were therefore deleted or became sister nodes.

Theory area 3 – Initial coding	Theory area 3 – Refined coding

• Theory area 3 context
  ○ Patient like different styles of communication
  ○ Patients want different levels of information
  ○ Patients who are not engaged with care are more likely to DNA
  ○ Previous experience of GP managing patient's condition
  ▪ Experience of GPs talking down to them
  ○ 'Rules and regulations' of the NHS
  ○ Secondary Care patients have seen professions before physio
• Theory area resource mechanism
  ○ All patients should be provided with a lot of information
  ○ Clear communication of care pathway
  ○ Discussion on treatment
  ○ FCP confirming no serious pathology
  ○ FCP demonstrated high knowledge of muscular conditions
  ○ FCP did not talk down to patients
  ○ FCP explained the patient's problem to them
  ○ FCP explains why do not need scans or X-rays
  ○ FCP friendly
  ○ FCP provides evidence basis
  ○ FCP understanding
  ○ Good communication skills with patient
  ○ Listening to the patient
  ○ Patient involved in decision making
  ○ Professional
  ○ Treated like a person
	• Theory area 3 context
	  ○ Patient like different styles of communication
	  ○ Patients who are not engaged with care are more likely to DNA
	  ○ Previous experience of GP managing patient's condition
	  ○ 'Rules and regulations' of the NHS
	  ○ Secondary Care patients have seen professions before physio
	• Theory area resource mechanism
	  ○ Communication skill
	  ▪ FCP did not talk down to patients
	  ▪ FCP friendly
	  ▪ FCP understanding
	  ▪ Good communication skills with the patient
	  ▪ Listening to the patient
	  ▪ Patient involved in decision-making
	  ▪ Professional
	  ▪ Treated like a person
	  ○ Information provided
	  • All patients should be provided with a lot of information
	  • Clear communication of care pathway
	  • Discussion on treatment
	  • FCP demonstrated high level knowledge of muscular conditions
	  • FCP explained the patient's condition to them
	  • FCP explains why they do not need scans or X-rays
	  • FCP provided evidence basis
	  • FCP confirming no serious pathology
	  • expectations are met
	  • Patient perceives it as some experts talk down to patients

Theory area 3 – Refined coding

- Unintended resource mechanism
  - Removing patient choice
    - Patient being told their treatment
- Theory area 3 response mechanism
  - Communication when prescribing
    - Prescribing gives FCP ability to explain information
    - Prescribing gives FCP ability to be holistic in information provision
  - Holistic care as FCP is first-point-of-contact
  - How patient feels
    - Build a rapport
    - Communication skills of the FCP affects whether patient feels listened to
    - Patient perceives it as some experts talk down to patients
  - Patient understanding
    - FCP delivers a greater level of information to the patient
    - Informed discussion with patients
    - Patient able to weigh up pros and cons of treatment
    - Patient perceives FCP to communicate more in-depth info on MSKD than GP
    - Patient understands their condition
    - Patient understands their pain
    - Patient understands treatment options
    - Patients want to understand their MSKD

Theory area 3 – Initial coding

- Unintended resource mechanism
  - Removing patient choice
    - Patient told their treatment
    - Communication skills of the FCP affects whether patient feels listened to
- Theory area 3 response mechanism
  - Build a rapport
  - Communication skills of the FCP affects whether patient feels listened to
  - Communication skills affect whether patient feels expectations are met
  - FCP delivers a greater level of information to the patient
  - Holistic care as FCP s first-point-of-contact
  - Informed discussion with patients
  - Patient able to weigh up pros and cons of treatment
  - Patient perceives FCP to communicate more in-depth info on MSKDs than GP
  - Patient perceives it as some experts talk down to patient
  - Patient understands their condition
  - Patient understands their pain
  - Patient understands treatment options
  - Patient wants to understand their MSKD
  - Prescribing gives FCP ability to explain information
  - Prescribing gives FCP ability to be holistic in information provision

Theory area 3 – Refined coding	Theory area 3 – Initial coding

• Theory area 3 outcome
  ○ Belief in the FCP
  ○ FCP still decided treatment, patient accepting of this
  ▪ Patient more trusting of FCP
  ▪ Patient perceives FCP to be thorough when injecting
  ▪ Patient satisfied with communication skills FCP
  ▪ Patient's confident in the FCP's ability due to confidence
  ○ How the patient felt
  ▪ Felt valued
  ▪ Patient feels listened to
  ▪ Patient felt confident they could self-manage in the future
  ▪ Patients reassured no serious pathology
  ○ Informed choice
  ▪ Patient felt supported
  ▪ Patients informed to make own decision about their prescription
  ○ Patent understanding
  ▪ Confirmed to patient what they thought
  ▪ Patient has an understanding of their MSKD
  ▪ Patient understanding means they are accepting of their treatment
  ▪ Patient understands care pathway
  ○ Theory area 3 unintended outcome
  ▪ Patient less accepting of treatment as no choice
	• Theory area 3 outcome
	  ▪ Confirmed to patient what they thought
	  ▪ FCP still decided treatment, patient accepting of this
	  ▪ Felt valued
	  ▪ Informed choice
	  ▪ Patient accepting of treatment plan
	  ▪ Patient feels listened to
	  ▪ Patient felt confident they could self-manage in the future
	  ▪ Patient felt supported
	  ▪ Patient has an understanding of their MSKD
	  ▪ Patient informed on alternatives to prescription
	  ▪ Patient more trusting of FCP
	  ▪ Patient perceives FCP to be thorough when injecting
	  ▪ Patient satisfied with communication skills FCP
	  ▪ Patient understands care pathway
	  ▪ Patients confident in the FCP's ability due to confident communication
	  ▪ Patients informed to make own decision about prescription
	  ▪ Patients reassured no serious pathology
	  ▪ Reduced demand o the health service
	  ▪ Satisfied with the role
	  ○ Theory area 3 unintended outcome
	  ▪ Patient less accepting of treatment as no choice

Appendix 55 CMO notes

CMO Notes Patient 6

This provides an example of the CMO notes that were created whilst coding. The title of each CMO is not significant, but it provided an overarching theme that facilitated the researcher when forming a narrative.

When components are left blank it is due to CMOs only being partially formed. Patient 6 has been selected randomly from Practice A. Practice A CMO notes have been presented as the nodes presented in Appendix 54 were also from this Practice; thus, the reader may cross-reference these CMO notes with the coding for theory area 3 – 'Communication'.

Patient Overview:

- 84-year-old woman
- Patient has OA in hips
- Waited around 3 months before accessing the role
- Saw two FCPS
- Slipped discs in the past, accessed GP and was on bedrest and medication

Understanding of the FCP title:

'INT: In this study I talk about a first contact practitioner or an FCP as the person that you see for a musculoskeletal problem. Is that what you know the role to be? I think in your practice there might be a different title that you use for the person you see for your musculoskeletal problem. Do you know what that title is?

RES: Not really, no. No, I think … I think they said 'Oh yes, you'll need to see the sort of MSK nurse, you know'. Don't think it's ever been called anything else.

INT: Ok. So, you think you saw a musculoskeletal nurse?

RES: Yes'

'RES: Well I would imagine, you know, because things have progressed obviously over the years and so on, I don't think the doctors that I had at the time had a musculoskeletal practitioner back in those days, kind of idea. I mean, you just saw the doctor. But so, I think like all areas, more or less, in medicine now, they've all got their specialists haven't they? Which probably is better. Makes it seem a little bit more long-winded of course but, at the same time it's … with somebody especially you can't expect an ordinary GP to be a specialist in everything can you?'

Novel outcomes

Thinks role is MSK nurse

Refuting Theory Area 4

Wait versus continuity

Chose reduced wait over continuity of the practitioner

Theory area 6

Wait versus continuity

Resource mechanism: reduced wait for an individual FCP

Response mechanism: patient chose reduced wait over continuity R(refuting t4)
Outcome: seen earlier
Accessed different FCP

Theory area 6

Wait for an appointment/ expectation of an older patient

Context: older patient - 84-year-old woman
Resource mechanism: direct access to FCP
Response mechanism: patient knows her own aches and pains
Outcome: patient waited 3 months to access the role

Theory area 1

Experience GP

Context: experience of GPs in the past when slipped discs – bedrest and painkillers

Theory area 5

MSKD expertise

Context: experience of GPs for everything in the past (T1)
Resource mechanism: Now patient sees a specialist for different things. FCPs MSKD experts.
Response: perceived as a longer process - *? is this due to seeing several people? (T6)
Consultants seen as having more expertise in MSKDs still
Outcome: happy to see whoever as long as they are knowledgeable (refuting T2, do not need choice)

Unintended Outcome: longer process to see several experts (T6)

Theory area 7

Role of the Receptionist

Resource mechanism: receptionists made patient aware of the role
Receptionists triaging
Response mechanism: patient satisfied with this as could then access the right person directly,
Outcome: Right person at the right time.
Patients accepting receptionist's explanation

Theory area 7

GP explanation of FCP role

Resource mechanism: GPs have not discussed the role with patients

Theory area 8

Hierarchy in Practice

Context: experiences of businesses with a manager
Resource mechanism: no hierarchy observed in the GP surgery
Response mechanism: patient perceives GP surgery to be like any other business

Outcome: patient perceives doctor to be 'top'

Theory area 2

GP involvement in care pathway

Resource mechanism:
Response mechanism: patient expects that their condition is discussed with the GP *? Would they be less satisfied if they knew it wasn't?

Theory area 2

GP involvement in care pathway

Response mechanism: expectation GP can see the outcome from FCP consultation in notes

Theory area 2

Complex MSKDs

Unintended resource mechanism: if MSKD wasn't improving
Response mechanism: patient perceives them as 'not knowing what they're doing'
Outcome: if MSKD wasn't improving, patient expect a referral elsewhere

Theory area 2

Expectations of an older patient

Context: older patient
Resource mechanism: was diagnosed with OA and x-ray ordered
Response mechanism: patient expects aches and pains at her age
Outcome: no expectation for FCP outcome

Theory area 3

FCP explanation on MSKD

Context: no expectations of an outcome (T2) Older patient knows own body
Resource mechanism: FCP explained the patient's condition to them
Response mechanism: Patient understands their MSKD
Outcome: confirmed to patient what they thought they knew.

Theory area 3

Experience GP hierarchy

Context: experience of being talked down to by GPs (T1)
Resource mechanism: FCPs did not talk down to the patients
Response mechanism: patient perceived it as some experts talk down to patients, but FCPs did not. Build a rapport.
Outcome: patient felt more trusting of them.

Theory area 5

MSKD expert

Context:
Latent resource mechanism: a prescribing FCP
Inactive response mechanism: patient listens to the expert – quite passive
Inactive Outcome: would take medications as advised. Patient would query if made unwell.

Theory area 5

Understanding of process of prescribing

Latent resource mechanism: patient not aware FCP can access GP for medications

Theory area 5

Access to services suggests 'higher up'

Resource mechanism:
Response mechanism: expectation that the FCP can refer you on to someone of higher qualifications (T8)
Patient may want a second opinion if problem not improving
Unintended Outcome: patient would be less accepting of the role if needed a referral and couldn't get one from FCP
Second opinion from someone else

Theory area 5

MSKD expert

Resource mechanism: if they had been referred to physio
Response: listens to the expert
Outcome: would attend physio consultation

Theory area 6

Reduced wait

Resource mechanism: reduced wait for and FCP appointment
Response mechanism: patient valued reduced wait
Outcome: patient seen earlier. Issue resolved earlier

Theory area 6

Number of appointments

Response mechanism: expects one appointment

Refuting T6

Length of consultation

Patient not aware of length of consultation

Refuting T4

Continuity NOT important

Context: patient indifferent about seeing the same GP or a different GP
Resource mechanism: experienced 2 FCPs
Response mechanism: patient does feel continuity allows a relationship to build. However, patient chose to see new FCP overseeing the same one. Patient perceives it as a passing situation
Outcome: continuity not important to the patient for this role

Theory area 7

Role of the Receptionist

Context:
Latent resource mechanism: receptionist did not highlight benefits of the role
Unintended Response mechanism: patient not informed on the role
Outcome: patient did not know much about the role

Theory area 7 refute

Patient understands FCP role

Patient needs no more information on the role
Patient does not confuse the role with GPs

Theory area 7

Info in reception area

Resource mechanism: patient doesn't read information in the reception area

Refuting theory area 8

Accessing GP for prescriptions

FCP accessing GP for prescriptions has no impact on patient ideas about final authority

Theory area 5

Accessing GP for prescriptions

Resource mechanism: FCP accessing GP for prescription
Unintended response mechanism: FCP not aware of side effects
Outcome: patient safety

Appendix 56 Practice A context

Practice A Staff

The information provided to the researcher by the Practice Manager stated that, in May 2018, the two Practice sites consisted of:

- Three GP Partners
- One Salaried GP
- One Management Partner
- One Practice Manager
- One Clinical Nurse Manager
- Three Primary Care Practitioners (PCPs)
- One senior Clinical Pharmacist
- Four Long-term Condition Nurses
- Four Treatment Room Nurses
- Three Health Care Assistants
- 31 Medical Receptionists
- Three Medical Secretaries
- Locum GPs (unknown number)
- Two MSK Practitioners and one practitioner covering absence (known as FCPs in this study)[33]

Practice A Access

A Practice A marginally exceeded the opening hours standards set out in the General Medical Services (GMS) contract (NHS England, 2017b). This contract stipulates 'core hours' as 8am to 6:30pm, Monday to Friday; this equates to 52.5 hours per week. Although Practices do not have to be open throughout these hours, they must be able to meet the needs of their patients (e.g. service cover from a local out-of-hours provider). Practice A was achieving more than the minimum targets, as they provided on-site services during core hours, rather than outsourcing to other providers. The total Practice opening hours were on average 52.7 hours per week, just in excess of the minimum standards (NHS England, 2017b).

[33] This information was obtained from contacting FCP 1.

The Practice was closed from 12:30pm one Tuesday per month for staff training. The telephone lines were only partially staffed during lunch hour; however, patients were able to contact the Practice if the situation was urgent.

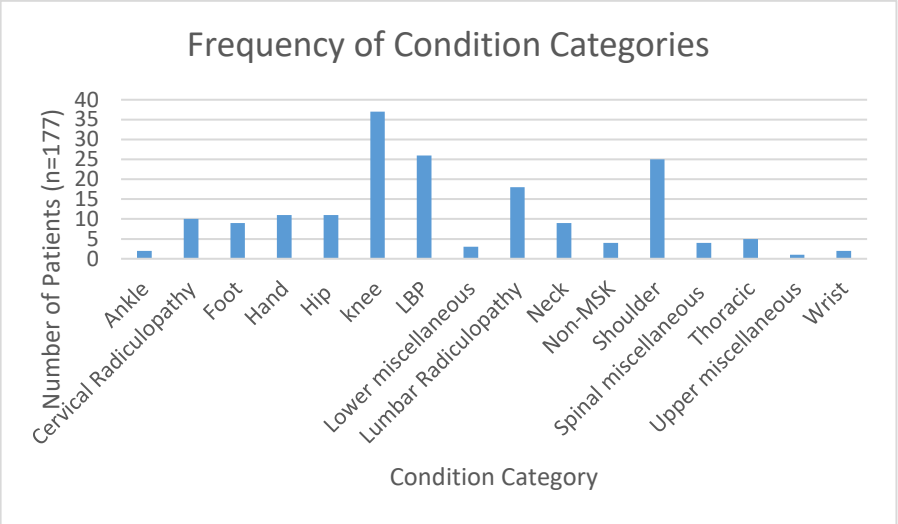
Making an Appointment and the Role of the Medical Receptionist

Practice A's website informed patients that they were able to request a telephone or face-to-face consultation depending on their situation. It stated patients would be requested to provide an outline of the reason for consultation in order for the reception staff to offer an appointment with the most appropriate member of the healthcare team. The Practice used the title of 'Medical Receptionist' for their reception staff, and assured patients that the Medical Receptionists kept their information strictly confidential. The IT system used for bookings was Front Desk (EMIS Health, 2019). The Medical Receptionists had triage cards for multiple conditions, not just MSKDs. These cards directed Medical Receptionists to which professional the patient should be allocated. These cards were created by the Practice Manager and the Nurse Manager.

The website provided explanatory information regarding the healthcare professionals who undertook specific consultations, including for patients with long-term conditions, contraception advice, wound care and medication reviews; however, there was no mention or website presence of FCP appointments, although it was highlighted that consulting a different professional rather than a GP may reduce the patient's wait for an appointment. Nevertheless, it was recognised that demand may outweigh capacity, resulting in a longer wait for the next routine appointment for any staff member.

Reasons for consulting the FCP

Data collected locally, between January and June 2018, demonstrated that the most frequent consultations were for disorders of the knee, lower back pain (LBP) and shoulder conditions.



Overview of Staff Participants

This section will provide an overview of the staff who were interviewed. The participants are presented in the sequence in which they were interviewed.

Medical Receptionist 1

The Medical Receptionist had been working within the Practice for a year. She had been trained to book patients in with the most relevant health care professional (HCP), including the FCP. This training was provided by the Nurse Manager and Practice Partner and provided all members of staff with an understanding of the FCP role. This regarded signposting and triaging for various clinicians, including: stroke, Early Pregnancy Advice Clinic, Minor Ailments, MSK Practitioners and Urgent Care Day. Training was given when the member of staff began employment and there were regular updates of the training by the Nurse Manager, Practice Manager and the Senior Receptionist. PowerPoint presentations were used with regular discussion in order to invite suggestions.

Management Partner 1

The Management Partner had been working in the Practice for 38 years, starting in a Medical Receptionist role, before becoming a Practice Manager and then a Management Partner. Her role was to manage strategic planning for the Practice; the day-to-day management of the Practice was delegated to the Practice Manager. The Management

Partner was partially instrumental in initiating the FCP role, working in collaboration with the Nurse Manager and a Practice Partner.

FCP 1

FCP 1 had worked in the NHS as a qualified physiotherapist for 25 years; as a junior, in orthopaedics, and as a musculoskeletal Senior 2 (Band 6) and Senior 1 (band 7). At the time of this study, she was in the FCP role as well as working as a Clinical Specialist Rheumatologist (Band 8) for 30.5 hours a week.

At the time of the interview (June 2018) she had worked within the Practice for 18 months, including the initial six months pilot. She was based in the Practice 1.5 days a week (11.5 hours).

FCP 1's role included: triaging and diagnosing patients with MSKDs; signposting to other services; referring on to other services; giving advice and discharging when appropriate. Although she had been able to order bloods and X-rays for approximately 10 years and had been carrying this out in her rheumatology position, she was not permitted to practise these skills in her FCP role. She had acquired the specialist skill of injection therapy, which she was using in her current role, and she was undergoing her Independent Prescribing Masters level qualification.

GP 1

At the time of the interview (June 2018) the GP had been a Partner in the Practice for approximately 14 years. Previous to this, he had been a salaried GP in a different practice for 14 years, thus, had been a practising GP for 28 years.

The GP was involved in the FCP role start-up as a solution to the increasing GP workload.

FCP 2

The FCP had been working as a physiotherapist for almost 10 years. She spent four years undertaking her junior rotations before practising as a static MSK Band 6 at the local hospital. She predominately carried out her working hours in her hospital-based MSK role. FCP 2 has been practising as an FCP at the Practice for approximately 18 months as a Band 7. Her role is on a cover basis only, normally equating to two-to-three days a month, or for extended holiday periods.

Appendix 57 Practice B context

Practice Staff

The Practice consisted of:

- Five GPs and one GP Locum
- Two Senior Nurse Managers
- One Nurse Practitioner
- Two Nurses
- Two Health Care Assistants
- Nine Receptionists
- Three Secretaries
- One Patient Liaison
- Three Admin staff
- Two Services staff

Making an Appointment and the Role of the Receptionist

The Practice's website advised patients on the role of the Receptionist in signposting the patient to the most appropriate profession, including GPs, NPs, physiotherapists, pharmacists, Healthy Mind Practitioners. Thus, the Practice stated that it is essential that the Receptionist could ask patients questions regarding their condition. The website explained that this allowed an efficient team-based approach. The Receptionists had a Care Navigation template that they could follow in order to correctly signpost the patient to the right appointment and the right professional. The IT system used for booking appointments was SystmOne (TTP, 2019).

The Practice also offered patients to book appointments via e-reception, an online portal which asked for the patient's name, email, telephone number. The first stage was 'outline your query', which had nine options, one being 'I have a muscular or joint problem (physiotherapy)'. The next stage asked details on the MSKD, which included:

1. What is the nature of your problem or issue?
2. Is this a follow-on problem which the Doctor knows about?
3. How long have you had the problem?
4. What are your ideas about what's happening? What do you think it is?
5. What are your concerns - what is worrying you about this?
6. What are your expectations - what would you like to see happen?
7. Anything else you would like to add?

The final section of the e-reception asked the patient to fill in their availability.

The Practice offered several types of appointments. Routine appointments could be booked up to six weeks in advance, but for more urgent cases, patients could receive on-the-day appointments with the triage team. These urgent appointments were with a Duty Doctor who was supported by Specialist Nurses. The Practice also offered telephone triage with GPs, NPs or FCPs; these appointments were for conditions that may simply need to be discussed. Patients who were housebound could also receive home visits by GPs or NPs.

The FCP consultations were predominantly accessed via the route of a virtual assessment. The Receptionist or GP booked appropriate MSKD patients into a virtual telephone assessment with a physiotherapist. There were several outcomes of the virtual assessment (see Figure 12.1). Predominantly patients were managed over the phone, without needing a face-to-face consultation. The Practice had a MSK service outpatients service which they offered in-house; back pain was immediately triaged to this service.

Patients could also be booked into a face-to-face FCP appointment directly by the GP. However, patients ideally would have had a virtual assessment prior to their face-to-face consultation. Out of the 25 Practices, 22 used SystmOne and three Practices used EMIS for patient notes (TTP, 2019; EMIS Health, 2019).

The other 24 Practices that could access the FCPs were booked into the FCP's diary directly using SystmOne (TTP, 2019), without having to contact Practice B's reception. Practice B was not able to make these patient bookings as they were unable to access the notes of patients from other Practices for data protection reasons.

Overview of Staff Participants

This section will provide an overview of the characteristics of the staff provided by the respondents in the interview. The participants are presented in the sequence in which they were interviewed.

Head of Reception/ Operations Manager – Receptionist 2

At the time of the interview (September 2019), she had been in the Practice for two years as a dual role as Operations Manager and overseer of reception. Her role on the frontline reception desk was to triage patients and correctly signpost them to the correct professional, including to a physiotherapy virtual assessment when appropriate. The reception staff all received training on correct signposting and were provided with a Care Navigation template to facilitate correct placement of patients. The Receptionists attended

staff training once a month in which all members of staff were informed on Practice updates, including the FCP role. As Operations Manager, she was also ensuring that the Receptionist signposting was working efficiently, with patients seeing the correct professional. In this thesis she is referred to as Receptionist 2.

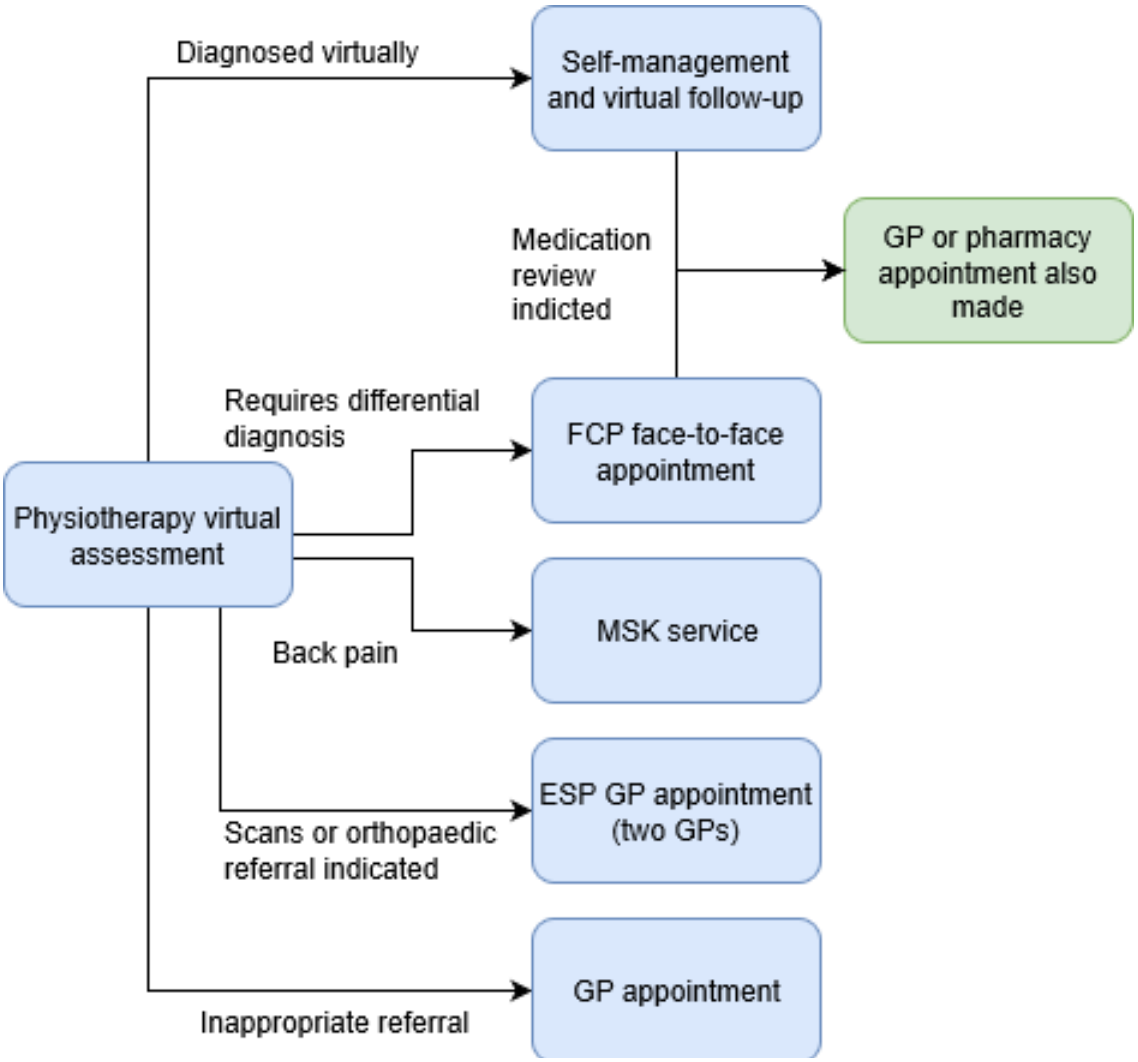


Figure 12.1 - Referral pathways

GP 1

The GP had been in the Practice for six years at the time of the interview and had several roles: he was a GP Partner, was one of two GPs who saw MSKDs, he taught GP registrars, and he carried out minor surgery in the Practice. As a GP Partner, he provided his support in board meetings when the FCP role was being commissioned.

FCP 3

FCP 3 had been practising as a physiotherapist for 10 years, working solely in MSK since the beginning of 2014. He expanded his skill set through working in Accident and Emergency minor injuries, as he became experienced in wound management and was able to administer medications under Patient Group Direction (PGD). PGD is not a form of prescribing, but their use is for groups of patients who may have not been previously identified present – for instance, minor injuries – where the treatment follows a clearly identifiable pattern (NHS, 2018d). The FCP had an evening clinic in the Practice for two hours on a Wednesday. A majority of his working hours were in Secondary Care MSK outpatients.

Practice Manager 2

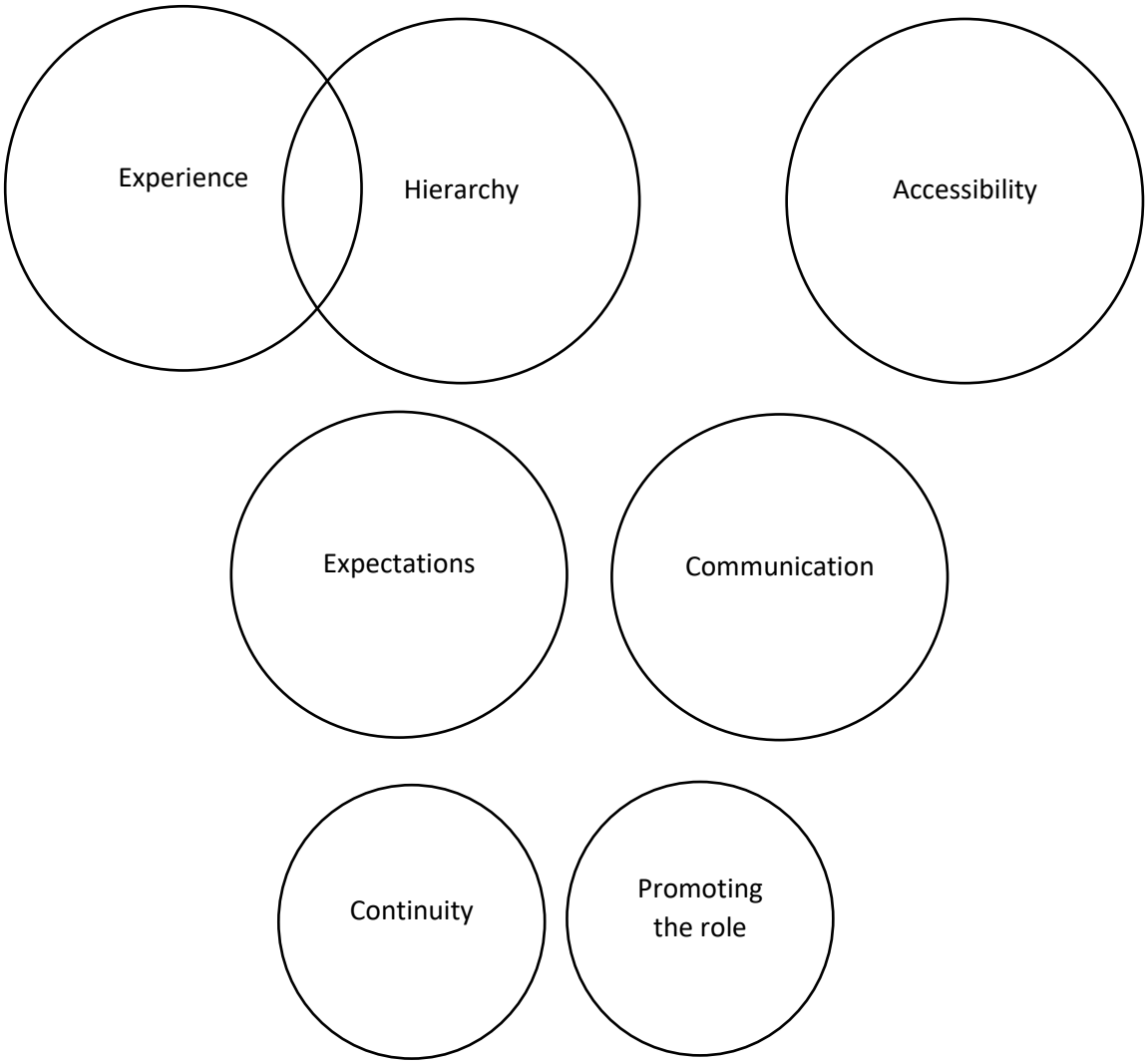
The Practice Manager was interviewed previously in her Receptionist and Operations Manager role (Receptionist 2). However, she began a new role as Practice Manager in November 2018. For this reason, she was interviewed as two separate roles. Her role as Practice Manager was more varied than her previous role; she ensured appointments were being utilised through correct care navigation signposting and she also monitored the Practice's finances. She did not manage the FCP role; rather, FCP 4 was the lead consultant of the role.

FCP 4

The FCP had been practising as a FCP in the Practice since March 2016 and had been working as a MSK senior for six years at the time of interview. Although the MSK senior role was based in the Practice, it was a Secondary Care funded service. Before starting the FCP service in the Practice, FCP 4 had a private clinic which he ran alongside his MSK senior role. This private clinic was commissioned to be the Extended Access service that Practice B offered. FCP 4 did not have any extended scope skills, but he had built up clinical skills from working in the MSK specialist team.

Appendix 58 Theory area overlaps

Due to the complexity of the theory area overlaps, with frequent overlaps of four or more theory areas, it was not possible to display these using the method for the realist review. The size of each circle corresponds with the number of theories the theory area overlaps with i.e. a theory area with three overlaps is half the size of a theory area with six overlaps.



Appendix 59 Overlap of theory across theory areas

Theory area and its total number of other theory area overlaps		Experience	Expectations	Hierarchy	Promoting the role	Accessibility	Communication	Continuity
Experience	6		×	×	×	×	×	×
Expectations	5	×		×	×	×	×	
Hierarchy	6	×	×		×	×	×	×
Promoting the role	4	×	×	×		×		
Accessibility	6	×	×	×	×		×	×
Communication	5	×	×	×		×		×
Continuity	4	×		×		×	×	