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# An Exploration of the Decision Making Process Between Musculoskeletal Extended Scope Practitioners and their Patients

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Submitted in accordance with the requirements for the degree of Doctor of Philosophy

York St John University
School of Health Sciences

April 2018

The candidate confirms that the work submitted is his own, except where work which has formed part of jointly authored publications has been included. The contribution of the candidate and the other authors to this work has been explicitly indicated below. The candidate confirms that appropriate credit has been given within the thesis where reference has been made to the work of others.

The work in Chapter 4 of the thesis has appeared in publication as follows:

Jonathan Thompson, Samantha Yoward, Pamela Dawson (2017).
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I was responsible for instigating the research idea behind the paper as well as designing and leading the study. I was the prime author of the paper and coordinated editing and submission with the publishers.

The contribution of Samantha Yoward was to act as second reviewer during the appraisal and selection process of the systematic review and both Samantha Yoward and Pamela Dawson acted as editors of the published paper.

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#### **Abstract**

Extended Scope Practitioner (ESP) posts are well established in musculoskeletal services across the United Kingdom and in selected international settings. However, the evidence supporting their effectiveness and details of their interventions is limited, particularly in relation to the way ESPs interact with their patients, consider management choices and arrive at these decisions. This thesis reports on research, which aims to address some of these gaps. A systematic review was undertaken to clarify the state of current knowledge and confirmed evidence surrounding decision making was lacking. The systematic review informed a subsequent qualitative study utilising a phenomenological approach to explore both patient and ESP experiences of decision making and the factors influencing this process.

Results demonstrated the complexities of the clinical relationship and how ESPs and their patients collaborate to enable patients to make informed healthcare decisions. Relationships are positive and productive, based upon a shared understanding and alignment of decision making preferences.

Effective communication, an awareness of patient expectations and influences acting upon both parties play an important role in decision making. The study provides new insight into the ways ESPs and patients interact to make appropriate decisions regarding musculoskeletal health. Decision making is most frequently undertaken as part of a collaborative shared style, showing ESP care is aligned to contemporary patient-centred and co-produced care. Details of how ESPs consider the stresses and risks of their advanced roles have been uncovered, alongside ways in which these stresses may be managed. There is also insight into how ESP staff develop into their roles and consider the

traditional allied health professional role to an advanced practitioner.

The results provide important advances in evidence for advanced practitioners, patients with MSK conditions, healthcare organisations and policy makers.

clinical competencies required to practice safely, transitioning from a

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#### **Abbreviations**

AHP Allied Health Professional

APP Advanced Physiotherapy Practitioner

CATS Clinical Assessment and Treatment Service

CRD Centre for Reviews and Disseminations

CSP Chartered Society of Physiotherapy

DOH Department of Health

ED Emergency Department

ESP Extended Scope Practitioner

EQ5D EuroQol 5 Dimensions

ESPPN Extended Scope Practitioner Physiotherapy Network

HCP Health Care Practitioner

HCPC Health and Care Professions Council

HTA Health Technology Assessment

IPA Interpretive Phenomenological Analysis

IRAS Integrated Research Application System

LBP Low Back Pain

MRC Medical Research Council

MSK Musculoskeletal

NHS National Health Service

NICE National Institute for Health and Care Excellence

OA Osteoarthritis

PDA Patient Decision Aid

PICO Population Intervention Comparison Outcome

PREM Patient Reported Experience Measure

PROM Patient Reported Outcome Measure

RCT Randomised Controlled Trial

REC Research Ethics Committee

SDM Shared decision making

SF12v2 Short Form 12 version 2

SF36v2 Short Form 36 version 2

SIGN Scottish Intercollegiate Guidelines Network

SpR Specialist Registrar

STP Sustainability and Transformation Plans

VAS Visual Analogue Scale

VSQ-9 9 item Visit Specific Satisfaction Questionnaire

#### **Chapter 1**

#### Introduction

My own professional background is embedded in musculoskeletal clinical practice and for many years I have held various ESP roles in both secondary care and community settings. For the past six years I have been a Consultant Physiotherapist and clinical lead to a large MSK service, which has included personally managing a complex clinical caseload. The research question I am now exploring has arisen from my own experiences as an expert practitioner embedded within the field of practice being studied. In relation to this researcher practitioner position, I am mindful of the reflexivity required to maintain critical distance throughout the study to avoid undue influence on both the research process and my professional position (Drake and Heath, 2010).

Patient consultations provide the cornerstone of healthcare delivery in many clinical services. It is the beginning of a journey between clinician and patient, requiring the building of a therapeutic relationship underpinned by effective communication, to enable both parties to arrive at a satisfactory outcome. Initial introductions involve the clinician explaining their position and role, whilst the patient explains their reasons for attending, or perhaps what is the problem or set of symptoms that have brought them to arrange an appointment or be referred (Petty and Ryder, 2018). Patient expectations may be explored to provide additional context and guidance to the clinician.

Depending upon the focus of the consultation, the patient is asked a series of questions to enable the clinician to develop an understanding of their

symptoms, present difficulties and how these affect the patient's functional activities. Often termed the subjective assessment (Petty and Moore, 2011), this includes questions on present symptoms, general medical history and current health status and aspects of the patient's social history. In settings such as physiotherapy an additional objective assessment follows, which entails a physical examination of the relevant body systems pertaining to the particular specialty. In a musculoskeletal (MSK) clinic this involves the function of the patient's locomotor system, joints, muscles, tendons, ligaments and other associated soft tissues (Petty and Ryder, 2018).

For Extended Scope Practitioners (ESP), who are specialist allied health professionals at an advanced level of clinical practice, there are complex patient presentations and multiple management options to consider. These management options include providing education and advice, referring for additional investigations (such as radiology or pathology tests), referral for rehabilitation, referral to another medical specialty, or potentially listing the patient for an orthopaedic surgical procedure. It is the experiences of ESPs and patients in making those decisions, in an MSK setting, which this thesis aims to explore.

The flow of information during the consultation is of course not purely one-way, with the patient answering the ESP's questions. The ESP is also engaged in providing their patients with information and knowledge and educating them in terms of their symptoms and what this means from a diagnosis, prognosis and future management point of view. The degree to which patients and ESPs exchange information depends upon the balance of the relationship and how both parties approach the clinic appointment. If the ESP holds the balance of

power a more paternalistic consultation will ensue with the patient adopting a more passive role. On the other hand, if more two-way communication occurs and both parties have a more equal level of involvement then a collaborative or shared approach can take place.

During the consultation the clinician is engaged in a process known as clinical reasoning (Edwards et al., 2004). Clinical reasoning involves the cognitive processes used to consider collected information and formulate hypotheses for diagnosis and management, using approaches such as hypothetico-deductive reasoning or pattern recognition (Doody and McAteer, 2002). The practitioner requires practice knowledge and an ability to synthesise and reflect on this knowledge, in a clinical context, undertaking deeper metacognitive reflective thought (Higgs et al., 2008). The focus of this thesis is not specifically upon clinical reasoning processes, but rather on the decision making interactions between ESPs and their patients.

This thesis aims to explore the interactions that take place between MSK ESPs and their patients, to develop a greater understanding of how these specific consultations occur, whether there is a preference for decision making styles and what factors influence the relationship and decision processes.

In order to achieve the stated aims the thesis was conducted through an initial systematic review. The results of the review directly influenced a subsequent qualitative research study based upon phenomenological and hermeneutic approaches using Interpretive Phenomenological Analysis (IPA) (Smith et al., 2009). Figure 1 shows the overall structure of the thesis.

#### Research question: How do MSK ESPs and their patients interact and undertake decision making?

Aim: Explore the interaction between ESPs in the MSK field and their patients with specific focus upon the decision making process

#### **Objective 1**

 Systematically review the ESP literature to understand how the decision making process of MSK ESPs affects patient outcomes

#### **Objective 2-5**

- Explore how MSK ESPs and patients interact during the decision making process
- Gain understanding of how patients perceive the ESP role
- Explore possible factors behind reported high satisfaction with ESP care
- Analyse how the ability to directly list for orthopaedic surgery is perceived by ESPs and their patients

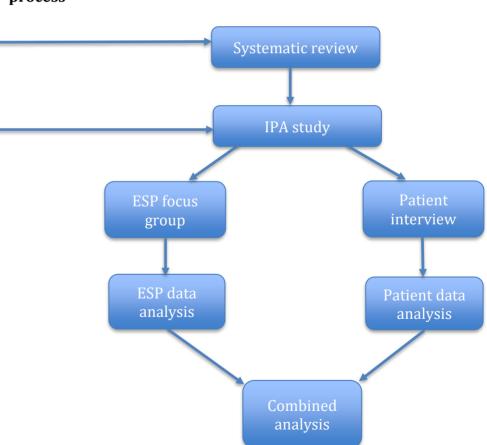


Figure 1. Overview of thesis structure

The thesis is structured in a logical format to allow the reader to follow the development of the research focus, how the studies were methodologically developed, the analysis of the emerging data and subsequent theoretical discussion and conclusions. Chapter two provides a narrative review of the development of ESP roles and how these posts have been influenced by health policy and professional practice. Healthcare decision making is reviewed with a focus upon its use in physiotherapy as MSK ESP posts are predominantly held by clinicians with a physiotherapy background. The literature concerning the decision making preferences of patients is also considered. Chapter three introduces the philosophical position informing the research approach alongside the underlying systematic review and IPA methodology, with a description of how both studies were implemented and delivered. The systematic review is described in chapter four with its results and metasynthesis, which influenced the subsequent IPA study. The following three chapters (five-seven) describe the qualitative IPA study results and themes, which are illustrated with multiple direct quotes from participant interviews. Chapter eight provides theoretical discussion of the IPA results, with chapter nine providing an overall conclusion of the whole thesis and recommendations for future research.

#### **Chapter 2**

#### **Literature Review**

#### 2.1 Overview of chapter

The literature pertaining to Extended Scope Practitioner (ESP) roles, their development and relationship to health policy is considered and critically reviewed. ESPs in MSK practice are predominantly from a physiotherapy professional background (Saxon et al., 2014). Therefore, development of advanced practice within physiotherapy is discussed linked to the leadership of the professional body in the UK and the ESP clinical interest group. The literature surrounding decision making models within healthcare is reviewed alongside relevant decision making literature in ESP and physiotherapy practice. The chapter closes considering the preferences that patients show for involvement in making decisions about their healthcare needs and decision making in the context of current health delivery.

#### 2.2 ESP role development and health policy

The United Kingdom has taken the lead in exploring and developing new models of health service delivery, utilising practitioners working in extended roles, especially within physiotherapy, other Allied Health Professional (AHP) groups and nursing (McPherson et al., 2004). Within the UK a number of key drivers promoted the development and expansion of ESP posts. There was a desire from central government to modernise and reform the NHS and restructure health care to become more patient-centred (Department of Health, 2000a). To

support the modernisation agenda the traditional career structures of non-medical staff needed to change and, therefore, focus was given to expanding and developing the non-medical workforce to improve career prospects (Department of Health, 2000a) and staff retention (Department of Health, 2000b). The government illustrated their desire to support this plan with the creation of AHP consultant posts that would advance career development through roles incorporating expert clinical practice, education, research and clinical leadership, to drive change and clinical service quality (Department of Health, 2000b). NHS modernisation plans do not always achieve their stated targets, illustrated by the aim to create 250 consultant AHP posts by 2004, with evidence suggesting this target was clearly not achieved, as only 123 posts were present in 2009 (Vits, 2010).

Lengthy patient waiting times in MSK specialties, particularly orthopaedics, were seen as detrimental to patient care and changes in practice were required to make an impact (Department of Health, 2000b). The introduction of ESP services in some localities significantly reduced orthopaedic waiting times (Maddison et al., 2004), although the reported reductions could also have been affected by the impact of concurrent service redesign projects, such as the National Orthopaedic Project (Department of Health, 2005). Orthopaedic services were also affected by the changes to junior doctor working hours when the European Working Time Directive was introduced (Department of Health, 2002) and this created an ideal opportunity for ESPs to support secondary care orthopaedic services.

ESPs have had a positive impact upon orthopaedic waiting times (Maddison et al., 2004;Rymaszewski et al., 2005), but waiting times in orthopaedics and other

MSK specialties, such as rheumatology, remained a focus of the MSK Framework (Department of Health, 2006). Seen as a key publication in highlighting developments in NHS MSK service delivery, the MSK Framework recommended a move away from traditional secondary care delivery to community based or intermediate care services that could be led by physiotherapy ESPs. These services were known as Clinical Assessment and Treatment Services (CATS) and aimed to provide patient management across a complete integrated pathway, removing unnecessary "hand-offs" between services. CATS included clinical triage, rapid access to assessment and treatment through a multidisciplinary team approach (Department of Health, 2006). ESPs were ideally placed to lead these services and provide specialist clinics through the possession of wider clinical scope of practice, having the ability to refer directly for investigations and to other medical specialties without the patient having to pass back through their own GP, a move that was recommended in earlier government policy (Department of Health, 2004).

If patients could be managed in community settings through CATS then the NHS would be better placed to cope with rising demand due to an aging population (Department of Health, 2006), many of whom could be suffering with long term MSK conditions such as osteoarthritis and back pain. If conservative management within the CATS was unsuccessful then ESPs may also have the ability to discuss surgical options with the patient, for example, joint replacement, and if possible place the patient directly onto an orthopaedic surgical waiting list. By designing and delivering MSK care in such a way these services would deliver on the central premise of the NHS Plan (Department of Health, 2000a), whereby patients should receive the most effective care at the

right time by the right clinician with minimal waiting times. All health districts were encouraged to plan and implement CATS over the 12 months following the publication of the MSK Framework as it was felt they would have a major impact on reducing MSK patient waiting times for both services provided in a CATS but also with the knock on effect of reducing orthopaedic referrals and easing pressure on surgical waiting lists, which the government were targeting to reduce to less than 18 weeks by 2008 (Department of Health, 2006). Intermediate care MSK services have flourished since the MSK Framework was published and the author is aware, through their specialist experience in the field, that many NHS Trusts operate such services with ESP specialists. However, it is not possible to say exactly how many such services now operate within the NHS, as no national figures exist.

Limited evidence also exists at present as to the effectiveness of CATS, although they have been shown to manage suitable MSK cases and achieve one of their main aims by reducing the rate of onward referrals to secondary care services such as orthopaedics or rheumatology (Sephton et al., 2010;Roddy et al., 2013). Measuring the impact of reduced onward referral is difficult to assess over a longer time period, as patients may seek further intervention for a chronic MSK condition at a later date and still end up requiring specialist secondary care input.

The expansion of ESP roles has been supported through a number of key government policy documents as described above, but there are other considerations to bear in mind that could impact upon the success of such posts and associated services. The MSK Framework advises on ways in which to set up MSK services, requiring the engagement and co-operation of key

stakeholders, such as consultant medical staff. If this support was not forthcoming it would be more difficult to develop truly integrated care pathways and protocols to support ESPs to provide effective care. Medical consultants may be required to provide additional time for training and supervision of ESPs (British Orthopaedic Association, 2013), which has the potential to impact upon their availability to train junior medical staff. Members of the medical professions have voiced concerns over the impact of advanced practitioners on the experience of medical trainees (Armitage, 2006). There is also the possibility that expanding the opportunities for AHPs to be promoted to advanced clinical roles may drain existing traditional AHP services of their highly skilled staff leaving a vacuum in departmental skill mix (McPherson et al., 2006). Mitigating against this situation could be achieved by ensuring MSK services are designed in an integrated fashion, to ensure ESPs continue to support more junior staff in other arms of a service.

The direction of more recent health policy remains committed to supporting ESP roles, for instance in the form of first contact practitioners in GP practice settings (Department of Health, 2014). Since the Five Year Forward View was published in 2014 the focus of MSK services and ESPs has widened to include more attention on health prevention, improving the ways in which patients with long term conditions self manage and providing economic savings through reducing reliance on secondary care services. Health prevention and management of co-morbidities in MSK conditions, such as diabetes and obesity, has gained greater recognition (Arthritis Research UK, 2014). Encouraging patients to have greater awareness for self-management and be provided with

more informed choices links to the focus of this thesis in exploring the process of decision making.

#### 2.3 Early ESP role development

Prior to the government policy driven focus on ESP roles described above, they had existed in smaller numbers, with development determined by the needs of local health services. ESP posts were created collaboratively, mainly between the clinical services of orthopaedics and physiotherapy (Hockin and Bannister, 1994;Daker-White et al., 1999), likely due to the close working relationships that exist between these specialties. Many of the underlying reasons for the focus on orthopaedics related to high waiting lists, recommendations to increase time consultants spend with patients in clinics, reductions in junior medical staff hours and a realisation that not all patients needed to see orthopaedic surgeons (Weale and Bannister, 1995). To create the environment in which a quite radical shift in roles could be successfully implemented must have required strong leadership and forward thinking orthopaedic surgeons, so as to break free from traditional medical hierarchical structures and similarly visionary physiotherapists with the clinical skills to convince medical consultants that they could perform these roles.

The first report of an ESP post described a physiotherapist in a pilot role as a clinical assistant in an orthopaedic service managing patients referred for potential elective surgery, such as joint replacements (Byles and Ling, 1989). Patients were selected by the surgeons to see the physiotherapist and outcomes found the physiotherapist managed two thirds of the patients themselves reducing the surgeon's workload. Patients reported high (88%) satisfaction

with the physiotherapist's role. Byles and Ling (1989) suggested 66% of patients waiting to see orthopaedic surgeons could be successfully managed by a physiotherapy practitioner with extended skills. But specific outcome and ESP intervention detail is lacking and the results come from one specific NHS service, therefore, care would be required in generalising the findings to other locations.

Papers published in the 1990s reported developments in ESP practice through retrospective audits, service reports and a national survey (Hockin and Bannister, 1994; Weatherley and Hourigan, 1998). Even though the research methodology of many of these papers is weakened by their retrospective designs and audit rather than research focus, they provide important examples of the way in which ESP roles and the scope of practice were beginning to develop and expand across the UK.

In a different subset of orthopaedic patients, physiotherapists with extended skills have been shown to successfully manage a spinal caseload when working in a triage capacity (Hourigan and Weatherley, 1994;Hourigan and Weatherley, 1995). A survey of ESP staff working across the UK managing patients with low back pain in orthopaedic departments reported varying lengths of operation of ESP clinics, from five months to nine years (Weatherley and Hourigan, 1998). Alongside what appears to be an expansion in ESP services, the actual ESP role was developing with widening access to order investigations, such as plain X-rays, illustrating a relaxing of control over practices traditionally limited to the medical profession. However, some medical control was still evident in the need for ESPs to gain consultant permission to order blood tests and MRI scans. Recommendations for all patients to have their cases discussed with a

consultant and the need for medical review of radiology results, reflects the early development of ESP roles at this time and the fact that ESP staff would likely seek out medical support for clinical and governance reasons. Another example of medical control over ESP practice is seen in the way patients were commonly selected for ESP clinics through consultant triage of referrals (Hockin and Bannister, 1994; Weatherley and Hourigan, 1998; Daker-White et al., 1999). Medical oversight shows consultants monitoring the skills of ESP staff to ensure they are competent, but could be interpreted as maintenance of medical profession power and authority.

Many services saw reductions in patients requiring consultant review after seeing an ESP, leading to reduced consultant waiting lists in 80% of the services responding to a UK survey (Weatherley and Hourigan, 1998), but unfortunately no specific data to back up these claims is provided. Weatherley and Hourigan (1998) also noted benefits in staff role development, along with improved communication between medical and physiotherapy staff. For the ESP role to flourish there needed to be good relationships between the surgeon and physiotherapist, but a substantial number of respondents (74%) in the same survey also reported higher levels of stress associated with their extended role. The higher stress in some ESPs related to concerns over their own levels of skill and perceptions that some patients would prefer to consult a doctor. These factors could be exhibiting ESP's self-doubt in their own clinical proficiency in a new role with higher levels of responsibility.

Hockin and Bannister (1994) report a high percentage of cases managed by an ESP physiotherapist (85%), but the detail of how much medical review of each case was required is not stated, therefore, it was hard to conclude how much

decision making and autonomous practice the ESP was undertaking. The same service development concluded an ESP was as effective as a doctor in managing a caseload of post-operative orthopaedic patients (Weale and Bannister, 1995). Effectiveness was measured through patient satisfaction and despite the lack of specific clinical outcome reporting there has been direct comparison of traditional medical versus ESP care, which strengthens the evidence supporting ESP developments.

ESP roles existed within secondary care orthopaedic departments, until new primary care community services began to emerge, with evidence that they could reduce the level of MSK referrals into hospital services and reduce waiting times for patients to receive a specialist opinion (Hattam and Smeatham, 1999). Primary care MSK ESP clinics developed due to high secondary care demand and waiting times and a feeling from GPs that services could be redesigned to improve on patient and GP dissatisfaction with long waits to receive a diagnosis and begin management (Hattam and Smeatham, 1999).

ESP services were expanding into developing areas of healthcare provision with the potential to positively impact on patient care (Hattam and Smeatham, 1999). With more rapid access to services in primary care MSK patients can receive appropriate management and many do not require additional secondary care referral for their musculoskeletal condition. Unfortunately they do not report on patient satisfaction data, which would have been useful to compare to the high levels reported in secondary care services.

The early ESP literature provides encouraging evidence showing the positive impact ESP roles could have on musculoskeletal patient care in a variety of settings and patient groups. Despite this, it is difficult to draw significant

conclusions from these early ESP reports, as many used weaker study designs such as retrospective audits, patient numbers are small, and there is no specific outcome data on ESP intervention, or what that intervention specifically entailed. Short comings aside, the drive to improve patient care and deal with changes in health service delivery and cope with increasing demand led to more radical thinking in how health professionals with appropriate skills could be utilised, leading to role changes for physiotherapy staff which were shown to be effective. The building of a body of evidence from different sources supported further ESP development and the NHS service improvement drive held greater significance compared to the level of research evidence that was available (McPherson et al., 2006).

Very few qualitative studies exist relating specifically to ESP roles within this early stage of their development. A study explored the perceptions of orthopaedic specialist registrars (SpR) to the ESP role (Milligan, 2003). Medics who had not worked with ESP staff shared very negative views of the physiotherapist's clinical ability to work in an ESP capacity. They felt a medical background and training were vital, as was the professional role of the doctor. These findings support a more traditional view of the medical hierarchy and evidence of medical role protection when seeing the emergence of other practitioners, seen as a threat to their own field of practice. The maintenance of medical control discussed earlier in this section could also be linked to this finding. Conversely SpRs who possessed experience of working alongside ESPs displayed far more positive viewpoints and could see the benefits of non-surgical cases being seen by other clinicians to free up their own more specialist surgical skills, a view supported by NHS policy at the time (Department of

Health, 2000a). There was also concern raised by medics who had no experience of working with ESPs about a physiotherapist's ability to undertake investigations within an extended role (Milligan, 2003), again related to a perceived lack of 'medical' training. Although evidence existed that putting support mechanisms in place and providing access to medical opinion when required had helped to overcome this in other services (Weale and Bannister, 1995; Weatherley and Hourigan, 1998).

Another area of concern raised by Milligan's study was the legal risk ESPs could experience by extending their skills and the potential for errors occurring. Risk could be mitigated to some extent by designing clear service protocols and clinical pathways for the ESPs. There were no specific examples that could illustrate this perceived risk, but the increased responsibility and changing focus of the ESP role may link to the stress that ESP staff had reported (Weatherley and Hourigan, 1998) and subsequent reports of ESPs feeling that their role carries increased risk (Dawson and Ghazi, 2004).

#### 2.4 ESP role definitions and professional practice

The vast majority of ESPs in MSK specialties are physiotherapists by background (Saxon et al., 2014). In order to discuss the ESP role and its place within professional practice, sources from the UK physiotherapy professional body have been used, alongside the national ESP clinical network, which is again led by the physiotherapy profession.

It has been difficult to define the term Extended Scope Practitioner (McPherson et al., 2004) and over the last 10 years the definition has been regularly updated to reflect the growing recognition of the role within the NHS, private provider

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sector and also the changing emphasis on physiotherapy professional roles and scope of practice led by the Chartered Society of Physiotherapy (CSP). Early definitions allowed for broad parameters of practice but do not provide a specific explanation of what extended scope of practice entails:

'clinical physiotherapy specialists in any recognised specialty with an extended scope of practice' (Chartered Society of Physiotherapy, 2002)

A later Department of Health definition that was more specifically related to MSK practice provided additional context and made overt the premise that these practitioners were involved in roles that altered professional boundaries:

'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.' (Department of Health, 2006, p. 54)

In 2008 the CSP updated its own position on ESPs and the wider physiotherapy profession by publishing new guidance for members on the scope and definition of physiotherapy practice:

'the scope of practice of physiotherapy is defined as any activity undertaken by an individual physiotherapist that may be situated within the four pillars of physiotherapy practice where the individual is educated, trained and competent to perform that activity. Such activities should be linked to existing or emerging occupational and/or practice frameworks acknowledged by the profession, and be supported by a body of evidence.'

(Chartered Society of Physiotherapy, 2008, p. 6)

In doing so the CSP moved away from describing physiotherapy activity as being within or outside the scope of professional practice and instead considered the profession as a more modern entity which can be reflexive enough to develop and change in the context of healthcare developments. The CSP made reference to the 'four pillars' of practice from its original Royal

Charter (The Privy Council, 1921), which are movement, massage, electrotherapy and kindred treatments. This position has been clarified in relation to ESP roles explaining that ESP activity aligns to what is known as the 4<sup>th</sup> pillar of physiotherapy practice, described as 'kindred treatments' thus confirming ESP physiotherapists as being within the professional scope of practice (White, 2015).

Following publication of the new scope of practice guidance from the CSP (2008) it was felt that a focus on professional status and role definitions would lead to calls to change the job title of ESP for physiotherapy staff, as the 'extended scope' descriptor was now in conflict with the CSP's own description of professional practice. A broad range of job titles, created within local health services remained, with these practitioners undertaking a range of clinical activities under the umbrella of what could be described as an ESP. The difficulty with variation in ESP roles is that research findings are hard to compare across role and service descriptions where it is not clear what the scope of individual professionals is. It is a task that would be made easier if researchers were explicit in their descriptions of clinicians and the interventions they provide.

Following the CSP's updated professional guidance a new definition of advanced practitioners (including ESPs) was published which also links to ESP's work within MSK services:-

'Advanced practitioners are experienced professionals who have developed their skills and theoretical knowledge to a very high level which is supported by evidence. They perform a highly complex role and continually develop practice within Musculoskeletal Services.' (National Health Service Education for Scotland, 2012, p. 9)

More recently the CSP endorsed the ESP clinical interest group as a physiotherapy professional network and as part of this process and to acknowledge the changes in the broader scope of practice in the physiotherapy profession the definition of an ESP was updated by the professional network:-

"Extended Scope Practitioners are physiotherapists working at a high level of expertise who have extended their practice and skills in a specialised clinical area" (Extended Scope Practitioner Professional Network, 2012)

The ESP professional network is affiliated to the Chartered Society of Physiotherapy, providing a national focus, and leads on ESP developments. The group have published a comprehensive training and competency guidance document specifically for physiotherapists working in ESP roles (Syme et al., 2013). Staff are supported through this document to progress from traditional physiotherapy roles into advanced practice and greater levels of responsibility. Its aim is to improve the standard of practice in these roles across different services, but this does rely on uptake in its use by both individual ESP staff and the services in which they operate. This is particularly important as no standardised ESP training programme exists, which has been highlighted as an issue within the field of advanced practice roles by a number of authors (Collins et al., 2000;Dawson and Ghazi, 2004;Crane and Delany, 2013). It remains to be seen whether the attempts to support ESP training and competency development have the desired effect of standardising quality across different service models.

In 2016 the CSP published their advanced practice framework (Chartered Society of Physiotherapy, 2016) under which they expected ESP roles to fit. The CSP felt the term 'extended' had a more limiting effect on role development, particularly in healthcare systems that can undergo rapid change. The CSP's decision should also be considered alongside changes that naturally occur in the evolution of professional practice and the way in which innovative treatments that have previously been seen as beyond scope of practice are now embedded in recognised practice; for example, MSK injection therapy (Kesson et al., 2002). Physiotherapy management, both new and old, requires professional liability insurance cover, protecting the public, physiotherapy staff and the professional body and is evidenced in terms of training and individual competency (Chartered Society of Physiotherapy, 2018). By ensuring a professional's practice is always within scope and has evidence of appropriate competency, levels of safeguarding are in place.

The CSP has endorsed the title Advanced Physiotherapy Practitioner (APP) (Chartered Society of Physiotherapy, 2016), and wishes this to replace the term ESP. They describe these roles as possessing assessment, investigative and management roles and describe complexity of decision making as part of the service positions they would be expected to undertake. ESPs manage unpredictable situations and risk, which is underpinned by their advanced clinical skills and knowledge. Possessing these skills allows an ESP to evolve to meet changes in the way healthcare will be delivered in the future.

The section above illustrates the complexities linked to ESP role definitions that can lead to difficulty in searching the literature for evidence, unless there is an awareness of the existence of multiple role titles. It is also difficult to make

comparisons across ESP roles due to the differing levels of skill and scope of practice required in ESP posts, depending upon the local service setting. Possessing many years of practice and personal experience of these roles and the surrounding issues the author is able to take account of these variables in searching the literature to ensure important evidence is not overlooked and as complete a picture as possible is developed to understand the research landscape and where evidence gaps exist in relation the research focus. Even though the methodological rigor of ESP literature is questioned the evidence suggests that these roles improve service quality and deliver safe and effective care when compared to medical colleagues (Desmeules et al., 2012). With the appropriate skills ESPs can reduce the clinical burden on medical colleagues and increase patient access to the most appropriate care. The demand on health services continues to grow and evidence suggests ESPs can provide care across MSK services to enable more efficient use of resources and deliver effective care with high patient satisfaction (Department of Health, 2006). ESPs are key to delivering care in both primary and secondary care services and within interface clinics that lie between the two. Health policy continually adapts and emphasis changes. The current focus is upon the transformation of NHS services in the UK in line with the NHS five year plan (Department of Health, 2014). As a consequence of the plans devised by the Government to change future UK healthcare delivery, ESP posts have been illustrated as being ideally suited to operate in strategic locations such as GP practices, providing first contact practitioner services (Chartered Society of Physiotherapy, 2016; House of Commons Health Committee, 2016). In this situation the ESP would be taking on some of the workload of GPs, much as they

did when first introduced, when orthopaedic surgeon workload was under pressure.

As part of the above developments health services in England are planning to restructure in line with what have been termed Sustainability and Transformation Plans (STPs) (National Health Service, 2015). Driven by ever increasing demand on NHS resources, there are clinical areas where ESPs operate in MSK services where this pressure is highly focused. The aim is to make efficient use of resources consistently across the NHS and bodies such as NHS RightCare (National Health Service RightCare, 2017a) have set out plans to support this. As this agenda continues to develop it will be very important that ESPs can describe the impact their roles have on patient experience, outcomes, delivery of patient centred care and how they can deliver value for money. To this end where knowledge and understanding gaps exist in the way ESPs impact upon patient care, these need addressing. With a broader evidence base the development of ESP and other AHP advanced practice roles can be supported and enhanced to the benefit of patients and the professionals involved. Aligned to these health policy and delivery developments is the theory of coproduced care. The concept of co-production was introduced to the UK by the Kings Fund as they were keen to gain a greater understanding of the relationships that patients and clinicians possess within the health service and how these relationships could be improved (Realpe and Wallace, 2010). Coproduction engages patients and carers, alongside health professionals in designing and delivering health services, encompassing patient's own experiences of their condition in decision making (Coalition for Collaborative Care, 2016). It is now central to the NHS agenda of delivering patient-centred

services and increasing user involvement. Shared decision making is crucial to this process and encourages the patient to move from being a passive receiver of care to having much greater involvement in consultations to achieve an outcome through shared expertise (Coulter and Ellins, 2006). The challenge of delivering healthcare in this way is that it shifts the power within a traditional patient clinician relationship onto a more equal footing and requires more effective communication skills on the part of the clinician to involve the patient in the process and acknowledge their preferences (Needham, 2009). The following section will now discuss the different models of decision making that are present in healthcare settings.

#### 2.5 Decision making

Decision making is defined as 'the action or process of making important decisions' (Oxford University Press, 2017).

Decision making in a healthcare situation involves gathering information on needs, risks and benefits, and weighing up these factors to arrive at some kind of choice. The choices available are based upon the findings from the assessment process and the clinical reasoning of the health worker and patients provide input into both the clinical reasoning and decision making processes (Higgs and Jones, 2008). The literature describes various models by which healthcare decisions are made. They all fall into a spectrum, with more clinician led decisions at one end, more patient led decisions at the other and shared decision making processes lying in the middle. Figure 2 provides a conceptualisation of the spectrum of decision making styles and enables each style to be positioned in relation to alternative options.

paternalistic
• clinician led
• shared
• patient led
• patient led

Figure 2. Decision making spectrum

Much of the literature describing the spectrum of decision making styles in the health arena is contextually related to the patient encounter with medical staff, illustrating the historical context of medical decisions, which were driven by the role of medical staff. Doctors were perceived as being in positions of power, possessing higher status within society, reinforcing their dominant role in patient encounters (Charles et al., 1999a; Taylor, 2009).

A number of different decision making styles have been reported in the literature. These are paternalistic (Emanuel and Emanuel, 1992;Charles et al., 1997), informed (Emanuel and Emanuel, 1992;Charles et al., 1997), shared (Charles et al., 1997;Charles et al., 1999a), professional as agent (Charles et al., 1997;Gafni et al., 1998), interpretive and deliberative (Emanuel and Emanuel, 1992).

Paternalistic decision making lies at one end of the decision making spectrum, the patient adopts a very passive role in the process and the doctor acts as the expert and leads the process (Charles et al., 1997). The medic is seen as having the necessary skills and knowledge to decide what is best for the patient and that they will make the best decision on their behalf (Charles et al., 1999b).

Decision making follows a process of assessment and investigation led by the clinician, with the medic then relaying to the patient the management plan they should be following. Unlike a shared or informed process the patient's preferences are not actively taken into account and their involvement is purely to give consent to what is advised to take place.

The medical practitioner makes the decision based on what he/she feels is in the best interests of the patient (Emanuel and Emanuel, 1992). The medic may well be acting as the patient's guardian, but the power relationship in this situation very much places them in the dominant authoritarian role. There is a degree of efficiency present in adopting this style of consultation and medical staff have voiced time as a frequent issue when trialing other decision making styles such as shared or informed processes, over more paternalistic approaches (Edwards et al., 2005;Elwyn et al., 2012). In busy clinical situations medics and other health practitioners may adopt what they see as more efficient practice, to enable their patients to be seen in a timely fashion and defer to a paternalistic style.

In certain clinical circumstances it is recognised that a more paternal style of decision making may be more appropriate, or may be the preference, given the medical situations occurring at the time, such as in emergency medicine or palliative care (Emanuel and Emanuel, 1992;Charles et al., 1997;Flynn et al., 2012). To make these more one sided decisions clinicians must possess the appropriate level of knowledge and although clinically the correct management decision may be made, there remains a real lack of recognition for the patient's views in this process.

At the other end of the decision making spectrum lies informed decision making. Here the clinician is a provider of knowledge and information following assessment, so the patient can make a decision, which has more bias toward his/her own preferences for care (Gafni et al., 1998). It takes account of the knowledge barrier that may well impede the patient from knowing what to do in the first place before they see the health professional. The medic's position becomes a far more passive role of information provider and has been criticised as providing a less satisfactory rapport, affecting patient-doctor relationships, restricting professional roles (of the medic) and being difficult to support if the patient does not know what they want (Emanuel and Emanuel, 1992). The benefit to the patient is in greater empowerment and becoming the main decision maker for the management of their health (Charles et al., 1997). Adopting this process would very much give a voice and prominence to the patient's values and treatment preferences and although the balance of power now shifts away from the health worker, the exchange of information is still very much one way from clinician to patient (Charles et al., 1999a) and does not allow for more open discussion.

Paternalism in medical encounters has been challenged since the 1970s (Ishikawa et al., 2013), as patients started to be seen more as consumers rather than clients. Ethical concerns were raised regarding medical consenting and an acknowledgement that more informed patient consent processes were required (Abram, 1982), along with greater informed choice in providing patients with a range of management options (Charles et al., 1997). Shared decision making (SDM) was to reduce the power differential between doctors and their patients with the development of greater mutual respect and a partnership approach to

clinical relationships. The drive to achieve this dramatic shift in medical decision making was led by policy makers in the United States and quickly spread to other health economies (Charles et al., 1999a). It was also an alternative in preventing a radical swing of the medical decision making process to an informed model, which sat solely with the patient, as a reaction to the paternalistic relationship which had predominated (Charles et al., 1999a). But critics argued that SDM was informed decision making under another guise (Emanuel and Emanuel, 1992). The development of SDM has also been complicated by terminology and conceptual definitions as to how it should be adopted (Makoul and Clayman, 2006; Towle et al., 2006).

Shared decision making occupies a centre ground between paternalistic and informed models. The aim is for both the clinician and patient to share the process of deciding upon management and agree the outcome. Key aspects of the relationship should occur for the model to be seen as truly SDM (Charles et al., 1997). These are:

- At least two people involved but could have more healthcare professionals present and patient relatives
- Both parties actively participate in the decision making process
- A sharing of information occurs
- The decision is made by both and agreed

The difference from other models is seen as a state of mutual acceptance and agreement (Charles et al 1997).

Weaknesses are felt to exist in the way SDM is undertaken, specifically in relation to how options are developed during the consultation and the potential that this may not be fully explored, alongside how the decision is actually made

and how the patient and doctor work together (Wirtz et al., 2006). The development of management options, termed as 'framing' could be compromised by a lack of consultation time, lack of knowledge of options from the doctor, policy and guideline limitations within the organisation the doctor works for and the impact of communication skills and how the doctor perceives the patient's values and preferences (Wirtz et al., 2006). The second issue described as the 'nature of reasoning' considers a potential reasoning gap in terms of what a patient understands regarding treatment options and how all the factors surrounding this can be balanced and then a choice made (Wirtz et al., 2006). Both issues risk the process becoming simplified and the patient deferring to a doctor's expert knowledge and what they feel is best to offer and choose for the patient. If this occurs the patient values, lifestyle and preferences become neglected and a paternalistic relationship takes place.

Although SDM is considered key to undertaking care that is patient-centred and fully engages the patient in an informed way about the decisions they need to make (Sandman and Munthe, 2010; Dierckx et al., 2013), there are risks that this may lead to tensions in the patient doctor relationship, given the complexities that often surround healthcare decisions and the ethical dilemmas that maybe present (Wirtz et al., 2006).

Other decision models have emerged from the literature on the basis of critical analysis of SDM that bring aspects of the sharing process into models that lie at the more paternalistic (medic led) or patient choice (patient led) end of the spectrum (Sandman and Munthe, 2010). They argue that SDM can present some ethical ideals regarding doctors acting in the patient's best interests and also the ability for patients to be respected as autonomous individuals with capacity.

It is felt that the process of information sharing comes across as more of a negotiation, which is felt to have more in common with conflict resolution, bringing a negative connotation to the clinical relationship. If the process was described as more of a deliberation this is felt to convey a more positive tone (Sandman and Munthe, 2010). But one wonders if this argument is more about semantics rather than a particular weakness of using a shared model. Sandman and Munthe (2010) acknowledge that SDM is really an ideal and point out that in healthcare practice what may well be occurring is that clinicians exert or exploit their position as an expert and for SDM to work they must actively avoid this. Clinicians certainly need to accept and agree to the principles of SDM practice (Elwyn et al., 2012) and by adopting more patientcentred practice deliver care with a more holistic, biopsychosocial perspective rather than biomedical stance (Taylor, 2009). The ability of medical clinicians to change established practices of communication and consultation delivery that have been undertaken since training have been questioned (Towle et al., 2006). Other concerns with SDM are the requirement for enough consultation time to fully engage in the process and clinicians possessing the necessary skills in communication to deliver and ensure patients understand the risks and rewards of management choices (Taylor, 2009; Elwyn et al., 2012). Despite these worries SDM is regarded as a key component of patient-centred care and current healthcare delivery (Realpe and Wallace, 2010; Kings Fund, 2012). Outside of the three main decision making models that have been described above there exist descriptions of other potential processes. The 'professional as agent' model has its roots in health economics and, as with the informed model, makes an attempt to shift the power balance within the consultation away from

a paternal encounter (Gafni et al., 1998). Here the doctor takes on the decision making role at the end of the consultation, but only after they have a clear understanding of the patient's preferences. The risk is in the doctor making assumptions as to the patient's wishes and then the process resembles paternalism (Charles et al., 1997).

The professional as agent model has been reviewed against an informed model of decision making (Gafni et al., 1998), with the informed model preferred as the emphasis was on a patient led process and it was felt easier for the doctor to transfer information to the patient than for the doctor to understand each patient's individual preferences and then apply those to a decision. Interpretive and deliberative decision making are the other two models described (Emanuel and Emanuel, 1992). Interpretive decision making follows a similar structure to informed encounters, whereby the clinician provides the patient with information. The difference comes in the focus that is now placed on the patient understanding his/her values position in relation to his/her presenting symptoms, achieved by the clinician acting as more of a counselor (Emanuel and Emanuel, 1992). The same values position is determined between the patient and doctor in the deliberative model. But here the discussion is described as taking more of a moral stance so the patient can consider the most laudable health care values in conjunction with their symptoms and management choices (Emanuel and Emanuel, 1992).

The risk with both interpretive and deliberative decision making models is the shift that may occur toward paternalistic consultations. With limited time a doctor may revert to a more paternalistic process by imposing his/her own values on the patient's preferences and thereby influencing the overall

management decisions. The patient may also prefer the consultation to focus upon their medical presentation rather than discussing associated moral and values positions with the clinician. (Emanuel and Emanuel, 1992)

Emanuel and Emanuel (1992) support deliberative decision making as an ideal over paternal, informed and interpretive decision making models, as in this framework medics can be seen to be upholding professional values, acting as providers of care and also allowing patients to be involved in the discussions.

However, the deliberative process of decision making suggests that the medic will maintain a balance of control and power given that he/she are expected to inform their patient what best course of action should be taken.

As has been stated above, the majority of the literature describing decision making models is based upon medical encounters. The following section considers these models in light of the available literature concerning ESP and physiotherapy practice.

### 2.6 Decision making in ESP practice

In the literature specifically related to ESP management there is very little mention of the decision making processes which occur between the ESP and their patients. One paper considering patient experience describes more positive outcomes when patients have more involvement in decision making with the ESP and conversely more negative outcomes when patients are less involved (Coyle and Carpenter, 2011). No further detail is provided surrounding the decision making process itself, therefore, it is not possible to understand what more or less patient involvement really means. The paper focuses upon quality within one particular MSK service and in-line with previous ESP

literature the consultation outcome relates to patient satisfaction. There is brief mention of decision making within one other paper (Reeve and May, 2009) but again this is not explored in any depth. Upon reviewing the quotes included in the article it appears the patients interviewed want a more paternal interaction from the ESP. If this were the case then this finding would be contrary to Coyle and Carpenter's (2011) analysis of ESP patients seeing decision making involvement as important. No further insight within this specialist area of AHP practice into the mechanics of clinical decision making were found.

In considering the wider physiotherapy specific literature describing decision making models, limitations still exist, although research does consider the different processes that may be adopted. Paternalistic models of practice in patient encounters appear to be the predominant process (Smith et al., 2007;Smith et al., 2010;Dierckx et al., 2013;Jones et al., 2014;Robinson et al., 2014).

Low levels of SDM are found in physiotherapy practice, with clinicians lacking knowledge as to the preferences of their patients in this regard (Dierckx et al., 2013). The physiotherapists appear to use a more paternalistic model and assume patients want a more passive role. One interpretation of these results could be that there are potential deficiencies in the communication skills of the physiotherapists or they struggle to interpret their patient's real preferences. Particularly when it was found that the patients themselves wanted a greater role in decision making (Dierckx et al., 2013). The study was undertaken with self-employed physiotherapists in Belgium who appear to be working in MSK practice. The findings have a relevance to the context of this thesis, although should be analysed with caution given the small sample size, limited

generalizability and being a different country of origin with a more insurance based health system rather than NHS type provision.

When shared decision making is undertaken, it is performed poorly by physiotherapists treating patients with low back pain (Jones et al., 2014). They found that paternalism is more evident, with underdeveloped processes of shared decision making in clinical practice. It was common in consultations to provide patients with treatment options but not really within a clearly shared framework and risk versus benefit conversations surrounding those options were lacking. Despite the findings Jones et al. (2014) did support shared decision making as good practice, citing the main reasons as promoting patient-centred care, providing patient empowerment, increased patient autonomy, a reduction in complaints and improved patient experience.

Considering physiotherapy practice beyond MSK services, there are suggestions that clinicians have a preference for leading decision making with their patients in a more paternal style in cardiorespiratory care (Smith et al., 2007;Smith et al., 2010), although there is a lack of detail describing the specific decision making model that was used. Similarly in falls prevention physiotherapy staff show a desire to maintain a controlling position over patient management (Robinson et al., 2014). The consultation style would, therefore, lie toward the paternal end of the decision making spectrum, limiting the ability physiotherapy staff would have to empower patients in principles of self management and work in a shared decision making framework.

Overall the literature indicates physiotherapists and potentially ESPs prefer adopting a paternal style of decision making with their patients. Patients may describe better quality of care and outcomes from decision making involvement

(Coyle and Carpenter, 2011), but clinicians may lack the skills or awareness of their patient's preferences in this area (Dierckx et al., 2013).

## 2.7 Patient preferences in decision making involvement

How patients prefer to be involved in a decision making process about their own healthcare needs is complex (Clark et al., 2004). There are situations where patients have a greater preference for shared styles of decision making (Bodenheimer, 2002; Deber et al., 2007) across a variety of medical specialties including both acute and chronic MSK conditions. But conversely, there are examples of patients wishing to adopt a more passive role with a more one-way flow of information from the clinician during a consultation and for that clinician to take the more authoritative stance when making decisions. Passive patient roles can be seen in secondary care, such as orthopaedics (Gooberman-Hill et al., 2010) and in primary care GP settings (McKinstry, 2000). There appear to be certain patient variables that can indicate someone is more likely to want to play a passive role in their care. These are if someone is more elderly (McKinstry, 2000; Hudak et al., 2002; Doherty and Doherty, 2005; Deber et al., 2007), less well educated (Doherty and Doherty, 2005; Deber et al., 2007) or in some instances when presenting with a more physical MSK condition (McKinstry, 2000). Conversely younger patients and those who have a greater knowledge of their condition are more likely to want involvement in a shared process (Deber et al., 2007).

Where patients receive care in a more paternal style they are deferring to the knowledge of the clinician (Gooberman-Hill et al., 2010) and, therefore, accept a more passive role and the fact that the power and authority of the relationship

is firmly with the medical practitioner. If in communicating with a practitioner patients feel the practitioner's style is more paternal they adjust their own position to fit that style (Gooberman-Hill et al., 2010). Adjustment of patient style linked to a perception of the doctor's preferences was also noted in primary care patients (McKinstry, 2000).

Other influences on a patients decision making preferences have been reported. Patients may be more open to collaborative relationships and knowledge sharing if the clinician they are seeing is not a doctor. Doherty and Doherty (2005) found some patients were more likely to communicate on a more equal footing if they were seeing nursing staff. The patient's response to an unequal power relationship when seeing a doctor may lie behind this finding. There is no similar research comparing patient's responses in ESP consultations. Patients are also influenced by their own perceptions of their condition or symptoms. For example, patients with hip or knee arthritis may defer a decision to undergo surgery if they felt their arthritis was part of growing old or that they were coping and surgery was seen as a last resort (Hudak et al., 2002). The clinician they consult with may disagree with that position, but if the clinician perceives their patient does not want to have an operation or is not describing severe enough symptoms, surgery may well not be offered as part of the management options at that time (Gossec et al., 2011). In a paternal consultation, if the medic does not offer surgery the patient is unlikely to challenge this position and directly request an operation given their passive role (Hudak et al., 2002). As can be seen, the decision making position taken by the patient is likely to influence the outcome of the consultation. The consequences could involve limited management options being discussed and the patient not having the

opportunity to explore all these options fully to make an informed choice. By incorporating a more shared approach there is a greater chance of both patients and clinicians gaining a clearer understanding of the knowledge required to make that informed choice.

Specific tools to support the shared decision making approach have been advocated (Bozic and Chiu, 2011). These tools are known as Patient Decision Aids (PDA) and their use is encouraged within the NHS to support decision making (National Institute for Health and Care Excellence, 2012). PDAs aim to provide patients with evidenced based information on treatment options and help patients reach a preferred choice through a values based decision process (Stacey et al., 2017). The positive impact from a patient's perspective of using PDAs is seen in education and information exchange (Bhavnani and Fisher, 2010), although in the same study patients felt PDAs may shift the decision making process more toward themselves and reduce their GP's clinical responsibilities. Suggesting there were participants within this study who would prefer more medically led decision making processes. There were also signs of impact on power within the clinical relationship, where some patients felt uncomfortable if the PDA led to differences in opinion between themselves and their GP. Conceptually, Charles et al. (2005) questioned the impact PDAs may have on patient care. They had concerns that PDAs may limit the individualisation of care and the choices that were made available. Some patients may have a preferred method of making health decisions based upon their own values position and a PDA may force them to adopt a different stance. In the MSK specialty, specific PDA tools are available for patients with osteoarthritis (National Health Service Rightcare, 2017b). Orthopaedic surgeons support PDA use when considering management choices for patients with osteoarthritis, including whether to proceed to joint replacement surgery (Adam et al., 2008;Stacey et al., 2008). This suggests PDAs would be of benefit to ESPs when assessing and offering management choices to similar patient populations, although at present there does not appear to be any evidence reporting PDA use specifically in relation to ESP services.

### 2.8 Decision making in context

Shared decision making is described as central to the idea of co-producing care and developing a more balanced relationship between clinician and patient during a consultation (Realpe and Wallace, 2010). Adopting co-produced care and SDM processes moves the consultation away from the patient acting as a passive receiver of care to a more active role. Aligning with the way health policy has developed and supported the role of the patient in recent years, with patient centred care and user involvement seen as key aspects of service design and delivery (Department of Health, 2010).

Patients now have significantly more access to information regarding health conditions and treatment choices and are most likely to source information about their condition through the internet (Clarke et al., 2016). The balance of knowledge and power is no longer with the clinician and by working alongside clinicians patients can reach mutually agreeable management decisions. To achieve collaborative care, both patient and clinician have particular skills that they bring to the consultation (Coulter and Ellins, 2006). The clinician brings competency in diagnosis, treatment options, aetiology and prognosis, whereas the patient's skills are in their own personal experience of their condition, their

social circumstances, their values and preferences and their attitude to any risks associated with treatment choices. In order that true co-production of care is seen there has to be a transformation of the whole patient pathway (Realpe and Wallace, 2010), with shared decision making forming an important part of this process. Co-production is described as a collaborative process (Needham, 2009), which alters the dominant role of the professional, balancing the relationship and allowing the clinician to support the patient to make appropriate choices about their own care.

Shared decision making is supported within these models of co-production by both central Government policy papers and charities and organisations that promote active patient involvement in healthcare in the UK, such as the Kings Fund and the Health Foundation. Shared decisions and more patient involvement were central to the Department of Health (DOH) policy paper Equity and Excellence: Liberating the NHS (Department of Health, 2010), but subsequently the Kings Fund reported that patient involvement was more focused around choice of services rather than SDM in specific clinical encounters (Kings Fund, 2012). There is a potential delivery gap on seeing these changes to service provision in healthcare achieved on the ground, as there exists a mismatch between recommendations from organisations keen to improve the way patients receive care and how policy makers interpret and support this in key policy documents and how this is then implemented by services and individual clinicians in day to day care.

From an ESP perspective, roles have expanded within MSK services alongside these recommendations for changes to the way patient care is delivered and currently no evidence exists to show how these practitioners undertake decision making with their patients.

### 2.9 Chapter summary

Chapter two has provided a review of the development of the ESP role in the NHS and placed developments and changes in the description of such roles in the context of physiotherapy professional body requirements and the continually shifting health policy framework. It has also provided a critical review of the academic literature surrounding decision making models in medical, ESP and physiotherapy fields and how the recommendations for undertaking decision making has shifted over time from a more paternal stance to that of a shared or collaborative approach.

The literature provides no details concerning ESP and patient interaction within a consultation or the details as to how management decisions are made. Within physiotherapy, which provides the closest clinical context to MSK ESP practice, a paternal style of decision making appears to be the preference. Patients adopt a mixture of paternal or SDM, with instances where paternal processes take place as the patient adapts and follows the clinicians lead. Contrary to this position is current health policy and recommendations for the delivery of patient centred care through the use of SDM.

Considering the existing literature and lack of evidence concerning ESP decisions making this thesis will focus upon the question of how do MSK ESPs and their patients interact and undertake decision making? The main research aim will therefore be to explore the interaction between ESPs in the MSK field and their patients with specific focus upon the decision making process.

# **Chapter 3**

# Methodology

### 3.1 Introduction

This chapter provides an explanation for the underlying philosophical position of the research and the theoretical reasons for the research methodology and methods employed. The research has been approached from my position as an experienced MSK Extended Scope Practitioner and Consultant physiotherapist, with many years of practicing and managing the context and patient population that was explored. Where appropriate my personal role and stance was examined reflexively and is described in the first person. Chapter three contains descriptions of the ethical steps taken to safeguard study participants and the researcher. Details of the recruitment process, patient and public involvement, data collection and data analysis are also presented, along with steps taken to ensure validity, reliability and trustworthiness. My research interests, informing the specific study questions I have attempted to answer, have arisen from my extensive clinical experience. Questions have developed as I have practiced and tried to make sense of what I and other ESPs do and how we interact with our patients to provide care in a rapidly evolving healthcare environment. The key research aim is stated again below with the five research objectives.

#### 3.1.1 Research Aim

To explore the interactions and decision making process that take place during consultations between extended scope practitioners and their patients in a musculoskeletal setting.

### 3.1.2 Research Objectives

- Systematically review the ESP literature to understand how the decision making process of MSK ESPs affects patient outcomes.
- 2. Explore how MSK ESPs and patients interact during the decision making process
- 3. Gain understanding of how patients perceive the ESP role
- 4. Explore possible factors behind reported high satisfaction with ESP care
- 5. Analyse how the ability to directly list for orthopaedic surgery is perceived by ESPs and their patients

### 3.2 Underlying philosophy

There is a lack of clear understanding regarding the concepts and theories underpinning physiotherapy practice (Wikstrom-Grotell and Catharina, 2011). To improve this position the physiotherapy profession should consider how physiotherapy is targeted at improving patient's functional wellbeing, the competence of clinicians, the world view taken by the profession and how the scientific community views physiotherapy (Noronen and Wikstrom-Grotell, 1999). The same authors understood that linking research to practice was an important step in developing these concepts of practice and physiotherapy theory (Noronen and Wikstrom-Grotell, 1999; Wikstrom-Grotell and Catharina, 2011).

Physiotherapy has historically aligned itself with a more scientific generation of practice knowledge in the biomedical tradition drawing upon a more positivistic and naturalistic paradigm (Wikstrom-Grotell and Catharina, 2011). Physiotherapy practice involves complex interventions (Higgs, 2009; Nicholls and Gibson, 2012), and in order to develop a theory of practice that encompasses that complexity, the profession needs to widen its research and knowledge acquisition into more humanistic paradigms (Wikstrom-Grotell and Catharina, 2011). Previous literature had considered the risks in maintaining a predominant biomedical position and given that physiotherapy and patient interactions are the key area of practice, more holistic and hermeneutic exploration was required (Noronen and Wikstrom-Grotell, 1999). The shift toward more humanistic thought compliments movements the profession has made, particularly within musculoskeletal management, into more holistic models of care embracing the psychosocial interventions and management strategies, now employed alongside more biomedical models of practice (Foster and Delitto, 2011). There has been support for a move away from positivistic study by physiotherapists to engage with wider aspects of knowledge generation (Richardson and Lindquist, 2010; Petty et al., 2012a; Petty et al., 2012b).

Therefore, in relation to this research, the humanistic perspective of practice is vital to gain a wider understanding of the complex interventions that ESPs are involved in and to gain greater understanding and knowledge of how ESPs interact with their patients and work together to make management decisions. The focus of the research, regarding decision making, has a much closer resonance to an interpretivist paradigm (Lincoln et al., 2011), rather than the

theories of positivism (Schwandt, 2000). In recognising this, principles of knowledge generation, methodology and method that align to the principles of interpretivism (Lincoln et al., 2011) have been employed.

Interpretivism was established as research paradigms shifted away from positivism to develop approaches that have a closer affinity to social science and qualitative methodologies (Broom and Willis, 2007). Interpretivism possesses a relativist ontology and a subjectivist epistemology (Lincoln et al., 2011). Relativism considers reality based upon the meanings and understanding people make of social experiences. Rather than having a belief that there is only one truth, reality exists in multiple ways, with the emphasis being upon accessing the subjective meaning that people give to their own experiences within a particular environment (Kidd, 2002). Reality is subjective and knowledge is generated through exploring aspects of the world around us. The researcher is inherently linked to the experiences they have of the surrounding world. It is not possible to create an active separation from the topic under study, as would be the case if a more positivist stance was adopted. Interpretivism is the most appropriate philosophy to underpin a study of decision making because it allows for the generation of knowledge through considering personal interactions in a social context. For this study the interaction is a healthcare consultation and interpretivism encourages the researcher to try to make sense of and develop interpretations of participant experiences. Developing an understanding of the experiences of decision making would also be seen in the interpretations of the person who is undertaking the research (Scotland, 2012). Research within the interpretivist paradigm has the ability to provide a richness of data that can be used to

understand the complexities of ESP and patient decision making, whilst ensuring the findings are grounded back to the experiences of participants in the study. The findings would be linked back to the original data transcripts, and by doing so provide credit and justification to the collected accounts (Scotland, 2012).

As interpretivist study refers back to the experiences of the people involved in the study (Noblit and Hare, 1988), there is a link to my researcher practitioner experience impacting upon the development of this research and providing the source of the research question. In essence the research was attempting to unravel and make sense of the phenomena of decision making within a specialist clinical field that lacks current understanding and knowledge. Using interpretivism in terms of exploring decision making in healthcare is recognised as a suitable underpinning philosophy (Broom and Willis, 2007).

There are potential disadvantages in the subjective nature of interpretivist research. As the analysis is drawn from specific experiences in a particular context it is difficult to generalise the results (Braun and Clarke, 2013). Aspects of trustworthiness and validity have to be considered and controlled against, as there is a potential for bias to be introduced through the personal experiences of the researcher themselves influencing data analysis. These issues will be discussed in more detail in section 3.11 later in this chapter.

Enquiry through phenomenological or hermeneutic methodology lies within the interpretivist paradigm (Finlay, 2011;Lincoln et al., 2011). The founder of modern phenomenology at the turn of the 20<sup>th</sup> Century is recognised as Edmund Husserl (Moran, 2000). Husserl saw phenomenology as a practice of philosophy that would help reveal the heart of human experience through a

process of enabling this to be revealed within human consciousness. To achieve this, there is a requirement to bracket off your preconceptions and presuppositions and develop what Husserl termed a series of reductions, to get to the essence of the experience. His practice of phenomenology was to focus upon the lives of people themselves and gain a greater understanding of lived human experience within their lifeworld or 'Lebenswelt' (Moran, 2000, p. 61). Martin Heidegger was a student of Husserl and took his descriptive phenomenological approach and developed a new philosophical position. This was centred around the idea of 'being there' or 'Dasein', which focused on subjects being within the world. In order to understand this lived experience a more interpretative stance was required and Heidegger introduced a hermeneutic perspective to phenomenology (Moran, 2000). There was, therefore, recognition that the researcher themselves plays a more significant role in understanding the phenomena in question. In analysing the experience the researcher needs to move back and forth between their own understanding and the knowledge that was revealing itself to them. This interpretative endeavor was described as a circular procedure and formed the process of a hermeneutic circle which was a central part of Heidegger's analytical process leading to a deeper understanding as the circle is repeated (Finlay, 2011). By adopting a hermeneutic phenomenological approach I will be able to incorporate my own researcher practitioner position into the research process. In aligning my position to the underlying methodology I can ensure through a reflexive stance that consideration is given to my own experience and knowledge of ESP practice in MSK services as data is collected and

interpretation is carried out. Also ensuring the interpretation is grounded with in the experiences of the research participants.

Another philosopher that impacted upon the development of phenomenological

practice was Hans-Georg Gadamer. He was a student of Heidegger and made further developments to hermeneutic phenomenology. Gadamer felt that to gain knowledge and understanding from human experience there was a clear link between phenomenology and interpretation. In order to achieve the understanding of being, the interpretation needed to be focused upon speech or language (discourse) (Moran, 2000). Gadamer believed that it was not possible to bracket off preconceptions and that within the process of understanding you had to engage with your prejudgments. This occurs through engaging with the hermeneutic circle where you test these positions as knowledge from the experiences you are studying are uncovered (Schwandt, 2000). From my own perspective, I live within the experiences that I am now researching and this has informed my position as a practitioner researcher and in how I have decided to approach and research this area through an interpretivist paradigm. Finlay (2011) sees a clear benefit to therapists using phenomenological research methodology in researching their practice. Through reading and developing insight into interpretivist methodologies there is a clear link between the description of phenomenological theory and the aim of this thesis. The phenomena of ESP and patient decision making is a specific entity, and phenomenology provides the research framework for exploring this to a greater depth than has been so far reported in the literature. The hermeneutic phenomenology described by Heidegger considers the idea of Dasein, of 'being in the world'. My position as a Consultant MSK physiotherapist with

considerable experience of ESP practice in this field provides my 'being in the world' within the field of study and my own lived experiences of decision making in advanced clinical practice resonate well in this choice of methodology. Linking research exploration from practice and personal experience through phenomenology is supported in other areas of health research, such as nursing practice (Walker, 2011).

Therefore, in my exploration of phenomenological methodology the hermeneutic position provided the best option to explore decision making and develop a deeper interpretation of the collected data. The specific methodology of Interpretive Phenomenological Analysis (IPA) has been selected as it is situated within the hermeneutic phenomenological tradition, possesses a very clear methodolological framework and is recommended for researching decision making within healthcare (Smith et al., 2009). In a hermeneutic sense I am living within the world of ESP practice as a clinician and bring that sense of underlying knowledge and experience to the study I am undertaking. As opposed to a more Husserlian phenomenological position, where it is expected that the researcher brackets off this knowledge to study lived experience, within IPA it is recognised that this knowledge plays an important role in developing new understanding. IPA data analysis allows the perspective of the researcher to be included alongside the new knowledge that is collected from the participants of your study.

## 3.3 Research methodology

Interpretive phenomenological analysis is a qualitative method of enquiry which has developed within the theory of phenomenology. It is a relatively modern methodology, developed within the field of psychology (Smith, 1996), but has since seen expansion into health research, including physiotherapy (Dean et al., 2005; Cassidy et al., 2011; Cruz et al., 2014). IPA has been recommended as a structured approach to qualitative research for use by therapists (Finlay, 2011) and enables therapists to inform practice through a more patient-centred research process, gaining important perspectives on care from patients themselves (Cassidy et al., 2011) and is an important method for analysing and understanding patient-clinician interaction (Biggerstaff and Thompson, 2008).

The main theoretical underpinnings of IPA relate to the theories of phenomenology, hermeneutics and idiography (Smith et al., 2009; Pietkiewicz and Smith, 2014). It is important to first have an understanding of how these theories link to IPA methodology to then appreciate from a theoretical perspective how IPA can be applied to the specific research question of: how do MSK ESPs and their patients interact and undertake decision making?

#### 3.3.1 Phenomenology and IPA

In Husserl's development of a practice of phenomenology he developed an approach to concentrate on the study of conscious experience (Moran and Mooney, 2002). He coined the term 'Lebenswelt' meaning life-world (Moran, 2000), and wished to understand peoples lived experiences in their world and what meanings could be drawn from this (Moran and Mooney, 2002). Husserl

described the idea of going 'back to the things themselves' (Moran, 2000). Achieved by concentrating on the lived experience of individuals, which are situated within particular contexts and exploring a particular phenomena within that context (Smith et al., 2009).

'IPA is concerned with the detailed examination of human lived experience' (Smith et al., 2009, p. 32)

In this way IPA very much lies within a practice of phenomenology considering the lived experience of research participants in a particular context. But IPA also recognises that within that situation the context of the lived experience is experienced through a lens impacted upon by the social, cultural and historical viewpoints of the participant and the researcher (Eatough and Smith, 2010). A more Husserlian practice of phenomenology requires a bracketing off of oneself from prior experiences in order to truly immerse yourself in the experiences being studied and not be influenced by those prior experiences and events. Bracketing means removing oneself as a researcher from your own preconceptions and ideas to allow the perspectives of the person being researched to be all encompassing and not influencing reporting through your own assumptions (Finlay, 2011). Being immersed in the data generated from the participant's, allows a more complete understanding of the phenomena from their viewpoint, as it is their worldview that is of utmost importance. IPA does appreciate this position and encourages the researcher to consider each participant's account that is collected in isolation, in order to immerse oneself in that person's experience during initial data analysis stages, before embarking

upon a more interpretive analysis both across participant presentations and the position of yourself as researcher (Smith et al., 2009).

Physiotherapists spend considerable time developing an awareness of how the body functions and interacts with the surrounding environment (world). In musculoskeletal physiotherapy practice patients are assessed to understand their physical restrictions, which impact on functional activity. Subsequent management options are recommended with the aim of improving any functional limitations. This clinical practice perspective aligns well with the theories of phenomenological method described by Merleau-Ponty, who portrayed peoples lived experiences with an embodied link to the surrounding world and the close relationship of the body and lived experience (Finlay, 2011). Merleau-Ponty also considered the changes that take place when peoples' physical health is affected by illness and the relationship with their world takes on a different perspective (Moran, 2000). Both ESP clinician and patient experiences were explored within this research and through the connection to the theories of Merleau-Ponty, provide further rationale for the use of phenomenology.

Utilising a phenomenological approach in researching physiotherapy patient encounters can assist in developing a broader understanding of clinical practice (Shaw and Connelly, 2012). As phenomenology explores lived experience it enables study of interactions between patients and therapists and understanding of the perspectives of each participant in a therapeutic encounter. Phenomenological method has been used to explore the relationship between medics and patients during decision making (Starks and Trinidad, 2007). As decision making is at the heart of this research, phenomenological

enquiry and specifically IPA is seen as an ideal basis for exploring this process between expert ESP clinicians and their patients.

#### 3.3.2 Hermeneutics and IPA

IPA is grounded in a structured interpretive style and the hermeneutic phenomenology of Heidegger and Gadamer (Eatough and Smith, 2010). Individual accounts of experiences are gathered and analysed to gain greater understanding of a phenomena. The separate accounts can then be analysed for shared meaning by developing themes. It is a key aspect of IPA that the analysis goes beyond pure description and produces a deeper analysis and understanding to reach a more interpretative position. It is recognised that the researcher's own views and the interaction between the researcher and participants will have an influence on the process (Smith et al., 2009), which reflects Heidegger's position that it was not truly possible to totally bracket oneself off from everything. Heidegger describes 'being in the world'; that is experiences occurring within our world, and also used the term 'being with' signifying a connection between people and relationships. These connections include those that exist between researchers and participants, which occurs throughout the process of data collection and analysis. In practice this means IPA research is carried out through a method which is more interpretive and aligns with the hermeneutic approaches of Heidegger and Gadamer (Smith et al., 2009).

IPA takes the hermeneutic circle form and due to the dynamics of the data analysis within IPA develops this into what Smith et al. (2009) describe as a double hermeneutic; the researcher is trying to make sense of the participant

who in turn is trying to make sense of their particular experience. There is less emphasis on the idea of bracketing within a hermeneutic approach and within IPA the researcher is encouraged to consider their experience of the phenomena being studied and consider these preconceptions within the data analysis.

Although it is important to state that theories that arise from the data analysis are grounded back to, and illustrated by quotations from the participants and not abstractly formed from the researcher's own thoughts.

My own experience of MSK ESP practice and undertaking clinical consultations in this setting will allow sense to be made of the contextual data, but there is a need to always be mindful, through the data interpretation process that my own preconceptions should not skew the analysis away from the participants' reporting of their own personal experiences.

#### 3.3.3 Idiography and IPA

The third aspect to IPA methodology is its idiographic nature, in that it focuses on a specific phenomena, with detailed analysis of each individual's experiences (Pietkiewicz and Smith, 2014). It is that depth of analysis and the fact that there is focus upon a specific phenomena, in a specific context, by a specific group of people that makes it idiographic (Smith et al., 2009).

Analysis moves from detailed individual accounts through thematic generation by comparing other participants and then ensuring the analysis is grounded back in to the individual by illustrating the narrative with direct quotes from the individuals concerned (Pietkiewicz and Smith, 2014). This can involve a process of considering divergence and convergence of different themes across the experience that is shared by all the participants.

IPA explores people's experiences and how they try to make sense of what has happened; for example, when making an important decision (Smith et al., 2009). The decision making process between ESPs and their patients is the focus of this research, attempting to understand how the patient and clinician approach this process and make sense of what has happened.

IPA may challenge assumptions of practice such as a belief that shared decision making is the default process undertaken between clinicians and patients. Phenomenological approaches are seen as a way of providing this challenge (Starks and Trinidad, 2007). Will the data analysis show a shared understanding of what occurs or do both parties approach the encounter from differing perspectives and then develop a shared understanding to move forward? IPA was felt to provide the best methodological fit for the decision making process to be explored and will focus upon a greater in-depth analysis of the phenomena with perspectives from the different participants of ESPs and patients to explore their lived experiences in the context of a clinical consultation.

### 3.4 Researcher practitioner position

As a practicing expert physiotherapist in a musculoskeletal service and with over 20 years experience in the musculoskeletal field, I see myself undertaking this research project from the stance and perspective of a researcher practitioner. Practitioner research is described as academic research, which is carried out by someone who also works within the professional field under study (Reed and Procter, 1995). This is seen as insider research, where you are

studying the practice within your field and also could be using colleagues as participants (Reed and Procter, 1995).

An alternative definition is that the practitioner researcher is 'employed in a professional capacity but who as part of their role is expected to undertake research' (Fox et al., 2007, p. 1).

It is important to be fully aware of this research position and the implications this can have during the study so as to be able to adopt a reflexive stance throughout. The research is approached with an open self-aware position and continued reflection on this position through all stages of the process. There are strong positives associated with the researcher practitioner position. The research question often comes from an in-depth knowledge of the specialty area and awareness of gaps in the knowledge base or questions arising from practice based quandaries, which is exactly how the research question for this thesis arose. In possessing this insider knowledge the research results are more likely to contribute to learning within the discipline and impact on related policy as the practitioner has greater awareness of the opportunities to disseminate results (Drake and Heath, 2010). From a practical perspective understanding the way in which clinical ESP services operate, aids the development of the research programme and for this study will provide access to participants through health service contacts and enable often confusing terminology surrounding the ESP role to be negotiated and understood. The other positive aspect of the dual role is in the personal professional development and impact on clinical practice that the journey through this thesis could have (Drake and Heath, 2010).

Despite the considerable positives there are a number of risks that must be considered and avoided during the research study. I must remain wary of introducing bias to the reporting of the study results and ensure through a reflexive view that personal assumptions do not distort the interpretation of participant experiences. Patient participants must feel they can voice their opinions freely without any prejudice to future care and staff participants in a similar fashion must feel they can be open and honest in the descriptions of their experiences, be they positive or negative. All these factors are to be considered throughout the research methods employed and will be referred to throughout the thesis where it is appropriate for them to be highlighted. At the time of initiating this research project I held a Consultant MSK physiotherapy role, responsible for clinical leadership throughout the MSK service from which participants will be invited to take part. Consideration has been given to the position of authority this role entails and the need to balance the professional clinical role against the role of researcher, maintaining separation between the two positions to avoid potential conflict (Drake and Heath, 2010). Reed and Procter (1995) discuss this in terms of balancing the benefits of having insider knowledge and understanding, which aids the development and placing of the project, against having existing relationships with potential participants who may withhold knowledge during data collection because of this. Conversations could occur with staff outside of the parameters of the investigation and even though they may contain useful content for the study, ethically these discussions must be separated from official data collection.

Another potential issue is where the research project is confined to a local geographical area in relation to the practitioner. In this instance the reporting of results, particularly in relation to staff participants needs to take into account maintaining anonymity, as there is the risk that even with safeguarding data sources and using pseudonyms, that there is enough demographic data to allow some readers of the research to ascribe comments to particular individuals impacting on relationships between team members or the practitioner researcher themselves. It will be seen that maintaining anonymity, particularly of clinical staff has been given specific thought in the demographic data supplied within the results section of the IPA study.

The practitioner researcher position links very well to the use of evidence based practice principles within healthcare. In this position the development of new knowledge can be influenced, which is situated and grounded within current practice. The focus of the research question concerning ESP and patient decision making is attempting to answer important questions that could have real service impact and improve patient care. As has been mentioned earlier in this section, the researcher with an insider position can be in exactly the right position to ensure research findings are disseminated widely and be able to monitor impact of any recommended practice changes into the future (Fox et al., 2007).

#### 3.5 Method

To achieve the aim and objectives, the research was undertaken through two phases. Phase one was a systematic review to complement the narrative literature review presented in chapter two and provide a contemporary review

of the literature concerning MSK ESP practice. The systematic review was targeted at research objective one, which is to systematically review the ESP literature to understand how the decision making process of MSK ESPs affects patients' outcomes. Phase two was an IPA study, influenced in context and direction by the results of the preceding systematic review and aimed at research objectives two to five. The IPA objectives were to explore how MSK ESPs and patients interact during the decision making process, gain understanding of how patients perceive the ESP role, explore possible factors behind reported high satisfaction with ESP care and analyse how the ability to directly list for orthopaedic surgery is perceived by ESPs and their patients.

#### 3.5.1 Phase 1. Systematic review

To be informed by the best evidence a researcher must ensure the knowledge base is critically appraised for inference of bias, methodological weaknesses and any possibility results are misinterpreted or misrepresented (Higgins and Green, 2011). Studies can provide conflicting results, which need to be reviewed in a structured and organised way.

'Systematic reviews aim to identify, evaluate and summarise the findings of all relevant individual studies' (Centre for Reviews and Dissemination, 2009, p. v)

A well conducted systematic review following the correct design and methods will provide reliable information regarding a clinical or research question, based upon the available literature, which has been searched in a systematic way. Results will provide the best available evidence within a particular field to inform evidence-based practice (Brown et al., 2012). It also provides the

researcher with an overview of the current state of knowledge within the field and helps to identify where gaps exist in the knowledge base to guide research development decisions (Haines et al., 2008).

The research literature concerning rehabilitation (including physiotherapy) often lacks high quality studies to include within systematic reviews (Brown et al., 2012). The research available is often of varied methodology and design and this has to be taken into account when designing criteria for systematic reviews. A limitation of systematic reviews can be their exclusion of non-experimental research (Dixon-Woods et al., 2006), although more recently it has been recognised that qualitative research should be included where appropriate and that this can improve the overall value of the results. This is an important consideration for the focus of this research, when evaluating evidence concerning health interventions and the experiences of the people who receive them and when trying to understand the mechanisms that may influence the effectiveness (or not) of these interventions (Centre for Reviews and Dissemination, 2009).

Systematic reviews have a different focus and output compared to a more traditional form of literature review, such as a narrative review (Haines et al., 2008). Systematic reviews possess an underlying methodological rigour, which allow for critical appraisal of the process and reproducibility and this is their main strength (Wright et al., 2007).

If it is not possible to include a form of statistical analysis (meta-analysis) due to heterogeneous data then a more narrative style of review can be reported, which still follows an underpinning systematic method (Wright et al., 2007). These more structured narrative reviews are termed a narrative synthesis

(Snilstveit et al., 2012) and aim to consider a range of more qualitative evidence in a more structured fashion, beyond the summary of findings reported in more traditional narrative literature reviews. The following table 1 provides a comparison between the focus of systematic and narrative reviews.

Table 1. The focus of systematic and narrative literature reviews (Haines et al., 2008)

Systematic review	A well structured research question
	Explicit search strategy with keywords
	and multiple sources.
	Stated exclusion and inclusion criteria
	within a protocol defined before the study
	begins.
	Critical appraisal of literature by at least
	two people with standardised tools.
	Systematic documentation of findings.
	May include meta analysis or meta
	synthesis.
	A quantitative or qualitative analysis of
	findings.
Narrative review	Often more broad research question.
	Literature selected less systematic.
	Less defined search strategy.
	May lack formal appraisal process.
	More qualitative report.

Narrative literature reviews have a less defined search strategy and the literature included within the review is selected in a less systematic way. A more structured quality appraisal of the literature may be lacking and the resulting reports can focus on limited aspects of studies and there is a danger that they can be biased by the researcher's own perspective (Dixon-Woods et

al., 2006). A narrative review can possess a degree of selection bias owing to the way the author selects included literature (Wright et al., 2007). Despite these potential weaknesses narrative reviews do still have a place in the literature, as their strength is in a generally broader picture that provides the ability for a researcher or clinician to place a specific treatment within the overall context of a condition (Sauerland and Seiler, 2005).

In order to identify any gaps in the ESP literature regarding decision making and outcomes on musculoskeletal care a systematic review was felt to be the most robust method and would also provide a more up to date review of the available evidence which could be published in its own right to expand the literature on ESP care. The literature review presented within this thesis has been undertaken through a combination of a more narrative review, reported in chapter two and a structured systematic review in chapter four. Chapter four contains a detailed description of the systematic review carried out as part of this research study.

### 3.5.2 Phase 2. IPA study

Data collection for the IPA study required the use of qualitative interview techniques. There are a number of techniques available to the researcher including face to face interviews, group interviews or more remote techniques; for example, telephone or internet contact (King and Horrocks, 2010).

The IPA study has been designed to include the two groups of participants who are involved in the specific decision making process being explored; the patient and the ESP clinician. It was important to gain understanding of the decision making experience from both perspectives so as to develop a more complete

and rounded understanding and explore the potential diverging and converging data.

A decision was made to undertake the clinician interviews using a focus group method and the patient interviews using in-depth one to one interviews. The reasoning for this decision was based on the fact that focus groups would allow the possibility of bringing a new dimension to the ESP data collection by allowing for interaction between the participants (Barbour, 2007). This interaction has the potential to draw out richer detail from the experience being studied, creating greater depth of understanding through the use of IPA methodology. As the ESP clinicians worked across the same clinical service it was felt the focus group would provide the opportunity to create a more productive encounter through this interaction. The researcher has a clinical leadership relationship with the ESP staff in practice and considering reflexivity the decision was made to avoid individual interviews with the ESPs, distancing the researcher from direct data collection through the use of focus groups and an independent moderator. Wider conversations and reflection on experiences of decision making in the ESP participants should be encouraged through the use of focus groups.

With the patient group the aim was to explore the same individual experiences of each person during their encounters with ESP staff and how decision making was negotiated and occurred. It was felt this would be best achieved through the in-depth interview approach rather than in a group setting allowing closer interaction between researcher and patient participants to understand their experiences. An individual interview closely resembles the familiar environment of a clinical consultation and is likely to make the patient more

comfortable. There was also a concern that a group setting, with other patients present, may have inhibited some participants from contributing fully, limiting the breadth of responses. Individual interviews were the best way of maximizing the opportunity for patients to consider their experiences of decision making with ESPs and provide data for analysis.

Focus groups and interviews are valid data collection methods for qualitative research studies and used within IPA methodology (Smith et al., 2009). It must be acknowledged that the use of focus groups with IPA has generated some debate on how this data collection method can be effectively utilised, owing to the more social context of the data collection process and ensuring that there is the ability for the group to produce personalised accounts. In this way the focus groups have to be set up carefully and use smaller numbers of four to five participants (Smith et al., 2009). The benefits lie in the focus group dynamic allowing greater reflection and insight to emerge from the data (Palmer et al., 2010)

As stated above, focus groups are recognised as a data collection method for use with IPA (Clarke, 2009;Smith et al., 2009;Pietkiewicz and Smith, 2014) and have received support for their use in a review of the use of focus groups with IPA (Mercer, 2012). There are a number of papers published where focus groups have been used to collect data within an IPA methodology (Dunne and Quayle, 2001;Flowers et al., 2001;De Visser and Smith, 2007;Sternheim et al., 2011;Archer et al., 2015). As IPA is a relatively modern and emerging methodology within phenomenological research there are now an increasing number of papers supporting the use of focus group data collection with IPA analysis, beyond the use of individual semi-structured interviews. As IPA

develops and is selected by more researchers this is leading to more critique of data collection methods, which within IPA aims to uncover meaning of individual lived experiences. The data analysis within IPA is seen as a flexible process and there is no one specific prescription to follow (Smith et al., 2009), as long as underlying principles are followed, entailing analysis which moves from individual to shared experiences and descriptive accounts leading into more in-depth interpretation.

The aim of using both focus groups and individual interviews was to increase the richness of the reporting of ESP and patient decision making, to enrich the data analysis and gain more in-depth understanding of the phenomena. Thus maintaining the principles of IPA by focusing on lived experiences, providing an interpretation of the data and giving idiographic depth to the accounts.

#### 3.5.2.1 Focus group interview

Focus groups are a research methodology used mainly within the qualitative research paradigm (Wong, 2008). They are a way for the researcher to collect data from a group of individuals within a specific field which not only gathers information from the participants themselves but also importantly through the interactions which take place between the group members. The interaction with group members gives focus groups an advantage over other types of data collection such as one to one interviews or surveys (Plummer-D'Amato, 2008a). This interaction between members of the group is key to generating further highly useful information. It is this facilitated interaction that makes focus groups more adept at generating a richer pool of data from the group members

and provides a different angle from which to capture the group members thoughts (Kitzinger, 1995).

Encouraging a process of group interaction with the ESPs had the aim of uncovering the ESP's individual thoughts and experiences of the decision making processes used with their patients. The focus group setting would provide the ESP participants with the opportunity to debate and discuss their experiences of decision making and patient interaction and the essence of what it feels like to be an ESP. The addition of the group dynamic and interaction would hopefully allow a richer data set to emerge and the chance for the ESPs to explore experiences in a shared way to understand and form ideas, which would come to light during the group. This emergence of thought regarding experience in focus groups ties into theories discussed by Gadamer in which he recognises a link between phenomenology and hermeneutics in describing the emergence of meaning (Moran, 2000, p. 248).

Focus groups provide insight into processes and are seen to be useful to explore people's thoughts and ideas, but are seen as an excellent way of revealing the underlying reasons of why people think as they do (Morgan, 1988). Historically this method was not used extensively in physiotherapy research, perhaps illustrating the relatively low use of qualitative methods of research. The systematic literature review described in chapter four did not identify any use of focus groups in specific research studies into ESP roles and services. However, focus groups are shown to have application in terms of patient experiences of healthcare, subjective impacts of treatment and patient experiences of illness (Sim and Snell, 1996). They have also been recommended to explore beliefs and behaviours in health care (Sim and Snell, 1996) and as a

way of researching health workers themselves (Green and Thorogood, 2009). More specifically related to this thesis, DePoy and Gitlin (2011) recommend focus group use in exploring the processes of decision making in health care professionals. There are also examples of focus group methods employed to study patients with knee osteoarthritis and when they feel considering surgery is appropriate (Frankel et al., 2012), exploring patient experience and patient satisfaction in out-patient musculoskeletal physiotherapy (Hills and Kitchen, 2007a), exploring decision making of physiotherapists when they discharge outpatient orthopaedic patients (Pashley et al., 2010) and investigation of role perceptions in expert nurse and AHP practitioners (Stevenson et al., 2011). Therefore, there is good evidence within the description and application of the focus group method in the literature to select this method. Barbour (2007) states focus groups are particularly well established in health research and can gain user perspectives to inform interventions and study decision making processes, aligning with the aim of this thesis, to investigate how expert MSK practitioners and their patients undertake decision making. The data gained through these group discussions gives the researcher insight into the knowledge, behaviours and attitudes of participants (Wong, 2008). People's experiences are explored and it is possible to expose through data analysis a common or shared knowledge within a particular group (Kitzinger, 1995). As there is limited evidence with in the current ESP literature exploring the ESP role the focus group will hopefully provide a valuable insight into how

The group interaction could also allow for ESP participants to expand on their own thoughts and stimulate new insight into why they think as they do, so

these expert practitioners think and operate.

gaining greater knowledge of thought processes and reasoning behind ESP decision making. A potential pitfall of the focus group method is that certain members of the group may become too dominant, thereby allowing their viewpoint to be accepted by others even though this may actually not be the collective view (Krueger, 2009). Likewise a more reticent individual may not speak out above other stronger voices meaning that a potentially important piece of information is lost. This issue is known as conformity and censorship (Plummer-D'Amato, 2008b).

In order to protect against this possibility a vital role within the focus group is that of the moderator (Krueger, 2009). The moderator facilitates the group discussion and helps to generate output from the group in relation to the particular area of research questioning, without introducing their own thoughts or knowledge into the process. In view of this it is preferable to have a moderator who is not the researcher themselves, to maintain a degree of neutrality and avoid the risk of bias (Krueger, 2009), as it could be very difficult for the researcher in this role to avoid introducing their own thoughts or steer the discussion inadvertently to their own ends. The selection of an appropriate moderator is, therefore, particularly important in this study given the researcher practitioner role of the author, which could increase the likelihood of impact on the direction of discussion. A neutral moderator should provide more objective data and can improve participant responses (Plummer-D'Amato, 2008b). A focus group topic guide is developed to support the moderator to engage with the group participants. This guide enables the moderator to monitor whether important areas concerning the particular research project have been explored and consider additional probing questions to encourage

group members to reflect further on their experiences (Barbour, 2007). The topic guide for this research study was reviewed by an independent ESP prior to the groups as described in section 3.9 and is included in appendix 8.

Another important role within the focus group is that of a second observer who can take up a position in the room away from the main group and take field notes. Transcribed speech can be supplemented within a wider context of group member's interactions and non-verbal communication allowing the data to be placed into a more specific contextual framework (Wong, 2008). The researcher can then analyse the data in the manner in which it was intended without making assumptions as to the underlying meaning, which is going to be a risk if this secondary data is not interwoven into the analysis stage (Plummer-D'Amato, 2008b).

Focus groups for the IPA study were planned to take place at a local university, so they were held away from the clinician's usual place of work creating a relaxed new environment. A large office was booked to provide a quiet, private and relaxed space along with refreshments to aid the group process and audio recording. An independent moderator who possessed training in focus group delivery was recruited. The moderator was a doctorate student and physiotherapist in an unrelated field, but had professional knowledge to help them guide the focus group as the conversation and interaction played itself out. I was present at the groups as a silent second observer to make notes on nonverbal behaviours and note the order of participant input, which would make subsequent transcription easier and more accurate. Audio recordings of the focus groups were downloaded to a secure computer and field notes collected during the groups filed securely in readiness for data analysis.

### 3.5.2.2 In-depth interviews

For data collection purposes with the patient participants in-depth interviews were used. Sometimes known as semi-structured interviews these are a very common method of data collection in social and health science research (Kvale, 2008). Interviews are commonly used in qualitative research designs as a way of exploring the meanings and experiences people have in a particular context. They hope to gain greater understanding of these experiences through the data collected in the interview process (DiCicco-Bloom and Crabtree, 2006). For the patient participants there was concern that collecting the data by focus groups would lead to limited interaction between participants and this would have a negative impact upon the breadth of data collected. It was felt one to one interviews would make patients feel more at ease, in a safe environment to discuss their experiences of decision making. The setting would also appear familiar in terms of the researcher and participant, in a similar way to the patient attending for a consultation interview. Again considering the method of data collection that would allow participants the greatest chance of providing a richness of data for analysis and interpretation.

It is important to consider the method of data collection in relation to the underlying research methodology and approach. As this study has a phenomenological basis, the data collection method should enable participants to give an account of their experiences of the phenomena being studied in such a way as to create a richness of data that can be analysed and interpreted by the researcher to allow new descriptions and theories to emerge which add to the body of knowledge in the subject area. In-depth interviews are supported in the

qualitative research and phenomenology literature as a suitable method for achieving this (Smith et al., 2009;Turner, 2010;Walker, 2011). The use of open style questions in the interviews allow participants to discuss and explore their experiences and through interaction with the researcher gain clarity of their perspectives (Kvale, 2008). In-depth interviews have been successfully used within previous qualitative ESP literature to collect data from both patients (Reeve and May, 2009;Coyle and Carpenter, 2011), ESPs (Dawson and Ghazi, 2004) and medical SpRs (Milligan, 2003).

The skill of the research interviewer is very important when considering how effective one to one in-depth interviews could be. As a practitioner researcher I feel that skills I possess in interviewing patients in clinical situations and wider advanced communication skills related to my Consultant leadership role could be put to very effective use in leading interviews in a research framework. It is important to hold a reflexive approach during this process (McNair et al., 2008) so as not to negatively effect the research interview. This is particularly important when considering research in a field that is well versed by the researcher practitioner. There is the risk of making assumptions over patient's responses and not exploring the data during the interview in enough depth so as to be sure of the meanings that the patients are inferring. Other ways the practitioner may negatively effect the process include a lack of probing of answers, closing down the interview responses too quickly and inaccurate use of paraphrasing (McNair et al., 2008). If the interviews are approached with a knowledge of reflexivity, as they were within this research, these issues can be countered.

One to one interviews may elicit a narrow field of views and answers around the topic being investigated as there is a reduced chance of views being challenged (Bryman, 2008), this could mean that the researcher misses out on a more realistic account of an interviewee's thoughts. One to one interviews could reduce the complexity of the data collected and could introduce too much bias through the possibility of the researcher, as interviewer, inadvertently leading the discussion and introducing their own viewpoint.

These potential limitations have been guarded against in this study by reviewing the literature and becoming aware of these particular issues relating to my researcher practitioner position before undertaking the interview process. In this way a reflexive approach to the study has been adopted, ensuring awareness of how to reduce the negative impact of these issues on data collection techniques employed.

An interview schedule was developed to encompass questions relating to the main aims and questions of the research study (see appendix 9). The questions were kept open to allow patients the space to explore and explain their experiences and feelings. Additional probing questions were included in the schedule in case they were required to encourage participants to reflect and have the opportunity to add greater depth to their responses. Prior to data collection the interview schedule was reviewed by independent patients, as outlined in section 3.9.

A quiet consulting room location was chosen to carry out the interviews to suit each patient, using the option of two sites at a community clinic and a main hospital. It was more practical to hold the interviews in a clinic setting rather than at patient's own homes and all participants were happy with the available

site locations. Refreshments were provided and the quiet comfortable environment encouraged participants to feel at ease and relaxed before the interviews started. As well as the audio recording, field notes were made immediately following each interview to enrich the transcription data. The audio files were downloaded to a secure computer and field notes filed in a secure location in readiness for data analysis after all interviews were completed.

### 3.5.3 Consideration of alternative methodologies

In the course of deciding which was the most appropriate methodology to adopt for this research two alternatives to IPA were considered. The first option was grounded theory, which has its roots in sociology (Glaser and Strauss, 1967) and is a commonly used research methodology in healthcare settings (Starks and Trinidad, 2007). Grounded theory was discounted for this research study because it is more related to the generation of theory rather than exploration of individual experiences (Starks and Trinidad, 2007). The more iterative data collection and analysis through theoretical sampling and achieving data saturation was also not felt to be the ideal way of exploring ESP and patient decision making. The employment of a larger sample than IPA would normally consider (Starks and Trinidad, 2007), would have provided a challenge in recruiting sufficient ESP staff in the specialist MSK field and in the thorough analysis of the larger quantities of data this would have generated. An observational study was also considered to view the decision making process in practical clinic settings. Observational studies have been used to explore decision making in medical encounters (Weiner et al., 2013), although

this was by patients using ethically approved covert recording. The study concluded that physicians who adapted care in a patient centred manner could positively influence clinical outcomes. However, physicians involved in the study were aware covert recording may take place, which could have altered their behaviour and other factors may have influenced subsequent changes in health outcomes. An observational study has also been successfully undertaken regarding physiotherapy decision making in an acute hospital setting across multiple clinical specialties (Holdar et al., 2013). Non-participatory observation took place during consultations, with ensuing interviews within two days to ensure participant recall of content.

In relation to ESP and patient decision making in this research study it was decided that an observational study was better suited to a subsequent research project after the IPA research, with the aim of confirming whether the IPA results were borne out in clinical practice.

### 3.6 Ethical approval

As the IPA study involved staff and patients within an NHS musculoskeletal service, ethical approval was sought through the Integrated Research Application System (IRAS). A full ethics application was made, involving a submission for proportionate review given the scale of the study and uncontentious nature of the study material. Proportionate review was turned down by the initial Research Ethics Committee (REC) panel with the application being forwarded for local REC panel approval.

The local REC panel requested minor changes to some of the study documentation, but their main concern was with the possibility of uncovering

clinical incompetence or malpractice during the interviews. Additionally some of the questions within the interview guide were thought to be too leading. These ethical risks are seen within qualitative research in healthcare settings in terms of participant vulnerability, privacy and the possibility of uncovering substandard practice (Morse, 2011), within the context of a research conversation.

Alterations were made to the study documentation and the interview guide was re-edited to ensure questions maintained an open framework for participant responses. The amended interview guide is the one provided in Appendix 9. An additional sentence was added to the consent documentation to ensure staff participants were aware of how any malpractice issues would be dealt with if uncovered in the process of the study. Finally, demographic data regarding the clinicians involved in the study would not be so specific as to risk clear identification of participants and their responses.

After making these amendments ethical approval was granted by the NHS Research Authority with REC reference 15/YH/0049 and IRAS project ID 164795 (see appendix 4).

Following the favourable opinion from IRAS, ethical approval was also sought and granted by York St John University ethics committee and Research and Development approval granted by the NHS Trust from which participants would be recruited. The research protocol is available in appendix 5.

To maintain participant anonymity unique identifiers were used within the data transcription phase of the study and no personal data linked named participants to the direct quotes within the study results. Personal addresses of the patient participants, required for contact by the researcher, were held on an NHS

password protected computer system and the master list of participant names linked to the interview identifiers was held on the university's computer system in a password protected folder.

Participant's mental capacity was considered during the informed consenting process. Full discussion of the information sheet, opportunity to ask questions or make comment on any aspect of the research or being a participant in the project, enabled the researcher to make informed professional judgments that the participant was able to fully comprehend what research participation meant, including potential implications. Participants were clearly advised of their right to withdraw from the study, which could be done by contacting the researcher. Participants were also informed that all data pertaining to their contribution would be removed from the project database and sensitively disposed of, according to data protection and University requirements.

### 3.7 Recruitment

With IPA methodology it was important to have a sampling strategy that ensured participants had lived experience of the area being studied to allow for collection of relevant in-depth data. A purposive sampling strategy was, therefore, employed for ESP and patient participants to ensure they all had prior experience of the phenomena being studied (Smith et al., 2009;Pietkiewicz and Smith, 2014). Purposive sampling strategies are non-random and aimed at recruiting participants with knowledge and experience that is relevant to the research (Bowling, 2009).

The inclusion and exclusion criteria for the IPA study are detailed below:

### Patient Inclusion Criteria

- Patients over 18 years of age
- Patients with a musculoskeletal condition
- Patients managed within an ESP led musculoskeletal service within the past three months
- Patients seen by an ESP specialising in musculoskeletal practice
- Patients with good understanding of spoken and written English

### Patient Exclusion Criteria

- Patients under 18 years of age
- Not diagnosed with a musculoskeletal condition
- Seen by a clinician not holding an ESP role
- Patients being managed by the Chief Investigator
- Patients and clinicians who do not give informed consent

### **ESP Inclusion Criteria**

 Clinician holding an ESP role currently working within a musculoskeletal service

### **ESP Exclusion Criteria**

• ESP clinician not working within a musculoskeletal service

Extended Scope Practitioners were recruited from one NHS Trust who worked within a community based musculoskeletal service. Invitation letters were sent out to all staff fulfilling the inclusion criteria with information about the study and a reply slip to express their interest in taking part. Of the 13 invitation letters dispatched, 12 ESPs expressed an interest in being involved in the study. Of these 12 ESPs, nine were available to attend the focus groups when they were organised. The ESP sample included staff working across different clinical sites, therefore, contained a mixture of individuals with and without prior working relationships. The ESP sample also contained staff from both a physiotherapy and podiatry clinical background. There is a lack of literature

pertaining specifically to podiatry staff in ESP roles, but all practitioners were employed in identical ESP posts within the community MSK service, undertaking the same responsibilities and therefore met the inclusion criteria. Considering ESP sampling in relation to the use of focus groups, undertaking research within a relatively small clinical field can mean participants have pre-existing relationships that may have an effect upon the dynamics and discussion with in the group. It is possible to reduce this effect with group members whom have not met which can allow discussion to be more open, particularly around more sensitive topics (Sim and Snell, 1996). Although conversely members from a pre-existing team may yield more reasoned responses, as in this situation members of the group may feel they can challenge viewpoints in a relatively safe environment (Barbour, 2007).

Patients were recruited from the same musculoskeletal service who had been assessed and managed by an ESP clinician and again fulfilled the inclusion criteria. Invitation letters were sent out by post, which included a study information sheet and reply slip with a stamped addressed envelope for return. The selection of patients to be sent initial invitation letters was carried out by an independent administration manager of the MSK service who had no direct link to the study but was informed of the inclusion and exclusion criteria for patient recruitment. In this way the chief investigator was removed from the initial patient selection process and did not access any medical records or data regarding individual participants until they had replied to the invitation expressing interest in taking part in the study.

Patients who fulfilled the criteria, were selected by the administration manager within the therapies directorate, from the department's information system.

The manager selected a broad spectrum of patients who had been seen within the ESP clinics, which included patients who had been referred onto secondary care specialties and those who had been managed conservatively by the ESPs. This was done with the aim of enabling a wide variation of potential patient outcomes and experiences to be represented within the research participants, which would hopefully enrich the experiential data collected for analysis. In order to check whether patient participants had experienced a range of conservative and surgical outcome decisions a sampling grid was constructed and is included below (see Table 2).

Table 2. IPA study patient participant sampling grid

Patient no.	Male	Female	Age	Conservative management outcome	Referred for surgical opinion	Directly listed for surgery
P01		Х	70	Х		
P02	X		85			Х
P03	Х		74			Х
P04	Х		72			Х
P05	Х		63	х		
P06	Х		60	х		
P07		Х	57		Х	
P08		Х	72		Х	
P09		Х	66	х		

Of the 30 invitation letters that were sent out there were 12 positive replies. A decision was made to recruit up to 10 ESP clinicians and up to 10 patients for this study in line with recommendations for smaller sample sizes in IPA research (Smith et al., 2009). Following contact with all participants who had expressed interest in being involved in the study it was possible to include nine ESPs, split between two focus groups and nine patients attended for individual interview. The overall sample for the IPA study included ESP clinicians and patients so as to allow interpretation of the consultation and decision making phenomena from different perspectives.

Sample sizes are purposefully small to allow for the gathering of detailed data and in-depth analysis and interpretation (Clarke, 2009). Managing smaller

sample sizes has been effective in IPA physiotherapy research (Cassidy et al., 2011). Care was required in this research to not recruit large numbers of participants, as this would have made data analysis very difficult to achieve when the aim is to undertake in-depth interpretive analysis across both participant groups.

In relation to the practitioner researcher position I selected a particular MSK service for recruitment as I was aware that there were relatively large numbers of ESP staff working within the service to invite and the service was situated in primary care with a wide range of patient groups being managed through the service. This insider knowledge was useful in considering prospective participants, access, time and the potential for my research to impact upon service delivery (Reed and Procter, 1995).

#### 3.8 Data collection tools

Audio recording of the focus groups and in-depth interviews were undertaken using a Sony ICD-UX533 digital voice recorder. The audio files were then transferred to a computer and transcribed verbatim using the Express Scribe software package (NCH Software), which allowed storage and manipulation of the audio files making transcription more manageable. Test recordings were carried out in all locations before interviews to ensure effective voice collection on the equipment and that unrecognised background noises were minimal. A decision was made by the author to carry out all file transcription personally, so as to be engaged and immersed in the data from an early stage. This was an extremely important thing to do, so as to develop an in-depth knowledge of the data and understand the links between the data itself and the participants as

they described their experiences in the moment. Audio files allow for repeated listening and interpretation of the data minimising the risk of misunderstanding or missing data content or the context within which it was described, helping to support the depth of IPA interpretation required (Smith et al., 2009).

During the focus groups I attended as the second passive observer to allow the recording of field notes during the interview. These notes recorded the order of participants speaking to allow greater clarity when transcribing the audio files and also link any non-verbal signals taking place during the group, which could enrich the understanding and context of the verbal data.

During the individual interviews field notes were recorded immediately post interview, allowing interesting context to be recorded which could be linked to the audio data during analysis and again enrich the collected data.

An interview schedule was developed for the individual patient interviews and a topic guide for the focus groups (see appendix 8 and 9). Both the topic guide and interview schedule were designed to provide a framework of suitable open questions and prompts to make sure all relevant aspects of the study were covered in each data collection setting. The content of the guides was developed through considering the aims of the IPA study and through personal reflection of ESP practice relating to the research focus. Using the personal experience of the researcher in the process of developing interview guides is encouraged (King and Horrocks, 2010), as it can enable the participants to be asked more effective questions.

### 3.9 Patient and public involvement

It is important to involve external parties who have a connection to the research topic, but are not necessarily directly involved in the study, in the process of developing data collection tools. They can provide the researcher with an additional level of scrutiny to ensure all relevant areas have been considered and in doing so offer additional rigour to the research design; for example, in the wording and appropriate content of data collection tools (Brett et al., 2014). In developing the IPA study the interview schedule for the patient interviews was reviewed by two patients who had received management within the MSK service. Both were very happy when approached to provide patient feedback and user involvement to the research study process. One of the patients was also a member of the local Healthwatch group with considerable experience in patient and public involvement. Valuable feedback was received in terms of the interview schedule and the format of the questions. Overall the reviewers felt the interview content was comprehensive and understandable. Suggestions were made to provide more opportunity for participants to describe how they understood the ESP role and their involvement in the exchange of information through the decision making process and this was applied by making small alterations to the interview guide.

In a similar vein the ESP focus group topic guide was reviewed by an ESP clinician who worked in a relevant specialty, but was not eligible to be recruited to the study. Their feedback supported the layout and content of the topic guide and felt it would provide effective opportunities for ESP participants to discuss and detail their experiences.

The interview and focus group guides were also discussed with the PhD supervision team throughout their design to gain additional oversight and comment. Providing this opportunity for review, including with similar participants to the main study is an important part of the research method when using interview techniques (Turner, 2010).

### 3.10 Data analysis

Data analysis has been conducted within the framework of IPA enquiry described by Smith et al. (2009). The stages of analysis involve multiple readings of the interview transcripts to become immersed in the content, initial note taking exploring at a more descriptive level, developing emerging themes, considering connections across themes, developing superordinate themes and once multiple participant records are analysed consideration of the data across individuals.

In keeping with the description above, the first stage of the analysis for this IPA study involved repeated listening and reading of the interview transcripts in order to note down early ideas and thoughts arising from the data. Once this process had been completed a more in-depth analysis occurred, attempting to identify emerging themes within the data. These themes could be specific to one area of the transcripts or sometimes reappear in multiple places throughout the text. The completed list of individual themes was then further analysed to draw them together into superordinate themes (Smith et al., 2009).

Additional care was required in analysing the data drawn from the ESP focus groups as there are considerations to acknowledge in how the analysis accounts for group dynamics and still illustrates the individual experience of participants

(Palmer et al., 2010). The data analysis process for IPA is not seen as a rigid process and there is flexibility within the design to allow the individual researcher to adapt the process to their study (Smith et al., 2009). In keeping with this and choosing a method of analysis appropriate for the individual study an additional review of the ESP focus group transcripts was undertaken to ensure highlighted content contributing to the development of themes could be attributed to individual ESP experiences.

A decision was taken at the beginning of data analysis to undertake exploration of the clinician focus groups first and then move onto the patient interviews. The reason for this decision was to provide a degree of initial bracketing to the process between the two sets of data at this early stage to encourage a concentration of thought on each individual data set and attempt to avoid introducing preconceived ideas and influence by analysing the data at the same time. The focus group data was analysed up to the point of developing superordinate themes before putting this data set to one side and then concentrating upon the patient data and analysing that up to the same point. The transcripts were transferred to an analysis document template, including line numbers, to enable audit and tracking of participant's voices and specific quotations against themes throughout the process. In this way the analysis of the transcripts was always grounded within the collected data and reduced the risk of abstract analysis, which could have become disconnected from the source data. Reflexivity on the part of the researcher is, therefore, demonstrated during analysis. There were also practical reasons for developing this template to allow themes to be rapidly identified against specific quotations in an efficient way during the complexities of the analytical process.

Due to the large amount of data arising from the multiple interview transcripts and complex nature of the content, mind maps were used to help support the development of emergent themes into superordinate themes across both ESP and patient data. These themes are described in chapters five and six. Mind maps allow the visualisation of ideas and themes in a flexible format and are recommended in qualitative research analysis (Meier, 2007;Wheeldon, 2010). The flexible nature of mind maps allows qualitative researchers the ability to develop themes around a central concept, which in this thesis was the data on decision making from ESPs and their patients. They certainly aided the organisation and interpretation of the data and allowed relationships to be seen when moving from multiple themes to a smaller number of superordinate themes (Davies, 2011).

On completion of the separate analysis of patient and ESP data sets, the superordinate themes were subject to a further level of analysis, to consider where convergent or divergent data themes had arisen. A further stage of analysis is encouraged where larger IPA samples have been employed (Smith et al., 2009). The process was supported by developing an additional mind map of combined superordinate themes (figure 8, page 223). The patient and ESP superordinate themes were reviewed to look for patterns of content that were common to both groups and where different aspects of similar themes could be combined under shared headings. During this process it was important to maintain a focus upon individual accounts to remain true to the idiographic principles of IPA (Smith et al., 2009). The combined data themes are reported in chapter seven.

# 3.11 Validity and trustworthiness

From the very start of the qualitative research process it is important to minimise any limitations in the research design and to show rigour at all stages. Research is often characterised within the context of reliability, validity and generalisability (Plummer-D'Amato, 2008b). Qualitative designs can be difficult to explain within these terms and in response to this, the idea of trustworthiness was put forward by Lincoln and Guba (1985). Trustworthiness exists when you can show your research findings represent a certain reality. The criteria are based upon the ideals of dependability, credibility, transferability and confirmability (Lincoln and Guba, 1985). Frameworks exist to describe the various factors associated with qualitative research validity and a decision was made to adopt the framework developed by Yardley (Yardley, 2015), which is also recommended within the IPA methodological literature (Smith et al., 2009). The framework is broken down into four particular areas, discussed below.

### 3.11.1 Sensitivity to context

As the whole thesis has been derived from my own clinical practice experience within the chosen topic area, sensitivity to context underpins the whole project and has influenced the entire approach. Through my use of a phenomenological methodology, in the use of IPA, it has been possible to explore in depth, the decision making process between ESPs and their patients and uncover previously unreported themes and phenomena. The design of the focus groups and individual interviews allowed participants the space and time to consider and voice their descriptions and understandings of the experiences they had

been involved in. Specific examples within the method design include the openended questions used within the interviews and the use of a moderator within the focus groups to provide an environment where participants would be more willing to share their experiences in a more in-depth fashion. The data analysis and development of superordinate themes has been grounded directly in the interview transcripts from the data collection to illustrate a constant link to the context of the research study.

### 3.11.2 Commitment and Rigour

Participants were selected through a purposive sampling technique to ensure that all had relevant experience of the phenomena being explored. Through the use of IPA an in-depth analysis was undertaken, beyond purely descriptive exploration, to develop data interpretations at a deeper level. The PhD supervision team provided scrutiny throughout the data analysis phase ensuring this was appropriately conducted, by reviewing transcript analysis and discussing mind map development as emergent themes were shaped into superordinate themes. This was an important iterative process given the data analysis was complex and primarily carried out by myself and it is my interpretations of the data which have led to the conclusions. By deciding to select both ESP and patient participants at the outset of the research, both aspects of the decision making process are represented, increasing the richness of the data collected and showing a degree of triangulation, with the aim of improving methodological rigour. Triangulation is a process by which the researcher can devise mechanisms to strengthen the research through the collection of data from more than one source (Braun and Clarke, 2013), as has

been discussed above, or by utilising different methods of data collection (Bowling, 2009), which have been carried out in this research project through the use of focus groups and individual interviews.

Member checking is seen as another method for enhancing rigour in qualitative research (Braun and Clarke, 2013) and involves the checking of data analysis with participants. Member checking was considered as part of this study, but subsequent review of the IPA literature showed Smith et al. (2009) do not include member checking in their description of IPA analysis and it has been discounted in other IPA studies due to the risk of impacting upon the hermeneutic position of the researcher (Smith et al., 2011). It was this concern regarding the impact of a member check on the researcher's own interpretations and then separating secondary participant interpretations of the data analysis that informed a decision to not include this process.

### 3.11.3 Coherence and transparency

It is very important when conducting qualitative enquiry to provide an audit trail, clearly describing the different stages of the project from data collection through to analysis and interpretation. In order to exhibit an audit trail of the journey taken through the IPA study to reach the point of completed data interpretation the following steps were taken:

- Development of the interview guides with user involvement
- Annotation of the guides were carried out for each interview
- Field notes were taken immediately following each interview and focus group to provide additional information and context to the transcribed text
- The stages of data analysis were recorded

- Mind maps were developed to illustrate thematic developments and links through the interpretive process
- A research diary was kept during data collection and analysis.
- Regular discussion with the PhD supervision team and review of data analysis themes and development of superordinate themes took place throughout the interpretation process using a selection of data from both ESP and patient interviews.

Mind maps showing more detailed illustration of superordinate themes and underlying themes arising from IPA data interpretation are provided in Figure 5 at the beginning of chapter 5 and in Figure 7 and the beginning of chapter 6.

The choice of actual methodology has to be compatible with the research question posed. Using IPA was a valid choice in considering and exploring the decision making experience and has been directly influenced by the results of the initial systematic review findings.

Throughout the research I have also considered my own reflexivity in regards to my researcher practitioner position in the same clinical specialty and how this could have impacted upon the conduct of the research. The use of a moderator for the focus groups and the selection of patient participants who have not had any contact with me in a clinical capacity are two examples of how this has been considered.

### 3.11.4 Impact and importance

It is hoped that there will be a clear impact from the findings of this research as this is an area of ESP practice that has not previously been specifically explored and the findings provide a whole new insight into how the ESP and patient decision making process occurs and the factors which impact upon this.

Deciding upon the most appropriate way of disseminating the findings will be assisted by my practitioner knowledge of the field of study and awareness of appropriate journal and conference opportunities.

# 3.12 Chapter summary

The methodology chapter has considered the philosophy behind my research position, informing the choice of methodology. The specific choice of IPA methodology is discussed and appraised, linked to the direction of my thesis. My researcher practitioner position is considered, with reflection on the positive and negative implications and how these can be managed throughout the studies that have been undertaken.

A rationale for the systematic review and IPA study is provided alongside critique of delivering focus group and in-depth interviews. The methods employed in research ethics, recruitment, the process of data collection and data analysis are described. As the study involves qualitative research an appreciation of the ways in which validity and reliability can be addressed is detailed.

The following chapter will now provide a detailed description of the systematic review study.

# **Chapter 4**

# **Systematic Review**

## 4.1 Overview of chapter

Chapter four describes the development and implementation of a systematic review into ESP practice in the specialty of MSK medicine. It aims to compliment and considerably expand upon the narrative review contained within chapter two. This study forms the first major piece of research conducted as part of this thesis with the intention of updating the most recent systematic critiques of the ESP literature. The focus of the review is on decision making and outcome from ESP management, with the intention of understanding the current state of published research and identifying where knowledge gaps exist which could be explored through further studies. The specific research questions targeted by the systematic review were: how does the decision making process of ESPs affect outcome in patients with musculoskeletal conditions?, and what impact do ESPs have on outcomes in patients with musculoskeletal conditions?

### 4.2 Background to systematic review

ESP posts (or their equivalent) have been reported in the literature since 1989 (Byles and Ling, 1989). There has been a significant expansion of these roles over the last 20 years particularly within the UK NHS, although these posts are also present in other health economies, particularly Australia and Canada. Expansion has predominantly been driven by organisational pressures and changes due to both internal and external healthcare factors. These factors

include changes in health policy, legislation, development and expansion of professional roles, changes in health professional boundaries and increasing pressure on health services to deliver care to greater numbers of patients in the most effective manner (McPherson et al., 2006). Robust research evidence to support these service and professional developments is lacking (Kersten et al., 2007).

As the body of literature regarding ESP roles has grown a number of reviews have taken place. Eight previous literature reviews have been published, (McPherson et al., 2004;McPherson et al., 2006;Kersten et al., 2007;Lowe and Prior, 2008;McClellan et al., 2010;Desmeules et al., 2012;Stanhope et al., 2012a;Stanhope et al., 2012b). The two papers by McPherson et al (2004, 2006) report on the same systematic review data.

McPherson et al. (2004) searched the ESP literature as part of a funded project by the UK NHS Service Delivery and Organisation programme. The literature was explored in a systematic way using protocol guidelines from Cochrane methodology (Clarke and Oxman, 2001) and was applied across five allied health professional groups including physiotherapists. The aim was to identify extended roles in these staff groups and appraise the evidence behind their use. McPherson et al. (2006) disseminates the findings of the same study. In this they wished to evaluate outcomes in the broadest sense relating to patients, other health professionals and NHS service delivery and to describe the ESP role and the perceptions of ESP staff.

Evidence was searched across both quantitative and qualitative papers up to 2004 (McPherson et al., 2006). To be included in formal quality appraisal the papers had to include some form of data analysis, which was possible in 22

papers. The authors describe many papers as reports of local service audits and methodological issues affecting quality, in relation to lack of data, small sample sizes, lack of service standards within audits and a lack of reporting of patient health outcomes. The review does highlight an article by Daker-White et al. (1999), which was the first randomized controlled trial (RCT) carried out into extended scope practice. It bases its results on health outcomes and has a degree of robustness in its method despite some flaws in follow up, variable inclusion criteria, small clinician numbers and lack of blinding. The heterogeneity of the literature led McPherson et al. (2006) to present the evidence as a descriptive synthesis rather than being able to undertake a meta-analysis to pool data results and provide higher-level evidence supporting ESP roles.

In 2007 Kersten et al published a narrative systematic review of the literature concerning ESP posts in physiotherapy. Kersten co-authored the McPherson et al (2006) review and this paper uses the data from the same original work to focus purely on the evidence of ESP posts in physiotherapy. As such it utilises the same search strategy and methodology with a slightly extended literature review up to 2005. They highlighted seven papers, which pass the Cochrane quality criteria used within the review. The conclusions unsurprisingly align with McPherson et al (2006) with regard to poor methodology of the included studies with lack of method description and audits without clear process and standards. They also supported the assertions in the previous review in relation to a lack of exploration of patient outcomes from ESP interventions.

Lowe and Prior (2008) published a literature review as part of a feasibility study into the introduction of ESP posts in part of the Australian health care

system. This involved a broad search through bibliographic databases and sources of grey literature between 1998 and 2008 and was confined to physiotherapy related posts. Data from the review was formatted through a thematic approach in order to answer the broad scope of the project and questions posed. The themes related to ESP definition, barriers and enablers to role development, outcomes, professional requirements to undertake the role, how ESP roles are utilised and the required legislative changes and applicability due to the nature of the review within the target health economy. A quantitative data analysis had been planned but with the lack of data, and heterogeneity, which was previously reported in other reviews (McPherson et al., 2006;Kersten et al., 2007) this could not be carried out. On completion of the feasibility review recommendations were made to trial ESP posts in Australia within clinical areas such as orthopaedics and emergency departments, define ESP role competencies and review existing legislature to enable physiotherapists to legally extend their practice.

In 2010 McClellan published a systematic review that focused upon the work of physiotherapy extended scope practitioners within an emergency department setting. The review was targeted at clinical effectiveness and cost efficiency where ESPs were independently managing patients with minor injuries.

Possible papers were screened against the Scottish Intercollegiate Guidelines

Network (SIGN) criteria (Scottish Intercollegiate Guidelines Network, 2008), including papers that achieved level 1-2 but excluding level 3-4 papers. It is mentioned in the paper that this grading includes qualitative papers but reviewing the SIGN evidence hierarchy (Scottish Intercollegiate Guidelines

Network, 2008) qualitative papers do not appear to be included. The search was

conducted from database inception up to November 2009 with bibliographic database searches and grey literature. The results came from four papers passing the inclusion criteria and concluded that ESP roles in emergency departments were effective. There were higher levels of patient satisfaction with ESP consultations compared to usual care (nurse or medic) but it is worth mentioning that ESP staff appear to spend longer periods of time with patients and this could have influenced this result. Clinical outcomes with ESP led management were also positive compared to care provided by the medical team.

Stanhope et al. (2012b) carried out an updated systematic review, in relation to ESP roles in orthopaedic settings, based upon an existing Australian review (Lowe and Prior, 2008). A more defined search strategy was used, which only included bibliographic databases and used the Australian National Health and Medical Research Council hierarchy of evidence (National Health and Medical Research Council, 2009) to set inclusion criteria so that only studies at level I, II and III-1 were included. Therefore only systematic reviews, RCTs and pseudo RCTs could be selected and this decision was justified on the grounds of reducing the risk of bias. Studies were included between 1999 and 2011 and 12 studies passed initial screening. Unfortunately due to the strict evidence criteria only two diagnostic studies underwent full critical appraisal. The authors concluded that the ESP evidence base remains of low quality (based on the evidence hierarchy) with lack of health outcome reporting and, therefore, effectiveness of ESP interventions could not be clarified. They recommended a focus on ESP health outcome research and the inclusion of decision making protocols.

Stanhope et al. (2012a) also completed a parallel systematic review focusing on ESP roles in patients with inflammatory arthritis. They used the same methodology as in their other review and report no high level evidence over the past 10 years with only four studies being selected from the search but none achieving an evidence level necessary for critical appraisal. As both of these systematic reviews only appraised very small numbers of papers based upon their criteria it is very difficult to draw significant conclusions from the data. The most recently published systematic review was conducted in Canada (Desmeules et al., 2012), with the aim of providing an updated evaluation of ESP roles in treating patients with musculoskeletal conditions. They based the search strategy on the keywords used by Kersten et al. (2007) with the addition of research into ESP diagnostic ability and the area of emergency medicine. The search was limited to three bibliographic databases and the reference lists of previous ESP systematic reviews. The search ran from 1980-2011. Only quantitative papers were included which had to relate to advanced physiotherapy practice in musculoskeletal disorders. The papers could be in English or French, which is likely to relate to the review originating in Canada. The team critically appraised 16 papers and felt overall the evidence supported these advanced physiotherapy roles in terms of patient satisfaction and treatment effectiveness. It was again found that no quantitative meta-analysis could be performed due to study heterogeneity. As in all other reviews, they report variable study quality and the need for better outcome measure reporting. They suggested the future use of a validated patient satisfaction tool and the need to compare advanced physiotherapy care to medical care. A clearer description of treatment options and interventions that clinicians in

these advanced roles provide would also help to clarify their role and enable further research to focus on the impact of these interventions.

# 4.3 Justification for a new systematic review

Despite the number of systematic reviews which have taken place into ESP care over the last few years, there is good justification for undertaking a new review. There has not been a UK based review into ESP care across all musculoskeletal specialties published since 2007 (Kersten et al.) and this was a modification of a previous review by members of the same review team (McPherson et al., 2006). Reviews after this date have either been carried out on specific patient populations (McClellan et al., 2010) or by authors based in Australia or Canada (Lowe and Prior, 2008;Desmeules et al., 2012;Stanhope et al., 2012a;Stanhope et al., 2012b) where the focus of the review may have been influenced by the country's healthcare structure and professional developments in physiotherapy scope of practice at the time.

A number of methodological weaknesses are present in these studies. Lowe and Prior (2008) was a very broad based project and limited some of the search strategies to only Australian literature. Stanhope et al in both studies from 2012 used very strict inclusion criteria, which resulted in a very small number of studies reaching a quality assessment stage, which only described a very limited aspect of ESP intervention. Searches only took place through bibliographic databases and with no grey literature included, publication bias is a possibility. These reviews also excluded any qualitative data based upon their hierarchical inclusion criteria. The review by Desmeules et al (2012) was based upon a limited database search and only included quantitative papers.

The search strategies of all of the reviews ceased in 2011 and since that date further research papers in the field of ESP care have been published. ESP practice is rapidly evolving and new publications are likely as a result of increasing interest in this clinical field. By including a more widespread search strategy and including grey literature the aim was to reduce the potential impact of publication bias and provide a more thorough review of relevant papers.

The aim was to review the evidence behind the decision making processes that occur between ESP staff and patients and explore how this process may influence the subsequent outcome. Previous reviews have highlighted the absence of outcome measure reporting from ESP intervention, therefore, the other focus of this new review scrutinised reported outcome measures to see if the quality had improved.

Due to the review's scope, searches for both quantitative and qualitative evidence were included and an attempt made to synthesise this, which has not previously been reported in the literature. The aim of this approach is to explore any new insights which can be gleaned from the literature and inform gaps in the research base to inform further research in this field.

The systematic review, which forms the first research project of this thesis, was successfully registered with the PROSPERO database, managed by the Centre for Reviews and Dissemination (CRD) at York University and is a database of health related systematic reviews. A review protocol fulfilling PROSPERO criteria was submitted, in order to be published electronically on the CRD website, informing other researchers and reviewers of ongoing reviews. This serves as a method of publishing the review protocol with verification of the

standards upon which it is based before the review is undertaken, providing a level of robustness and transparency, helping to illustrate a strong scientific process is being followed.

#### 4.4 Method

Details concerning the systematic review method itself and rationale for its use are presented within the methodology chapter at section 3.5.1. The following sections provide a complete account of the systematic review process undertaken for this review. To provide the appropriate level of evidence appraisal a review team was created, led by myself, with one of the PhD supervision team acting as the second member of the team.

#### 4.4.1 Identification of studies

## 4.4.1.1 Search strategy

A comprehensive search strategy was employed with keywords and MeSH / thesaurus terms within the following electronic databases: MEDLINE, CINAHL, AMED, EMBASE, PsychInfo, PEDRO, Cochrane, CRD and PROSPERO. The expertise of a medical librarian was sought in the development of the search strategy to ensure this key aspect of the review was carried out in a systematic and structured way.

To ensure the search strategy is thorough and unbiased grey literature sources were searched alongside bibliographic databases for unpublished work. These sources included ZETOC conference proceedings and the UK Theses database. Specialist sources were also utilised by contacting the ESP national professional network in the UK using their central literature database and requesting

information regarding unpublished or ongoing work from members of the network at their national conference in 2013. Secondary searching of eligible paper reference lists also took place to identify any additional papers not found through the primary search strategy. An attempt was made to contact the authors of eligible papers where further clarification assisted in making decisions on inclusion to the quality appraisal stage of the review.

The search strategy was designed to ensure there was the best chance of relevant qualitative papers being sourced given the breadth of the review.

Delivering a comprehensive search was achieved by including multiple databases and using both thesaurus and free text search terms. Sources outside bibliographic databases were employed and full paper retrieval took place to protect against variable abstract content (Centre for Reviews and Dissemination, 2009).

## 4.4.1.2 Piloting of search strategy and screening criteria

A pilot search was carried out to test the search strategy and keywords within all the bibliographic databases. The pilot search was executed with no limitations placed on search fields within the databases, resulting in the retrieval of large numbers of papers which had no relevance to this study. When the screening process was piloted against the inclusion and exclusion criteria it was found that the description of an ESP outcome was too broad and made it difficult for the reviewers to decide on which papers should be included or excluded.

Following discussion the review team decided to make three alterations to the review protocol. The first change involved controlling the bibliographic

database search strategy by searching against title and abstract field content only. The second was to strengthen the inclusion criteria by making the outcome description more specific, which is referred to in the title and abstract screening section below and lastly limiting papers for inclusion on screening to those published after 2004. This date is justified on the basis that the last ESP systematic reviews conducting a comprehensive search across qualitative and quantitative designs were Kersten et al. (2007) and McPherson et al. (2004), who were part of the same research team and their searches were completed between 2003 and 2005. These changes were recorded by updating the PROSPERO database to maintain transparency in the review process.

#### **4.4.1.3** Keywords

The selection of appropriate keywords was complicated by the extremely diverse descriptions of physiotherapy extended scope practice in the literature. The keywords needed to take this into consideration to ensure the conducted search was as rigorous as possible. A decision was made to base the keywords on those used by (Kersten et al., 2007) as they had designed their search terms with the issue of ESP descriptions in mind and a more recent systematic review has also made use of this list (Desmeules et al., 2012) as a method of controlling for these variable descriptions. Both reviews used descriptions known as role substitution and role enhancement.

These advanced clinical practice characteristics were first described in relation to health service staff skill mix and the support required to develop the NHS workforce (Sibbald et al., 2004). At the time of publication this coincided with a political and professional drive for greater efficiency, meeting increasing patient

demand, reducing costs of health provision and improving the career structure and responsibilities of health care professionals to enable them to take on more roles traditionally undertaken by medically trained staff.

Role substitution describes the expanded breadth to a particular job role where responsibilities develop across traditional professional boundaries or there is an exchange of one type of health worker for another. Role enhancement describes a role with increasing depth due to extending the skills or role within a particular group of practitioners (Sibbald et al., 2004).

The keywords were modified for the systematic review undertaken for this thesis to include more specific features, in relation to outcome measures, decision making and patient experience. The keywords used in this review are detailed in appendix 1. The keywords were organised in line with a PICO framework (Pope et al., 2007) to ensure the search strategy aligned with the review question. Boolean operators (Centre for Reviews and Dissemination, 2009) were employed to provide structure to the keyword search with the aim of achieving results that would be more focused to the research question.

#### 4.4.1.4 Search dates

The literature search was carried out between August and September 2013 with a search timescale from database inception to August 2013.

# 4.4.2 Study selection

#### 4.4.2.1 Inclusion and exclusion criteria

The inclusion and exclusion criteria were carefully selected to focus upon MSK ESP practice and consider ESP decision making and intervention outcomes.

# **Inclusion Criteria**

- Papers relate to physiotherapy
- Extended scope practice -

Criteria from Kersten et al (2007):

Papers describe 'role substitution' or 'role enhancement'; which is describing an extended role or taking over a role previously carried out by a member of the medical profession.

- Patients with musculoskeletal conditions
- All MSK health care settings
- Report outcomes Specific clinical outcome

Patient related outcome measure

Patient related experience measure

- Reporting of patient satisfaction or the decision making process
- Both quantitative and qualitative papers
- Language all
- Publication between January 2004 to August 2013
- Grey literature

## **Exclusion Criteria**

- Other health professions
- ESPs working in other specialties outside MSK
- No specific outcomes or data analysis reported
- Systematic or literature reviews
- Audit or service reports

#### 4.4.2.2 Data extraction

The search results were exported from the bibliographic databases and organised in Endnote (Thomson Reuters).

#### 4.4.2.2.1 Title and abstract screen

A primary title and abstract screen was independently undertaken by the two reviewers, who then met to review the results and discuss any decision variations. Discussion quickly resolved any anomalies and helped to provide better clarity of the inclusion and exclusion criteria, specifically in relation to only including primary research and not literature or systematic reviews, audits or service reports. The definition of what constituted a clinical outcome was also clarified to ensure this only included specific clinical outcomes from an ESP intervention, a Patient Related Outcome Measure (PROM) (Black, 2013) or a Patient Reported Experience Measure (PREM) (Black, 2013). PROMs are used to gain patient's views on their symptoms, affect on function and impact on quality of life (Black, 2013). PREMs have a different focus, aiming to consider patient's experiences in relation to the humanity of care; for example, treatment with dignity (Black, 2013).

Results of the screening process were exported from Endnote to Excel

(Microsoft) spreadsheets to facilitate ease of recording and comparison of

decisions as software compatibility with the Endnote program would not allow
the transfer of customised data fields between reviewers.

Reviewer one and two, separately applied the criteria to the primary screened articles and the secondary search results. This was carried out on title and abstract only with the following results:

Both reviewers reject = 36

Both reviewers accept = 27

Reviewer one accept v Reviewer two reject = 16

Reviewer two reject v Reviewer one accept = 3

The Kappa score is K = 0.543

At 95% CI 0.371 – 0.714 this equates to 'moderate' agreement levels (Landis and Koch, 1977).

On meeting and reviewing the results it quickly became apparent that the majority of the differences were due to two specific reasons:

- A lack of clarity over whether the paper related to specific ESP
   activity. This was easier for reviewer one to make a judgment given their researcher practitioner position.
- 2. The definition of a clinical outcome left room for variation in interpretation; for example, conversion to surgery

By meeting and clarifying these points and reviewing the screening results this then showed:

Both reject = 33

Both accept = 42

Reviewer one accept v Reviewer two reject = 3

Reviewer two reject v Reviewer one accept = 4

The Kappa score is K = 0.827

At 95% CI 0.704 – 0.949 this equates to 'almost perfect agreement'

Cohen's Kappa statistic (Cohen, 1960) allows a measure of inter-rater reliability to be recorded during the study selection phase of the review. The level of interrater reliability demonstrates a level of methodological quality and helps the review team spot any problems with interpretation of criteria, illustrated by the two Kappa statistical results above where once clarification of criteria had taken place there was an increased level of agreement between the reviewers.

Research papers were rejected at this stage due to not reporting physiotherapy ESP or musculoskeletal care, describing audits, being literature or systematic reviews or the date of publication preceded 2004.

#### 4.4.2.2.2 Full text screen

After the primary review stage 43 papers went forward to full text screening against the inclusion and exclusion criteria. Reviewer one and two again completed this process independently and the results of the screening with comments explaining the reasons for inclusion or exclusion were recorded on Excel spreadsheets. Both reviewers had a further meeting following full text screening to discuss the results and reached agreement on a small number of anomalies without having to seek arbitration from another member of the PhD supervision team.

Research papers were rejected at this stage where it was found that they did not relate to ESP management, no outcome data was provided, they were service descriptions or the paper was related to physiotherapy practice that was not undertaken by an ESP.

# 4.4.2.3 Quality appraisal stage

It was agreed that 25 papers would be included in the quality appraisal stage. A further seven papers did not contain enough detail on full text reviewing to make a definite decision on inclusion and, therefore, contact with the paper authors was attempted to see if further details could be made available to allow a decision to be made on more content. No further data was forthcoming from this attempted contact and, therefore, the final number of included papers remained at 25. An overall view of the study selection results is illustrated in Figure 3.

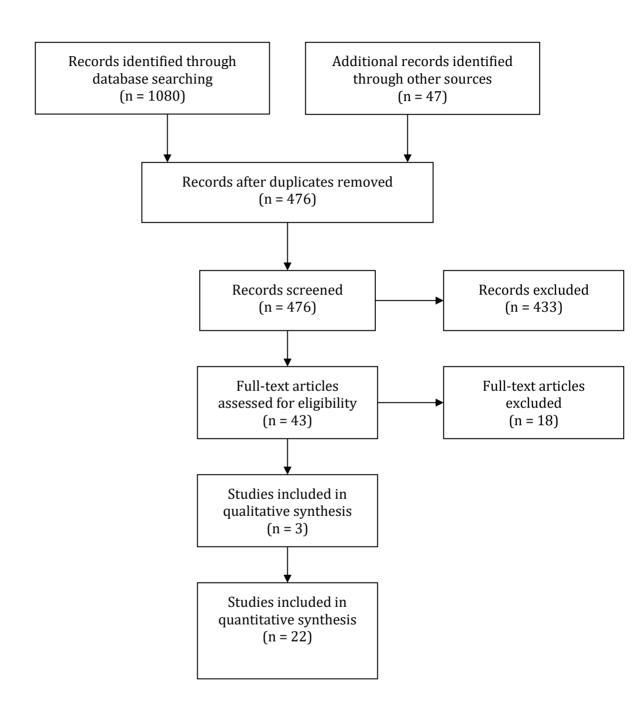


Figure 3. PRISMA flow diagram

From: (Moher et al., 2009)

# 4.4.2.4 Quality assessment

## 4.4.2.4.1 Justification for critical appraisal tool

An important stage in the process of completing a systematic review of the literature in any given field is being able to assess the quality of the included literature to ensure the findings of the systematic review are based upon sound research, which minimises the effects of bias (Centre for Reviews and Dissemination, 2009). A well conducted systematic review is still open to question if its results are based upon poorly reported research and quality appraisal avoids this concern.

Quality appraisal reviews the research design and its appropriateness to the objectives of the study, the risk of bias and quality aspects related to statistical analysis, validity and reliability of outcome measures, aspects of the intervention applied to the target population and the overall findings of the study and how they can be applied in the wider clinical context.

Internal validity is one of the main focuses of quality assessment to enable the reviewer to decide whether the results of a given study can be trusted with a degree of certainty. If a systematic error has occurred in the design and delivery of the research then the true effect of the intervention could be called into question (Centre for Reviews and Dissemination, 2009).

There are different types of bias which can occur (Higgins and Green, 2011):

 Selection bias, whereby allocation of participants and the sequence in which this happens is flawed.

- Performance bias, which relates to the blinding process within the trial, of clinical staff or the participants themselves. In addition it concerns how the intervention affects the subject in question and whether other variables could impact on how this occurs.
- Detection bias where the outcome of the assessment or intervention is not blinded or differences occur in outcome assessment.
- Attrition bias where outcome data is incomplete or has not been accounted for.
- Reporting bias occurs when only selected aspects of the results are highlighted and other areas are not described or taken into account.

External validity is concerned with the generalisability of the research findings to the wider population being studied (Bowling, 2009). Assessing this, involves reviewing the types of patients studied, in which environment, the type of intervention and the outcomes used to measure the effect.

To complete the quality assessment of papers that have passed through the initial screening process there are a large number of quality appraisal tools at the researcher's disposal. Some of these take the form of checklists and some are set out as scales, which provide a numerical score when completed. It is felt that the use of scales in quality assessment is less desirable due to the subjectivity that can occur when calculating the overall score (Deeks et al., 2003). It is the weighting of scores assigned to different aspects of a research paper that is open to interpretation (Sanderson et al., 2007). When the scoring of multiple studies weighs the quality of one against another this can result in a

biasing of the overall effect of the evidence (Greenland and O'Rourke, 2001). Some tools are designed so they can be generically applied across various types of research and other tools are targeted to specific types of research report; for example, RCT or qualitative research.

Previously reported systematic reviews on physiotherapy ESPs have used the Critical Appraisal Skills Programme (CASP) (Critical Appraisal Skills Programme, 2018) quality appraisal tools (Kersten et al., 2007), a combination of the CASP qualitative tool (Critical Appraisal Skills Programme, 2006) and appraisal resources through the SIGN guidelines for quantitative papers (McClellan et al., 2010), personally designed appraisal tools (Desmeules et al., 2012) or made no mention of a specific tool (Stanhope et al., 2012a;Stanhope et al., 2012b). Although Stanhope et al. (2012b) did not progress to critical appraisal due to papers not achieving a high enough quality rating on the initial screening process.

The systematic review undertaken for this study included research from both a quantitative and qualitative perspective and as such requires the use of quality appraisal tools to review research papers across this whole design spectrum.

The CASP qualitative appraisal tool (Critical Appraisal Skills Programme, 2006) and the Effective Public Health Practice Project (EPHPP) quality assessment tool (Jackson and Waters, 2005) for quantitative studies have been selected and a rationale for this decision will now be provided.

From a qualitative perspective the research process needs to be shown to be trustworthy and rigorous. This translates to the ideas of reliability and validity and overall assessment of bias, which is more traditionally associated with systematic reviews of quantitative studies (Hannes, 2011). The methodology on

which the systematic review process is based requires assessment of the quality of included research and an informed synthesis of results to occur.

The quality assessment of qualitative papers can be more difficult owing to the breadth of methods and research designs in use, but applying an appraisal tool assists in the process of reviewing a paper's methodological soundness, its quality of reporting and its trustworthiness. The CASP qualitative appraisal tool is recognised and commonly used in the appraisal process, particularly when carried out by researchers who are less experienced in the qualitative field (Hannes 2011). A copy of the CASP qualitative appraisal tool is included in appendix 3. Dixon-Woods et al. (2007) acknowledge the theoretical difficulties in applying quality assessment to qualitative research when they considered reproducibility of decisions across three appraisal methods and regardless of the method used it is still common to find differences of opinion between reviewers undertaking a systematic review.

For quantitative research papers a Health Technologies Assessment reviewed the use of quality appraisal tools for the evaluation of non-randomised studies (Deeks et al., 2003). The results of this review, which included a systematic review of the literature, recommended six tools which were felt to be suitable for use in a systematic review process. The appraisal tools selected needed to have shown they included quality assessment in at least five of six internal validity domains, which were: creation of a treatment group; blinding; outcome; comparability; follow up; and soundness of information. The tools also had to possess three of four core items: showing how subjects were allocated; if study groups balanced; the identification of prognostic factors; and presence of case mix adjustment. By selecting a tool that fulfills these criteria it should be

designed in such a way as to provide a systematic quality assessment of studies which have passed through the initial screening stages, facilitating the critical comparison of study quality.

The tool originating from the EPHPP at McMaster University in Canada (Jackson and Waters, 2005) has been chosen for this review, as it fulfills the criteria within the HTA assessment (Deeks et al., 2003) and is recommended for use in a systematic review where non-randomised trials are to be assessed. However, the tool can be applied to all quantitative designs including randomised trials and this was an important consideration given the heterogeneity of the literature concerning physiotherapy extended scope practice. The EPHPP tool was felt to be a better option than using another more study design specific tool such as that from CASP. Another appraisal option was the Cochrane risk of bias tool (Higgins and Green, 2011), but this is more specific to Cochrane methodology and the high prevalence of randomised trials reported within these. It was felt neither of these other tools would be appropriate when reviewing the more heterogeneous ESP literature.

The EPHPP tool covers eight sections and benefits from providing an overall quality rating rather than a numerical score, which as has been described above can be open to more subjectivity. The tool is supported by a dictionary, which assists the reviewer in completion. A copy of the tool is included in appendix 2.

# 4.5 Quality appraisal results

Table 3. Quality appraisal study ratings

Study Author	Tool Used	Final Rating
McClellan et al 2012	EPHPP	Strong
Bath and Phawa 2012	ЕРНРР	Moderate
Desmeules et al 2013	ЕРНРР	Moderate
Kennedy et al 2010	ЕРНРР	Moderate
Mackay et al 2012	ЕРНРР	Moderate
Razmjou et al 2013	ЕРНРР	Moderate
Richardson et al 2005	ЕРНРР	Moderate
Sephton et al 2010	ЕРНРР	Moderate
Taylor et al 2011	ЕРНРР	Moderate
Hattam 2004	ЕРНРР	Weak
Aiken et al 2008	ЕРНРР	Weak
Ball et al 2007	ЕРНРР	Weak
Bath et al 2012	ЕРНРР	Weak
Bath and Janzen 2012	ЕРНРР	Weak
Griffiths et al 2012	ЕРНРР	Weak
Heywood 2005	ЕРНРР	Weak
Mackay et al 2009	ЕРНРР	Weak
McClellan et al 2006	ЕРНРР	Weak
Moloney 2009	ЕРНРР	Weak
Oldmeadow et al 2007	ЕРНРР	Weak
Parfitt et al 2012	ЕРНРР	Weak
Robarts et al 2008	ЕРНРР	Weak
Coyle and Carpenter 2011	CASP	n/a
Dawson and Ghazi 2004	CASP	n/a
Reeve and May 2009	CASP	n/a

Table 3 shows the summary of quality appraisal ratings for all the papers included within the review. Twenty two papers were reviewed using the EPHPP tool and three papers were reviewed using the CASP qualitative tool. The quality appraisal review was undertaken by both reviewer one (the author of the PhD) and by reviewer two. There is a range of quality in the papers reviewed, but all will be included as each has something to offer in the synthesis

of findings. As discussed earlier, the systematic review undertaken for this doctoral work aims to be inclusive and to add a wider range of literature than reported in previous published reviews. The variation in quality shown in table 3 therefore needs to be considered in the interpretation of the results.

# 4.5.1 Overall study characteristics

The following two tables (Tables 4 and 5) provide an overview of the study characteristics across all included quantitative and qualitative papers.

Table 4. Quantitative paper data summary

Papers	Country	Study design	ESP	N =	Intervention	Outcome	Key findings
			role/setting			measures	
Aiken et al 2008	Canada	Cross sectional cohort	Ortho TKR/THR cases	38	ESP and surgeon assessment then discussion of plan	WOMAC Waiting list priority tool Patient satisfaction	Kappa 67% All patients satisfied with care from both clinicians
Ball et al 2007	UK	Retrospective case note review	ED	164 EDPP 142 ENP 127 SHO 135 M.Gd 72 Cons	No as notes review	Chi square Fisher Freeman Halton exact P<0.05	EDPP recorded more advice and more physiotherapy referrals. SHO more medication
Bath et al 2012	Canada	Retrospective case note review	Spinal triage patients	Up to 1162	No as notes review	Management recommended and if surgery or not	16.7% cases sent for surgery review with high 70% conversion rate (v normal 30%)
Bath and Janzen 2012	Canada	Prospective observational cohort	Spinal triage	108 pts 21 referrers	Evaluate satisfaction	Satisfaction of patients and referrers	66% patients very satisfied 90.5% referrers very satisfied
Bath and Phawa 2012	Canada	Prospective cohort	Spinal triage	108	Triage visit and 4 week review	Pain scale ODI SF36v2	Signif. improvement pain scale P=0.007 and physical component subscale P<0.001 of SF36v2
Desmeules et al 2013	Canada	Prospective cohort	Ortho hip and knee	120	Assessment ESP and surgeon. Compare decisions and satisfaction	Diagnostic agreement VSQ-9	K=0.86 diagnosis K=0.77 surgery Higher satisfaction score for ESP
Griffiths et al 2013	UK	Questionnaire survey	Primary care ESP	99	Review surgery conversion for onward referrals	Secondary care conversion rate	74% surgery conversion rate
Hattam 2004	UK	Cross section survey	ESP ortho triage	170	Review of decision to refer to orthopaedics	Surgeon agreement on	70.6% appropriate

						referral	
Heywood 2005	UK	Prospective cohort	Military spinal clinic	235	ESP assess/management	ODI	ESP managed 184 cases (78%) without further intervention
Kennedy et al 2010	Canada	Cross section	Ortho	123	ESP review post knee/hip replacement	VSQ-9	High ESP satisfaction
Mackay et al 2012	Canada	Prospective cohort	Ortho non surgical hip and knees	87	Baseline and 6 week follow up after ESP	Self efficacy Exercise behaviour	All self efficacy scales improved. 83% still exercising
Mackay et al 2009	Canada	Cross section cohort	Ortho hip and knee	62	Seen by ESP and ortho surgeon. Compare decisions.	Diagnostic accuracy Surgical decision	69% diagnostic agreement K=0.70 for surgery
McClellan et al 2012	UK	RCT	ED	126 ESP 123 ENP 123 Dr	ESP v Dr v ENP care of soft tissue injury	DASH / LEFS / SF12v2 / SF6D	ESP / ENP equivalent outcome to Dr care.
McClellan et al 2006	UK	Prospective cohort	ED	351	ESP v Dr v ENP care	Patient satisfaction SF36 VAS	Higher satisfaction with ESP care. Ankle cases had very poor study FU rate
Moloney 2009	Ireland	Clinic evaluation	Fracture clinic	60	Satisfaction ESP care	satisfaction	98% very good/good
Oldmeadow et al 2007	Australia	Prospective observational	MSK screening	52	ESP review then consultant review and comparison	Diagnostic / mgt agreement Satisfaction	74% ESP surgeon agreement high ESP satisfaction from patients and medics
Parfitt et al 2012	UK	Retrospective review	ESP primary care	130	Is surgery listing by ESP correct	Surgeon review of decision	127 of 130 had surgery
Razmjou et al 2013	Canada	Prospective cohort	ESP shoulder clinic	100 194	Diagnosis/mgt agreement satisfaction	VSQ-9	Diagnosis k=0.63-0.86 Surgery k=0.75 ESP satisfaction higher
Richardson et al 2005	UK	RCT	ED	766	ESP v routine ED care	Return to activity Patient satisfaction	ESP longer activity return p=0.071 ESP high satisfaction
Robarts et al 2008	Canada	Descriptive study	orthopaedic	123	Patient satisfaction	VSQ-9	High satisfaction. No significant difference

Sephton et al 2010	UK	Prospective cohort	Primary care	217	Primary care service up to 12 month FU	SF36/EQ5D/VAS Patient satisfaction	EQ5D/VAS small signif improvement SF36 small change High satisfaction level
Taylor et al 2011	Australia	Controlled trial	ED	315	Primary ESP mgt v routine care	Length stay/treatment time/wait satisfaction	All times reduced for ESP care. Strong satisfaction patients and staff.

Kev			
- 3		M. Gd	Middle grade medic
		Mgt	Management
DASH	Disabilities of the Arm Shoulder and Hand (Hudak et al.,	ODI	Oswestry Disability Index (Fairbank et al., 1980)
	1996)	SF12v2	Short Form 12 version 2 (Ware Jr et al., 1996)
ED	Emergency Department	SF36	Short Form 36 (Ware Jr and Sherbourne, 1992)
EDPP	Emergency Department Physiotherapy Practitioners	SHO	Senior House Officer
ENP	Emergency Nurse Practitioner	THR	Total Hip Replacement
EQ5D	EuroQol 5 Dimensions (EuroQol Group, 1990)	TKR	Total Knee Replacement
FÜ	Follow up	VAS	Visual Analogue Scale (Huskisson, 1974)
LEFS	Lower Extremity Functional Scale (Binkley et al., 1999)	VSQ-9	9 item Visit Specific Satisfaction Questionnaire (RAND
			Health)
		WOMAC	Western Ontario and McMaster Universities Arthritis
			Index (Bellamy et al., 1988)

Table 5. Qualitative paper data summary

Papers	Country origin	Study aim	ESP role / setting	Sample/approach	Data collection	Key themes
Coyle and Carpenter 2012	UK	Impact of ESP on patient experience	ESP in local MSK service	Purposive sample 6 patients	In depth interview	Education re ESP role to GP's Patient information on ESP role ESP to prioritize patient expectations
Dawson and Ghazi 2004	UK	What is the ESP experience of the role	City and rural ESP service settings	Purposive sample 4 ESP staff	Semi structured interviews	Medical support / relationships very important good support network needed with peers / medics no formal training process. Local and ad-hoc. Medicolegal implications ESP emotions of frustration / anxiety / pressure / dissatisfaction. This comes out of role in coping with patient expectations of a cure or explaining no more can be done. Important consequences of making decisions e.g surgery (risk)

Reeve and May	UK	Establish quality	Secondary care	Purposive sampling	Semi structured	Provision of
2009		dimensions from a	spinal screening	12 patients	interview	information
		patient perspective	service			outcomes
						professional skills
						interpersonnal
						skills
						patient care
						pathways

The papers, described in table 4 and 5, meeting the inclusion criteria and screening processes, were subject to analysis and synthesis as separate groups of quantitative and qualitative papers. The separate syntheses then combined in a final synthesis, drawing conclusions from across all the findings. This process is based upon the mixed method systematic review approach described by Harden (Harden, 2010) and supported by the Evidence for Policy and Practice Information and Coordinating Centre framework for conducting reviews (Evidence for Policy and Practice Information and Coordinating Centre, 2006).

Preceding the primary synthesis of qualitative and quantitative papers there were three aspects of data extrapolation common to all the included studies, which have been described below. These were nomenclature (role descriptions), country of origin and type of service described.

#### 4.5.1.1 Nomenclature

Throughout the systematic review process it became very apparent that significant variability exists, within the published literature, regarding the naming of physiotherapy posts describing extended scope of practice. This is clearly illustrated by the fact that within the 25 papers which reached formal quality appraisal there existed 11 different post titles:-

- Extended scope practitioner
- Advanced practice physiotherapist
- Emergency department physiotherapy practitioner
- Specially trained physiotherapist
- Primary contact practitioner

- Clinical specialist physiotherapist
- Experienced physiotherapist
- Expanded practice physiotherapist
- Advanced musculoskeletal physiotherapy practitioner
- Physiotherapist with advanced orthopaedic training
- Physiotherapist with extended scope role

As the author of this PhD has significant clinical and national policy experience within this arena of advanced practice, a pre-emptive awareness of the variations in nomenclature before the review was undertaken were taken into account with the development of a search strategy aimed at reducing the risk of missing relevant published work in this field. Search strategy development was described in section 4.4.1.1 earlier in this chapter, illustrating a positive consequence of the researcher practitioner position during the systematic review study.

The most widely used title is 'Extended Scope Practitioner' which is present in ten papers (Dawson and Ghazi, 2004;Hattam, 2004;Heywood, 2005;Richardson et al., 2005;McClellan et al., 2006;Reeve and May, 2009;Coyle and Carpenter, 2011;Griffiths et al., 2012;McClellan et al., 2012;Parfitt et al., 2012), all from the UK, and runs through the whole timeframe of this review. The widespread use of this description in the UK across different service models is not surprising given the role and title was developed in this country. However, this does not preclude individual services developing their own local titles for similar roles and this can be seen in the literature with two other titles in UK based services (Ball et al., 2007;Sephton et al., 2010).

The title Advanced Practice Physiotherapist (APP) has been described in a number of Canadian services since 2008 (Robarts et al., 2008;Kennedy et al., 2010;MacKay et al., 2012;Desmeules et al., 2013;Razmjou et al., 2013) and may represent an attempt at adopting a more standard title in that country. Although as in the UK other job titles are described in Canadian services (MacKay et al., 2009;Bath and Janzen, 2012;Bath et al., 2012;Bath and Pahwa, 2012). Considerable variation in nomenclature makes it more difficult to make comparisons across research papers and reports without the researcher themselves having an in-depth prior knowledge. A strength of this review is in the lead author also being an experienced practitioner in the field, which brings with it the ability to understand the nuances of the descriptions. This was found to be particularly important during abstract and full text screening stages of the review, where the second reviewer who does not have clinical involvement in this area questioned the content of papers and through discussion these variables were clarified against the criteria.

## 4.5.1.2 Country of origin

The international distribution of services describing ESP roles in the literature focuses predominantly on the UK and Canada, with a noticeable increase in papers describing Canadian ESP roles over the past few years. The only other ESP roles appear in two papers related to Australian services (Oldmeadow et al., 2007; Taylor et al., 2011) and one paper from Ireland (Moloney et al., 2009). This distribution is likely to illustrate the proportion and development stages of the ESP role within the global physiotherapy profession and international healthcare services. In addition the literature from Australia is describing initial

exploration of these extended roles to see if they warrant further study or expansion across the health economy of that country.

#### 4.5.1.3 Healthcare service location

A wide variety of services were described within the included ESP literature. Services are predominantly in the specialty of orthopaedics with many studies focusing on patients with hip or knee arthritis, including pre or post joint replacement surgery (Aiken et al., 2008; MacKay et al., 2009; MacKay et al., 2012; Desmeules et al., 2013). Papers also describe orthopaedic triage roles in patients with peripheral joint or spinal symptoms (Hattam, 2004; Bath and Janzen, 2012; Bath et al., 2012; Bath and Pahwa, 2012). Five papers describe roles in emergency departments with caseloads of soft tissue injuries or simple fractures (Richardson et al., 2005;McClellan et al., 2006;Ball et al., 2007;Taylor et al., 2011;McClellan et al., 2012). One paper describes an ESP role in orthopaedic shoulder clinics (Razmjou et al., 2013), one paper a role within a fracture clinic (Moloney et al., 2009), three papers are linked to UK primary care services (Sephton et al., 2010; Griffiths et al., 2012; Parfitt et al., 2012) and one other paper describes an ESP role within a UK military clinic setting (Heywood, 2005). This variation illustrates the diversity of settings in which ESPs now operate within MSK health services and how the role has developed over the last few years. The drawback in this distribution is the difficulty in comparing effectiveness and contribution of ESP roles across these diverse settings.

#### 4.5.2 Quantitative studies

The results from the quantitative studies included within the review have been divided into four categories. These are study methods, satisfaction, ESP outcome

and decision concordance/diagnostic agreement. Each of these categories will now be discussed in turn.

## 4.5.2.1 Study methods

A conscious decision was taken to keep the breadth of quantitative methodology as wide as possible and not place methods restrictions in the inclusion criteria. The reasoning behind this decision relates to the specific question and aims of the review, to enable capture of all available information regarding ESP decision making and outcomes. As a consequence the review has found wide variation in design and quality of the included studies, which mirrors comments made in previous reviews of ESP literature (McPherson et al., 2006;Desmeules et al., 2012).

Of the 25 papers included there were 22 quantitative papers, which fulfilled the protocol criteria. The quantitative papers were quality assessed using the EPHPP tool (Jackson and Waters, 2005) and the results concluded that one paper was classified as strong, eight papers scored as moderate and the remaining 13 papers as weak. The one strong paper was a RCT (McClellan et al., 2012), based upon sound methodology, including block randomisation and blinded allocation of participants with clear inclusion criteria. Unfortunately the final data analysis showed participant numbers fell just short of achieving the targeted power calculation, but overall this was a well designed and conducted study. A further RCT was included and received a moderate score (Richardson et al., 2005). A strong classification would have occurred but for problems with primary outcome reporting timeframes and a significant loss to follow up for secondary outcome data.

The remaining papers classified as moderate were a mixture of prospective cohort studies and a controlled clinical trial. The methodological short-comings illustrated through the appraisal tool were due to weaker study designs (in comparison to randomised trials), the validity of data collection methods, a lack of blinding within the study design and problems with external validity. The controlled clinical trial (Taylor et al., 2011) had a strong study design and was conducted over multiple centres and with data comparing appropriately sized clinical comparison groups, but had issues with the clear differences between participant groups which weakened the study.

The remaining 13 papers were made up of a series of retrospective studies, notes audits, surveys, pilot studies and clinical service evaluations. All these papers had methodological quality issues and were classified as weak on quality appraisal as not all were specific research studies. Some examples of specific quality issues within these papers alongside the study designs themselves, include variation in use of outcome measures, lack of validation in patient satisfaction measures, significant loss to follow up data (McClellan et al., 2006), lack of detail regarding participant selection (Aiken and McColl, 2008) and incomplete data retrieval for analysis (Parfitt et al., 2012).

# 4.5.2.2 Satisfaction in ESP care

One of the most striking findings from the systematic review are the high levels of patient satisfaction with ESP care which are consistent across many service settings and reported in papers throughout the reviews timeframe (McClellan et al., 2006;MacKay et al., 2009;Desmeules et al., 2013;Razmjou et al., 2013). This provides good evidence for the acceptance amongst patients for the use of ESP

clinicians in delivering MSK care and is the most common type of outcome measure reported in the ESP literature. Patient satisfaction data has been collected as a primary outcome measure of the research or is reported as a secondary outcome alongside the primary reason for the research trial. It should be noted that there is limited use of validated patient satisfaction tools. The 9 item Visit Specific Satisfaction Questionnaire (VSQ-9) tool (RAND Health), is used in two papers (Kennedy et al., 2010; Desmeules et al., 2013) and the Deyo and Diehl tool (Deyo and Diehl, 1986) in one paper (Sephton et al., 2010). The majority of papers used locally developed tools or do not provide details of the method of data collection. Some papers report a comparison of satisfaction scores between ESP and other health care staff. Richardson et al. (2005) report scores significantly in favour of ESP care versus medical staff or Emergency Nurse Practitioners in an Emergency Department (ED) setting. Similar findings are reported by McClellan et al. (2006) again in an ED. Razmjou et al. (2013) describe higher ratings on all levels of satisfaction comparing an ESP to medical care in a specialist orthopaedic shoulder clinic. With the VSQ-9 tool there are statistically significant results in favour of the ESP compared to orthopaedic surgeons in one report (Desmeules et al., 2013), but conversely no statistical difference in another (Kennedy et al., 2010), although the scores for both clinicians were high.

The reasons behind the high satisfaction scores are not clearly stated and do not appear to have been specifically investigated. Although there are possible explanations provided by some of the literature. There are instances where the ESP has received high satisfaction ratings where they have also been reported

as having longer consultation times when compared to other members of the team.

(McClellan et al., 2012;Desmeules et al., 2013;Razmjou et al., 2013). There are also reports of ESP staff providing a more holistic and enhanced intervention with patients when compared to medics or nursing staff. ESP interventions involve both advice and exercise management (McClellan et al., 2006;Razmjou et al., 2013). These factors could certainly have a close link to the improved satisfaction scores in these studies but it is difficult to be clear as to whether it is these factors alone which contribute or whether there is something more unique to an ESP's interaction with the patient which influences their satisfaction.

There was only one study reporting on satisfaction from medics referring into an ESP service. Bath and Janzen (2012) report 90% referrer satisfaction with a Canadian spinal ESP service, although it must be noted the sample is very small with only 21 responses from 115 referrers and, therefore, should be interpreted with caution.

All included papers report data collected by a variety of patient satisfaction measures. Using patient satisfaction as a specific outcome measure is thought to provide too narrow a viewpoint when assessing healthcare contact (De Silva, 2013). A patient may provide evidence of a satisfactory experience with a service or clinician but their clinical outcome may have been poor. It is felt more appropriate to use a Patient Related Experience Measure (PREM) as they are designed to not only assess satisfaction but also the outcome from a patient's perspective (De Silva, 2013). Unfortunately none of the ESP literature currently includes PREM data.

Studies reported positive outcomes from ESP care with data reported

through specific outcome measures. Improvement in the use of outcome

#### 4.5.2.3 ESP intervention outcome

measures in more recent studies is starting to address some of the previously highlighted shortfalls in the ESP literature (Kersten et al., 2007).

Bath and Pahwa (2012) describe a significant improvement in Short Form 36 version 2 (SF36v2) (Ware Jr and Sherbourne, 1992) pain scales and physical component sections when measured four weeks following assessment of patients in a spinal triage clinic. It is difficult to clearly explain this change over such a small space of time and also to directly link this to the intervention by the ESP as the detail behind this intervention is lacking.

MacKay et al. (2012) studied non-surgical hip and knee osteoarthritis (OA) cases following ESP review and found that at six weeks all self efficacy scales had improved after only one appointment. Within these scales the improvement was significant for the management of pain, fatigue and distress. There was also good recall of advice and exercise prescription with 89% patients recalling advice and 83% continuing with the exercise programme.

Sephton et al. (2010) showed a small but significant improvement in EuroQuol 5 Dimensions (EQ5D) (EuroQol Group, 1990) pain scores at three months with the improvement sustained at 12 months, in patients managed through a primary care MSK service. It is not possible to link this improvement to purely ESP intervention as patients were managed through both ESP and physiotherapy clinics.

Another perceived positive outcome of ESP management within an ED setting was that patients managed by an ESP required less medication as part of their treatment plan when compared to medical and nursing staff (Ball et al., 2007;McClellan et al., 2012). This may reflect the more physiotherapy based treatment approaches used by the ESP clinicians, with less reliance on medication. It would be interesting to see if this approach alters in future if the implementation of independent prescribing for physiotherapists becomes a more established part of clinical practice.

A high proportion of the studies included in this review relate to ESP staff working with orthopaedic patients. One of the possible outcomes of ESP management is referral for a surgical opinion, or more recently as the scope of practice has extended, the ability of the ESP themselves to directly list patients for a surgical procedure. Only one study explored this direct surgical listing aspect of ESP care (Parfitt et al., 2012). The study is a retrospective case review and in quality terms is rated by the EPHPP tool as weak, but they reported in a primary care service that ESP staff direct listed 127 of 130 cases referred to orthopaedic services for total hip replacement. Of this number 92 patients proceeded to surgery without any orthopaedic out patient review, representing a saving per case of £145.00. Transfer of care was carried out under the umbrella of an agreed local referral pathway with criteria for direct listing these cases. This research illustrates the expansion of care that ESPs are able to provide and the improvements that can be made to patient care pathways. There are potential cost savings for local health services if ESPs are supported to further develop these advanced clinical responsibilities. In the authors clinical experience, listing patients for orthopaedic surgery forms an

increasingly important aspect of ESP and patient management outcomes in many ESP services. The decision making which is undertaken as part of this process (including the surgical decision making) was explored within the IPA study as part of this research.

# 4.5.2.4 Decision concordance and diagnostic agreement

A number of papers reported on correlation of ESP decision making, particularly between ESPs and orthopaedic surgeons. Aiken et al. (2008) show a kappa of K=0.67 for management plan agreement after assessment in orthopedic hip and knee cases. MacKay et al. (2009) again reported in relation to orthopaedic hip and knee patients a 69% agreement on diagnosis and a kappa K=0.70 for surgery decisions. Oldmeadow et al. (2007), in a MSK screening service, had ESP and surgeon agreement level of 74% in diagnosis and management decisions, although there are no kappa statistics reported. Desmeules et al. (2013) studied orthopaedic ESP activity with hip and knee patients and found between ESP and surgeons a kappa agreement of k=0.86 for diagnosis and k=0.77 for surgical decisions. In the only report of upper limb orthopaedic cases, it was shown within a shoulder clinic that ESP and surgeon agreement was kappa k=0.63-0.86 for diagnosis and for considering surgery as an outcome k=0.75 (Razmjou et al., 2013).

These more recent research results compare well with previous reports (Hattam, 2004) who described a 70.6% level of appropriate transfer for orthopaedic opinion by an ESP service. At the time of Hattam's study, ESP roles had more restricted boundaries, particularly access to investigations, which may have had an impact on decisions regarding cases transferred for

orthopaedic review. If ESP staff have the ability to base decisions upon more informed knowledge with access to additional investigations there could be the potential for greater agreement to be seen.

Taken together these results show evidence to support the clinical knowledge and decision making of ESP staff, particularly with musculoskeletal cases in an orthopaedic setting. Although the literature does not include information regarding the decision process itself or the interactions that occur between the ESP and their patients and these aspects of ESP care are a focus of the IPA study reported within the rest of this thesis.

## 4.5.3 Qualitative studies

Of the 25 papers reaching the critical appraisal stage there were only three qualitative papers, which fulfilled the protocol criteria (Dawson and Ghazi, 2004;Reeve and May, 2009;Coyle and Carpenter, 2011), illustrating the limited extent of published qualitative research within current ESP literature.

#### 4.5.3.1 Study Methods

The three qualitative papers were assessed using the CASP qualitative tool (Critical Appraisal Skills Programme, 2006) and overall findings showed a good level of quality in their methodology and reporting. Qualitative research design was appropriate for the aims of each of the studies, exploring patient expectations prior to ESP appointments (Coyle and Carpenter, 2011), quality dimensions of a spinal ESP service from a patient perspective (Reeve and May, 2009) and the experience of the ESP role from the clinicians perspective (Dawson and Ghazi, 2004).

Critical appraisal of each paper uncovered many examples of good methodological practice in conducting and reporting qualitative research. Semistructured or in-depth interviews were the data collection tool for each study, and two studies described reaching some form of data saturation as part of their methodology (Reeve and May, 2009;Coyle and Carpenter, 2011). Thematic analysis was used in reviewing the data and additional descriptions of data checking by a second reviewer (Coyle and Carpenter, 2011) or member checking through research participants (Dawson and Ghazi, 2004) was described. This illustrates the authors have considered the trustworthiness of their data and sought some degree of dependability and confirmability (Bryman, 2008).

Dawson and Ghazi (2004) interviewed four ESP staff across different Scottish ESP services and although the paper aimed to report on the experience of ESP staff within their roles there are two key pieces of content linked to this systematic review. The first is that ESP staff may perceive an increased element of risk in their clinical responsibilities, through making decisions which hold potentially greater consequence for the patient. This was not explored further within this article but alludes to an aspect of the ESP's role which the clinicians themselves may well find challenging. Given the development of much wider scope of ESP practice over the past 10 years since this paper was published, including a wider acceptance of the place for ESPs directly listing cases for surgery this aspect of ESPs' decision making should be explored in greater depth. The second, is that ESP staff alluded to a pressure they felt in the role to meet patient expectations. It can be difficult to inform patients that there is no further treatment available for them in the wider sense, which goes beyond

traditional physiotherapy practice. This could have an influence on the perceived outcome of the consultation from the ESPs' and patient's perspectives depending upon how this information was communicated and understood. Reeve and May (2009) interviewed patients who were seeing ESP staff in a secondary care spinal service before they had had contact with an ESP. Patients placed less importance on the actual structure of the service they were in, but more important were processes of clinical care and the subsequent outcome. The patient participants saw information provision as extremely important. Particularly in relation to what could be expected from being seen in an ESP service and also the role the ESP clinician played in their care pathway. Patients wanted skilled staff, information on their care and explanations of their diagnosis and management plans. They also wanted staff who would listen and when decisions were made that they were involved in those decisions. Coyle and Carpenter (2011) also conducted patient interviews, but only once they had been seen by ESPs. Patients reported some confusion over the purpose of an ESP as opposed to traditional physiotherapy (which some had undergone previously). Themes emerging from data analysis were very similar to the findings of Reeve and May (2009) in that patients placed importance on communication and active listening skills, they wanted an explanation of their condition and treatment recommendations and wanted the time with a clinician to discuss these things. An active role in decision making was also seen as very important (Coyle and Carpenter, 2011). Following extraction of data from the qualitative papers six key themes and concepts have been identified. These were: information provision; patient expectations; decision making; ESP craft

skill; communication; and outcome process. Each of these themes will now be discussed.

### 4.5.3.2 Information provision

The provision of information to patients is a key aspect of the contact with an ESP and can be broken down into pre-contact information and that provided during the consultation. Reeve and May (2009) reported patients wanting details of the service they were referred to, including waiting times for ESP appointments and for onward referral. This information may help to manage patients' expectations regarding their management timeframes.

Patients also wanted more detail regarding the specific role of the ESP clinician and why it was they were referred, as there was a lack of understanding concerning the ESP role. A factor that also appeared within other qualitative data analysis (Coyle and Carpenter, 2011).

During consultations patients requested clearer information on their diagnosis, prognosis and management plan which was provided to them by the ESP in language they understood. With this information exchange it maybe possible to achieve greater acceptance of the outcome, even if this outcome was not ideal in the patient's mind.

### 4.5.3.3 Patient expectations

Patient expectations are an important theme potentially influencing the ESP / patient relationship and consultation outcome. Two papers discussed how patient's expectations are influenced by the previous management of their condition and previous unrelated healthcare contacts (Reeve and May, 2009;Coyle and Carpenter, 2011). Patients did not seem sure what an ESP

would offer and, therefore, related back to previous experiences of physiotherapy management. If this experience was positive they went into the ESP consultation in a more receptive frame of mind, but if they had had a negative experience (or no previous physiotherapy) they appeared more reticent and required reassurance the clinician was able to provide a specialist opinion. Linking to the previous theme of information provision this could be compounded by the fact some patients are not clear what an ESP can achieve or contribute to their care. There certainly could be a risk that this affects the ESP / patient dynamic and leads to a less desired outcome (or the feeling of this) from one or either party.

It is clear that ESP led services and ESPs themselves need to ensure patients and referrers understand their role to allow patient expectations to be managed and not unduly influence the decision making process and outcome.

## 4.5.3.4 Decision making

The data emerging from the research shows patients want active involvement in the decision making process with the ESP (Coyle and Carpenter, 2011), or to feel involvement through effective communication (Reeve and May, 2009). Coyle and Carpenter reported patients wanting the time to discuss and explain findings and that an active role in the decision making process translates into a positive experience. Conversely there is more negative feelings from the patient with no involvement in this process. Decision making involvement also gives the patient an increased confidence in the ESP (Coyle and Carpenter, 2011). Patients want clear reasons for the choices being offered for their management and the implications of these choices (Reeve and May, 2009). An associated

factor to this is the ESP having the ability to act upon those decisions and be able to instigate management and investigations.

Another perspective on ESPs' responsibilities is the degree of anxiety surrounding some of the decision making aspect of the role, particularly where the ESP perceives an increased risk in making the decision (Dawson and Ghazi, 2004). This was only alluded to within this study and no further details were available to back up or explain this finding. It could link to an emerging governance theme and, given the increased scope of an ESP role over the years since this research was published, particularly in relation to more direct surgical listing by ESP staff, should be explored in further detail.

## 4.5.3.5 ESP craft skill

The skills an ESP can demonstrate are very important to patients. They encompass clinical skills relating to knowledge, assessment and diagnostic competency and patients want to see ESPs who possess those skills and are able to provide management options for their condition (Reeve and May, 2009). Craft skills are the skills and processes undertaken by the ESP during patient consultations and allow the ESP to respond to the variety of presentations and potential management decisions required. There are also technical proficiencies employed by the ESP; for example, musculoskeletal injections. Skills are required in communicating knowledge and providing coherent understandable explanations to patients so they understand the decisions that need to be discussed and why a particular outcome is decided upon. Craft skill in this context is considered in a broader sense beyond patient and clinician communication. Similar craft skills have been discussed in relation to medical

practice (Dornan and Nestel, 2013). ESPs themselves are also aware of the need to develop skills and competencies in relation to their role and access to appropriate training is seen as important (Dawson and Ghazi, 2004).

### 4.5.3.6 Communication

Communication is vital in a therapeutic relationship and comes across as another key theme. It impacts upon the whole clinical encounter and is an important factor to consider in relation to this PhD research into the decision making process. Communication closely links with many of the other themes highlighted, from the information provided to patients at various stages of their contact with an ESP, the way the decision making process is undertaken and the craft skills of the ESP themselves. Reeve and May (2009) reported a need for the ESP to provide effective explanations in a language that patients understand, and a need to adapt this delivery dependent upon the patients response. One example provided by Reeve and May is that of an older patient requiring more time to absorb that information and the ESP ensuring understanding has occurred. Both Coyle and Carpenter (2011) and Reeve and May (2009) also mentioned the need for ESP staff to demonstrate effective listening skills and be approachable and show empathy as part of the consultation process.

### 4.5.3.7 Outcome process

Synthesising the data, this theme engages the patient in the management process and the decisions made, the ESP's explanation of relevant information and the formulation of a clear plan of action, which the patient understands. As with the communication theme this connects with many of the themes already

discussed, helping to draw together interlinking aspects of the ESP and patient interaction.

It is important that the ESP takes into consideration the patients' goals and their desired outcome when discussions occur. Dawson and Ghazi (2004) described the ESP feeling a degree of pressure in meeting patient expectations and that in their specialist role the patient may well be looking for a cure, which is often not possible. Taking into account the patient population that is often seen by an ESP, with many patients having long-term conditions such as low back pain (LBP) and degenerative joint disease this would be very difficult to achieve. Patient expectations may be wrongly perceived by the ESP, but could be explored within the consultation so all parties are working toward the same achievable outcome. Different ESPs' feelings toward expectations may be reported across variations in ESP service settings as the current evidence is only from a secondary care setting of orthopaedic out patient clinics (Dawson and Ghazi, 2004).

### 4.5.4 Secondary synthesis combining quantitative and qualitative findings

The results from this systematic review offer further evidence and a richer understanding of the complex intervention provided by ESP clinicians. Patient satisfaction levels are shown to be consistently high when reported within the included literature (McClellan et al., 2012;Desmeules et al., 2013;Razmjou et al., 2013). However, it must be considered that these results have come from a mixture of validated and unvalidated data collection tools and are, therefore, difficult to compare across the reports. What is difficult to ascertain are the reasons behind these reported satisfaction levels. It maybe linked to the

increased time ESPs appear to spend with patients (McClellan et al., 2006) or the additional interventions that ESPs have been described as providing, such as advice and exercise prescription (Razmjou et al., 2013). This would link to the qualitative findings from patients who expressed a desire to have longer consultation time with an ESP (Coyle and Carpenter, 2011), or the increased provision of information that is also requested (Reeve and May, 2009;Coyle and Carpenter, 2011).

As well as the patient reported outcomes of satisfaction, evidence does now show greater confirmation of positive outcomes when measuring either generic patient functional outcomes (Sephton et al., 2010;Bath and Janzen, 2012), or self efficacy scales (MacKay et al., 2012). The drawback to these reports is the lack of clear information stating what the ESP's intervention actually included, or the possibility that other variables could have impacted on patient status and led to the outcome measure improvements.

Evidence is emerging to support ESP staff listing their patients for orthopaedic surgery directly, without the patient consulting with a surgeon first (Parfitt et al., 2012). As qualitative studies have mentioned ESP staff perceiving risks existing within their role (Dawson and Ghazi, 2004), it would now be timely to explore this aspect of ESP care further to see what the risk perception is based upon and how this may impact on more recent advances in ESP role such as surgical listing. Especially given that the research paper that mentions risk is now over 12 years old (Dawson and Ghazi, 2004) and ESP practice has certainly advanced in the intervening period.

The evidence supporting ESP decisions on diagnosis and management when compared to orthopaedic surgeons (Aiken et al., 2008; MacKay et al.,

2009;Desmeules et al., 2013) provides reassurance of ESP clinical knowledge and clinical reasoning skills. Possessing this knowledge and then having the skills to communicate this to patients is vital. From a patient's perspective, this information is important and something they want the ESP to provide (Reeve and May, 2009;Coyle and Carpenter, 2011). If ESPs are taking the time to engage patients in these conversations it may explain the additional time ESPs have been noted to take when compared to other practitioners in ED (McClellan et al., 2006) and orthopaedic clinics (Desmeules et al., 2013). Higher patient satisfaction could also convey the way patients relate to the ESP staff, particularly if these relationships are felt by patients to be positive and this is alluded to by Coyle and Carpenter (2011).

# 4.6 Chapter summary and outcome

The systematic review has enabled a critical assessment of current ESP literature, obtained through a robust methodology, regarding ESP management of MSK conditions, with particular emphasis on outcomes and decision making. There appears to be broad support for the ESP role, particularly in relation to patient satisfaction levels, which are consistently high. There remains limited reporting of measurable clinical outcomes but where used results appear favourable. The diagnostic and management choice decisions made by ESPs show good levels of concurrence with medical staff. The actual process of decision making is alluded to but not clearly described. There is a lack of explanation concerning the way patients and ESPs interact, how the decision making process occurs and what influences may impact upon this process. We, therefore, do not fully understand the mechanisms or interactions underlying

the impact that the ESP might have. Further research is required to investigate the mechanisms that lie behind ESP and patient decision making.

Given the results of the review there exists gaps within the evidence base for ESP practice within MSK services regarding decision making which provides a clear rationale for a more in depth study of ESP and patient perceptions of decision making in MSK practice. A phenomenologically based IPA study has, therefore, been undertaken to explore ESP and patient interaction and decision making. The methodological underpinnings of the IPA study are set out in chapter three of the thesis and the results of the IPA study are presented in the following three chapters.

# **Chapter 5**

# **Qualitative IPA Study: Patient Interview Results**

This chapter, alongside chapters 6 and 7, describes the results of the IPA study

### 5.1 Introduction

exploring decision making between ESP staff and patients who have experienced care through a community musculoskeletal service. Chapter 5 describes interpretation of the results from the patient participant interviews. In keeping with the methodology employed it is my own interpretation of the collected data that is presented within the following three chapters.

To arrive at the results, the focus group and individual interview data has been interpreted through an IPA analysis process. IPA analysis involves repeated reading of the transcripts, initial note taking, which then develop into themes and then coalesce into superordinate themes (Smith et al., 2009). The data analysis process is described in more detail in section 3.10 in the methodology chapter.

In order to illustrate the findings and descriptions of the themes, derived from the interview data, there are numerous direct quotes included throughout. They serve to ground the results back to the individual voices of the research study participants and show transparency, in that the interpretations are expressly linked to the transcribed texts. As multiple themes have been derived from the data sets and the study had a total of nine patient participants, the number of direct illustrative quotes are quite extensive, allowing for a full exploration of the data across the participant's individual experiences.

The table below describes the transcript notation that has been used throughout the results chapters.

**Table 6. Transcript notation** 

	Significant pause
[]	Material omitted
()	Additional comments from another participant or the interviewer
JT	PhD student as interviewer

The chapter is organised by firstly providing a description of the superordinate themes, derived from the data. The results are then linked to each of the superordinate themes in turn. Interpretation of the results is illustrated with direct quotes, both from individual participants or from more interactive dialogue where this best illustrates a theme or allows for greater interpretation. A border highlights the sections of direct participant quotes involving interactive dialogue. Throughout the results chapters participant gender has been anonymised through the use of 'they or their' rather than 'he or she'.

### 5.2 Patient data themes

Table 7 provides a high level overview of the super-ordinate themes, which appeared through the analysis of the data from interviews with the patient participants of the study.

**Table 7. Patient interview superordinate themes** 

	Patient interview superordinate themes
1.	ESP Role
2.	ESP/patient relationship
3.	Decision making process
4.	Expectations
5.	Internal/external influences
6.	Service process
7.	Outcome/intervention

Figure 4 shows the superordinate themes derived from the patient data. Mind maps were used throughout the IPA study to aid the organisation and interpretation of multiple emergent themes. A more detailed mind map of the patient interview superordinate themes with all sub themes derived from the data analysis and interpretation process is provided in figure 5.

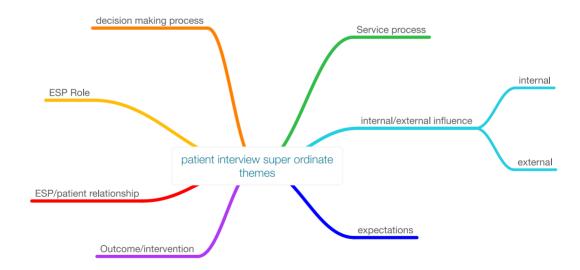


Figure 4. Diagrammatic representation of patient superordinate themes

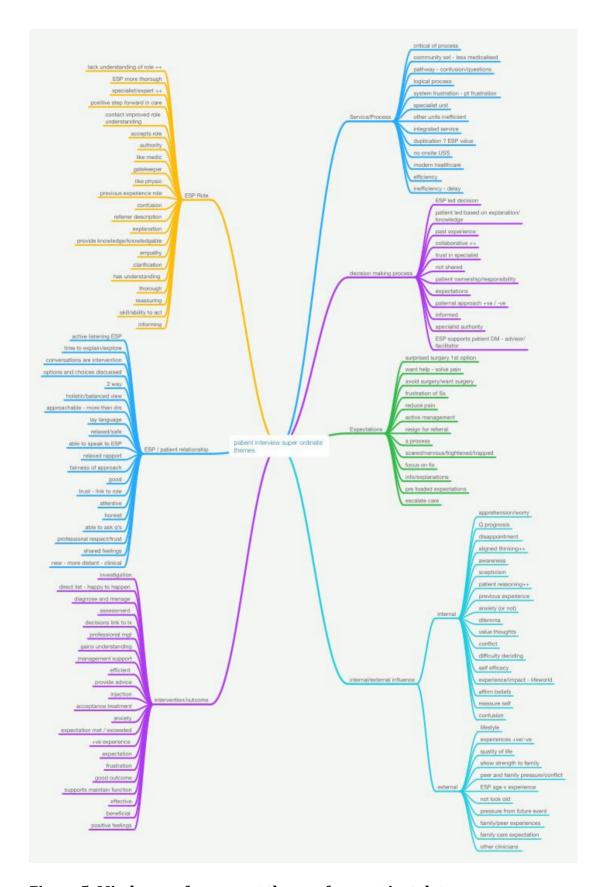


Figure 5. Mind map of emergent themes from patient data

#### 5.2.1 Theme 1. FSP role

Participants were asked what they understood of the ESP clinician's role (see appendix 9), and in relation to this had they had any previous experience of consulting an ESP. Of the nine participants only one, (P03), expressed any broad understanding of the ESP role on their initial attendance and none had seen an ESP clinician previous to their referral to the musculoskeletal service.

P03 Well I understood that [] he knew about shoulders, that was his specialism and he said well I can give you an injection here, and he did and then he said well after that I would refer you onto, well, would have to be a surgeon, to do the operation. I was fairly clear I think.

Even though P03 showed awareness of the specialist nature of the ESP role, over and above previous physiotherapy intervention, greater understanding was limited, as illustrated by this comment

## P03 The shoulder chap.

The majority of the patients interviewed for the study, clearly did not have any real understanding of what clinical role or purpose the ESP provided.

- POI I was not aware of what her role was.
- P04 No I really didn't. I subsequently found out she was actually a physiotherapist. I didn't actually know that.
- Very professional, but I haven't got a clue who he was.

  He introduced himself obviously and what his job title was but again to somebody like me I don't know what a musculo, musculoskeletal extended scope practitioner does.

I didn't have any understanding of his role, none at all, cos as I say I was under the impression I was coming down for the scan (JT mmm) so when I was escorted into this room and he did his initial examination, he asked lots of questions he was very thorough, very professional but I haven't got a clue who he was or what the purpose of the questions was.

P06 Before I went to see the GP I didn't know they existed... I just assumed there would be another tier, somewhere that I would be referred to.

He was just saying this person specialises. Whoever you see specialises in this kind of thing, erm so I'll refer you, to paraphrase.

- Well it was interesting because I wasn't sure what a musculoskeletal specialist was? so I figured out she probably wasn't a doctor, you know a consultant, a Mr, consultant. Er, so a figured it was a higher level than a nurse...probably a physio or OT level or something like that (JT ah ha) but I hadn't heard of that role before.
- P08 No no. It was er I was coming to see someone about my knee as far as I was concerned. I didn't know who I was going to see.
- P09 Well I knew who I was seeing cos it was in the letter but er just to diagnose what was wrong with my knee really (JT mm mm) and then provide some sort of treatment.

These quotes show participants' lack understanding and knowledge regarding the role of the ESP. Patients allude to a recognition that the ESP has a more specialist clinical role, which some place within an identified medical hierarchy. In this way the role is seen to have a more diagnostic purpose and ability to signpost to appropriate treatment (P09), illustrating a degree of power is conferred by patients, on the clinicians undertaking this role.

In patients attending subsequent appointments with the ESP there were still very few of the nine participants who had a clear understanding of the ESP role. This may reflect the vagueness within the actual job title itself, as it does not clearly state the professional background of the clinician. But some participants showed more awareness in their responses, based upon how the ESP's knowledge gains the patient's appreciation. The specialist position of the role continues to be highlighted.

- JT and after you had been to that appointment did you have a better understanding over what kind of clinician they were?

  P09 Yes definitely yes... I just felt they had better understanding of the workings of well, in my case the knee, they just seemed very knowledgeable, yes, well with the bones and everything yes
- P07 But I understand that its someone who knows, who specialises in limbs and musculoskeletal stuff so I was quite happy to trust that, er you know that er title (laughs)

It is interesting that P07 laughs following this response, almost as if they feel on reflection that they have placed trust in a clinician about their health without having fully understood what they do or who they are.

Other participants also illustrate this placement of trust in the ESP as health professionals. P03 does this by conferring his professional past and how he would expect to be trusted, onto the ESP during the consultation and believes they have the skills and knowledge to carry out their role and provide him with the most suitable opinion.

P03 I'm not in any position to make any judgments about competency or whatever and yes you have to trust the professionals you are dealing with. I was a professional and would expect you to trust me so therefore I did the same.

The patient participants exhibited no overt negativity to seeing an ESP, despite this lack of role awareness. There appears to be an acceptance on the part of the patients over who they are referred to see or have an appointment to see. The patient places trust in that person in their clinical position to do the job they expect them to do. The ESP is the right person they need to see and they have the ability to do their job through their skill and competence. Their title, position, power and how they present themselves and their skills, provides the patients with confidence in who they are seeing and the trust that occurs alongside that.

There was one person, P01, who appears to consider the age of the ESP, in that they are a younger person than themselves and this may have a bearing on that giving of trust. But this quickly passed in the context that the ESP placed the patient at ease.

Well she put me at ease as soon as she came along you know and put me at ease and she was a younger person than myself but I felt very much at ease.

Despite the knowledge gap in patient understanding, the specialist nature of the ESP role appears as a key quality, enabling patients to gain positivity from their encounters.

- P09 I just felt they were specialists in what I was going for.
- P07 The specialist here knew much more about it and could tell me more about what was happening in my knee from the x-rays [] so it was obviously what the title says, its a specialist about my condition which my GP isn't.

Here P07 considers the higher specialist level of the ESP in managing their knee compared to their General Practitioner and how the ESP can provide relevant information and explanation of investigations (the x-ray). The knowledge of the ESP in musculoskeletal care and their ability to communicate effectively and provide patients with explanations was quite noticeable through the interviews.

POI She was very helpful and very knowledgeable (JT mm mm). She helped to reassure me this procedure could help with my problem.

She felt more knowledgeable. She came across as being knowledgeable and came across in language I could understand not saying the physio wouldn't do that but yes I came away feeling...my husband was waiting for me and he said oh how are you? and I said oh yes the future is looking good, rather than oh gosh I have been in there and feeling well there isn't much help here.

The great impact the ESP has had on this participant is seen in how they respond to their husband upon leaving the consultation. The ESP has positively

influenced the patient's perceptions of their illness and its future impact by providing information in an accessible and understandable way.

The ESP is providing patients with knowledge and understanding which helps them understand what their problems are and this can help them deal with the symptoms and their impact more effectively. Patients may see further intervention in terms of other treatment options that exist and can be offered, or ways in which they can manage their own symptoms.

### 5.2.2 Theme 2. The patient: ESP relationship

All of the patient participants described positive experiences when they consulted with an ESP. An important aspect of this was the way the patients and ESP staff quickly built a therapeutic relationship. Patients showed a connection and ability to communicate well with the ESP and showed shared alignment of the decision making process.

I felt that er I felt that if I'd wanted to I could have discussed it with him without feeling that I was being out of place or er (JT mm mm) pushy, you know it was very much a conversation with somebody who knew what they were talking about and somebody whose interested to know, if you like.

Participants appreciated the knowledge and experience of the ESP staff they consulted and the way the ESPs informed them about their condition and options. As P06 felt they could relax during the consultation, it allowed them to engage in the encounter to a greater degree and this allowed them to gain much more from it.

The guy obviously knew what he was talking about which was quite reassuring and he erm his manner was very good and he explained all the way through and what he was going to do [] so everything you would expect somebody would do or what I would expect he would do he did just that. He told me what was wrong and why.

P06 felt the ESPs had time and listened to them, which is more likely to encourage the patient to take an active role in the consultation, leading to a more collaborative relationship, rather than the patient adopting a passive role. ESP staff were approachable and this allowed patients to ask questions and discuss their care and feelings. This led to broader conversations with greater emotional depth, helping the decision making process. Participants felt they had the time to engage with the ESPs and this fostered positive relationships and an ability to provide an environment conducive to collaborative conversations.

- POI She was generally, you know she gave me time and listened to my lifestyle which again I think anything that pain or where your body is not working and if you are ... it was affecting my lifestyle. She asked this and I was not able to walk very far she asked how far I was able to walk... before the pain came in my knee and so she did ask me everything, lots of aspects about my life erm which I felt able to share with her.
- P06 He obviously had the time to talk to me. I didn't feel at any time he was rushed, he had enough time to do everything he wanted.

Differences were expressed in how the ESP approached the consultation and communication styles when compared to other consultations they had experienced, with maybe GPs or consultants. These differences in communication style and interaction were seen in a very positive light. This connected to the ESP's ability to provide explanations of presenting problems and patients feeling they had gained from the consultation.

P06 It was much more in depth and I felt that I was not going ...not that I have felt rushed by the GP...oh well that's not true [] this gentleman obviously I had a lot more time with him and he could explain, he could explain things in a lot more depth than GPs have done in the past.

P07 Its very similar to going to see anyone else I've seen er except there's a lot more detail so er my GP had seen my x-rays and shown me but obviously the specialist here knew much more about it and could tell me more about what was happening in my knee from the x-rays and er doing things such as the Oxford score well she could assess things in more detail I think.

P08 She was very thorough, it was fine. Like I say I understood more about it when I came away than when I left the surgery to be honest but as I say nothing detrimental toward him (GP) he has more patients to see. They can't go into so much detail for someone who doesn't know so much about these things.

## 5.2.3 Theme 3. Decision making

In total nine participants were interviewed and there were differences described in the way decision making was experienced. The following extracts show how P07 describes their appreciation of the decision making process and also the dilemmas that this creates. They take a lead, within a shared decision making framework, supported by the ESP. Initially the ESP described the problems found on assessment and the patient understood the decision over treatment was more their choice.

(the ESP) went through er what the problem was, basically osteoarthritis and what happens in that condition and erm when the cartilage is disappearing and er the bone builds up so she explained all about that and that er treatment was really my choice, you know what I wanted to do and all depended on my pain level and what I wanted to do. So yes she explained it all really well.

The participant had been guided into being the main decision maker by the GP, pre-empting the ESP appointment. P07 was able to take on board the information provided by the ESP, understanding there was a choice to make but felt supported and allowed the time to consider their options. The outcome was that they were more able to take an active decision making role.

P07 Because I'd seen my GP and she'd said well you know in the end you've got to decide whether you want surgery or not so and er if you do and you want to see a surgeon I'll refer you to one. This is before I'd come here you know to see a specialist and I thought well that's an either/or decision and this gave me the space and other options in between seeing the surgeon.

Even though the patient did decide to go down a surgical route and be listed for a knee replacement they were still describing internal dilemmas over whether they had made the right decision. The impact of the impending surgery on their quality of life was a key personal factor in these feelings surfacing. So even though the patient, based upon the information and ESP support, has made an informed decision, they are still unsure in hindsight that it is the right one for them. But they do take personal responsibility for that decision and the consequences of that choice as can see from the extract below. They seem to prefer that the decision is under their control and that it has not come from a more paternalistic directive.

P07 I'm still thinking is this the right time for this...its quite hard to decide so yeah its a dilemma but I'm pleased its my dilemma (laugh) and nobody else's. You know (laughing). I'm pleased its not a surgeon saying look you've really got to have this, its not life threatening is it so...(JT mmm) its about improving your quality of life and I'm still assessing my quality of life to see if I've, you know, I think I need it.

They are also pleased the ESP is the specialist they have seen, rather than a surgeon, who they feel would have been more difficult to communicate with and could have offered narrower management choices and be biased toward a surgical pathway.

Consultant surgeons have a sort of reputation that well that's their job isn't it, so well you come to see me and I'll give you surgery [] they have quite this important air about them don't they...whereas the specialists here were very friendly and very approachable so I er didn't feel I was wasting their time as perhaps I might have done with the consultant if I'd been going on you know, will I be able to kneel down with my gardening and things like that (JT mm mm). So yes it felt good.

Some of the other cases revealed a more paternalistic trend toward decision making. In P01's case they are surprised by what they see as the more radical option of surgery, which is the first treatment option broached by the ESP and seems quite directive and at odds with the patient's previous clinical discussions. At first she seems quite taken aback by this decision.

P01 Well the first thing she said to me was have you thought about surgery...my GP had said this was a last resort...well knee replacement surgery I haven't really thought about it.

Following this the consultation is described as a wider discussion and more collaborative in nature, with the patient feeling more involved in a two way process. This results in the patient feeling more comfortable over making a decision what to do. The reaction of the patient to the directive statement from the ESP regarding surgery may have triggered a shift in the ESP's communication and decision making approach, permitting a more mutually aligned consultation resulting in a decision the patient is happy to make.

IT How involved did you feel in that process?

Oh very much involved yes, that we were, yes yes I felt we were very in union with one another yes good certainly on the same wavelength [] you know it has been easy...it has been explained to me so well, its an easy decision to make.

P05 describes quite clear cut options again through an ESP led decision making process during their consultation, which can be followed within the interview extract below. But the patient was very happy with the more paternalistic approach as it suited their style of consulting a professional and being led as to what is required by them as they see the ESP as knowing best and the patient was happy to take a passive role.

JT	Were there any choices talked about in terms of what was going to happen (P05 no) at that stage?
P05	No no, er it was very much a case of I've assessed you and you're a suitable person to go forward for a scan. Or or the next stage of your treatment should be that you go forwards for a scan, that sort of thing.
JΤ	Ok. Did you feel during that assessment and process that you were involved in that?
P05	That I was involved in?
JΤ	In talking through things.
P05	No. I know what you're getting at. No it was very much a case of, well I've looked at you and this is what's going to happen now (JT mm mm) that was basically itwhich suited me cos that's what I wanted to happen nowreally but I know what you're saying whether we discussedwhether it was a joint decision whether it goes forward to that. There was none of that.
JΤ	Mmm and was that something you were comfortable with?
P05	Yes yes. It didn't bother me in the slightest that. If I come to see somebody whose job is to do that and he tells me I've got to do $x$ $y$ $z$ I'll just take his word for it, I'll do $x$ $y$ $z$ .

P05 goes on to explain the expert and authoritarian position of the ESP and clearly places the power of the relationship with the ESP and themselves, as the more passive patient, willingly accepts the ESPs judgment on what should be done.

Yes well I felt like that cos he was in a position of authority if you like for want of a better word. In as much as he's the expert, he knows what should happen next and if he said well to cure you we'll hang you from the ceiling by you're neck I would have agreed to it (laughing) because I would have just taken it that he knows exactly what he was talking about (JT mm mm) really so that's why I felt like that.

Here with P06 we see the ESP providing information and informing the patient, in terms of what they feel as the clinician is the best management option, or not in this case, where they explain they are not severe enough for surgery. This is the ESP's opinion and most likely linked to treatment pathways and when

patients are deemed most appropriate for different interventions based upon their presenting symptoms.

P06 At the end he explained a few things...er what the options if you like (right) where we could go, not not that I was supposed to er you know choose one of these...well it was thinking about it but he advised in his opinion the condition wasn't severe enough just yet to have any medical intervention [] He was kind of...almost like describing a sliding scale of severity erm and these are the procedures that happen as you go further up that scale.

When they are probed on how that felt P06 does not feel the ESP is being authoritarian, compared to some medical conversations, but that they are involved in a two-way dialogue and this suits the patient's way of thinking and discussing their problems. So another example of an aligned approach is exhibited between a patient and ESP.

Oh yes very much. I've been...not recently I must say, as I say I don't go to my GP very much but sometimes you can just be told what to do...and I suppose in some cases maybe that's how it should be. But certainly didn't feel like it at this one, it was very much a discussion around...an expert trying to help somebody understand what was wrong with part of their body (mmmm) he did it very well.

IT and how do you feel yourself about that way of discussing it?

P06 Er personally it suits me very well. The line of work I was in before was with disabled people er in work, and a lot of the work I did was around trying to figure out what would help them stay in work, what would help overcome the barriers so it was very much...I was used to er having those kind of discussions... What's wrong? What can we do? and a lot of it, it er suits my way of er dealing with things to feel involved.

Looking at the patient's perspective, it appears the decision making process can be quite complex and a fluid experience. It does not always fit with one particular style of decision making and there appears to be movement taking place between shared decision making, where this leans more toward the patient, or more toward the clinician in a paternal way during the consultation. This may reflect the exchange of information and a consideration of the

expectations both parties bring to the appointment and how the experience plays out to try and achieve mutual satisfaction in the outcome.

Some interview extracts show the ESP can appear quite directive but information exchange becomes a two way process and the patient has the feeling that the experience with the ESP is more collaborative. Other participants felt a more shared decision making conversation took place throughout, illustrated by participant P02, who describes a period of thinking time after being provided with information and treatment choices by the ESP. Even though this thinking time was quite short, the patient was able to make a decision on how to proceed with the support of the ESP in this process.

She gave me an opportunity to, she told me what it entailed, she gave me an opportunity to think about it for some time...she went out of the room she said she would be back in 10-15 minutes, mull it over with yourself and see what you want to do and erm I thought about it and well I can't really carry on like this with all this pain and told her I was willing to go ahead with it.

P02 did feel apprehensive with regard to the operative option due to other health complaints as she was mulling things over but as she had failed to respond to other treatments felt this was the best way forward to try and improve her pain.

I was a bit dubious about going in for an operation where erm it was with the anaesthetic. Reason being that I've had asthma and erm at the height of an asthma attack it makes you wonder if you'd come out of...if anything happened during being asleep.

The feelings of apprehension were discussed with the ESP, who reassured the patient that from their perspective surgery was a possibility, but the choice and decision over whether to proceed or not, eventually comes down to the patient.

But the process is shared, in that the ESP is providing their clinical expertise and the patient is considering their perspective to arrive at a decision.

P02 She seemed to think that I was fairly fit, fairly capable of going through this so, but she did say at the end of the day it really is your own decision. So that was it she didn't make any decisions for me. She just offered me the choices.

As with some of the other participants P02 considers her ability to make a decision (being the one to have to make that choice) about her healthcare in relation to her life experience and having to make decisions in other aspects of her life.

P02 I've always been in a position where I've had to make decisions at work and everything so yes it was no problem.

In another case P04 again describes the decision being theirs to make, although the decision looks to have been weighted by discussions the patient had with the practitioner who carried out their ultrasound scan, who explained that the operation was really the only way to improve their problem. So the patient looks to have returned to the ESP with some preconceived thoughts and expectations as to the best way to proceed. So when this was discussed with the ESP, the patient has decided very quickly that the surgery is the best thing to do.

She said its up to you but well its your decision if you have the operation but yes there is entrapment there and you're not going to get rid of it by...she told me its not a major operation, quite a minor thing just to shave the bones and ok lets do it (|T mm mm) lets get on with it.

This extract shows how P04 felt comfortable with the decision making and information from the ESP and certainly involved and not told in a paternalistic way what they should do.

JT	Ok. When you were talking about different treatments did you feel involved in that process?
P04	Yes yes
JΤ	Anyway you could expand on that and explain how you felt involved?
P04	Well er yeah I felt she knew what she was doing. I was quite pleased with the injections she had given me and she explained she couldn't continue with the injections because that might damage things. So yeah she did ask me yeah it wasn't a dictatorial situation I was yes I was quite pleased with what happened.
JΤ	How did you feel about that involvement and talking through things?
P04	Yeah I think she was helpful yes helpful.

There was further discussion of options in the interview with P09, where the ESP carried out an examination and then explained what treatment options were available, showing they provided informed choices.

JT	You mentioned that there were things that you discussed in terms of
P09	(interrupts) Well he just went through saying they could do a steroid injection, They could do physio and if that didn't work then they would have to think further and see what to do (JT mm mm) [] he was talking and explaining the er pros and cons with everything yes.

Through further exploration it appears this participant places the ESP in a more expert position of authority in their relationship. Even though the patient is happy for the ESP to discuss choices about management, their underlying view is that the ESP is the expert and the patient would not intervene with other options to counter the ESPs position. The ESP has more power in this interaction and the patient prefers this distinction.

JΤ	How did you feel in terms of discussing those options of treatment?
P09	Erm I felt fine really yeah. I just feel that they are the expertsso its not up to
	me to tell them what to do if you know what I mean. (JT mm mm)

It was quite telling in the interview that P09 was not comfortable with a more shared approach to decisions about her care, she felt quite strongly that the clinician as the expert was in the best position to tell her what to do and weighs the clinical expertise and knowledge against her knowledge of how she lives with her condition.

P09 Well...I just feel that they are the medical people, that they know about...well its with all doctors I just don't like them asking me what I think they should do, because I don't know, (JT mm mm) you know they know the things...that you should do to help so...well that's just my opinion.

JT Because often now people ask patients what their preferences are (P09 yes absolutely yes) cos thats how things have evolved (P09 mmm) how do you feel about that change?

P09 I honestly don't like it because well you're the experts you know you have all the equipment to look at knees and whatever and then decide and we're not, we're not trained medical people (JT mm mm) and we don't really know.

Despite the variable ways in which decisions were reached between the patients and ESP staff it came across clearly that all of the participants in this study were pleased with their experience of the decision making that occurred. As can be seen from the extract above the participant (P09) being happy with the decision making which occurred does not mean that this had to be in a shared or collaborative way. It seems more important that it happens in a way that the participant is comfortable with in terms of how they wish to make decisions over their health. Patients may see themselves as active participants in this process or alternatively more passive and wishing to defer expertise to the practitioner (ESP) who they see as the expert in their condition. The preference that patients adopt in decision making then translates into who should use their particular expertise in deciding what happens next.

A similar situation occurred with P05, who expressed the position of authority that the ESP was in and how they would not contradict or dispute their expertise or recommendations. Although this did happen through a more clinician led decision making process as can be seen below.

P05	Er yesI don't go to the GP and he says oh well you need to do this and I turn round and say oh well I'm not doing that (JT mmm). If I want to get better I'll do what the fellow tells me to do.
JΤ	and in doing thaterm howcould you explain you're kind of thinking around that, obviously that's how you're happy for that to happen.
P05	Yes
JΤ	ercould you give me any more detail as to why you feel like that?
P05	Yes well I felt like that cos he (the ESP) was in a position of authority if you like for want of a better word. In as much as he's the expert, he knows what should happen next and if he said well to cure you we'll hang you from the ceiling by you're neck I would have agreed to it (laughing) because I would have just taken it that he knows exactly what he was talking about (JT mm mm) really so that's why I felt like that.

P08 was again happy with the level of involvement, but in a different way, as they see the process of consulting with the ESP and passing through the MSK pathway as a means to an end of getting the outcome they want. Which is an onward referral to orthopaedics.

JT	and do you feel you were involved in those discussions about what to do?
P08	Yes very much so yes yes and she explained why and we both discussed what it would entail.

You have to go through these procedures to get to where you want to be so that was my option and that was the one I took.

Other participants express happiness in the involvement they had in their decision making and the information provided by the ESP. The ESPs

communicated information during this process in an open and honest way and participants responded positively to that.

Yes I think so because I said to you I did say well how about nature doing it? and that was discounted which I thought was very honest and very fair.

JT Do you feel happy about the way you make those decisions and your involvement?

POI I think so yes. Yes I feel very happy about it that...you know it has been easy...it has been explained to me so well, its an easy decision to make. Sometimes things are explained and you are still not too sure really what they are talking about so you think gosh should I...but all the times I have had to make that decision it has been an easy decision to make.

### **5.2.4** Theme 4. Expectations

Expectations of care are clear drivers for patients when they attend ESP appointments. There are often multiple facets to these expectations, but all are targeted at improving symptoms, with the aim of reducing their impact personally and on others within their family or social networks. Each patient has a values or preference position forming a key focus for how the patients involve themselves and agree outcomes through the decision making process with the ESP.

Participants voiced clear expectations, or drivers, behind their reason for attending ESP appointments. The following expectations were articulated through the interviews by seven of the nine participants during this study:

- Reduce pain (P01, P02, P08, P09)
- Keep active (P01)
- Maintain a lifestyle (P01)
- Solve problems (P04)
- To feel better (P05)
- Need a specialist review (P07)
- Fear of falling/look well to friends and family (P08)

This illustrates the values or preference position that they bring with them to the consultation, which may have been formed by themselves or through interaction with other people before being seen; for example, family or other health care professionals. All these factors appear to impact upon how patients approach decision making. Their feelings toward the process and subsequent outcomes relate to whether they feel these factors are being listened to, taken seriously, understood and being addressed through their contact with the ESP. P01 considered multiple expectations of reducing pain, keeping themselves active and maintaining their preferred lifestyle. Early in the interview they questioned whether the ESP would be able to improve their pain, which was in the context of previous failed conservative treatment in physiotherapy. Now referral to a more 'specialist' clinician harbours expectations this would have a more positive impact for them, as they see their care has been escalated from GP to physiotherapy and now upward to the specialist ESP.

- POI Was she...they the person who was going to be able to solve my pain?

  Here PO1 describes in two extracts their personal drivers of keeping going and keeping healthy because that is their philosophy for living. They see themselves as of a more stoical generation and not giving in to symptoms, reflecting the way more degenerative joint symptoms can be viewed as part of the natural ageing process and, therefore, something to manage and cope with.
- POI She asked me my lifestyle which I explained to her that I was a very healthy person and I always want to be a very fit person and my body and brain keep telling me I have to keep going and I am from that generation of people that has to keep going even though it might be painful [] My brain tells me I must do that (cycle and swim) that its good its not good to say right well I have knee pain so therefore I must sit at home and do nothing.

Pain is a major feature of musculoskeletal conditions (Hoy et al., 2014), particularly in longer term degenerative disorders (Cross et al., 2014), which are a mainstay of ESP caseloads and the focus of assessment and management. Four participants reported reduction in pain as a key expectation of their consultation.

P02 Well I'd do anything to get rid of this pain.

As well as pain, other participants (P07) considered broader quality of life issues, triggering referral or a wish to seek treatment.

I don't think this is...erm...I don't think I can erm you know have erm...my quality of life is deteriorating because of it, so that's what made me go back to the GP and ask for another appointment.

It may be a wish to improve general function, or in P08's case we see in the extract below an upcoming family wedding and their function and fear of falling is seen as a key driver for attending the ESP's clinic. It is interesting that this position may suggest a wish to show an outward suggestion of being fitter, or appearing more healthy and less of a burden to family and friends in a large social gathering. Therefore, not attracting attention to themselves and concern that this would be an embarrassment to them if this occurred.

P08 Its my nieces wedding on the 30th of August and I would like to have it all cleared up by then and be able to walk normally by then [] I was frightened to walk and not so much falling down but I'm a heavy person and if I fall I fall heavy and I was thinking that from where I live I can walk into town but I didn't want to be falling down crossing the road and that was one of my main fears erm so it was just something that needed sorting out and I wanted it doing as soon as possible.

Seeking further information can also drive patients toward more care and P09 and P05 were vocal in wanting to have a diagnosis, enabling them to understand what was wrong and then progress to treatment. In effect the ESP can, through the provision of giving a diagnosis, give patients more control over their own

care and relieve frustrations that can surface if they feel they are not making progress.

- P09 But er just to diagnose what was wrong with my knee really (JT mm mm) and then provide some sort of treatment.
- P05 I just wanted to get the damn thing done (scan) and get the results back so I could get some proper treatment. (JT mm mm) Cos as you can see it from my point of view all I'm bothered about is that I don't care what the internal procedures are I just want to feel better [] Thats what I wanted. To move the thing forwards. To put a little meat on the bone. The problem I've got has been going on now over a year and its got gradually and gradually worse and I couldn't see myself taking the painkillers for the rest of my life which...because it dopes you up really...and I wanted to find out exactly what the problem was.

In these cases there is a feeling from the participants that if the scan shows what is wrong it can be fixed or made better. This is quite a simplified, mechanical way of considering their problems and it would be understandable they may feel disappointed if symptoms which are more degenerative in nature require symptom management rather than a cure. However, the converse view holds, that if the patient's understanding of what is causing the symptoms improves, they may be more reassured and able to self manage.

Expectations may not just come from the individuals themselves, but also through their contact and conversations with others. This could be family or friends, or other health professionals they have come in contact with before seeing the ESP.

- PO4 He said look your not going to get rid of this by physio you've definitely got an entrapment in here and if they shave the bone away you're going to be fine so its my recommendation you do that.
- P07 I'd seen my GP and she'd said well you know in the end you've got to decide whether you want surgery or not so and er if you do and you want to see a surgeon I'll refer you to one.

It could be difficult for the ESP to manage expectations arising from, or reinforced by, other health professionals as they can have powerful influence over a patient's thoughts on management options, particularly if the ESP feels a different course of action is indicated.

### 5.2.5 Theme 5. Internal and external influences

Five of the patient participants noted influences on their decision making which came either from external sources or internally due to their own dilemmas and conflicts over how to proceed. Participants highlight different influences impacting upon their decisions. For one participant it was very much their inner conflicting thoughts having a bearing on the decision process as they kept changing their mind. For others, they are influenced by external factors such as family members and other clinicians they have consulted. These clinicians are predominantly physiotherapists, general practitioners or radiographers, which would be expected, as these professionals are frequently accessed by patients with MSK symptoms.

One participant particularly, displayed internal conflicts regarding their decisions (P07). They had made a joint decision with the ESP to go ahead with a surgical referral and were subsequently listed for a joint replacement. The study interview uncovered interesting dilemmas they were having over whether to actually proceed with the decision they had made to have surgery. Even though they complained of pain and functional restriction this was variable in nature. They had periods of time with fewer symptoms and were, therefore, able to undertake their hobbies and sport pursuits. These were very important to them

from a social and psychological perspective and they had concern they would not be able to participate to the same level following an operation.

P07 So sometimes when I've got no pain I've thought why am I going for this operation? I really don't need this. But then when I'm being woken up in the middle of the night with my knee locked and knowing I've got to move it and its going to be agony and waking up in the morning exhausted I sort of think you know you've got to get this done erm but I'm still a bit like that.

They were voicing this conflicting position over proceeding with their original decision to have surgery and how this may affect their lifestyle. They did go on to explain another home issue may lead them to cancel the surgery but there is no disappointment in this, it is more a positive feeling that this would give them more time to think it through or delay.

P07 So there's quite a lot of relief, in that I might have to cancel it (laughing). Cos I'm still ...not wholly convinced that...I should do it yet but then on the other hand its going to get worse. So its deciding at what point to do that (JT mmm). Because of the limiting...there might be some limit in flexibility and I think I'm a bit young to accept that yet (JT mmm) so you know I'm stuck at the moment (laughs).

Shared decision making has been an effective process for this participant and they take ownership of the decision themselves even though this is difficult.

P07 Well I think its better than a doctor saying you've got to have this done really [] for somebody your age its really your choice cos you, you've got to its up to you and how er your pain levels are affecting your quality of life so...I think thats good...me having the choice...yes. (JT mmm) and then I can't blame anybody afterwards (laughs) if I can't get out of my kayak (said with jokey feeling) and why did I have this done?...you know its only me that I've got to blame (laughs again). Yeah.

Apart from the functional issues there are other thoughts that affect how they feel, such as undergoing the operation itself. They try to reassure themselves that there will be a positive outcome if they went ahead. There are risks involved but they would very much hope to be in the group who suffer no complications after surgery. They may well still be at the point with their

symptoms where the risks and benefits weigh more toward living with their condition over a surgical procedure.

Well going under the knife is scary isn't it [] yes a bit daunted about that...a bit scared but er knee operations and hip operations are fairly routine these days and the outcomes are very good so that's what I have to keep telling myself...don't be a wimp (laughs).

This is important for them as there are other influences coming from more external sources, mainly family members.

P07 So you sort of come home and cos you're family are saying 'so well what are they going to do?', well its kind of up to me (laughs).

The same point surfaces again later in the interview about how they felt with decisions they have made to have surgery, showing the decision is certainly playing on their mind.

I'm still getting through a day and still assessing if that's the right route and then of course you go home to your family and they say 'well if the doctor says you need it you should really have it done' yes and well yes they haven't really said that, they've said I can have it done if I want to. But my family, my dads 88 and he's had a hip replacement and he's going to have another one soon and er he said oh get it done get it done, everyone's saying get it done, but they're not the ones left with, you know, who might be left with not being able to do things that I can do now

This passage shows P07 has clearly understood and engaged with the shared decision making approach. The comments by other family members suggest they may have been involved in different decision making approaches with their own health choices. These experiences could in turn colour their influence on other people around themselves in how they see medical professionals operating when decisions are made. If family members have been involved in more paternalistic processes they see this as the norm and wonder why others do not make what they feel are the right choices and accept health professionals' paternal advise.

Other participants showed external influence can impact upon the decision making process, when clinicians that the participant comes into contact with share their own opinion. This was positive in terms of case P03 as the physiotherapist that referred onto the ESP explained they were specialists and this provided clarity for the patient when they attended in terms of discussing choices.

P03	Well I understood that he was the shoulder, he knew about shoulders, that was his specialism and he said well I can give you an injection here, and he did and then he said well after that I would refer you onto well would have to be a surgeon to do the operation. I was fairly clear I think.
JТ	Did that information come when you came here or previously?
P03	Well the physio said I'm sending you here as someone knows more about shoulders than I do and that was it.

For another participant the transition from physiotherapy to an ESP appointment was described in very specific terms in order to have an investigation. Leading to the patient having an expectation the ESP appointment was actually for a scan, but they are now confused as to what is going to happen, when and how.

- P05 He er asked me how I'd got on with the exercise and I said the problem was exactly the same, still no improvement at all and he said fine I'll send you for a scan, and that was it that was the end of the second meeting. He never actually laid a finger on me (JT ok). No explanations or anything. He said obviously its not working for you I'll send you for a scan. So I went away again and some time later I got a letter from this place (JT ok) which I presumed was to come for a scan because as a lay person I don't know where you do the scans. I don't even know what's involved in a scan.
- I felt a little bit bewildered when I left er strangely enough I saw my son in law who was here having some treatment at the same time and we walked out together and he said what are you here for? and I said well I thought I was here for a scan but I've just had an interview with a chap to see if I'm a suitable candidate if you like for a scan. So I was a little bit bewildered when I left.

Showing that other clinicians can really influence patient's thought processes was P04, who had a conversation with the person who carried out their shoulder scan after referral from an ESP. As they were informed that an operation would be needed they had that expectation and decision in mind when they returned to the ESP. This comment was very much driven by the result of the clinical investigation and the person carrying out the scan. It is clear the patient's preferences and values were counter having surgery and it would be very difficult to reverse that new stance once returning to see the ESP. P04 was clearly influenced toward a surgical pathway as the best course of action for their problem.

He said look your not going to get rid of this by physio you've definitely got an entrapment in here and if they shave the bone away you're going to be fine so its my recommendation you do that...it was just the radiographer who said look you're not going to get rid of this by physio you just need this scrapped so that's what made my mind up (JT mm mm)

|T Was that something you were thinking about anyway?

P04 No no it was that conversation that decided for me.

# 5.2.6 Theme 6. Service and process

Surrounding the patient appointment with the ESP is a complex healthcare system and administrative and referral processes which do have impact upon patients in both positive and negative ways. More participants from this study had positive experiences than negative in relation to the MSK service they were referred into and managed through. Five of the nine participants felt the experience of seeing the ESP and the MSK service process was positive. One patient mentioned the community setting of the service and the positive impact

of this (not set in a large hospital), feeling the setting de-medicalised the experience and had a positive influence for this patient.

P01 I feel very good. I feel very good. Yes definitely and...I am praising [] hospital [] It doesn't feel like a hospital really.

Other participants appreciated the integrated aspects of the MSK service and the way their care was joined up and they were able to move from one practitioner to another along a care pathway seamlessly. One patient below described the service in comparison to what they have experienced in private healthcare and their surprise that this level of care is possible within the NHS. If patients are having a positive experience it may support engagement with the ESP in their care decisions.

P07 I've been in fact I've been really impressed with the service, with the fact that I've hardly had to wait any time at all you know five, six weeks is nothing you know between referrals from GPs to here and referrals to physio, erm and then onto the consultant and then the offer of the operation, so fast, is a really good service [] We used to pay for private appointments to see consultants to miss out the waiting time and erm you know you don't have to do that anymore. It's a fantastic service I'm really impressed.

The community site the ESPs worked in was also felt to be more accessible and there is a feeling that seeing another clinician in a separate setting conveys that underlying specialism of the practitioner.

Just the fact that going to the (community site) was very very good. I felt that was better than here (main acute hospital) really.
 Ok. In what way?
 Well apart from parking being a lot easier I just felt they were specialists in what I was going for.

From a more negative viewpoint some participants mentioned delays in accessing investigations or waiting for imaging results. In contrast to the

positive service comments this led to frustration in service pathways; for example, a lack of on site scanning facilities and requiring multiple appointments and the waiting time associated with this which led to lengthy periods of time before definitive decisions could be reached.

- My only disappointment in the whole process is erm this place doesn't have an ultrasound scanning piece of equipment and you're relying on the [] and I did get frustrated down there as I was suppose to wait six weeks, well in fact I didn't wait six weeks I kept badgering them its its, it gets inefficient after it leaves here and erm [] said look make an appointment with me two weeks after you've had the scan you know so its not, look there is inefficiency in the system which I find totally frustrating.
- Physio wasn't going to put it right and quite rightly referred it onto the next stage. whether that decision could have been made any sooner I'm not competent to say.

  [] you have to have the scan I mean in organisational terms the speed he did the x- ray here he could have done the scan in another five minutes if you want to be managerial about it. I mean you've got to know what you are looking at as

the x- ray here he could have done the scan in another five minutes if you want to be managerial about it. I mean you've got to know what you are looking at as the things on the screen were just a pile of black and white dots as far as I was concerned (laughs). You need to know what you are looking for (JT mmm).

There is therefore a risk that these frustrations also impact upon the decision making processes undertaken between the ESP and patient.

#### 5.2.7 Theme 7. Outcome and intervention

All participants reported and described very positive experiences of their consultations with the ESP staff despite their lack of understanding regarding role. This encapsulates a number of the themes discussed around knowledge, skill, ability to make and assist in decisions and building a therapeutic relationship with the patient.

- PO2 Yes very good. Yes I thought she was very good indeed.
- P06 A guy who knew what he was doing, with a very good manner that suited me explained it all I think as I said earlier it was done with more discussion and more explanation than I expected, which was good, er and I came away feeling well I know what's wrong, I know what to do now and what to do in the future so that's all you can ask really...I think.

P08 Fine. Absolutely fine. Very clear. I understood what was going to go on.

P07	But I felt I'd had really good attention and treatment and well very impressed with the treatment really.
JT	Thats good. And overall a positive or negative experience?
P07	Oh positive yes. Yeah definitely.

JT	Generally do you feel that the consultation was worthwhile?
P01	Oh yes definitely. Definitely yes. It certainly gave me more knowledge about how my knee works and what the future could be and sheyou knowshe was very helpful. I came out feeling good, if that is the right word.

JT	and how did you feel about that appointment? How did you feel it went?
P09	Yes I was pleased yes yes cos he gave it a thorough examination and I was glad the x-ray was done to look into my knee mm mm (nodding).

There was only one slightly negative comment about experience, but this related to a process issue regarding access to a scan as mentioned in the previous section, rather than the ESP themselves. The experience of seeing the ESP was positive and they laugh because the scan has been mentioned numerous times throughout the interview as a recurring issue for them, which indicates a miss match between their clear expectations and what occurred when they attended.

P05 He was very efficient and I was totally happy with the interview that I had with him apart from the fact that I didn't have a scan (laughs).

Many participants had clear expectations met by the consultation with the ESP and this may explain the overwhelming positive feelings of all patients as this would be more likely to occur if you left the appointment feeling you had reached either a shared goal or the outcome achieved your own goals. The following extract illustrates the outcome of being referred to an orthopaedic

consultant is exactly what the patient wanted and the time available to discuss symptoms with the ESP was key to this.

JΤ	Do you feel the outcome of going to see the orthopaedic specialist was the right one for you?
P08	Oh yes. Definitely er because as I say I had time then. Certainly more than seven minutes so I had time to discuss it. There's nothing more I can tell you really.

Another patient explained at the end of the interview how they felt about the procedure of seeing an ESP and what they had gained from the appointment.

P06 has clarity and the ESP appears to have empowered them to manage their condition and they feel positive about this. Showing that powerful influence can be had when patients leave a consultation knowing what is wrong and how to manage things in the future.

P06 I came away feeling well I know what's wrong, I know what to do now and what to do in the future so that's all you can ask really I think.

Three of the participants were direct listed for surgical procedures by the ESP staff and gave an opportunity to explore this area of ESP practice which is a more recent extension to the scope of some ESP staff and has received limited research. Patients reported they were very happy with this process. No issues were forthcoming that concerned the participants given the ESPs are neither medics, nor the surgeon who would be undertaking the procedure.

The following patient, listed for shoulder surgery, did not see any issue with the ESP listing them for surgery. It was seen as a sensible thing to do, to enable the operation to occur in a timely manner, without unnecessary delays for further appointments, which for this participant is a key factor. This may have been

influenced by the surgical unit making the patient aware that they trusted the ESP and it was usual local practice and part of the existing clinical pathway.

JT and were you comfortable with that extended scope practitioner placing you straight on the waiting list without you seeing the surgeon before the operation?

P04 Yes in fact I, in fact I was because if I had had to wait for the surgeon it would have been another wait and further delay and yeah er I think I might just have said I would pay for it. er but yeah I was, I was quite happy. Over the road they said they would take notice of what [] said you don't need to see the surgeon Mr [] who I think is doing it. Yes quite happy.

For the following participant, trust in the ESP is a key factor. They trust the professionalism of the ESP to have the ability to list for surgery, based on their professional background and how they would have expected to have been treated in their own occupation. The fact that the ESP could explain surgery in an understandable way with clarity enabled the participant to place trust in them and feel they possessed clinical competence. ESP communication is again seen as a key factor in this relationship.

Yes. I was quite happy with that. I felt he knew what he was doing and talked to me about it and I'm quite trusting (laugh). I'm not going to be any wiser if I have a great discussion with the surgeon and I thought he described it in very simple terms, which is adequate for me. I presume I will see the surgeon when I go in for the operation but well thats fine. I'm not...I'm not making any judgments, I'm not in any position to make any judgments about competency or whatever and yes you have to trust the professionals you are dealing with. I was a professional and would expect you to trust me so therefore I did the same...unless there is evidence to the contrary.

JT But you were quite comfortable with that?

P03 It's very important, the manner and the communication is important. I think I am relatively easy to communicate with but yes he was very clear.

Where another participant was directly listed for surgery they were again very comfortable in the ESP undertaking this and did not see anything wrong with

that process. Their previous hospital experiences influenced their thinking that this was a 'normal' thing to happen.

JT	Did you feel comfortable about the ESP putting you on the waiting list for the operation directly without having to see the surgeon till that morning?
P02	Yes.
JТ	No problems for you with that?
P02	No.
JΤ	Did you feel that was unusual or a surprise that someone could do that for you as part of this process?
P02	No that was quite normal to me, mmm, I mean I've been in and out of hospitals through my lifetime here there and everywhere. It seemed quite a normal procedure really.

# 5.3 Chapter summary

Seven superordinate themes emerged from the patient interview data, which has been interpreted through the use of IPA methodology. The first theme of ESP role illustrated the striking lack of understanding displayed by the majority of the patient participants in trying to describe the ESPs position. What the patients did recognise was the specialist and expert nature of the ESP role, and with this recognition came trust. Trust was borne out of seeing the ESP's skill and competence and patients saw the positive impact the ESPs could have on their care. Overall there was no negativity directed specifically at the ESP role itself.

The relationship between patients and the ESPs they consulted with were all positive and these relationships developed over very short timescales, supporting the positive experiences of the participants.

The decision making process was complex and fluid. Patients described the process as positive and the majority of patients were involved in a shared experience of deciding upon their future care with the ESPs. Patients were able to readily engage in conversations with the ESPs, taking into account their lifestyle, values and experiences which all provided significance from a patients' perspective. Some of the patient participants described a more paternal process, although in these instances it aligns with the patients preferred style of decision making and is not seen as a negative issue in relation to the patient's experience. It was clear that patients are driven by expectations they bring to the ESP consultation. If those expectations are acknowledged and considered as part of the decision making process this has a positive influence on the decisions patients make. These expectations derive from the patients themselves, as well as the influence of other relationships they have before seeing the ESP. These influences which act upon decision making come from internal dilemmas that patients have to overcome in order to make management choices. The external factors arise from the influences exerted by patient's family and friends as well as other HCPs, which they encounter as part of their care pathways. Overall patients describe positive outcomes from engaging with an ESP. The only negative connotations are linked to service process issues and access to investigations. The patients interviewed as part of this study were very receptive to the ESPs offering and carrying out direct surgical listing and did not see this aspect of the ESP's role as unusual or problematic.

# **Chapter 6**

# **Qualitative IPA study: ESP Focus Group Results**

# 6.1 Introduction

The ESP clinicians were interviewed in two separate focus groups using the same topic guide. ESP participants 01-05 were in one focus group and ESP participants 06-09 were in the other. The ESP members were employed within a community based musculoskeletal service across one NHS teaching hospital trust. The ESP cohort consisted of seven ESPs with a physiotherapy background and two ESPs with a clinical background in podiatry (Table 8). As all recruited staff were employed as musculoskeletal ESPs and were in identical roles delivering the same type of patient care it was deemed appropriate to include all staff within the research study. Throughout the ESP focus group analysis no differences were found when considering the responses of the ESPs who came from these two different allied health professional backgrounds.

Table 8 also describes the length of time clinical participants have been practicing as ESPs, to differentiate between early advanced practice career staff in the 0-5 years group and more experienced staff in the 6 years plus group.

Table 8. Length of ESP experience and clinical background.

Participant	ESP experience - time		Clinical background
	0-5 years	6 years+	
ESP01	X		Physiotherapy
ESP02		X	Physiotherapy
ESP03		X	Physiotherapy
ESP04	X		Podiatry
ESP05		X	Physiotherapy
ESP06	X		Physiotherapy
ESP07		X	Physiotherapy
ESP08	X		Podiatry
ESP09		X	Physiotherapy

As in the preceding chapter, given the number of ESPs involved in the focus groups, themes are illustrated with numerous direct quotes. The quotes are formatted in the same style with interactive conversation pieces surrounded by a border.

# 6.2 ESP data themes

A high level overview of the super ordinate themes developed through the analysis of the data from focus group interviews with the ESP participants of the study is presented below.

**Table 9. ESP focus group superordinate themes** 

	ESP data superordinate themes
1.	Role development and reasoning
2.	ESP/patient communication
3.	Decision making
4.	Clinical governance
5.	Internal and external influences

Figure 6 shows the superordinate themes derived from the ESP data. In the same vein as the organisation of the patient data a more detailed mind map of the ESP focus group superordinate themes with all sub themes derived from the data analysis and interpretation process is provided in figure 7.

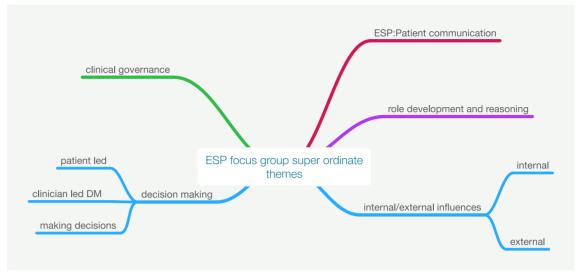


Figure 6. Diagrammatic representation of ESP superordinate themes

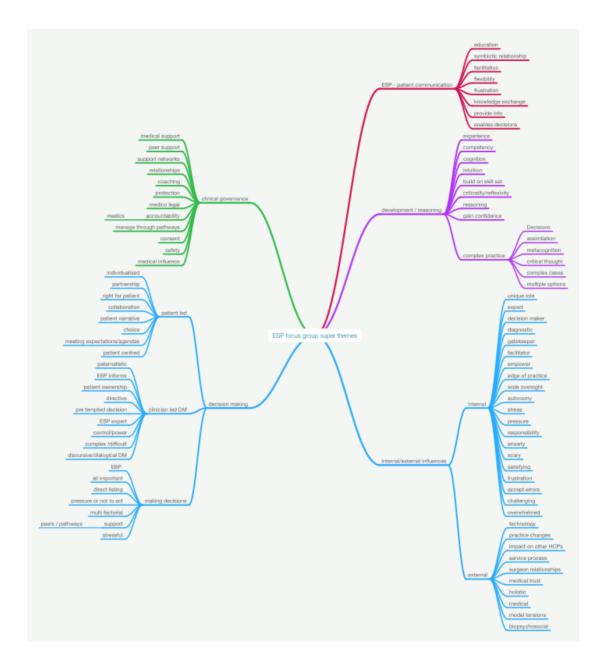


Figure 7. Mind map of the emergent themes from the ESP data

#### 6.2.1 Theme 1. Role development and reasoning

Participants were asked how they individually felt as ESP clinicians. The ESPs clearly recognise experiencing the role as one of becoming a specialist clinician. The responsibility and 'extended' role status came across strongly, with some feeling the role provided a unique position and expanded their skills beyond that which would be recognised as the traditional role of AHP clinicians. The role comes with increased accountability and decision making and there is awareness that ESP roles have developed to extend AHP practice into areas which used to be the preserve of the medical profession.

- ESP01 I think its kind of a niche sort of role really [] I think its quite a unique position.
- ESP02 Well I think the extended part of our role includes some other skills, which we wouldn't have used as a physiotherapist in our previous roles. Things like primary investigations and injections we would do the injections or erm direct list, which is a further expansion of our role.
- ESP04 It's I suppose a kind of sub specialism.
- ESP06 Increased responsibility over patient care. You have more ownership of patients being at a higher tier to where other people are referred to.
- ESP07 It's having an advanced extended clinical role so taking on some of the jobs that used to be done more by the medical profession is my interpretation.

Experience of the role moved one participant (ESP09) to feel that their ESP role was shifting toward a position that was potentially outside of the physiotherapy profession and has more in keeping with medical roles. That the role was morphing into something that was more unique, neither physiotherapy nor medical but something positioned in-between. This may relate to the particular ESP role this practitioner held, which had a diagnostic and triage focus, leading

to a reduction in emphasis upon their AHP treatment skills. Therefore, the clinician feels their role is very different and they are seeking to gain a clearer professional identity.

ESP09 The current role is er very different and it's almost becoming a different profession to physiotherapy.

The same ESP revisits this expansion of skills and wider professional development at the end of the focus group reflecting on where ESP roles could play a greater role in health care delivery linked to current pressures on NHS primary care delivery.

ESP09 I think you know I think the knowledge gained in the last certainly last four years in this service has been massively empowering for the profession, I think if we could keep pushing it and get it right we can definitely be these musculoskeletal interface clinicians can't we, and be very effective.

In ruminating on these wider issues linked to the ESP role these comments by ESP09 show how an ESP with greater experience, considers the impact of their role and how they have personally developed in relation to their own previous clinical roles. Alongside the impact of length of experience there is also influence that could have occurred through ESP staff development and training as they gained new skills and competencies. For many ESPs, development is based on exposure to medically led clinics in secondary care during early role training programmes, alongside the mentorship and peer support of the medical team which may foster thinking that sits within a medical model of reasoning, influencing the way an ESP considers clinical situations and ultimately makes decisions. Through exposure to medically led practice, a medical pathoanatomical reasoning process has the potential to dominate over more holistic and bio-psychosocial models commonly seen in AHP practice (Jones et al., 2002).

An alternative outcome from ESP training could result in the additional medical skills the ESP develops, blending with the more holistic bio-psychosocial reasoning position of the AHP. Possessing a broader set of skills and competencies enhances the knowledge and ability of the ESP to operate in what is often an intermediate care setting (Hussenbux et al., 2015), between primary and secondary care. The patient benefits from knowledge across a breadth of conservative and surgical management options which the ESP is in prime position to discuss and support the patient's decision making.

ESPO1 I think if patients just see a physio they just get a physio opinion and if they see a surgeon they just get a surgical opinion and I think with the fact that we sit in the middle (murmurs of agreement) is quite a unique place to be and quite an interesting place to be.

Supporting this view there were ESP staff that discussed the holistic nature of their role taking the centre ground between physiotherapy or podiatry and medical specialties. This reflects the service from which the ESP staff were recruited and this may be a different story if you interviewed ESP staff working in a different setting.

- ESP06 It is that extended role isn't it...you know that er I'm putting this in MSK and...but equally its knowing that holistic approach to the patient (ESP09 yeah) and knowing (ESP08 yeah) that if things don't quite fit have I done everything I can to explore what I need to explore.
- ESP04 You get chance to look at all the management options without bias particularly and can kind of escalate care as necessary if that makes sense.
- ESP03 It gives you that job satisfaction that you can wholly manage the patient rather than just as a physiotherapist where you are going to have to send them back to the GP for investigations.

Three of the ESP staff felt they were very much working within a medical model of practice.

- ESPO1 From a very physiotherapy based model of doing things erm I think when you see my ESP practice its very much more an orthopaedic medicine way of working so actually the thing I spent a long time honing was to get really good at doing what I did in half an hour exploring I now do in 5 minutes.
- ESP01 There's a greater medical understanding from being an ESP. So as a physiotherapist you're... the frameworks in which you work are very much physiotherapy frameworks and moving to an ESP role you start to have a much deeper understanding of medical frameworks and understanding of things like blood tests and interpretation of imaging and being able to piece all of those things together.
- ESP07 This is integrated into orthopaedics. So a lot of the decisions we make and the escalation of patients, protocols that are followed, are by request of the orthopaedic team that we might be working with [] I'd say its a standardised medical consultation.
- ESP09 That's er the thing about ESP work. We do work in a diagnostic paradigm. Its much more towards the biopsychosocial model but you know you can't ignore the medical model with these patients because we are entirely accountable er for diagnostics.

As well as considering that ESP practice aligns with a more medical model of working, the ESP staff considered that their position in the patient's pathway and their background clinical experiences as an AHP, alongside the enhanced ESP skills, gave them a more holistic and broader view which could be brought to patient consultations and discussions, feeding through into how decision making was considered.

ESP06 It is that extended role isn't it...you know that er I'm putting this in MSK and...but equally its knowing that holistic approach to the patient (ESP09 yeah) and knowing (ESP08 yeah) that if things don't quite fit have I done everything I can to explore what I need to explore.

The same ESP expands by considering that they see themselves taking a wider view of the patient and not purely focused on one clinical problem. They are seeing the wider picture and the implications of this for the patient in their decisions and possible outcomes.

ESP06 Taking into account that whatever you're referring that patient on for would be affected by other things so its very important that from an MSK your looking at

the OA knees there's a person around this so (ESP09 yeah) if they've got some spinal stenosis it could affect their outcome so...its knowing how relevant that is.

ESP03 You can wholly manage the patient rather than just as a physiotherapist.

ESP01 I think the expertise of the ESP is knowing when its a good idea to push people back into physio and that conservative management, injections, and recognise where that is maybe not a good idea and they need directing toward secondary care

ESP staff gain confidence in their role as they develop skills and competency to work at this more advanced level of practice. Development into the role was seen across different participants in their responses, particularly as some had much more experience working as an ESP than others. Complexity of practice related to an enhancement of clinical reasoning and thought processes.

**ESPO1** What I did in half an hour exploring I now do in 5 minutes.

ESP02 I think your clinical reasoning gets a lot better you know you have to think quickly all the time.

ESP04 There is obviously a thought process behind it, but sometimes I go ok that's not right and even if I don't know what it is I just know its not right and I kind of work in those two ways you're right you're already making decisions as you are talking and assessing and things.

ESP01 I find that process actually starts on paper cos if you think about it you read a referral you're already starting to make decisions about (ESP04 differentials) yes, what, where is this person going to end up (ESP04 yes). What's the likelihood [] so when they come in actually you've already got you know, actually in my mind some diagnoses in mind so that you're questioning becomes quite focused and closed so you will almost ask things for affirmation that yes that's...so you're almost forward reasoning.

ESP09 I think the key thing to this job is just er the degree of complexity of patients we see and us just being able to assimilate that information.

ESP09 Academically its related to experience and seeing similar situations, similar things under the same situations and that's why your recognising it and if you don't have that you can't [] patients who clearly have a box presentation but have a few symptoms that don't fit so you almost learn to downplay symptoms than up play them to make the best decisions as well [] I found that very overwhelming as a clinician (ESP06 yeah) in terms of hang on I think its this but their describing this and then they're going (ESP08 yeah) on that tangent and you know that's very

overwhelming to be able to sort of package it into a constrictive framework but er I think you do develop that ability (ESP08 yeah) to say ok right that's a different thing.

ESP07 Critical analysis of all the pieces of information (ESP09 yeah) that are given.

**ESP09** and a lot of that is sub-conscious, metacognition.

With this recognition that ESP work lies on the advanced edge of AHP clinical practice, there is reflection amongst the clinicians that they understand and come to accept this new level of work and responsibility. Acceptance is necessary for some ESPs to enable them to operate effectively and not let the feelings and stress of that increased responsibility cloud their practice or negatively impact on their ability to make decisions.

ESP09 Cos you have to push those boundaries cos that's a responsibility we have and er it took a long time for me to make that decision [] we are going further down that expert continuum, you become more aware of situations and appropriateness of interventions [] I just think its you know...a massive...that question to me has been a massive journey to have confidence in my decisions but I think its quite an individual question as some people could be very confident you know it depends how you're made up doesn't it you know. Every decision I make is wrong till proven otherwise and that's always the way I have been and er but I can understand its very different for other people.

ESP06 You get more confidence the more experienced you are.

All the ESP participants felt a major role of theirs was in the diagnostic element of practice and clarifying what the patient was presenting with so decisions could be made regarding any future management based on a sound understanding of their underlying symptoms. Providing a diagnosis can also be seen as a specific intervention in itself.

ESP05 I guess if you are in physio the you're mindset is to try and rehabilitate them but if you see them as an ESP you still want to rehabilitate them but you need to make a decision first.

ESP03 I think that I seeing them in an ESP role because it is...you are trying to get to the bottom of the diagnosis.

ESP04 So basically we are focused upon diagnosis and management in terms of which management arm to send them down but the intricacies of what that management is doesn't really become part of our role now.

ESP02 They are often very grateful because their GP has not been able to fully confirm a diagnosis and know where to go.

**ESP06** I think you are responsible for a diagnostic element to patient care.

ESP08 You've got to be happy with your diagnosis and happy with what is actually wrong with them.

ESP09 Its people we see, its just giving them er advice and education on where they are now with a given pathology, that they may not have had a diagnosis previously, you know what I mean (nods of agreement from the group) and that can be the treatment.

Despite all the pressure, enhanced thought processes and responsibility that is felt by the ESPs there is evidence from some participants that they see the role as ultimately satisfying.

**ESPOI** Quite a unique place to be and quite an interesting place to be.

**ESP03** As five said it gives you that job satisfaction.

### **6.2.2** Theme 2. Clinical governance

As ESP staff work at the boundaries of AHP practice, their awareness of governance frameworks is extremely important. They need to ensure they have the competence to operate at the advanced levels of practice demanded by their roles. Throughout the ESP interviews it was reassuringly apparent that the ESP staff involved in the study have awareness of their own scope of practice and was particularly noted with complex presentations and with the surgical listing process.

ESP04 I think another lesson is that you don't have to list. I list when I'm really really confident and if I'm not I won't or I'll ask a question and its knowing when to ask isn't it? [] we created listing pathways and criterias with them and as long as we work within those boundaries they are happy.

ESP07 From that side of things cos more simpler and easier patients to make decisions on that's perfectly within our scope of practice to do so. With more complex and difficult patients we need to take them as far as we can and er ask our colleagues for further information and evaluation.

ESP08 Yes.

ESP07 You don't ultimately have to reach the decision making point with every patient that we see.

ESP clinicians value the support networks that they have available and have fostered, both within their own teams and support from medical colleagues in relevant specialties to provide peer support for practice decisions and development of skills and experience to enable them to fulfill their ESP roles. With team peers this goes beyond clinical knowledge and skills and also encompasses the ability to "offload" when a difficult case has been managed. It is a way of sharing their experiences across the team and reducing stresses associated with their work.

ESP02 I think its discussing with other individuals that helps and offloading a little bit. Its maybe you have made a decision about a patient and seen a really complex case and had to deal with a cauda equina or cancer or something nasty that you have had to deal with and actually sharing those experiences and chatting with other ESPs actually just helps, it helps you offload that burden and sometimes you feel rubbish about it and yeah discussing it, if you have a difficult patient discussing it with other people or contacting the surgeons and its get...we have those links now and use them.

ESP04 I think you get better at talking and reflecting after. I think you don't have an issue with saying well maybe I should have done this or could have done this differently or talking to your colleagues about what the other options were that just helps you offload a little bit doesn't it?

(murmours of yes from the group)

I think you reason to begin with but then reflect after. I think it helps you to learn, it does help you to calm down a little after if you have dealt with something a little bit stressful for any reason.

ESP07 I think some of our confidence comes from working in a team and working with our peers. So although we sometimes make our decisions independently we are making the same decisions as other practitioners at the same level as us who are making independently and we do case discussion and we get feedback from consultants we work with about patients we may have managed and that improves your confidence and your ability to make those decisions independently within a particular remit.

ESP06 In any particular cases where you're lacking confidence there is a support network, not only your peers so consultants, radiographers and things around.

ESP07 We do some peer reviews and you see that when you go with colleagues to look at them with patients.

Support from medical colleagues outside the ESP team is very important to the clinicians as this provides a higher, more expert level of governance to ESP practice which aids knowledge, reassures over diagnoses and decisions that are taken, but also provides a feeling of protection for some ESP staff. Protection comes from close ties with medical colleagues and provides a safety net when they are dealing with cases that create decision making dilemmas.

ESP07 We always have the option to refer on for an added, more experienced orthopaedic opinion [] so we are fairly well protected [] with more complex and difficult patients we need to take them as far as we can and er ask our colleagues for further information and evaluation.

ESP08 Yes

ESP09 Yes

In this next extract ESP01 considers changes to their role over time and the impact this has on how they see their role and the governance implications to them when clinical decisions and responsibility fall more directly to them as an individual clinician. But they still recognise support that exists to assist their practice and the fact that those support networks are an important escalation route of the service they work in.

- ESPOI Its one thing, to go back to my first extended clinical role, its one thing to be sat in a clinic with an orthopaedic consultant [] Its an entirely different thing to be sat on your own without that sort of support and making those decisions autonomously.
- ESP01 I'm still going to take that case to an MDT cos I've identified that there is a problem there and its probably beyond my scope to be able to say definitively with my level of knowledge.

#### 6.2.2.1 Risk

Within the theme of clinical governance, aspects of risk loom large in the consciousness of many of the ESPs, as they more deeply consider their practice. Risk impacts upon how they operate and how they consider clinical information and reasoning in the consideration of decisions by themselves, or alongside the patients they see. There were examples of the personal journeys some ESPs have taken in understanding risk in relation to their role and the acceptance of what that means, which allows them to now operate more freely.

- ESPOI In my head the risks were probably worse than they are you know I didn't you know really understand the actual amount of risk [] I now understand the risks a lot more and the medical context of risk a lot more and would say a lot more comfortable making those decisions.
- ESP05 You can develop pathways and as long as you follow those pathways and reach some conclusion directed by those...the development of those over the years has made things easier to deal with in terms of risk management [] You can minimise risk but you can't eliminate it.
- ESP06 In the beginning you make a decision er for whatever reasons you've come to to make that decision and there is always that element of risk with me that I may have made a wrong decision then the right thing happened so you've got the positive feedback and the outcome that everybody wanted so you feel confident making the next decision so there's that, those building blocks, that support network that reassures that so er your anxiety about risk is because you think certain things are going to happen or...but they don't happen.
- ESP09 You've got to have an awareness of risk and risk assessment in multiple contexts, er I think just talking about ESP work in general then you really just need to have a good sense of self governance.

ESP07 I think, when you think, risk to me then I'm thinking about the fact that we have taken more risk on in this role because ultimately some of the bigger decisions are with us.

ESP09 Yeah yeah and I think over time especially in the last 4 years I've taken on more risk [] cos you have to push those boundaries cos that's a responsibility we have and er it took a long time for me to make that decision [] Someone's got to make that decision and if I know deep down its the right thing to do then I've taken on more risk to be able to do that you know.

**ESP07** I don't think we are risk averse but we take risk on safely.

The ESPs interviewed were involved in directly listing patients for orthopaedic surgical procedures and this area of their practice was explored more specifically, both from a decision making perspective and in relation to the risks that this entailed.

It was interesting to find that perceptions of risk changed over time with certain ESP staff and that the direct surgical listing management option was not considered to be of specifically high risk, as these decisions were taken on more specific black and white presentations, or criteria were in place within clinical pathways. The ESP staff possessed clear lines of demarcation between patient's suitability for direct listing and those that fell outside those criteria and would not be considered suitable and these decisions came across in some ways as more straightforward.

ESP08 I find sometimes that's an easier decision to make cos its only something I would do within my remit so its got to be quite straightforward for me to list [] If I had any doubts I wouldn't list. So that's how I see it.

ESP09 I think personally I know my limitations so so listing does becomes quite a straightforward process as I'd only list what I see as black and white.

ESP04 I list when I'm really really confident and if I'm not I won't.

We see below one of the participants who has less clinical experience as an ESP, recognising that their ability to offer direct surgical listing is limited at their

stage of role development. Because of this they actively pass that responsibility (and risk) on to other clinicians within the pathway of care.

ESP06 I almost don't direct list. There are one or two cases where I felt I was happy to, but they are few and far between as I just feel less experienced.

Some of the ESPs consider the impact their decisions may have on the orthopaedic surgeons taking over the patient's management. The ESPs understand the surgeons would have had no contact with the patient until the day of surgery and, therefore, focus on making sure their decisions are correct in the eyes of the surgeons. The ESPs are conscious of the confidence and trust the surgeons have placed in them to make those decisions and do not want to affect that position.

ESP04 If this patient turns up on the surgeon's theatre list at 9 o clock on a Monday morning then are they happy, and if for a second I think hmmm no then I don't list them and if I don't have any problem at all then I list.

Where risk was seen as a clear issue by the ESPs was more in terms of radiology, and more specifically the interpretation of plain film x-rays within their clinics. This was felt by many of the ESPs to be an area of heightened risk as their skill set in this area was a developing one. Even though support mechanisms were in place in the form of radiology MDT meetings and access to consultants, the initial interpretation had to happen at the time of their clinic. There was also a feeling that even though this access to second opinion or interpretation was available it relied on the ESP to know which radiographs needed this additional level of scrutiny. If the ESPs are unaware or do not recognise there is an issue this would not necessarily be picked up. This point is illustrated well in the following extract between two of the ESPs who had quite strong feelings about this, as you can see in the way they interact and speak

over each other at times. The strength of their feelings on the advanced competencies required to undertake radiographic interpretations may be a reflection of these participants relatively shorter experience in an ESP role.

ESP01	I think the other big area of risk is in terms of the interpretation of plain film x-rays [] There is an inherent risk with that as its not a traditional part of an MSK physios role to be a primary interpreter of plain film imaging. erm I think, I perceive this as a potential area of risk within practice.
ESP04	It is, it is.
ESP01	and its how you mitigate that risk that is important. We've got our MDT meeting which is led by some of the MSK radiologists so if we have x-rays that we are unsure about or not confident in our interpretation
ESP04	(ESPO4 comes in over ESPO1) That relies on you though doesn't it, in recognising that there is something.
ESP01	(ESPOI comes in over ESPO4) It's knowing what you don't know.
ESP04	Recognising something that you're not happy with. So you still have to have a baseline of what is normal and acceptable to you and that isI feel much more comfortable with it now but at first its a little bitits really daunting.

Returning to other aspects of direct listing for surgery, this was considered as a heavier responsibility in terms of the potential management options open to the ESPs. The ESPs recognise the trust that is conferred by the surgeons on themselves and when they consider if they would confer that trust if the situation was reversed they are not sure they could.

ESP04 It's quite a responsibility (direct listing).

ESP04 Maybe its just experience as well in that you list somebody and that patient goes onto have surgery you listed for and have a good outcome and the surgeons are not shy at telling you when there is an issue [] They put an awful lot of trust in us you know we see a patient, they have never seen the patient before and that patient rocks up on a theatre list and its the first time they have met them and if I was to do that, you know its it's, I don't think necessarily there's many...if I was a surgeon would I let some random (laugh) physio or podiatrist list this patient for me?...I don't know if I would.

There is importance seen in building personal relationships with the surgeons, so they can develop a confidence in the ESP who is placing patients directly on their waiting lists. Time is required to develop this relationship, but it is an important process underpinning the ESPs role and less experienced staff understand they need to foster those relationships to then be able to take on those tasks.

ESP01	It comes down to personal relationships doesn't it.
ESP04	It does yes you've got to build that rapport.
ESP01	You just have to spend a long time cultivating a relationship with someoneyou have to understand the individual's pattern of working and it takes time to cultivate that.

ESP06 Not having the relationships with the consultants that I think you need er personally I feel that chain needs to be really sorted before I would want to be direct listing.

An interesting point was raised that all management decisions have implications and it is not just the most advanced process the ESPs are involved in such as direct listing. The ESPs are considering the implications of all the decisions they are involved in, in just as much scrutiny, to make sure they are relevant and correct. This illustrates the ESPs desire to operate with high levels of professionalism and clinical judgment, but may well also place higher levels of stress on the ESPs.

ESP07 I have a fairly high conscience for every decision I make er referring a patient onto receive physiotherapy with a neck or spinal problem gives me an equal level of stress as listing somebody for surgery because I'm making sure I've made the right decision by double checking before I don't see that patient again.
 ESP06 The question is not have we direct listed, the question is have we managed that patient appropriately.
 ESP07 Yeah. There's just as much to get wrong with the person who isn't having surgery as the one who is so I don't think the surgical or non surgical decision, that either is any easier.

Alongside aspects of risk come medico-legal implications of practice. These are linked to clinical note keeping, gaining consent, safe practice and an understanding of when to seek assistance. ESP staff are conscious of these underlying issues throughout the way they practice, illustrated in various ways, either overtly considering the medico legal content of their work:

- ESP07 I'm thinking about the fact that we have taken more risk on in this role because ultimately some of the bigger decisions are with us, not with other people. So that's the medico-legal risk but also the risk of getting it wrong for the patient.
- ESP07 Really making sure I was complying with the medico-legal side of making sure patients understand what they are letting themselves in for, that consent process.
- ESP01 I now understand the risks a lot more and the medical context of risk a lot more and would say a lot more comfortable making those decisions.

Or an implied awareness of this:

- ESP03 You think right we need another opinion now so it's then packing the patient off elsewhere.
- ESP03 I don't push myself to make a decision at that first consultation. I don't feel comfortable with it so if I feel I need another opinion on an x-ray and discuss with one of the surgeons to see if surgery really is one of the feasible options [] I'd rather do that than make the wrong decision.
- ESP04 Its really interesting when you think back, not about the panic (laughs) but the kind of feeling of well I've got to dictate this letter now and this is part of this patient's medical record and I'm making a judgment on what this is.
- ESP04 I think sometimes its good to cover yourself in that risk we are not medics.
- ESP08 I wouldn't take on anything I had any doubts about.

Here a point is raised by two ESPs about accepting that risk but within a safe framework of practice and awareness of that.

ESP09	Cos you have to push those boundaries cos that's a responsibility we have and er it took a long time for me to make that decision.
ESP07	Yes that's a good point because I've always had that opinion that well if I don't do it somebody has to do it so I may as well do it if I can do it safely.

#### 6.2.3 Theme 3. ESP and patient communication and relationship

The importance of building a relationship through effective communication was seen and three staff discussed this in terms of the ability to gain information. It is seen as a way of developing a relationship with the patient and, therefore, aids clinical information gathering to inform and support the process of decision making.

ESP02 I think their role is foremost. I think we should be helping them to make their decisions on how they should manage their problems.

Differences are recognised here from previous clinical roles the ESPs have held, partly due to time constraints and the speed of needing to build a rapport.

Contact between ESPs and patients, tends to be short lived over one or two clinic appointments rather than across multiple contacts where time exists to gradually develop a therapeutic relationship.

ESP02 Better at questioning whereas, and its more a, briefer, you ask the right questions because you know you need the answers for those to be able to manage those patients whereas in physio I think you maybe let them go off on a tangent whereas now you like great...we get better at streamlining the patient to where we need to be and asking the right questions.

The quote from ESP02 suggests instances where the communication style is driven more from the ESP, to get to a point they feel they need to reach in order to make decisions. There is a potential bias toward ESP led consultation and communication processes, which may lead into more directive or paternalistic styles of consultation and decision making, as can be seen in the extract below.

ESPO1 So when they come in actually you've already got you know, actually in my mind some diagnoses in mind so that you're questioning becomes quite focused and closed so you will almost ask things for affirmation that yes that's...so you're almost forward reasoning.

Therefore, in order to make a decision communication is driven in a way that gains the narrative from the patient in, what some ESPs feel, is the most efficient manner.

But the relationship with the patient is key to supporting clinical decisions and discussions and formulating an outcome. Effective communication facilitates this process by allowing the patient to contribute their account of what they are experiencing. A supportive clinician and environment encourages this and it is clear other ESPs approach patient consultations in a different manner.

ESP08 You've got to be approachable so they are going to tell you...but not too informal that they don't tell you anything else.

ESP06 You've got to try to facilitate, sort of getting the information out of them rather than encouraging them down a road you've got to let them, its letting them tell you their story rather than er rather than er fitting their story to your questions if that makes sense...and that's a difficult thing to do really.

Communication is complex and the need for an ESP to be able to flex their communication skills to suit the individual patient is discussed between two ESPs in this extract.

ESP09 I think, I think we've got a responsibility to assimilate a lot of information in usually half an hour with quite complex cases so I think, I think within that framework we often use different skills. For example you might for one patient who can give a very clear history and another patient you might have to lead or guide or take a series of mini histories in terms of understanding their current complaint but then have a look at the historical information the patients presents or visa versa and you often have to reconfigure that for different patients er to get a true narrative of what's going on ...Do you agree with that? (question directed to the group who nod)

ESP08 Yeah I do everyone is so individual.

ESP09 Or if the patient struggles to frame their narrative you often say well tell me about now and then we'll go into...and you have to guide it a lot more [] you know er cos its our responsibility to get the information not the patients to give it and er sometimes you have to be quite direct, so you just have to morph your communication skills.

Communication and relationship building can sometimes be frustrating and if there is difficulty in sustaining the flow of information between the ESP and patient this may negatively effect the consultation. ESPs realise a point is reached, at which decisions can be made appropriately with the right amount of clinical and background information. But if communication is awkward the more difficult decisions maybe harder to discuss.

ESP09 A big contributor to the difficult decisions are the, they often relate to the patient and erm er the, I suppose its not always the patient it could be professional as well can't it but its its themselves, the personality, the way they give and receive information. Straightforward ones are the ones who can give a good history and accept sort of, what is said to them. The difficult ones are the ones that can't. Is that fair enough?

There is a two-way flow of information supporting both parties to achieve their shared aims. The ESP to understand the problems the patient faces and their signs and symptoms and the patient to understand their diagnosis and what appropriate options are available to them in terms of management. This is seen in the extract below during the discussion.

ESP09	I'm a big believer in the sort of kindness and good compassionate care and that they should feel comfortable they should immediately buy into that professional relationship that you are building up and er have the freedom to explore and not feel time pressured those sorts of things.
ESP08	They need to provide the information that we need but at the same time the right information for them sort of thing, if that makes sense.
ESP06	At the same time to understand why you are asking what you are asking.
ESP08	Yeah.
ESP06	Cos sometimes questions we ask can't be directly related to the problem they have so its sort of giving them the confidence and reasons for asking what you're asking and so they are going to volunteer all of the the pertinent information which might not immediately be pertinent to their pathological problem so its as you say, getting that relationship so they can volunteer that information.

The ESP acts as an educator, imparting knowledge to the patient, facilitating their decision making. Even though sometimes the ESP feels time is a pressure, in this instance they see their relatively longer consultations as being able to support this process in a way that is more difficult for other members of the healthcare team to achieve.

ESP07 I spend most of my time explaining why we could do something to somebody or why we should not, because its often that explanation bit that may have been missing in the pathway so far for the patient who comes through so sometimes that's due to lack of time by our medical colleagues and we may be fortunate to have slightly more time or it may just be that er I seem to get better compliance from patients and better understanding when we have more information, or information they understand.

ESP06 So it gives them that element of education and understanding about how the pain is affecting them actually.

Education can become the main focus of treatment and the intervention that people need allowing them to understand and manage their condition at that point in time.

ESP09 Its just giving them er advice and education on where they are now with a given pathology, that they may not have had a diagnosis previously, you know what I mean (nods from the group) and that can be the treatment.

# 6.2.4 Theme 4. Decision making

The decision making process is frequently described as complex from the perspective of the ESP staff. The complexity can be due to the patient's particular presentation or can relate to the making of the decision itself.

ESP07 A complex patient or complex presenter, somebody you may find it more difficult to make a decision on.

ESP06 It depends on so many things, in terms of the patient, what's led up to the point of you meeting them.

ESP09 It seems that the complexity of the case, the medical comorbidities is probably the difficult things, but, but a big contributor to the difficult decisions.

The ESP staff describe differing views and expressions of how decision making occurs in practice. Moving from more directive ESP led approaches to more patient focused and shared approaches. All these approaches are described or touched on by the ESPs through the focus group discussions.

Some ESPs described more paternalistic styles of processing and reaching decisions with their patients through either having formed pre-emptive thoughts or considering the ways they would direct patients to what the ESP feels is the most appropriate care.

ESP01 So when they come in actually you've already got you know, actually in my mind some diagnoses in mind so that you're questioning becomes quite focused and closed so you will almost ask things for affirmation that yes that's...so you're almost forward reasoning.

Descriptions of patient involvement and shared interactions were more common than paternalistic decision making within the ESP cohort. ESP staff see their role as one of providing knowledge, informing patients about their options once a diagnosis has been reached and allowing them to make decisions that are appropriate for their own circumstances. Patients are partners in the process and ultimately need support to decide how they wish to proceed.

- ESP02 I think their role is foremost. I think we should be helping them to make their decisions on how they should manage their problems.
- ESP03 Its about that informed consent and giving them all the information to help them make a final decision.
- ESP05 Knowing all the different options taking their preferences into account.
- ESP07 Coming up with a clinical reason to do something or not to do something. Most of us work through that with the patient. The patient. Put them in a position where they can make a decision.

ESP08 You give them options really, what is available, we work on a spectrum of conserve...not doing anything, conservative to surgical so er more or less you can go through those options, worse case scenario best case scenario and its a mixture of their subjective and how's its impacted on them to how its impacted on them to what's available and what their preconceptions are and then after you've, er, say do you have any idea what you thought was going to happen you er and say what is available and then they often say well they tend to more or less go with...well they often ask what do we think and you have to be very careful not to make it a personal thing to what's available to them really.

The extract above describes how one ESP approaches the decision making process involving the patient, after providing relevant information. But there are occasions where patients may try to defer back to the ESP for their own opinion which the ESP tries to avoid as they feel the decision is more specific to the patient's wishes than their own.

It is interesting that contradictory views can sometimes be seen from the same ESP when describing decision making roles, as can be seen from the two extracts below, the first describing paternal processes and the second quote leaning toward more active patient involvement.

ESP04 We give patients the choice but you are kind of giving people choice who doesn't have all the information and knowledge you have so you have a responsibility to influence if that's the right word, or direct with some degree of education towards what maybe the most appropriate...but at the same time giving them...people can still decide that they don't want to do things can't they and can consent to going ahead with certain things. But we wouldn't be doing a very good job if we didn't direct them.

ESP04 Our role is to make sure they leave knowing options, what is possible, not possible, hopefully taking them to a point where they have made a decision and are happy with where it is going from there on in.

Supporting a shared decision making process can be influenced by a number of clinical service issues surrounding the consultation; for example, waiting lists.

Showing that it is not purely the interaction between the patient and ESP.

ESP08 Management for me is sometimes altered slightly by waiting lists [] so not necessarily follow a pathway in that respect, its kind of working out what symptoms a patients got at the time and making sure their quality of life in the next few months is better rather than waiting longer.

Considering how the role of the patient is viewed by the ESP, shows the difficulty staff may feel in supporting a consultation to be more patient centred or patient driven. Time constraints may be an influence or the fact that a collaborative consultation style is a difficult skill to use, particularly if they are someone who is more likely to default to a paternalistic style, even though they recognise patient involvement is important, a dilemma that is illustrated here:

ESP06 You've got to let them, its letting them tell you their story rather than er rather than er fitting their story to you're questions if that makes sense...and that's a difficult thing to do really.

When considering the practicalities of the actual decision making process from the ESPs viewpoint this has various components attached to it. These vary depending upon the individual practitioner. Some illustrate more pre-emptive practices:

ESP01 I find that process actually starts on paper cos if you think about it you read a referral you're already starting to make decision about (ESP04 differentials) yes, what, where is this person going to end up (ESP04 yes).

Others the responsibility and power to make those decisions:

ESP05 Its more of a responsibility as you kind of take ownership of the patient you can always refer them back to the GP who can then make the decision but as an ESP its within our job to do that.

The ways in which clinical pathways support decision making:

- ESP07 May be what investigations they need, what previous treatment they have had, where we are on the pathway of the patient and where they may need to go to get to the endpoint if the outcomes going to be surgical intervention or non surgical interventions.
- ESP07 In the background some pathways which are evidence based er we have er preferences from the professional we work with so orthopaedic preferences for management of certain conditions.

There are also the personal and individual feelings described by the ESPs which influence their decision making. How they personally feel about assisting patients to decide on the best course of action to take and the levels of responsibility they feel for their involvement in those actions and how those decisions could affect patients in the future.

- ESP09 I think er I think also again probably personally I've sort of come to the point where I have accepted you know we are sort of human in our decision making and er we will make errors and er we try our best for patients and I'm probably a lot more comfortable with that now than I was four years ago and beyond before we started.
- ESP06 Its about personality styles as much as clinical reasoning styles isn't it in a sense its about how comfortable you are as an individual in the decision your making and we all make a decision with the right information behind us and make the best decision we can make with the information we have and er er if that's your first stage then you you're doing the best you can for your patient and er hopefully that's the right attitude to have.

There is also a clinical intuition ESPs exhibit, coming from previous experience and importantly the way they reflect on their own and others practice.

- ESP08 You often know when something's not right and even though you may not be able to put your finger on it you just persevere don't you.
- ESP09 Again you know it comes back to when you don't have that inner mechanism of you know (ESP08 yeah) er its about trying to understand how ESPs tick (ESP08 yes) and er if you don't have that cos your talking about clinical intuition.

Other extracts from the focus group describe ESP's personal journeys of development and acceptance into the roles they hold and decisions they are involved in. In some instances overcoming personal emotions, which could have limited their ability to practice confidently and effectively. There is a strong sense of these feelings in the following text where the ESP has developed professionally and overcome inner barriers. They are now in a position where they feel they have more control of their practice enabling them to personally

progress as an ESP. It becomes clear that for this clinician the journey to become an effective ESP and take on the decision making responsibilities required involved quite powerful underlying emotions and other group participants acknowledge themselves and agree with these descriptions.

ESP09 I just think its you know...a massive...that question to me has been a massive journey to have confidence in my decisions but I think its quite an individual question as some people could be very confident you know it depends how you're made up doesn't it you know. Every decision I make is wrong till proven otherwise and that's always the way I have been and er but I can understand its very different for other people. [] So you know its a very emotionally...you know I've vested a lot in into kind of being able to make decisions and you know trying to make it easier.

I think er I don't know really er I think its just a massive thing in terms of er I think we really go through the mill to get where we are and yes we are very accountable to decision making and I found that very overwhelming as a clinician (ESP06 yeah). In terms of hang on I think its this but they're describing this and then they're going (ESP08 yeah) on that tangent and you know that's very overwhelming to be able to sort of package it into a constructive framework but er I think you do develop that ability (ESP08 yeah) to say ok right that's a different thing so lets you know...

Stress is specifically mentioned in terms of the need to understand what the patient is presenting with and also overcoming new aspects of a role and develop competence to assimilate that knowledge and process into the ESP role. Stress also links to the actual making of clinical decisions and the hope that they are correct. Stress in the role can be successfully managed through peer support and reflection of one's own practice.

ESP06 If you don't ask all those questions and get that...it could open up a lot of worry and stress.

ESP07 Making sure patients understand what they are letting themselves in for that consent process that was something that was unfamiliar and provided a certain amount of stress initially but again when you do a number of cases successfully and you are reviewed by peers and consultants that you work with and they say well I'm happy with you're competency well it becomes a less stressful process and just another part of your job.

ESP07 I have the same level of stress with pretty well every decision that I make so...

ESP04 I think it helps you to learn, it does help you to calm down a little after if you have dealt with something a little bit stressful for any reason.

ESPs describe a process of adjustment to the extended responsibilities involved in the role when transitioning from previous AHP roles. The new clinical focus feels very different and also adds a pressure and stress that has to be managed and overcome.

- ESP01 (very quick to respond) First point is its quite scary. When I first started doing it erm I, I as a physio without that background it was it did weigh on me a lot for a long time erm you know.
- ESP02 It was scary to start with and it has you know it's been a steep learning curve. I've learnt an awful lot in that time because I've had to and erm now I feel a lot more comfortable making those decisions.

Another consideration having clear impact on decision making is the expectations which patients bring with them to a consultation, highlighted as important by all but one of the ESP participants during the focus groups. It was felt essential to recognise what expectations patients bring, in order to have the best chance of successfully managing them. Particularly given patients recognise ESPs have a specialist role within local care pathways.

- ESP08 You can sometimes tell as soon as someone walks in the room oh all they want is a knee replacement or all they want is something, so its er understanding that's that, what they want actually giving them that information to allow them to consider other options as well.
- ESP04 So their agenda and reason for being there is the core of our focus on the appointment really.
- ESP04 I think sometimes the patient's expectations of our appointments are higher, they have greater, because they have usually been elsewhere, we are sometimes the first point of contact after a GP but many of our patients have been elsewhere and they come and have a level of expectation for what we can do and our role is to make sure they leave knowing options, what is possible, not possible, hopefully taking them to a point where they have made a decision and are happy with where it is going from there on in.

When there was a possible miss-match or patients attend with unrealistic expectations when they are compared to the clinical signs and symptoms this could make discussions and decision making much more difficult. This extract of dialogue between three of the ESPs illustrates this dilemma:

ESP06	The ones who have experienced interventions that haven't worked for them or who haven't given them the benefit they want so you've got limited options for them. But then you do have that extra there haven't you. But they're the difficult ones that er are expecting something that hasn't come together.
ESP09	If you've got a patient who demands a knee replacement and you you can tell they are no where near - they are the difficult ones.
ESP08	Yeah yeah, and not wanting to give physio a try.
ESP09	Yeah.
ESP08	Cos its got that expectation.
ESP09	You struggle to meet those expectations sometimes don't you.
ESP08	Yeah.

#### **6.2.5** Theme **5.** External and internal influence

#### 6.2.5.1 External influence

External influences impact upon the ESPs feeling they can effectively undertake their role and the decision making process alongside the patients they see. They work within services closely aligned with secondary care orthopaedics and this influences the clinical pathways that the ESPs have developed. Impact is seen through the ESP's experiences and how they consider these relationships and the surgeon's own preferences when making decisions. It appears that the surgeons can exert quite powerful influence over the ways in which the ESP staff consider their decisions and the wider practice impact that they may have.

It is also clear that where ESPs have links with more than one surgeon this can create difficulty for the ESP due to the individual preferences of each surgeon and needing to take this into account when discussing choices and decisions with patients.

- ESP06 I just feel less experienced and not having the relationships with the consultants that I think you need er personally I feel that chain needs to be really sorted before I would want to be direct listing.
- ESP09 You're decisions are very accountable aren't they?...You know accountable to and very closely aligned to our medical and surgical colleagues.
- ESP04 I tend to take the opinion that they tend to er sometimes give positive feedback, that's good. No feedback is still positive cos they are busy you don't see them all the time but they will tell you if there is an issue [] We created listing pathways and criterias with them and as long as we work within those boundaries they are happy.
- ESPOI It comes down to personal relationships doesn't it.
- ESP01 Some of the listing decisions I would make for Mr [] without blinking, all of a sudden there were some questions about some of the things that we were doing because Mr [] practices were different.
- ESP04 It's exactly the same with foot and ankle there's certain things they will do similarly but certain things they do very very differently.

From a staff perspective orthopaedic surgeons have the greatest influence on ESP practice, but influences from other members of the healthcare team also exist. These are clinical staff the patient has been in contact with along their care pathway, who can have an impact on the ESP's intervention.

- ESP04 I think sometimes they kind of come and feel they have to have something done...
- ESP03 Things can be suggested by their GP before they come as to what maybe offered well maybe offered or what they should take.

It can be seen very clearly below that those external influences can have real impact on how a patient presents to the ESP. Although even with those pre-existing expectations the ESPs are still able to collaboratively work with their

patients to reach decisions that fulfill their real underlying preferences as to how they wish to proceed with their own healthcare.

ESP03 I had a lady a couple of weeks ago who actually had her hospital bag packed as her GP had told her that you need a new knee and erm the relief on her face at the end of the day when I said the decision is entirely yours when we discussed all the options was that she very much wanted to try conservative management initially.

The following extract shows how an ESP has been influenced in their own approach to decision making by one of their immediate peers. Peer discussion has changed how they approach decisions with their own patients and the scope of what they are happy to undertake within their practice and how they balance the perceived risks of practicing in an extended role and remain safe.

ESP09 You (addressing another ESP in the group) said to me about four years ago and its stuck with me since really so if someone's...well if I send this patient on now well someone's got to make that decision and if I know deep down its the right thing to do then I've taken on more risk to be able to do that you know.

**ESP07** I don't think we are risk averse but we take risk on safely.

Another area of external influence on ESP practice comes from the healthcare systems they work within and how commissioning decisions impact upon the decisions they make. The ESPs show awareness of these factors.

ESP09 We have er governance from CCG and commissioners about what we can do with certain conditions and patients and er and that provides some sort of framework.

ESP08 Management for me is sometimes altered slightly by waiting lists for certain things.

There are clear emotional consequences for some staff if care decisions are negatively impacted upon by a breakdown in administration processes. They become very frustrated by what they see as unnecessary delays or complications, getting in the way of efficiently designed clinical pathways, even though these pathways can be part of quite complex systems. ESP staff are

displaying real caring attitudes for their patients given the individual consequences of these process failures.

ESP07 I'm happy to take responsibility for my own practice but we work in a process and where something goes wrong in the process chain and inadvertently affects the patient then my emotions of frustration, verging on anger. [] Most businesses and organisations get them but its different when somebody's treatment is dependent on something happening and when it doesn't happen because of the process.

#### 6.2.5.2 Internal influence

There has been some mention of the emotional experiences that the ESP staff feel when making decisions in their practice. There are further features uncovered during the focus groups which the ESP staff described and these have been collated within the theme of internal influences. A particular point relates to the ESP's perception of the time available to complete a consultation and arrive at a decision. Some of the ESPs see this as more of a negative influence on their practice.

ESP09 Its how much time you have. [] I think, I think we've got a responsibility to assimilate a lot of information, in usually half an hour, with quite complex cases.

ESP06 You need to get to the answer as quick as you can.

ESP08 Yeah to make a decision in half an hour.

Two of the ESPs had a more positive perspective on consultation time. Firstly it was felt the time available allowed patients to be given enough information and knowledge to help them reach decisions. Secondly the time available and case complexity led to an up-skilling of their clinical reasoning. This reasoning improvement was probably a necessity to allow them to practice effectively, but this particular ESP has seen this as a positive outcome personally.

- ESP04 We are in a good position to be able to have a chat sometimes you know educate them, you know give them the information they need and they can take as long as they need to work through that and come up with a decision.
- ESP02 I think your clinical reasoning gets a lot better, you know you have to think quickly all the time when the patient is giving you their subjective history. You are already starting to think what could this be? How am I going to manage it? Is this appropriate for physiotherapy? Do they need surgery? Do they need investigations?...You are making decisions very quickly about those patients.

The pressure of time in consultations links to a feeling ESPs had that they are often under pressure to arrive at decisions and this responsibility lies with them. More so than it did in their previous more traditional AHP clinical roles before they were promoted to ESP positions.

- ESP03 Somebody said earlier that well, you take more ownership of the patient whereas as a physio you can get as far as you can and you think right we need another opinion now so its then packing the patient off elsewhere whereas you've got to you know decide what the best management is.
- ESP05 I guess if you are in physio the, you're mindset is to try and rehabilitate them but if you see them as an ESP you still want to rehabilitate them but you need to make a decision first.
- ESP08 Er yes you've got to do all that in that one visit really cos there's no leading up to it and thinking oh I can ask that next time.

Increased role responsibility resonates with a number of the participants.

- **ESP06** Increased responsibility over patient care. You have more ownership of patients.
- ESP09 I don't know what absolutely separates you know this role from being an experienced clinician but its clearly added stuff we do.
- ESP07 So the buck stops more with us if for things like missed diagnosis or failure to recognise. Whereas in the past we may have had the security of working closer with a medical colleague, who would assume that responsibility.

ESPs feel part of their role involves acting as a gatekeeper to further management. Influencing the patient to consider the most appropriate option for their presenting problems falls within this remit and runs alongside the effective management of patient's expectations.

ESP02 You could say well having a knee replacement is an option however I don't think you are quite ready for that and I think we should try this first what do you think?

The following conversation illustrates ESP staff did not want the personal feeling of coming across to patients as a barrier to further care. There are instances where the decision to refer for a further medical opinion occurs, which may not always be the most suitable decision, but the ESPs recognise that for some patients to move forward this is sometimes necessary.

ESP02 Also coming back to the question if they didn't agree with you after a session and ultimately wanted to go and see a surgeon and wanted to go and have that chat then I don't have a problem with that as well and you refer those on.

ESP04 We don't act as a blockade.

ESP02 No we don't act as a barrier and yes if ultimately they want that...and some patients need to see the consultant to have or make that decision...though not very often. Most patients once you have presented all the information and things are fine but there are the odd ones that no matter what you say that just absolutely no matter what you say would want to go and see the consultant.

ESPO1 Its foolish to try and stand in the way of it because they will get there one way or another so yes you do come across those patients who just want a surgical opinion and that's fine.

ESP02 Yes even if its not the most appropriate thing for them.

Further internal influence on practice comes from the ESPs' previous experience and knowledge and to some extent having confidence in themselves to carry out their role and make the decisions required. Some ESPs exhibit a natural confidence in their practice, whereas for others the development of clinical confidence in an enhanced role comes over time from experience.

ESP02 I think pattern recognition and previous experiences when we were in physio and working in orthopaedics and seeing how patients respond to different things...so yes previous experience.

ESP04 Knowledge and practice and everything it all combines to build your knowledge.

ESP05 It's a learning curve as well. [] I suppose your experience affects the way you manage them and the decisions that you make.

ESP09 I think we have a triage role as well. [] I think that's a skill born out of experience and is usually in the domain of ESP work.

#### 6.3 Chapter summary

ESP focus group analysis and interpretation has yielded five superordinate themes of ESP role development and reasoning, ESP: patient communication; decision making; clinical governance; and, finally, internal and external influences. ESPs see themselves as specialist clinicians with a real focus of their practice on delivering patient diagnoses. They understand the extension of their roles from traditional AHP practice and the increased accountability that comes with this. The ESPs exhibit enhanced reasoning skills that combine medical patho-anatomical knowledge with bio-psychosocial awareness to influence decision making in a more holistic fashion.

ESPs have a clear awareness of their governance responsibilities and the need to acquire support for their advanced practice skills. They develop networks with their peers and medical staff in associated specialties such as orthopaedics and radiology. These networks support ESPs to develop their enhanced skills as they move from a novice to more expert level of ESP practice.

ESPs are conscious of the risks involved in their practice and staff provided interesting insights into their own personal journeys to overcome more negative perceptions of that risk, enabling them to practice with more freedom and more easily fulfill their clinical responsibilities. Interestingly the main area of concern regarding risk involved x-ray interpretation rather than surgical

listing, which had been considered to be the most likely issue when formulating the focus of the research study.

Effective communication is key to develop clinical relationships with patients. On occasions it appears some ESP staff will lead information gathering in a more directive style, but the majority engage with patients in a collaborative fashion. As with the patient findings from chapter 5, ESPs describe decision making as a complex process. Shared decision making is the predominant process across the ESP participants, although there are examples of more paternal decision making occurring. How ESPs engage in decisions links to their feelings around role responsibility and the clinical pathways in which they operate. In this way the ESPs sometimes have to manage their own feelings of anxiety and stress to enable them to function effectively.

These feelings come across as internal influences on the ESP's practice and if they can be managed the ESPs avoid them becoming a barrier to how they practice. Externally, influence comes from services such as orthopaedics and the preferences of the surgeons that the ESPs are linked to. Here this suggests a degree of power can be exerted to influence ESP behaviours. Other external influences arise from clinical peers and also the service in which the ESPs operate.

In the following chapter the superordinate themes from both patient and ESP interview data are combined to illustrate a collective interpretation of the data.

# **Chapter 7**

# **Combined Thematic Data Analysis**

### 7.1 Introduction

The results from the two individual data sets have been combined and analysed across both thematic group sets to understand whether the results illustrate any convergence or divergence when considering the experiences of the patients and ESP staff together. The resultant themes have been represented diagrammatically in the following figure 8.

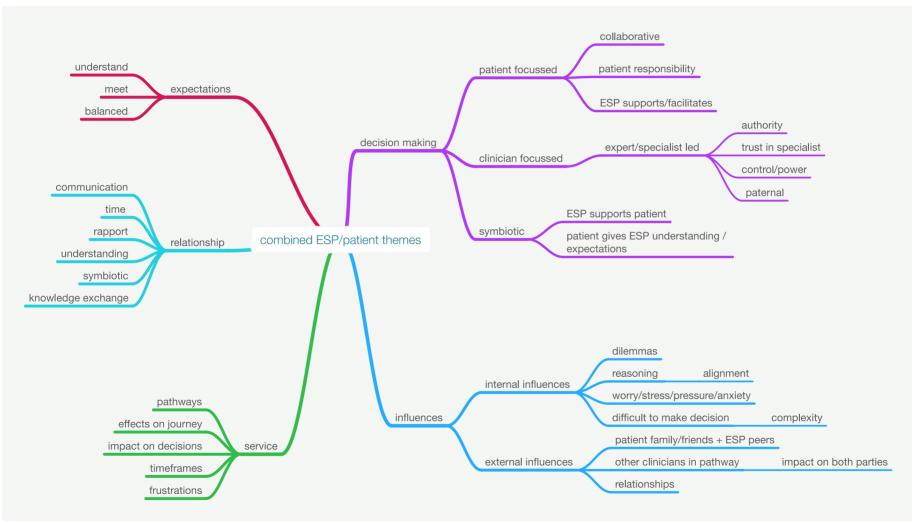


Figure 8. Diagrammatic representation of combined data themes

Figure 8 covers the following themes appearing across both data sets.

Table 10. Combined data superordinate themes

	Combined data superordinate themes
1.	Decision making
2.	Expectations
3.	Internal and external influences
4.	Service processes
5.	Relationships

Each of the themes represent experiences that have emerged from the interviews with each set of participants. They all have importance to the discussions taking place around the core interest of decision making. The themes do not sit in isolation of one another and all have a degree of overlap and interplay, illustrating the complexity of how clinical relationships develop and the different themes which have emerged and how they impact upon the central theme of decision making between the ESPs and their patients.

#### 7.2 Theme 1. Decision making

The experiences or preferences that were shown for decision making during the patient and ESP interviews lie along a continuum that will now be considered as existing in either a patient focused or a clinician focused position.

Patient focused positions were more prevalent and characterised by discussion of collaborative or shared practice, where the ESP and patient were involved together in the process and responsibility for decision making leant towards the patient, with the ESP providing support and facilitation of this process through knowledge and education as part of the assessment and consultation. Both parties were involved together with a shared agenda to allow the patient to

achieve the decision that ultimately the patient felt was best for their presenting condition.

ESP02 You often give them all the different options and discuss all the different options with the patient right through to surgery. You know we'll take, you know we'll look at all the investigations and take everything into account because every patient is different and what they want is very different. [] Sometimes I ask them rather than saying these are the different options, have you had a think about what you want cos often they have had a think before they come.

ESP09 We are very much in, a sort of quite rightly, in the age of shared decision making aren't we? and so I guess from going back to your question the patients responsibility is to contribute to the decision making process based on having all the information presented to them [] and they can form decisions.

ESP04 It's their... your there for them, it's their decision at the end of the day.

ESP04 Well they are core to it aren't they. They have to be on board.

Evidence of two way discussions surrounding management decisions occur through the interview with P08. The importance the patient placed on the information gained from the ESP appears to be key in helping them make a decision.

P08	No she was very thorough it was fine. Like I say I understood more about it when I came away than when I left the surgery to be honest.	
JT	and do you feel you were involved in those discussions about what to do?	
P08	Yes, very much so yes yes and she explained why and we both discussed what it would entail.	

Even though this information exchange was important to them P08 did see the ESP appointment in some ways as a means to an end, of getting to see a surgeon to have something definitive done to their knee to improve their presenting symptoms. Despite the fact discussions took place with the ESP the patient seemed very clear where they wanted to be and the ESP appointment had to

happen to get there. So the participant feels there are clinical pathways and referral hoops they have to jump through as part of the overall process.

JT and how did you feel about being involved in that process and discussing what the options were?

P08 Er. Alright. I'm told that is the procedure to go through and you can't just say well I want to go down to the [] unless I'm prepared to pay of course, and have it sorted out there and then. You have to go through these procedures to get to where you want to be so that was my option and that was the one I took.

Clinician focused decision making involves the ESP taking more of the lead and occurred less frequently. Sometimes it is seen as the clinician's preference and sometimes more the patient's preference. In this data set there does not appear to have been any situations where any conflict occurred between the two parties. Theoretically you may expect if the patient and clinician were approaching decisions from differing positions that conflict was more likely to arise.

The clinician led style is characterised by more paternalistic approaches to decision making, where the emphasis is toward the ESP leading this process. This may develop from the way the ESP approaches the decision making process, or a preference from the patient for the ESP to take more of a lead. In some situations the ESP, being seen by the patient as more of an expert or specialist, causes a shift in the balance of the therapeutic relationship showing the ESP in more of a powerful or authoritative position.

**ESPO1** That was me intervening in her preference but hopefully intervening for the right reasons...

ESP07 Look at the positive findings and use those as indications for, and look at the negative findings and use them as indications against and then balance whereabouts they might be on a particular treatment and consider it for them.

In participant P03's case there are signs of a more directive ESP led decision process in terms of how the treatment options are presented. The management decisions follow along a pathway of care and given the patient is keen for a cure they focused upon the surgical solution, especially given other conservative treatments have failed. The ESP puts the surgical option forward at the centre of the available choices, but this approach suited this patient in the way it was presented.

He gave me the injection and that didn't do any good, went back to physio, went back to him and then he said no it's going to be an operation. [] Well I think yes I think so because I said well won't it just get better? (laughs) Cos things sometimes do and he said no I'm afraid it won't its tendons [] He said its not going to get right unless its operated on so take your choice either live with it or have an operation, he was very honest. [] Well if you like its not right and I'm here and I want to be there (gestured between 2 points). This is the way to do it. He was perfectly clear. I was prepared to have a bit of discomfort if its going to be right which clearly an operation is going to give me erm its going to get better in the end its worth the risk and if I don't do anything its never going to get better so a simple decision. Mmm.

## 7.3 Theme 2. Expectations

Both groups of participants placed an emphasis upon the impact that expectations can bring to the clinical encounter and decision making process. Expectations relate to what the patient brings to the consultation and can be self directed or be influenced by previous management, or have been influenced by engaging with other health care practitioners, family and friends. It is important that these patient expectations are recognised and acknowledged by the ESP. If it is possible to meet these expectations, either fully or in part, there is a greater chance of the patient leaving the consultation with what they see as a satisfactory outcome. The decision then balances the patient's

expectations with the outcome of the clinical assessment and diagnosis and appropriate treatment options which are discussed by the ESP.

ESP staff were very aware of the need to understand the potential impact of patient expectations and factor these into their thinking.

ESP06 You need some perspective on where, you need to understand the patient's perspective on where, on what their expectations are er or what they thought their expectations would be.

ESP01 Some patients will come with an agenda so you will have patients coming who already have an outcome in mind.

All patients involved in this study were satisfied with the outcome of the contacts they had with the ESP staff. The achieving of this, is in part because of the way prior patient expectations were managed by the ESP.

In the extract below the expectation revolves around the patient's need for a scan. They do not feel the management of their symptoms is progressing and as the physiotherapist referred to the ESP for a scan that is very much the outcome they expect. As a scan has been arranged by the ESP the patient is very happy with the outcome. They see this as a way of getting to the root cause of their problem and moving things forwards away from their use of medication.

JT Yes thats fine, er and in terms of that outcome in going for the scan...comfortable with that?

P05 Oh yes. Yes. Thats what I wanted. To move the thing forwards. To put a little meat on the bone. The problem I've got has been going on now over a year and its got gradually and gradually worse and I couldn't see myself taking the painkillers for the rest of my life which... because it dopes you up really...and I wanted to find out exactly what the problem was.

#### 7.4 Theme 3. External and internal influence

There were a number of factors impacting on decision making which have been grouped into the theme of influence. The influence theme is then sub divided into external and internal influences, with the key factors extrapolated from the two sets of data.

For external influences both groups are impacted upon by other healthcare professionals within the care pathway. Either in direct relation to a particular patients journey when they have seen AHPs or medical staff before contact with the ESP, or where previous relationships have now played a part in how staff and patients decide what are the best options for their care.

- ESP07 There are in the background some pathways which are evidence based er we have er preferences from the professional we work with, so orthopaedic preferences for management of certain conditions in a particular way.
- ESP02 Because the Dr has said they (the patient) need it.
- P08 I was telling him I was walking and all of a sudden falling over cos my knee was giving way. He said it should be investigated and he would send me down here for an appointment and that's how I came to be here in the first place.
- He said obviously it's not working for you I'll send you for a scan. So I went away again and some time later I got a letter from this place (ok) which I presumed was to come for a scan because as a lay person I don't know where you do the scans... so I came down here expecting to have a scan.

There are also specific closer relationships for each group of participants; immediate clinical peers for the ESP staff and friends and family for patients. Both participant groups voice how these relationships influence thoughts and feelings toward particular management options and the emphasis they may place on individual outcomes.

- P07 You go home to your family and they say 'well if the doctor says you need it you should really have it done' yes and well yes they haven't really said that, they've said I can have it done if I want to. But my family, my Dad's 88 and he's had a hip replacement and he's going to have another one soon and er he said oh get it done get it done, everyone's saying get it done.
- ESP09 Its really...you said to me about 4 years ago and its stuck with me since really so if someone's...well if I send this patient on now, well someone's got to make that decision and if I know deep down its the right thing to do then I've taken on more risk to be able to do that you know.
- ESP07 We do some peer reviews and you see that when you go with colleagues to look at them with patients. We review each other's letters and forms so you see a pattern for a particular practitioner.

Internal influences relate to individual participant's thoughts and feelings, which can then influence the decisions they may make. There are examples from both parties describing their personal dilemmas with decision making in terms of its complexities and perceived impact. This complexity can make the process of actually making the decision very difficult for some people. ESPs do not always feel confident or at a level of competency to make decisions. Patients do not always want to fully commit to a decision due to the perceived impact that this may have on their function or lifestyle.

- P07 Erm. Well until you go under the knife you've still got the option to pull out haven't you (laughing) er cos there's always a bit...as I've said I'm still not...if if I wasn't moving house I'd still be er I'm still thinking is this the right time for this...its quite hard to decide so yeah its a dilemma.
- ESP06 You get more confidence the more experienced you are cos the right decisions but also the wrong decisions [] its personal confidence either your confident because you have become confident cos you've got to that point and gone through all the steps, or your just confident.

There were experiences of worry, stress, pressure and anxiety linked to decision making and the clinical relationships that lead to that point. These were evident across the patients and the clinical staff to varying degrees.

ESP04 You would expect it as it happens in physio and it happens in podiatry you are going to. I think sometimes the patient's expectations of our appointments are higher.

ESP06 Whereas an ESP, you are that decision maker and you, you're taking that role on.

**ESP09** We're usually the first contact practitioners to evaluate our patients in full, so yes a lot of responsibility so mmm...

So I made that decision really by the end of that consultation erm after talking about the options and physical symptoms (with the ESP)[] The specialists here were very friendly and very approachable so I er didn't feel I was wasting their time. [] (family) They're not the ones left with you know who might be left with not being able to do things that I can do now even if its in pain, a little bit of pain I can do them I don't want to be not to be able to get out of my kayak or not kneel down to do the gardening so yes, yes it does put you in a dilemma.

Examples appeared of where the decision making process and underlying reasoning that takes place to arrive at those decisions looks to involve an alignment between the ESP and patient. This seems to make the outcome more easily achieved and acceptable. There is evidence of ESP staff flexing their consultation style to achieve this aim as they become more accustomed to their patient's views and a more meaningful relationship and rapport develops.

The converse situation also occurs where the patient may end up changing their own stance from the point of referral to the end of the consultation when a decision is mutually agreed.

Patients describe positive feelings with the way decisions are reached or how the ESP communicates during that process, because it is the way of interacting that the patients appreciate. The ESPs align to the patient's outlook, demeanor, character, or life and work experiences.

You must keep going and I agreed with her and it was good to know that I was doing the right thing and she was agreeing with what I was doing. Rather that saying oh you mustn't do that. I felt we were in union with one another...yes. Which is good.

- You never felt uncomfortable, never felt they were not listening, never felt they didn't know what you were talking about. I felt very much at home very comfortable talking to them and explaining what I do and what I what to be able to continue to do with my life. Well not well I am getting a bit older so don't expect to be able to do those things. No. Well this is what we are able to do for you to enable you to continue to be an active person.
- The line of work I was in before was with disabled people er in work, and a lot of the work I did was around trying to figure out what would help them stay in work, what would help overcome the barriers so it was very much...I was used to er having those kind of discussions...what's wrong? What can we do? and a lot of it, it er suits my way of er dealing with things to feel involved but not er he was the expert not me (P06 mm), but it didn't make me feel like I was kind of just anybody sitting there, it was er it felt very much that he was er it was a one to one discussion.
- P06 To be honest it was pretty much as I expected, not that I'm an expert. but as I said I did deal with the same people in my previous job so I'm familiar with carpal tunnel and RSI so I'm, I, so I thought it would be something connected to that, so it did confirm what I thought (JT mm mm) but he did explain it in a way I understood it better.

### 7.5 Theme 4. The clinical relationship

Communication flows both ways, between the patient and the ESP, allowing the development of rapport and a clinical relationship, which fosters trust and the reaching of mutually agreed diagnoses and decisions. The clinical relationship benefits from the knowledge gained from both parties. The degree to which this happens in a consultation is variable, but the patient provides knowledge relating to the impact their condition has upon their life and function, and the ESP brings their clinical expertise (which is recognised by their patients) to educate and provide information. The outcome of the relationship, developed within the consultation, is a productive decision making process, that is shown to be effective, regardless of whether it is led by the patient or the clinician.

The guy obviously knew what he was talking about which was quite reassuring and he erm his manner was very good so it did confirm what I thought (mm mm) but he did explain it in a way I understood it better.

ESP07 I think we all give them a good explanation of why they maybe presenting with their particular problem and then what medical solutions are available to them and the problem is that there's usually more than one and give them as much information about each particular solution to make sure they understand that, to break it down, to explain it so they are in a position to decide which particular treatment pathway they may wish to embark on. So we are facilitators and also providers of information.

Clinical encounters with ESP staff are usually quite short term, potentially only lasting one or two appointments. Due to the low frequency of contact there is a real need to develop a rapport and relationship very quickly to support the decision making process, which is recognised within the ESP cohort studied.

ESP03 Its different to how you have a patient on an ongoing basis as in a physio role you tend to build a bit more of a rapport with them erm they open up to you more and you get more of their ongoing problems so you can sometimes build a better picture by seeing them over a longer period of time.

Time available in consultations is often cited, in both positive and negative ways. The negative comments come from the ESP staff, where there is a feeling of time pressure. The complexity of patient presentations, alongside the available length of a consultation can create a certain degree of stress in the ESP to achieve an outcome, impacting upon the way ESPs communicate with patients to gain the information they require. Conversely patients enjoy the additional time during ESP appointments, particularly in comparison to medical GP and consultant contact. Patients see a positive benefit in enabling further time to discuss their issues, question the ESPs and arrive at potential solutions. This positive patient viewpoint is noted to a lesser degree by the clinical staff.

POI Well she put me at ease as soon as she came along you know and put me at ease and she was a younger person than myself but I felt very much at ease. She looked at me which I think is very important that a person looks at you, listens to you and that certainly was the case at [] yes. You didn't feel rushed and if you had something to say you had time to say it and had time and she listened to

you. It wasn't a question of oh gosh you know time sorry running along next patient should be in you don't ever feel like that. I have been very impressed

P07 They were both very nice and probably more approachable than a consultant (laughs) but that's not a surprise! Yes they were really friendly and really nice. Yeah yeah and I was free to ask any questions and made sure I had time for that

ESP04 It's more focused (nods from the group). I think well maybe you develop skills to constantly bring the patient back to us is actually very relevant. People like to talk but we have a responsibility to focus it directly on the right path maybe we get better at that.

A positive relationship relies on effective communication with listening skills, empathy and understanding (Pinto et al., 2012). These important skills promote a positive experience for the patient and have to be recognised as important by the ESPs, so they actively seek to develop and practice those skills to underpin the consultation. When the ESPs use these skills, their patients acknowledge their importance to the clinical relationship.

P09 Erm. Well I found it very good, he was very good at explaining things and just discussing different things he could do to help me. I thought it was good (mm mm) yes. Cos when you go to the doctor he just has a general erm knowledge of all sorts where they are specialists there.

### 7.6 Theme 5. Service process

All decision making conversations take place within particular clinical service environments. These will be specific to the individual local MSK services in which ESP staff operate. The MSK service from which ESP and patient participants were sampled for this study was a community based operation. There are positive patient experiences seen in the community base of the ESP service and the quick access times.

P01 When you get there down this long road, and gosh are you in the right place? It doesn't feel like a hospital really but I am very...from reception staff to everybody I'm, I've said to my friends...how is your knee? How was it? I said the whole thing

to say I am impressed is probably not the right word but have been very you know pleased with what they have been able to do for me.

You, you, it all, the NHS is sometimes much maligned for waiting times and such but I saw the doctor within a couple of days of making the appointment and referred here and within a couple of weeks it all happened pretty quickly and the outcome I got was pretty much what I expected I think I probably was well I was er the service was better than I expected when a got here.

Service processes can have a more negative impact. These impacts have to be overcome to prevent an undue influence upon management outcomes. Service pathways affect both clinical staff and patients to some degree and were recognised in different ways. The ESPs focus upon clinical pathways and commissioning decisions, whereas patients relate to the things they see as having a direct impact upon their care. These are waiting lists and access to associated specialist services. Some patients voiced dissatisfaction with perceived inefficiencies in service pathways. They were happy with decisions made with the ESP staff, but then frustrated by delays in being able to move forward to the next stages of investigations or treatment.

This led to frustrations being displayed by ESP staff and particular experiences which were vocalised by patients in their interviews. These frustrations came across quite powerfully in the emotions displayed and sometimes the repetition of the same points during a single interview, illustrating how individual's feelings ran high about these issues and how they felt they could have negative impact on care.

P05 This is where it falls down because I don't know what happens next (JT mm mm). Nobody said to me you'll get you're results through the post or the results will go to your GP or the results come back to the guy here who sent me for the scan (JT mm mm) and there was no timeframe on it either. So here I am now five weeks later still no wiser as to where these results are.

ESP08 Yeah. Cos when we first started we were getting used to dictation and so many different processes that your decision making was at the forefront of your mind but it was distracted by all these other things. Whereas you don't really have the distractions now and actually your comfortable and in your zone so you kind of streamline those decisions over time. You kind of...its its like the mistakes that have happened make you discover some of these things.

ESP07 The service has been refined. Initially we had a number of problems and then those problems become solutions and then you get less problems and there is more streamlining and we are a lot less tolerant now all of us. I think individually if we encounter problems that effect what we do and we try to take it back to the source.

ESP09 Yes.

**ESP07** Do a root cause analysis and rectify it as soon as we can.

ESP08 Yeah.

ESP07 Whereas in the old days we may have let a problem fester (ESP09 yes) for a little while such as administrative processes here and I don't think we are tolerant of that anymore.

Considering the extract from the ESPs above it is clear to see the ways in which the service has been developed and how the ESP staff are proactive in their awareness and wish to rectify service related issues which impact upon their patients; for example, administration of patient records. Frustrations may build if problems arise that influence the smooth operation of their clinics, but the ESP staff would be keen to rectify any issues as soon as possible and not let these issues linger. A breakdown in the workings of the service could distract the ESPs from direct patient care and their clinical reasoning and decision making focus, which has the potential to reduce the effectiveness of ESP care.

# 7.7 Chapter summary

Five themes have emerged from the combined interpretation of the patient and ESP data sets. These are: decision making; expectations; internal and external

influences; the clinical relationship; and service processes. All five themes interlink and revolve around the research study's core focus of decision making. The actual practice of decision making occurs with either a patient or clinician focus. Patient focused decisions are the most commonly experienced across both data sets. Expectations are key to both groups, with patients attending appointments carrying expectations and the ESPs needing to recognise they exist and actively incorporating them into management options that are suitable for each individual patient. Positive consultation experiences occur when expectations are well managed.

Internal influences impact on patients and ESPs alike as they are considering decisions. These influences involve internal dilemmas arising from tensions and anxiety directly linked to the decision itself. External influence for both groups comes from other health care professionals and for patients, family and friends influence the decision making process.

Patients and ESPs can be seen to align in decision making styles and this happens either from the start of a consultation or as it is unfolding. The clinical relationship then blossoms and leads to effective outcomes. The information each party imparts is explored and shared to arrive at a mutually agreeable solution, despite there being constraints on time and the relatively short term contact with an ESP.

The final influence on both parties comes from service pathways or the following of referral processes and the wider implications of commissioning stances by funding bodies, which can directly impact upon care decisions.

The preceding three chapters have described the interpretation of the patient and ESP results arising from the IPA study, illustrated with direct quotes from

the interviews throughout the text, grounding the analysis in the collected data.

The following chapter takes the results of both the IPA study and systematic review and discusses the findings in the context of relevant literature.

# **Chapter 8**

#### **Discussion**

#### 8.1 Introduction

Chapter 8 will present the findings of the systematic review and IPA research studies in the context of the current literature and describes where the research findings from this thesis have made additional contributions to the knowledge base. Additional secondary literature searching has been carried out to support discussion of the emergent themes. To synthesise the different elements of the whole research study across the systematic review and IPA study, including the multiple thematic results from the IPA study, the discussion has been structured around key overarching themes. These themes are: decision making (which includes discussion regarding risk and trust); communication and interpersonal skills; expectation; role; governance; and internal and external influences.

### 8.2 Decision making

The findings from the IPA study form a new body of evidence regarding the complexities and influences affecting the decision making process between ESPs and their patients. There has been no previous literature specifically describing the decision making process between these expert clinicians and their patients (Thompson et al., 2017). The systematic review showed a clear gap existing in the current literature regarding ESP practice and the mechanisms and influences occurring around the decision making process. The only papers which have previously alluded to decision making in ESP practice reported patients having greater satisfaction with more involvement in consultation

discussions and a reduction in satisfaction with less involvement (Coyle and Carpenter, 2011), or a feeling of involvement through effective ESP communication (Reeve and May, 2009).

It became apparent through analysing the IPA data themes that decision making processes were complex and had a certain fluidity to their development and implementation. This appeared in the findings from both the patient and clinician sides of the experience and previous studies have commented on this decision making complexity (Harrison and Williams, 2000; Gooberman-Hill et al., 2010). In Harrison and Williams' (2000) study physiotherapy staff were working in out-patient departments and felt they were delivering more patient centred care, but conversely patients were of the impression decisions were more clinically led with the physiotherapist in a more paternalistic role. Even though Harrison and Williams' study (2000) supports the findings around decision making complexity it presents a difference of opinion between the clinicians and patients, over which decision making style is actually occurring. In the IPA study it has been shown that both ESP and patient groups were in agreement that a more shared decision making process was the predominant style. A shared understanding of the decision making experience in a musculoskeletal setting provides a new interpretation of this process. These new findings illustrate that ESP staff consider decision making across a spectrum of styles from a paternalistic, to a shared process. The clinician does not always prefer a fixed position or style, with ESPs actively adjusting their decision making styles during consultations, illustrated in one particular case description, where the ESP moved from a paternal stance to adopting a shared decision making style. The shift in approach appears to have occurred during

the consultation as the ESP became more aware of the patient's expectations and preferences and, therefore, shifted their own focus to match the patient. This is an interesting finding as it suggests the shift of decision making style can come from the ESP, who is influenced by the patient's preferred style of consultation. Contrasting with a previous study into orthopaedic management of patients with knee arthritis illustrating the opposite effect (Gooberman-Hill et al., 2010). Namely that patients seeing the clinician as the expert drove the decision making process in the opposite direction, where the patient deferred their own decision making preferences into line with the clinician. A situation that would not be unusual, given historical relationships between medical staff and their patients (Friedenberg, 2003) and could be interpreted as the patient adopting a more passive role compared to the authoritarian position of the clinician.

One of the most striking findings from the IPA study has been the overall preference amongst the ESP staff for a shared decision making style, providing a key finding of the research as previous literature (Dierckx et al., 2013;Jones et al., 2014;Robinson et al., 2014) has suggested that, within physiotherapy particularly, the predominant decision making process is paternalistic. In a cohort of chronic low back pain patients, a lack of shared decision making has been found (Stenner et al., 2016a;Stenner et al., 2016b), but that some patients may have wanted more involvement, although lacked the knowledge and confidence to do so. A contrasting position was reported by Kidd et al. (2011) where patients wanted to pass the decision making role to the physiotherapist and also through Cooper et al. (2008) where again patients wanted the physiotherapist, as the expert, to make the decisions, although it was mentioned

within this study again that some patients wanted to have more decision making involvement.

Peersman et al. (2013) also appear to describe a more paternalistic relationship. Their study considered the patient's priorities of physiotherapy out-patient care in Belgium. Patients want guidance by an expert and this is likely to influence the consultation process in a paternal direction. Interpretation of their results supports this view, with physiotherapy communication, explanations and a wish to be involved in decisions lower on patient's priorities.

The patients interviewed within the IPA study certainly saw the ESP staff in a specialist or expert role. In a couple of instances this seemed to be a driver for patients having a preference for the 'expert' to lead the decision making process and they expressed their satisfaction in this occurring. These findings would align with previous literature stating not all patients are comfortable with undertaking decisions about their care in a collaborative format and prefer a medical expert to lead the process (De Haes, 2006;Cooper et al., 2008;Kidd et al., 2011).

The demographic of patient participants in this IPA study was of an older cohort with different long-term musculoskeletal conditions; for example, osteoarthritis. Given previous research findings in the literature (Deber et al., 2007;Moreau et al., 2012) around decision making preferences it would not have been a surprise within this demographic if the main decision making preference was for an expert-led paternal style. It has been stated that patients with a lower preference for wanting involvement in SDM tend to be the elderly or less educated (Towle et al., 2006;Deber et al., 2007;Moreau et al., 2012). A more recent literature review of perceived or occurring patient participation in

decision making (Brom et al., 2014) again showed greater preference for passive roles in more elderly patients, although as a general trend, it is more common for patients to want involvement. These findings came from 44 papers included in the review covering patient populations in multiple medical specialties, but none included areas specifically related to musculoskeletal practice.

Drawing a direct comparison to Brom et al. (2014) with this IPA study's results is made with caution, although the results of this IPA study have provided an interesting and contrasting angle to these previous reports, showing a group of older patients with musculoskeletal conditions having a stronger preference for involvement in the decision making process. A possible explanation for this is that the ESP staff also exhibited a stronger preference for shared decision making and, therefore, patients were given, and took, the opportunity to be more involved. Cooper et al. (2008)showed some patients did have an underlying preference for wanting involvement and the IPA study may well be showing that patient participants experience the ESP clinicians providing such an opportunity.

There were three staff in the ESP cohort who described a leaning toward a paternal style of decision making. All ESP participants described having an expert position within their clinical service and this may translate into the perception that role identity places a position of authority and power on the ESP. With this position comes a requirement to make decisions and act as a specialist and authority figure. Alongside the ESP's own role perceptions there is the influence of training and development programmes coming into ESP roles which frequently involve working alongside medical colleagues in orthopedic

settings where a paternalistic decision making style appears most prevalent (O'Neill et al., 2007;Gooberman-Hill et al., 2010). It could be postulated that during role development some ESPs are more likely to align to the paternal decision making style. Although some ESPs do favour a paternal style, this has not been shown as the most preferred position in the results of this IPA research.

The ESP exhibiting the highest preference for paternal decision making was also the clinician that described a procedure of 'forward reasoning' within their practice, involving a process of patient referral data review and formulation of management plans before the patient attended a consultation. In carrying out this process, this clinician's method of developing assessment, diagnosis and management options may cause them to lean more to an expert led decision making process. A similar process of opinion forming before a consultation was noted by orthopaedic clinicians (Gooberman-Hill et al., 2010) where (surgeons or ESPs) considered whether knee replacement surgery was indicated or not in advance of meeting their patients.

How ESPs compare to medical staff in decision making has not been specifically investigated in terms of the preferred style used. Previous evidence for ESP effectiveness has reported more on the perceived effectiveness of the ESPs' practice, in that they have been shown to make diagnostic and management decisions which were comparable to, or agreed by, orthopaedic surgeons (Thompson et al., 2017). Previous research was more focused upon the actual decisions that the ESP made rather than the process behind it and a positive outcome was reported if the decision made by the ESP was in accordance with what the orthopeadic surgeon would have decided. A potential flaw in this is

that it relies upon the surgeon making a decision that is seen as the reference standard and in different circumstances and service profiles this may not necessarily be the case. The focus of previous research appears to have been on proving a degree of effectiveness in ESP practice as these roles took over positions that were previously in the realm of medical practice and to provide evidence that ESP roles should be adopted.

The majority of these studies were carried out within orthopaedic departments with patients seeing an ESP and then a consultant surgeon. Three of the studies compared decisions for patients with hip and knee degeneration in terms of diagnosis and management decisions (Aiken and McColl, 2008; MacKay et al., 2009; Desmeules et al., 2013). They all showed very good levels of agreement but interestingly the ESP recommended a wider array of conservative treatment options in each study; for example, exercises, advice and education, when compared to the surgeon. The ESP, with their physiotherapy background, is providing a more holistic approach to patients' care, and interestingly there was a correspondingly higher satisfaction from the patients in relation to the care they received from this practitioner (Desmeules et al., 2013). MacKay et al. (2009) commented on the fact that this support was provided by the ESP during the same clinical consultation, which could be viewed as added value for the patient, reducing the need for additional appointments, whereas the surgeon if considering this approach would refer the patient on to the rehabilitation department. This could provide a possible explanation between the high satisfaction levels in ESP care and the patient receiving this additional advice and support which was a theme from other physiotherapy satisfaction studies (May, 2001; Hills and Kitchen, 2007a). The ability of ESPs to demonstrate a level

of clinical judgment seen as comparable to orthopaedic surgeons, illustrates their level of professional skills and has been highlighted as an important theme (Reeve and May, 2009), as have medical support mechanisms and training (Dawson and Ghazi, 2004) to provide clinical governance frameworks to ESPs. The evidence that ESP staff can make these decisions effectively, underpins the role ESP staff play in complex situations, supporting patients to make decisions, which can then lead to successful clinical outcomes. As these roles are now far more embedded within health service provision the focus can now expand to explore in greater detail the actual experiences and interactions these clinicians undertake with their patients.

The IPA data themes illustrate complex interactions between ESPs and their patients, and the impact upon this of role perception and development, role identity, confidence, authority and how all of these factors influence preferred decision making styles. Considering these factors within social theories of trust and risk, it is very interesting to see how these themes may have developed and appeared.

#### 8.2.1 Decision making and risk

Risk perception has been briefly mentioned amongst ESP staff working in an orthopaedic environment in relation to surgical listing and the medico-legal side of their practice (Dawson and Ghazi, 2004). This IPA study considerably expands on this idea of risk amongst ESP staff showing they had a clear awareness of the risk involved in their role. The ESP participants of this IPA study also come from a different service setting compared to Dawson and Ghazi's research, being based in a community service which has more 'at arms

length' access to medical input and, therefore, requires the ESP staff to operate in a much more autonomous way when making decisions with their patients. In considering the perception of risk around decision making I had considered that this risk would have manifested itself more around the ability of the ESP staff to direct list for orthopaedic surgical procedures. This theory was born out of the Dawson and Ghazi (2004) paper and my own practitioner experiences and knowledge.

ESP direct surgical listing has only been described in one paper (Parfitt et al., 2012) and was more in relation to whether this was a safe and effective process. It is a part of ESP practice which lies at the very boundaries of AHP advanced practice and for the ESP staff interviewed, forms a competency and skill set which was a very different prospect from previous roles. The ESP staff conceptualised the direct listing process as having greater medico-legal responsibility, with the idea that they could have been more exposed during this process. As practically this route would mean patients would not meet or discuss anything with the surgeon themselves until just before the procedure was due to take place, there was a greater feeling of responsibility in this aspect of practice.

Interestingly the view from a number of the ESP participants was that these surgical direct listing decisions were a more black and white decision in practice. Therefore, in terms of risk they felt that this was in itself a somewhat smaller risk compared to other aspects of their practice. If there was any doubt, the safety net of accessing a medical opinion was present and that was the route they would decide upon and offer to the patient as part of the decision making conversation.

In a departure from what was theorised as part of the researcher practitioner position, it was the initial interpretation of x-rays that was felt to offer higher risk. As with surgical listing, this area of practice is a clear extension of an ESP's previous clinical experience and even though governance and support was available they felt a greater level of risk exposure in relation to this area of their clinical practice.

Considering risk alongside safety, the IPA data suggests the ESP staff are very aware of their patient's safety. Their primary concern when considering management options is to not do anything that would have potentially harmful consequences. This influences the options that are presented to patients during decision making conversations and if any doubt existed in the ESP's reasoning they would be more likely to seek a second opinion from another member of the ESP team or refer for a medical review. The ESPs practice in a safety-conscious nature and understand their own boundaries of competence, which is key to their advanced practice roles (Chartered Society of Physiotherapy, 2016). Some ESPs had become more accepting of the risks involved in their practice and in some instances considered the level of risk to be less than they had initially thought. These staff were able to free themselves from the potentially negative impacts of risk perception and work more effectively within their role. They were able to consider the risks involved in decisions with their patients in a more measured way and this enables them to work more effectively within the service and offer patients a full range of appropriate management options. If perception of risk became too substantial the data suggested there is danger that the ESP's practice would become more constrained and, with that, less efficient and effective.

This new evidence suggests that ESP staff develop a maturity in their practice through self-reflection of past experience coupled with professional development, role development and competence which is able to provide a balance to the pressures of the role, complexity of decisions and the risks involved.

These findings illustrate how ESPs undertake a balancing act within their day to day responsibilities. On the one hand they need to have insight into their practice and ability to think pragmatically about what they do, allowing the ability to perform in their roles effectively without being constrained by negative influences. But on the other hand understanding the context of risk, which is required to be a specialist practitioner, who is able to conceptualise their level of competence in the role and be able to work clinically within their scope of practice. The ESPs then fulfill professional practice obligations for their regulatory body (Health and Care Professions Council, 2016) and individual professions (Chartered Society of Physiotherapy, 2012;Health and Care Professions Council, 2013).

This is illustrated in responses from the ESPs in the IPA focus groups who described how their own feelings of competence and making decisions influences how 'advanced' those decisions are likely to be; for instance, if they are comfortable to offer patients direct surgical listing or would rather refer for a surgeon's opinion first. These findings support a recommendation that ESPs are provided with effective competence development, peer support, medical support and training. As it is then more likely ESP staff will develop these role attributes and become comfortable in their own abilities more swiftly.

In the ESP role there lies a necessary clinical responsibility to manage a patient's care at a more advanced level of practice. Depending upon the clinical pathways in place the ESP could have the option to defer a decision based upon possible risk but over time they become more accepting of, and comfortable with their clinical role and position. Role acceptance allows them to come to terms with making or offering more complex decisions and if that involves accepting a certain amount of managed risk they accept that within a framework of feeling that decision is safe.

Risk awareness and acceptance develops over time, as the ESP becomes a more competent and experienced practitioner. In terms of ESP roles it is felt that developing from a more novice to fully competent practitioner can take around three years (Syme et al., 2013). The ESP alongside this develops an ability to justify those decisions (and risks) to themselves, their peers, medical colleagues and importantly to their patients through the information they are able to provide during decision making conversations.

ESPs are able to reflect on their position as a specialist clinician and understand there is a degree of risk involved in the decision making process that they undertake with their patients. They are trying to provide the best care they can for their patients, but in being human accept that they are not perfect and a certain degree of fallibility exists. Coming to terms with this helps some ESPs to function more effectively and may relate back to the personality traits of ESPs as all staff have particular ways of working, processing data, clinically reasoning, dealing with complexity and an ability to reconsider new information and change tack.

#### 8.2.2 Decision making and trust

Emerging from the themes of the IPA study are interesting considerations of trust, when related to the interaction between patient participants and an ESP. All of the patient participants struggled to describe the nature of the role the ESP held before they attended. Many continued to have this feeling when asked how they felt after the consultations. Some vague descriptions were forthcoming, feeling the ESP may have been similar to a doctor, nurse or physiotherapist, so there was recognition of them being a healthcare professional, but many patients saw the ESP as an expert practitioner.

The interesting point to this finding is the level of trust being placed in the ESP by the patient, despite a lack of understanding for whom they were actually seeing for their health complaint. In addition, all the patient participants had very positive experiences and the ESPs were able to successfully influence peoples' healthcare needs.

Trust is seen as an essential component of a healthcare system (Gilson, 2003;Ozawa and Sripad, 2013) and allows the relationships to function within that system, based upon a premise of trust. The decision that someone may take to convey trust, can then depend upon the degree of risk present in that situation (Meyer and Ward, 2008). These trusting relationships appear to be what is happening through the results of this IPA study and can be interpreted as occurring in three different ways. Firstly, between the ESP and patients within this study, as they undertake the consultation and decision making.

Ozawa and Sripad (2013) reviewed the relationship of trust existing within health systems mainly between professionals and patients, but this did not

include AHP data as the studies focused largely on medical and nursing staff. Secondly, the trust placed in the ESP staff by surgeons to enable them to directly list patients for surgery. Thirdly, a further layer of trust exists in the overall role that ESP staff play within the NHS, as they developed out of a need to alleviate pressures on medical staff and took on extended clinical roles and responsibilities. For this to be successfully implemented there needed to be a level of trust from medical staff that this was possible and trust within the NHS management and policy makers that this was achievable and ESP staff were the right personnel to make this happen in a safe and effective way. These layers of trust illustrate the complex processes and interrelationships that occur within delivery of healthcare (Meyer and Ward 2008). Without these layers of trust existing it would be very difficult to see a situation where ESP roles would have developed and grown in the same way and this would have placed greater pressure on a system to have alternative clinical pathways and service models. Trust in a healthcare system is complex (Meyer and Ward, 2008) as it can lie between individuals in that system or within a wider view of the healthcare system and its place in society as a whole (Calnan and Rowe, 2007). The analysis of themes from this IPA study has shown significant complexity exists, even within one specific interaction within one specialty area of musculoskeletal practice. But even, with this complexity, a level of trust exists to enable positive outcomes to occur. Meyer and Ward (2008) described in their review that if patients trusted medical staff then more positive outcomes were possible. They set out characteristics such as competence, knowledge and skill, with a relationship built around respect and clear communication, which will foster that trust. These are all factors that emerged from this IPA study's

findings in relation to the ESP staff and these same characteristics have been promoted in previous medical literature (Wright et al., 2004).

The way trust is seen to operate within this IPA study illustrates an aspect of wider social trust theories such as those described by Giddens (1990) and Luhmann (1979). Giddens describes trust arising from a person's past experiences and if positive experiences have occurred in a particular environment; for example, health, they are more likely to trust future contacts in the same field. Conversely negative experiences can influence a person's desire to engage with a particular 'system' (Giddens, 1990, p. 91). ESP staff are specialists in their clinical fields, and patients when they attend clinics are expecting a more expert opinion and for the ESP to help them manage their problems. This occurs despite finding patients lack specific knowledge of an ESP's role, aligning to another component of Gidden's work suggesting that in a modern society based around more expertise and complexity (Giddens, 1990, p. 83), people rely on seeking advice from purveyors of expert knowledge. If a person has limited knowledge in an area, their contact with an expert has increased levels of trust attached to it, as the lack of knowledge requires a trusting relationship to bridge the gap, with acceptance of an associated level of risk.

If the ESP (as was seen in this IPA study) comes across to the patient as knowledgeable, professional and caring there is a greater likelihood of trust existing. The patient then considers the choices and recommendations of the ESP more readily and places greater emphasis on this information, rather than deciding to place their trust in their own acquisition of knowledge (Giddens, 1991, p. 140). If the person trusts the ESP they are then more likely to trust the

system (NHS) as a whole, which illustrates Gidden's idea that institutional trust is determined by interpersonal trust (Giddens, 1990, p. 85). If this is correct, as the ESP operates within a complex clinical pathway, other contacts the patient may have following consultation with the ESP may have a better chance of developing from a more positive and trusting basis.

Luhmann (1979) considered a different proposition, suggesting that a person needed to trust the system (NHS) before they could trust individuals representing that system (the ESP) (Meyer et al., 2008). Overall Luhmann sees trust as a wider issue holding society together as a whole. People need to possess an element of trust to enable them to cope with the complex systems that they interact with in a modern society (Luhmann, 1979).

In considering decision making alongside these theories there is the need for trust on both sides of the process if it is to be truly shared and evenly weighted. As shared decision making was the predominant practice found, it suggests that a more collaborative relationship exists between patients and ESPs rather than a bias toward paternal interactions. In this process there needs to be a willingness to listen and take on board each other's views to arrive at a mutually agreeable decision. Uslaner (1999) describes values such as social trust existing within a concept of social capital. For decision making to operate effectively in a shared style an underlying trust is necessary to appreciate each parties' knowledge and views, which can then be considered and taken forward. That combination of patients' values and preferences alongside professional knowledge, when considered on an equal footing then forms the basis for care which is co-produced and person-centred (Realpe and Wallace, 2010).

The positive aspects of trust theory have been considered within the previous section, but there is also a more negative aspect to trust that should be considered in light of the findings of this IPA study. As some of the ESP staff volunteered experiencing feelings of anxiety, worry and the daunting nature of their roles it could be postulated that the ESPs feel a certain amount of pressure from the trust placed in them. Trust comes from multiple sources, through patients, medical colleagues and the health system as a whole. In this situation trust maybe seen as more of a weight (Hawley, 2012) playing on the ESP's minds either consciously or sub-consciously, which could constrain practice and relationships.

Dawson and Ghazi (2004) certainly noted ESPs feeling a certain amount of pressure within their roles and other reported research into risk of burnout in physiotherapy staff consider work pressure and stress as factors which could lead to burnout (Fischer et al., 2013). Conversely physiotherapists having a role with high job satisfaction and satisfaction with aspects of their life outside of the work environment appear to have a reduced burnout risk (Ibikunle et al., 2012;Śliwiński et al., 2014a;Śliwiński et al., 2014b).

It was outside of the scope of this research to consider ESP pressures and burnout risk, but given some of the comments made within the focus groups around pressure, worry and anxiety there exist some risk factors that should be explored in future research.

# 8.3 Communication and interpersonal skills

The vital role communication plays in the interrelationship between the ESP and patient was an important theme arising from both phases of this thesis.

Communication has been shown to be a central process running through all aspects of a patient's management, particularly when considered within a framework of modern patient-centred care (Taylor, 2009). Its importance has been specifically highlighted by patients in musculoskeletal out-patient physiotherapy (Cooper et al., 2008;Peersman et al., 2013). There is limited evidence regarding communication within previous ESP literature, but Reeve and May (2009) do allude to its importance, particularly in the context of an older patient population who felt they benefitted from being given more time with an ESP to discuss and answer questions.

Qualitative data themes arising from the systematic review surrounding interpersonal skills (see section 4.5.3) were interlinked and did not exist in isolation of one another. ESP clinicians are operating in a complex environment, delivering multifaceted interventions and patients need to have a clear understanding of the ESP's role in the care pathway and all of their management options. This is particularly important given the ESPs are delivering what could be viewed as historically medical functions and there is also the distinction from traditional physiotherapy or podiatry care. The ESP needs to provide patients with clarification and knowledge to enable them to understand and 'trust' the ESP has the clinical skills and scope to provide what they require. If ESPs can communicate effectively they can provide this reassurance of their skills, knowledge and competence and this in turn will support the process of trust and decision making.

It is worth noting here that expectations and awareness of ESP roles may be influenced by previous exposure to physiotherapy treatment and through information from referring clinicians, which could influence patient's

expectations of ESP management (Coyle and Carpenter, 2011). This will be discussed further, later in this chapter, within section 8.7 regarding the impact of internal and external influences.

One interpretation, is that if communication is of an effective level, then clinician to patient relationships are likely to be improved and, therefore, the decision making process should be more effective. Communication is seen as a vital component running through all aspects of patient-centred care (Kidd et al., 2011) and allows for variation in patient preference for decision making involvement to be taken into account. The IPA study data showed some patients wanted to be involved and some wished for the ESP to take more of a lead. If this is then supported through effective communication the relationship is more likely to be a positive one (Cooper et al., 2008; Kidd et al., 2011). ESP staff within the IPA study showed the ability to very quickly develop a therapeutic relationship with their patients. Harding et al. (2015) showed ESPs can achieve this in an ED setting in a single visit through effective communication, a caring attitude and provision of relevant information. The IPA study supports this ability for ESPs to quickly foster these relationships with their patients, although expands the evidence into a different health setting and specialty. Patient participants in the IPA study described the ESPs in similar terms of being attentive, an active listener, approachable, empathic and providing knowledge.

By the ESPs displaying these traits which are deemed as being positive in a patient interaction (Gyllensten et al., 1999), they are improving the chances of the overall outcome being positive and certainly this would be borne out in the IPA findings showing all patient participants being satisfied following their

consultations. The fact that ESP staff have significant clinical experience before taking on these advanced roles may well enable them to utilise more advanced communication skills, supporting the development of positive patient relationships and this is illustrated in the study findings.

There is evidence of ESPs taking a leading role in communication to gain information during initial assessment appointments, suggesting a more paternal style of interaction. However, information from the ESP interviews implies the reasons for this process are due to appointment time pressures and the ESPs needing to gather and process potentially complex information efficiently to reach a diagnosis and management plan. If ESPs are focusing upon these objectives this aligns with patient aims of reaching a diagnosis and management plan when seen by an ESP (Reeve and May, 2009). Patients see effective communication and explanations as important facets of an ESP's role (Harding et al., 2015) giving patients confidence in their skills and this was uncovered in the experiences of patients within the IPA study.

What these findings do suggest is a dichotomy between delivering patient choice and shared decision making, alongside the clinician's need to maintain some control over the consultation for practical reasons. The fact that ESPs can be seen to take a lead in communication can be linked to other findings such as the description of forward reasoning which was discussed earlier in the decision making section of the discussion (see section 8.2), where again efficiency in clinical practice can lead to some staff developing processes which assist their consultations. Even though this evidence illustrates ESPs drive some aspects of information gathering, there is nothing in the patient data themes to suggest this was perceived as leading to a negative experience.

Overall the data suggests flexibility in an ESP's practice and process of communicating and interacting with patients. They are able to take account of their patients' preferences and adjust their communication style to match, ensuring care is individualised. Patients felt listened to and that ESPs understood their problems and provided appropriate and effective solutions, which matched their expectations.

ESPs can modify their approach to either a patient led or ESP led communication process depending upon patient preferences. Linking to the awareness and adjustment mentioned in relation to decision making in section 8.2, showing a departure from previous research suggesting patients are more likely to adapt to the expert clinician (Gooberman-Hill et al., 2010), rather than other way around.

Theorising on the interrelationship and communications themes from the IPA data it could be suggested that a type of symbiotic relationship exists between the ESP and their patients. Within the range of symbiotic relationships the ESP and patient themes illustrate a type of mutualism. Mutualism is defined as a close relationship in which both parties achieve benefit across the encounter (Oxford University Press, 2017).

In this example of a mutualistic relationship the patient benefits from the ESP's knowledge, explanations of information, and ability to support diagnosis and a range of management options to be considered. On the other hand the ESP is able to educate and facilitate the patient to make a decision and in doing so gains job satisfaction, experience and feelings of job and self worth, which in turn helps to justify their role and position. This is not to say that there is a clear aim from the clinician to gain from the relationship, but that the themes

emerging from the data suggest both parties gain from the therapeutic encounter in different, but linked ways, providing a reciprocal benefit from the relationship (Leung and Poulin, 2008).

Previous descriptions of symbiosis in healthcare have related to wider systems with suggestions of links in different paradigms of health research being mutually beneficial to policy development (Andersen et al., 1994). The results from the IPA study describe this relationship in a much more direct clinical context.

Within the realms of a mutualistic relationship we may be seeing more altruistic behaviours from the ESP, as part of their role as a health care professional.

Altruistic behaviour is certainly exhibited within the management of healthcare needs as a willingness to assist people in need (Steinberg, 2010) and it is this underlying caring attitude that is illustrated by the experiences arising from the IPA study.

# 8.4 Expectation

Expectations coming into an ESP consultation are seen as a key driver from the patient's perspective. Patients have a values and preferences position which influences the way they approach the consultation and an expectation of where they wish the consultation to go and what outcome they would like this to deliver. If patient expectations are delivered, patients feel more positive over the outcome of the consultation which aligns with previous research findings (Coyle and Carpenter, 2011).

All patients who participated in the IPA study had their expectations met by their contact with an ESP and that inspired delivery of the right outcome and, therefore, the positive experience that they all describe. Uncovering evidence of the significance this patient group placed upon their expectations is important, as the physiotherapy literature regarding patient expectations is limited and offers differing conclusions. There is limited specific evidence regarding patient expectation in the ESP literature, with only Samsson et al. (2016) describing evidence of increased quality of care from a physiotherapy led orthopaedic triage service in Sweden when compared to standard medical care. The patients seeing the physiotherapist in the study by Samsson et al felt a meeting of their expectations occurred and an impact from this was an increased likelihood of the patient following management advice. Coyle and Carpenter (2011) also describe expectation of an ESP service and role affecting the patient experience, but do not discuss the specifics of those expectations. The evidence from the IPA study provides an important and expanded contribution to understanding how patient expectations effect the different components which influence the ESP and patient relationship and more specifically the decision making process. The CSP Quality Assurance Standards (Chartered Society of Physiotherapy, 2012) for physiotherapy practice describe the understanding of patients' expectations as a requirement to deliver effective care. Understanding patient expectations is key in physiotherapy practice (Barron et al., 2007) and identifying these expectations are linked to increased patient satisfaction (May, 2001).

Peersman et al. (2013) studied patient priorities in out patient physiotherapy and concluded that physiotherapists should understand expectations, but there is no detail in terms of how important expectations are from a patient's perspective.

In contrast to this, Kidd et al. (2011) considered perception of patient-centred care from patients in New Zealand physiotherapy practice, but interestingly in the characteristics described there was little mention of specific patient expectations.

The IPA study findings support the importance of the clinician (ESP) taking account of patient preferences and their patients value this happening through the decision making process. A previous systematic review did not find evidence for patients valuing the health professional taking their preferences into account (O'Keeffe et al., 2016). Therefore, the IPA results provide a new perspective on clinician and patient interaction.

The ESP needs to understand and recognise their patients' expectations and then work together with them to incorporate those expectations into their reasoning and decision making strategies, so the patient feels involved and considers their care focused upon their individual problems. Harding et al. (2015) do not specifically discuss patient expectations, although they considered that experiences of care would be more positive for patients if staff (ESPs in ED) understood the things the patient felt were most important to them.

Even though a patient may attend an ESP appointment with a pre-conceived idea of what they require or what their preferred outcome should be, this was seen to be a flexible position. Expectations shifted, either within a single consultation or over a period of time between or after completing ESP care, illustrating expectations are not a fixed preferences position by the patient and can be influenced by many things. Influence may occur through the interaction with the ESP, as knowledge and management options are explored or through

other influences that are seen to act upon the patient, both internally and externally (see section 8.7). Understanding and supporting patients to have realistic expectations over their care is an important role for the ESPs to undertake, particularly when they are able to offer such a wide selection of management options. Having effective communication strategies and an ability to provide knowledge and understanding in a way patients are able to comprehend is vital if the contact between patient and ESP is to be effective and deemed satisfactory by the patient. Complex interplay occurs between the different themes that have emerged from this research and each theme has the ability to affect other components of the relationship and outcome.

## **8.5** Role

Role emerged as a theme throughout the IPA research study, encompassing the position of both the ESP and patient. Findings illustrate the complexities present in the psychological and sociological factors that occur in the way role impacts upon decision making, interpersonal relationships and professional development and identity.

Patients view the ESPs as specialist health care professionals and the IPA data shows they expect them to be in a position to act, make a diagnosis of their presenting complaint and support them to decide on further management. The findings show that patients have, in many cases, already consulted with a variety of practitioners and they understand they have been referred to someone (the ESP) with greater specialist skills and with that comes an expectation of greater authority. It is very interesting to see that all the patient participants in the IPA study voiced a lack of understanding of who the ESP

actually was or what their role entailed. Nevertheless they accepted who they were seeing and all patient experiences with the ESPs were positive and the therapeutic relationships appeared to have been productive. It appeared that there was an inherent trust present in the ESP's role and professional position and no evidence in this study showed any negativity or conflict between patients and the ESPs they consulted.

According to Coyle and Carpenter (2011) patients struggled to develop clear expectations when seeing an ESP as they lacked understanding of what the ESP was going to do within the service studied. The IPA study findings contrast to Coyle and Carpenter's results showing that lack of knowledge and understanding does not appear to lead to any hindrance in the clinical relationship, experience or outcomes. Coyle and Carpenter (2011) undertook their research within a phenomenological methodology exploring patient experience in seeing an ESP and, although there are similarities here in terms of this study, the new findings have increased depth in relation to the ESP role itself indicating patients are still comfortable with undertaking care through a practitioner where their role understanding is negligible, both before and after they have seen the ESP.

A positive relationship was illustrated in the way that many patients and ESPs in this study worked collaboratively to reach decisions about future management plans. Additionally all participants were very satisfied with the ESP's care, reinforcing previous ESP research and was one of the main findings of the systematic review (Thompson et al., 2017) showing consistently high patient satisfaction with ESP care and the ESP's ability to have a positive impact

on patient outcomes (Oldmeadow et al., 2007; Kennedy et al., 2010; Sephton et al., 2010; Desmeules et al., 2013).

This is an interesting finding as ESP roles have been present in the NHS for a considerable time and considered central to improving patient care in more recent government health policy documents (Department of Health (2000a), Department of Health (2006), Department of Health (2011a)), particularly in musculoskeletal services. Interpretation of the IPA data suggests, at least within this cohort, that an awareness gap exists between well established health policy and practitioner roles to deliver that policy and role awareness of patients accessing those services. As the ESP role neither fits a traditional physiotherapy, medical or nursing model of care perhaps patients need to have direct experience of the role to gain greater understanding. However, it is interesting to note here that many of the patient participants of the IPA study still struggled to explain the role even after they had attended appointments. Patients may be exhibiting limited understanding, or there could be a lack of clear role explanation by the ESP. Nursing research has shown that patients can struggle understanding advanced practice roles but still exhibit good levels of satisfaction in care provided (Gagan and Maybee, 2011; Stahlke et al., 2017). Patient participants described ESPs as experts or specialists, although were unsure of their professional background, which was described during the interviews as being possibly medical, physiotherapy or nursing. The patient participants saw the ESPs within a service model that identifies the ESPs at an expert clinical level. There could, therefore, be a pre-existing expectation from the patient that they are seeing a specialist that overcomes any ambiguity that

does exist in the ESP's role and allows the positive experiences, which are seen to transpire.

Patients are placing a natural trust in the health system that they are accessing for their care. We understand, through social trust theories, that people who have trust in a particular system within their society's makeup, are very likely to place trust in representatives of that system (Luhmann, 1979). As patients identify the ESPs as experts within the NHS system, they appear to trust them and this could explain the dichotomy seen in the data showing patients placing trust in someone for their health needs, even though they do not clearly understand the role of that practitioner. As patients describe high levels of satisfaction with ESP roles and appreciate the clinical outcomes, having greater role understanding may not, therefore, change the fact that trust appears strong. An alternative view, that was put forward by Giddens (1990), described trust arising from a person's past experiences and if positive experiences have occurred in a particular environment, for example health, they are more likely to trust future contacts in the same field. Therefore, if patients have engaged with other health practitioners before the ESP and have trust in those practitioners then that transfers to trusting the ESP, who is another practitioner from within the same social system. As patients often present to an ESP after seeing another AHP or GP they may have gained positive expectations of the ESP's role from the discussions with that original clinician, who from the data often describes the ESP as more specialist. This then materialises in the themes developing from the experiences of ESP consultations in this study. Another theoretical possibility is that patients very quickly gain confidence and trust in the ESPs' abilities and skills through the way the ESP presents

themselves and interacts with them. In doing so a positive therapeutic relationship develops and with this comes a feeling or position of trust, which allows the relationship to move forwards and decisions to be discussed and enacted. If patients trust healthcare professionals then more positive processes and outcomes are possible (Meyer and Ward, 2008). To foster this trust the clinician needs to demonstrate attributes such as skill, knowledge and competence within a framework of effective communication and mutual respect (Wright et al., 2004).

Healthcare is a complex social system with many inter-relationships at play. The ESP sits at the centre of a complex web and must manage those relationships to function effectively themselves and provide the care patients require. As well as the impact that role has on the interaction between the ESP and their patients, there is also the impact on relationships with colleagues, particularly medical teams, and with physiotherapists and podiatrists within the same service who are from the same professional background as the ESPs, who now occupy quite a different role. Therefore a much more complex interplay of social relationships and requirements for trust between different parties in and around the patient and ESP consultation itself is present. Trust within a healthcare system is a complex process (Meyer and Ward, 2008) as it can lie between individuals in that system or within a wider view of the healthcare system and its place in society as a whole (Calnan and Rowe, 2007). The study data indicates that the ESPs are aware of the different impacts these relationships can have upon their role.

ESPs view themselves as specialists and the role lies within an advanced practice framework for the physiotherapy profession (Chartered Society of

Physiotherapy, 2016). The interview results showed the main focus of their role is to gain information about the patient to enable a diagnosis to be made, allowing appropriate management choices to be discussed and decisions made on further care. As the ESP is developing personally and professionally within a more advanced practice role they need to become comfortable in and accept the wider remit of that role in order to be able to function effectively. It was clear from the data that some ESPs recognised a clear shift in responsibility and level of clinical practice from their previous roles in becoming an ESP. In some this increased responsibility and perceived risk in practice had created a level of anxiety and stress, which had to be managed and overcome. The perception of risk associated with the ESP role has been very briefly touched upon in the past (Dawson and Ghazi, 2004) but is more clearly articulated within the data from this study.

There were differences in how individual ESPs considered their practice status and illustrations of how they gained valuable support and reassurance from peers in the team. Seeing peers as role models and how they practice effectively, supports some ESPs to advance their own practice. They then become more accepting of the increased level of responsibility and decision making risk that exists in carrying out the ESP role.

Locus of control refers to the personal characteristics people possess to deal with demanding situations (internal control), whereas other people will struggle to adopt coping strategies and display negative emotional responses (external control) (Lefcourt, 1991). Considering the impact of locus of control on professional roles, the IPA study findings may be illustrating where ESPs adopting a more external locus of control are influenced in their professional

behaviors by colleagues as 'powerful others' (Rotter, 1966; Levenson, 1974) and this helps them to adapt to the demands of the ESP role. Gaining confidence from these behaviors then allows a shift from a more external to more internal locus of control which provides a self-confidence in one's own practice to come to the fore, allowing an ESP to cope more successfully with the demands placed on them in this role. An internal locus of control in work environments can improve staff well being and provide a more positive outlook leading to improved job satisfaction and job performance (Ng et al., 2006). A previous study regarding Polish physiotherapists (Wilski et al., 2015) described a link between locus of control and risk of burnout and stress. In their study it appeared that staff who were proactive in seeking actions to deal with work pressure and stress were more able to control burnout risk. The Polish study considered physiotherapists in a health system where they have limited professional autonomy. Conversely the ESP staff in the IPA study have considerable professional autonomy and decision making ability. Despite these differences there are traits of coping strategies that appear to be similar and provide new evidence for how some ESPs are finding strategies to alleviate work stress and role pressure.

These findings should be seen in conjunction with clinicians undertaking a different clinical role from their previous positions and having to, in some ways, revert to a more novice level of practice as they gain clinical confidence and competency and then progress to more proficient expertise within a new specialist role (Syme et al., 2013). Even though the ESP role is seen within a professional practice framework it is interesting to highlight here that one

participant voiced the opinion that it seemed so far removed from their previous role that they could see it existing as a separate role entirely. In a more novice state or when considering breadth of competency there was a greater reliance from the ESPs on peers and other colleagues, particularly medical consultants, to support their role development and training. Support became more important when considering complex decision making situations and again shows an illustration of the positive impact of the ESPs developing relationships and trust with colleagues. With the ESPs working in clinical roles that were once the domain of medical staff they are having to become accustomed to being the main decision makers, whereas previously, even though physiotherapists and podiatrists practice autonomously, they could still defer some definitive decisions or more complex problems to a medical specialist. Deferring decisions is still possible within their current practice but the boundaries of when that should occur have shifted so the responsibility falls to the ESPs more frequently.

The ESP comments illustrated that they need to be seen as competent and proficient in their more advanced practice role. It is important that patients feel this is the case but to justify their roles ESPs need validation from medical colleagues. Previous research has described medical staff concerns with ESP roles (Milligan, 2003). However, this study was carried out a number of years ago and with the significant expansion of these roles across the NHS and internationally it would be interesting to review the relationship that now exists between medics and ESPs. Given the closer working relationships described in this study and the significant trust placed in the ESPs to undertake tasks such as direct surgical listing further research in this area would be beneficial.

This is particularly the case within the cohort of staff involved in this study as their scope of practice included the ability to list patients directly for surgery and ESPs voiced a need to be confident that the surgeons, who were then going to operate on referred patients, had total trust in the ESP's decisions. Trust had to be built and developed over time through close cooperation and working relationships with the surgeons. If an individual ESP felt their relationship and trust was not established enough they would defer practices such as direct listing until they were confident this was the case.

A complex framework exists around the perception of the ESP role that has been born out of the patient and ESP themes. From the patient perspective this does not appear to have any negative impact upon experiences and outcomes. The ESPs own perception of their role has a different bearing upon their clinical practice and relationships with patients and colleagues. Some ESPs possess clarity of role and work with an awareness that does not stifle practice, for others it can create uncertainty and anxiety within themselves and how they feel they are perceived by others. Perception amongst the ESPs does appear to alter over time with the development of experience and competence and becoming more comfortable in the role. However, role perception does have the potential to negatively impact upon practice and needs to be specifically considered during clinical role development and the transition from more conventional clinical practice roles.

#### 8.6 Governance

Multiple findings within the IPA data themes link to principles that have been described as underlying clinical governance (Nicholls et al., 2000). These

include communication, risk management, patient experience and clinical effectiveness. The evidence supporting clinical effectiveness of ESPs has been highlighted in a recent systematic review (Oakley and Shacklady, 2015). As a practitioner researcher, it is not surprising to see governance emerge as a clear theme from the ESP data. Particularly if you consider the role development required to move from a traditional AHP role (physiotherapist or podiatrist in this study) to becoming an advanced practitioner, with all the additional responsibilities and competencies that this entails (Syme et al., 2013). Governance is key to the delivery of modern healthcare, not only in terms of broader AHP roles (Chartered Society of Physiotherapy, 2012), but also more specifically in relation to the advanced practice roles which ESP staff hold (Chartered Society of Physiotherapy, 2016). ESPs develop enhanced skill sets in diagnostics, investigative practice, interpretation of investigation results and delivering a wider selection of management decisions. Clinical skills are extended as more complex patterns and presentations are encountered, which then require more complex reasoning and decision making. By illustrating key components of clinical governance the ESP staff gain trust from the patients they manage. Patient participants displayed this by feeling ESP care was safe, having professional respect and trust in the ESP staff and being comfortable for these clinicians to carry out advanced management plans;

The extent to which governance emerged as a theme may have been influenced by the ESP participant recruitment for the IPA study, which came from primary care MSK services. ESP staff within these services had a broad remit with extensive role responsibility, including direct orthopaedic referral and direct

for example, the direct listing for orthopaedic surgery.

surgical listing, but also initial interpretation of plain film radiography, and a wide-ranging caseload of complex MSK patients.

Governance arose from self-awareness, peer support within the immediate team and a clinical support network surrounding the service in which they operated. The support network included orthopaedic and rheumatology medical staff (who may have been involved in training and skill development of the ESP staff) and radiology medical specialists who supported investigative decision making and interpretation.

Possessing self-awareness and an ability to reflect on their practice to develop competencies and overcome gaps in practice knowledge are key to developing as a clinician, but particularly in an advanced practice role. Showing a propensity for reflective clinical practice illustrates the ESP's ability to learn from their clinical experiences (Thompson and Pascal, 2012) and literature supports the review of practice to develop clinical expertise (Petty et al., 2011). Self-awareness in the ESPs shows they are proactive in considering their own practice and keen to learn and develop, linking to traits suggesting more inclination toward the ESPs illustrating internal locus of control, supporting the discussion in relation to ESP role in section 8.5 of this chapter, where the ESPs may be shifting from an external to internal locus of control as they gain confidence in their competence.

It is important for specialist staff working in roles at the forefront of clinical practice to look to wider networks for development and governance, supporting professional standards of care (Chartered Society of Physiotherapy, 2012; Chartered Society of Physiotherapy, 2016). To this end

clinical governance support does not only come from within the local clinical team but is also provided by wider support networks which are accessed through national clinical networks and also in recent years through accessing specific clinical social networks over the internet.

The governance theme included the perception of 'risk' and where the ESP staff felt this was important or impacted upon their practice. Risk was seen here in relation to how the ESP staff managed more difficult patient presentations, which pushed them to the edge or outside of their professional comfort zones. ESP participants recognised these situations existed and a framework for how they managed the risk element of their roles was discussed. It was shown that with increased experience they could more effectively manage situations of clinical risk in a positive way. ESP roles were fulfilled without risk becoming an overbearing problem which had the potential to suffocate their ability to practice, make decisions and provide the care expected within their remit. By using other members of their immediate team to discuss experiences and gain peer support some ESPs could overcome what were felt to be potentially risky situations. Using peer review to consider scope of practice and develop competencies is encouraged as a reflective practice skill across all AHP staff groups (Cross et al., 2004) and leads to an ability to illustrate competence to oneself and the wider clinical team. An ability to demonstrate competence supports the ESPs in justifying their role and skills across multiple people; themselves, their patients, medical colleagues and peers.

ESP staff are exhibiting traits that one could consider analogous to descriptions of perfectionism in other fields such as sport and performance (Hill et al., 2015). In this way the ESP staff in their advanced roles, at the boundaries of clinical

practice, could be described in terms of high performing members of the allied health professional team. Perfectionism can be viewed in terms of traits which are healthy and unhealthy (Stoeber and Otto, 2006). Through the emerging themes the ESPs show a drive and desire to improve their clinical practice and describe ways in which they prepare for their own 'performances' in patient consultations or during interactions with other members of the healthcare team. To do this they have to develop a confidence in their own abilities and clinical practice, which can then come across as positive (or healthy) indicators in terms of perfectionism and performance. On the other hand there are risks of negative (unhealthy) perfectionist traits affecting performance, such as strain, anxiety and pressure (Hill et al., 2015), which do appear through the themes emerging from the ESP data. Some of the ESPs expressed concerns regarding risks in their practice and the chances of making mistakes in diagnosis and management decisions. There was also the impact of perceived expectations from patients, peers and medical staff. These concerns over making mistakes and weight of expectations are seen as potentially unhealthy traits in the field of sports performance (Stoeber and Otto, 2006) and within the performance of other health professionals; for example, medical staff (Peters and King, 2012). If the ESPs are focusing upon their own performance as a way of living up to perceived expectations from others, this can have an impact upon increased work stress and potential for burnout (Childs and Stoeber, 2012).

## 8.7 Internal and external influence

#### 8.7.1 Internal influence

The theme of internal influences (related to the participants themselves) was seen across both the ESP and patient participant data. The clinical reasoning processes, by which clinicians interpret the information provided by patients and other sources and arrive at individual management decisions are well described (Higgs et al., 2008). Reviewing the data from the IPA study it appears that patients undertake a form of reasoning themselves. Patients have to consider all the information that is presented by the ESP, alongside their own perception of their presenting symptoms and consider what is the best way to proceed. The degree to which they are able to exercise this preference will to some extent be governed by the decision making process which is favoured by the ESP. Research suggests that if a more paternalistic style is adopted then despite the patient's preferences and outcome of their own reasoning, they may not have the balance of involvement allowing them to exercise that preference (Dierckx et al., 2013). If the decision making process is more collaborative then the outcome of the patient's reasoning will play a more significant role in the decision of how to proceed. In this study the balance of decision making was seen to favour a shared approach from both the ESP and patients interviewed. Analysis of the data suggested there were situations where an alignment of thought and decision making processes between the patient and ESP was occurring. This positively influences the experience for some patients and may well provide underlying reasons why in this cohort there were good outcomes, consistent patient positive satisfaction and no decisional conflict.

If there had been situations where study participants had not agreed on how management decisions were reached or those decisions had been conflicting then it is possible that a more negative set of responses would have been seen in those situations. If both parties are not aligned in their thinking then a more negative outcome may ensue, particularly if care is not personalised, if patients are not involved or feel time to undertake discussion is not forthcoming (Harrison and Williams, 2000;Stenner et al., 2016b).

Another factor considered as an internal influence for patients are the dilemmas invoked by making decisions, which can sometimes play heavily on people's minds when considering a range of management options. These are the difficult choices that patients are sometimes required to make and these dilemmas can be seen in some participants interview data. Difficulties in actually making a decision seem to occur because there are conflicting pressures on the patient or a difficulty in weighing up the pros and cons of a decision and the possible impacts this may have. Some patient participants in the IPA study struggled with the knowledge and implications of involvement in decision making, even though that was their preference and sometimes that can be seen to affect a patient's ability to be involved in a shared process (Moreau et al., 2012). It is not just a question of specific symptoms, such as pain but is a more complex issue impacting upon their ability to maintain or improve on a particular lifestyle, activity or occupation. Patients are having to consider more dynamic dilemmas when making choices about their medical wellbeing, particularly when it comes to more significant decisions, such as surgical interventions. Patients then have an internal balancing act of making the right decisions for themselves as an individual with a particular medical problem and also the

perceived or real pressures of what that may lead to; for example, will it give them the improvement they desire or is the risk too great?

One particular participant showed a clear fluctuation between different decisions over whether to proceed with surgery or not. In fact they had agreed to proceed, but when something caused a reason to reverse this decision they were relieved this was the case. They had illustrated real anxiety and worry over whether they were making the right choices even though they described a clear shared decision making process with the ESPs they had seen and were very comfortable with that preference. The anxiety had not manifested itself during the consultations and had developed later as the participant further considered the implications of the surgery on their lifestyle and the risks involved. Further illustrating the complexities of the processes the ESP and patients are grappling with and the choices that can have a real impact on peoples lives. Even though the presenting conditions in an MSK service would not be considered medical emergencies or life/limb threatening. Despite this, medical decisions can still play heavily on people's minds and the evidence from this IPA study suggests patients still want involvement in what are generally classed as more minor medical complaints.

Corresponding internal influences on the ESPs have emerged. The impact of time that is available to the ESPs in clinic appears to be a noticeable influence that some of the ESPs feel and has been noted previously (O'Keeffe et al., 2016) as influencing physiotherapy to patient interactions. Time has an effect in conflicting ways, in some instances this is a negative issue, which can put undue pressure on staff to make decisions and complete all of the tasks required of them during that clinical encounter. But this was not the case with every ESP

and conversely some felt they had more time available to discuss expectations, options and consider a decision. As the predominant process was for shared decision making this finding somewhat contradicts some previous research suggesting that a shared decision making process would take too long and time was a key issue for medical staff (Towle and Godolphin, 1999), although in physiotherapy practice Harrison and Williams (2000) found more time for explanations and discussion was positive, but negativity emerges if consultations are rushed.

The IPA data also shows where ESPs have become more efficient and developed their clinical practice to fulfill their role within their available consultation time. This can be seen in some of the descriptions of pre-clinical preparation and what is described as 'forward reasoning', using the actual face to face patient encounter to complete the picture and enable a diagnosis and management plan to be formulated. However, some of these working practices appear more aligned to decision making processes by clinicians at the paternalistic end of the spectrum.

What is difficult to unravel, is that within this complexity, do particular ESPs have a propensity or preferred style of paternalism and, therefore, adopt a style within the clinic which is more efficient for them? It would be interesting to undertake further research around this finding to see if improvements in time management are supporting that clinician led style, or is it the more practical factors surrounding the running of the clinic and service that have moulded that way of working.

Past experiences play a key part in how ESP staff felt they were able to develop and function. These experiences were linked to clinical practice, which was mainly as ESPs, but also some experiences from previous more junior roles. The ESPs gain learning from both positive and negative experiences, showing a constructive approach to continuing professional development.

Alongside the emotional dilemmas facing the patient participants, positive and negative emotions appeared as influencing factors upon the ESPs and showed a real sense of them considering their own personal experiences in that role during the focus group interviews. The positive emotions convey a great satisfaction with their clinical role and excitement in the scope of their practice, which provides job fulfillment. Whereas more negative views that some of the ESPs conveyed showed they had experienced feelings of being scared, anxiety, worry and self-doubt. This did not appear to be a continuous emotional state and appears to have improved and waned as they have gained confidence and role experience, becoming more comfortable with their responsibilities. But, as these factors surfaced as quite raw emotions in the interviews, it is likely that they could still resurface and strongly influence ESP experiences in new or challenging circumstances.

These negative emotions could be seen to impact on the way the ESPs function, in that in some situations decisions may be made which are more defensive; for example, seeking diagnostic clarification and medical specialty opinions rather than exercising their own scope of practice. But this is part of developing into a professional role, particularly one in which the boundaries of traditional AHP practice are extended. The ESPs are placed in situations which are very different from those they may have experienced in their professional development up to that point. It is how the clinicians deal with these emotions

and have awareness and develop to overcome them, which allows them to flourish and grow into effective, safe and professional staff.

#### 8.7.2 External influence

External influences have a bearing upon how both patients and ESP staff interact and make decisions. The influences on patients fall into two categories, comprising of family and peers and secondly other health care professionals they have encountered in the lead up to seeing the ESP. External influences also emerged as playing an important role with the ESP staff. These come from both peers and medical staff with whom they have professional relationships and also from the impact of how their own clinical services operate. The influence from patient's family or friends can occur as direct encouragement or as a pressure to act and make a decision, predominantly illustrated in patients being encouraged to have some form of 'active' management, which was seen in this cohort as a desire to be referred or listed for a surgical procedure. The driver behind this appears to arise from participant's family members wishing for their relatives to have less pain or be more able to undertake day to day activity. In trying to influence the patient to choose a surgical procedure, relatives or friends see this option as the most definitive, in that it delivers a 'fix'. Whether there is any consideration for risk and surgical complications factoring into these recommendations is beyond the scope of this study. But it would be interesting to understand the thought processes behind this pressure.

There is also a more indirect influence at play, from the same source, whereby patients perceive there is a pressure to have something done from their family

and friends, but it is their own sensitivity to how their condition may impact upon family life or how they are viewed by their family and friends that plays into their decision making process; for instance, how they may appear at a family celebration. There is a suggestion here that some patients worry about how they are perceived by their relatives, in terms of lacking mobility, or being a burden to people when they require a degree of help in social situations. Patient participant's interactions with other health professionals were also an influencing factor. As the ESP is functioning as a specialist within a clinical pathway, it is highly likely that patients would have had contact with another health care professional at some point before seeing the ESP for the same condition. It was apparent that conversations that had taken place with clinicians who were outside of the ESP service had played a role in patient's expectations and wishes. Specific examples that appeared through the interviews showed this could have come a variety of sources; from medical staff in other departments, GPs, or through physiotherapy staff who had treated patients prior to their appointments with ESPs. These interactions then led to the development of prior expectations, which influenced the interaction with the ESP and subsequent decision making. Patient's perception may become skewed, in terms of what they should consider in a shared decision making style of consultation and bias the outcome if they have a firm expectation of how they should proceed. Particularly given that understanding patient expectations can play a key role in the decision making process and outcome (Barron et al., 2007; Stenner et al., 2016b).

Therefore, there is the risk that patients fall under the influence of other parties' clinical preferences and judgements for treatment interventions. Shifting the

thought processes of the patient into focusing upon an intervention that they now feel is going to be of the most benefit to them. This maybe correct in some situations but there is equally the risk that they are now focusing upon an intervention that is not indicated in their presentation and this creates difficulties in decision making and delivering on expectations.

ESPs are also influenced by their relationships with peers and medical colleagues, impacting upon how the ESP has developed as a specialist clinician and how they decide upon which management option maybe best in any given situation. Dilemmas are created in situations where ESPs have working relationships with more than two medical colleagues in the same clinical field, who may have different views on the management of certain conditions. Having knowledge of these conflicting views can influence how the ESP describes different management choices to the patient.

ESP staff within this study received significant governance support and training from medical colleagues (particularly orthopaedic surgeons) due to the design of their service. The preferences of these medics can then be adopted by the ESPs and form part of their clinical reasoning considerations when they diagnose patients with particular conditions. The ESPs feel an increased competence and comfort in making those diagnoses and treatment choices but medical colleague preferences have the potential to influence what management options are discussed with patients and, therefore, the overall direction taken in managing someone's condition.

The other consideration is that the ESPs want to maintain positive working relationships with consultant colleagues, as this is an important dynamic within the service they operate in. They also want the surgeons to see them as

competent ESPs specialists in their own right. By aligning their decisions alongside how medical staff would work in the same situations helps to build confidence in their practice in the eyes of the medical consultants and this helps to support both the ESP as an individual clinician and the way the services in which they work operate and are perceived from external health professionals. The IPA study findings illustrate the impact of the complex relationships which exist within the healthcare system in which the participants operate, and how these combine to influence the decision making process. These relationships revolve around peers and the wider clinical team for ESPs and for patients it is their family, friends and other HCP contacts.

Further external influence on the ESPs arises from the operating characteristics of their employing clinical service; what it is there to provide, how clinical pathways are devised and operate and also the commissioning arrangements under which they work. All of these factor into the ESP's thoughts on management options and what patients can be offered influencing the decision making process.

The IPA study shows that both ESP and patient participants were influenced by the system within which they operate. This includes service pathways and how people move through a service that is designed in a particular way, the management options that these pathways allow and therefore the information that would be given to patients at particular points in their care, which then governs the choices they could potentially make.

Patients can become confused over the reasons for attending appointments and this was the only reason for any negative comments from patients during the interviews and illustrates the impact of their expectations. These expectations

are unlikely to have been aided by the lack of role awareness of the ESP and, therefore, fully understanding the reason for their appointments. For some patient participants this led to repeated mention in the interviews of inefficiencies that existed in the pathway and ways this could be improved, causing frustration over waiting times that existed between different parts of the service pathway. In the cases studied this frustration did not negatively impact upon the ESP interactions, but this could have occurred. The contact with the ESP and positive outcome of these consultations had the impact of overriding these patient frustrations, but the case numbers are small and exist within a specific setting, therefore, it is difficult to predict the effect of these frustrations elsewhere.

Healthcare commissioning decisions impact upon the way ESP staff interact with their patients and collaborate on decision making. Within NHS MSK pathways it is becoming more common to see services being affected by commissioning decisions which place restrictions on certain procedures or criteria that need to be met by patients before proceeding to surgical procedures (British Orthopaedic Association, 2016). In this environment it is more difficult for ESP staff to balance the complexities of decision making with the needs and expectations of patients and the availability of resources. Particularly where ESP staff are seen as the expert clinicians, who now act as gatekeepers to access more interventional management, such as orthopaedic surgery.

ESP staff have an important role to play in assisting patients to manage chronic MSK conditions and help them to make the most clinically appropriate decisions. There is a complex interplay of patient expectation, patient centred

care, decision making, available resources, clinical guidelines and the impact of historical care decisions which are being challenged by new research evidence (National Institute for Health and Care Excellence, 2015; National institute for Health and Care Excellence, 2016). The patient's role in MSK care is also changing, in that they are being encouraged, through public health initiatives, to play a much more active, preventative role rather than as passive recipients of care (Arthritis Research UK, 2014). The remit of MSK services (and ESPs) is widening to deliver improvements in patient's health within a wider public health agenda considering interventions such as weight management, smoking cessation, healthy lifestyles and increased physical activity (Arthritis Research UK, 2014). All of these completing pressures will continue to influence future ESP practice and patient consultations.

## 8.8 Chapter summary

The findings from the systematic review and IPA study have been discussed in the context of six themes; decision making; communication and interpersonal skills; expectations; role; governance; and internal and external influences.

Decision making between MSK ESPs and their patients is complex with a number of influences upon the process. A spectrum of decision making styles, from paternal to shared occur, but the predominant process is one of SDM. ESPs may flex their style of decision making during a consultation in response to patient preferences. Patient participants reported decision making aligned to their preferences and no conflicting practices were uncovered.

ESPs showed a clear understanding of risk and the importance of patient safety in their practice. The main area of risk for ESPs was surrounding x-ray

interpretation, rather than in surgical direct listing. Perceptions of risk in the ESPs has the potential to stifle practice, but colleague support and clinical experience reduce this risk and enable effective clinical practice to take place in a safe advanced practitioner framework.

Patients trust ESPs as clinical experts even though they do not understand the ESP role. Trust is a key aspect of healthcare delivery and was seen to exist at different levels surrounding participant experiences. There is trust between the ESP and patient, between surgeons and ESPs and also between the wider health service and ESPs. Social trust theory (Meyer et al., 2008) is linked to the way patient past experiences and trust in the NHS system allows trust of the ESPs to take place and positively supports the decision making process. Increased trust placed on ESPs can have a negative aspect, leading to anxieties surfacing with the potential for professional burnout.

Communication plays a central role in supporting complex care and rapid development of clinical relationships to allow effective decision making. ESPs exhibit positive skills in empathy, listening, understanding and knowledge transfer. ESPs can flex their communication skills to gain important assessment information and work collaboratively with patients to reach decisions.

Patients attend appointments with a values and preferences position which must be recognised and taken into consideration by the ESP. If patient expectations are acknowledged and achieved then positive experiences are reported and patients are satisfied with the care they receive. If patients have unrealistic expectations it is important for the ESP to possess effective communication skills to help reach a mutually agreeable solution with the patient.

Patients see the ESP as a specialist and even though they lack role understanding this does not affect patient satisfaction and there is a trust exhibited that allows effective decision making to take place. ESPs also see their own role as a specialist and through peer support and experience learn to manage the increased responsibility that this role brings. If the ESP can shift from an external to internal locus of control this will help them develop increased role satisfaction and could protect against professional burnout. ESPs recognise the importance of governance to underpin their advanced practice and support the skills necessary to deliver practice in a complex environment. They seek peer support and wider opportunities for development and training and appreciate practice risks and how experience can allow those risks to be managed. Both positive and negative traits of perfectionism (Stoeber and Otto, 2006) are illustrated by the ESPs.

Both ESPs and patients describe internal and external influences that impact upon the decision making process. Patients illustrate aspects of reasoning to consider the information within a consultation, but can also face dilemmas in making decisions. ESPs are affected in their practice by their perceptions of consultation time and internal emotions, such as anxiety and stress. Externally there is impact on patients from other AHPs, friends and family and on ESPs from peers and colleagues, which can affect decision making. Both groups of participants describe influence from wider health service issues such as commissioning guidelines.

In the final chapter key findings will be highlighted, limitations considered, practice implications discussed and ideas for future research put forward.

# **Chapter 9**

### Conclusion

#### 9.1 Introduction

The aim of this thesis was to explore the decision making process between MSK ESPs and their patients. The research was carried out through a mixed methods systematic review, followed by a qualitative IPA study. The final chapter will highlight the key research findings and illustrate contributions to the existing knowledge base. The findings are linked to the five research objectives, which were to:

- Systematically review the ESP literature to understand how the decision making process of MSK ESPs affects patient's outcomes.
- 2. Explore how MSK ESPs and patients interact during the decision making process.
- 3. Gain understanding of how patients perceive the ESP role
- 4. Explore the factors behind reported high satisfaction with ESP care.
- 5. Analyse how the ability to directly list for orthopaedic surgery is perceived by ESPs and their patients.

Limitations will be considered, linked to the chosen methodology. Implications for practitioner education and clinical practice and the wider healthcare policy landscape will be discussed. Finally, recommendations for ESP practice, education, policy and future research will be presented at the end of the chapter.

## 9.2 Key findings and contribution

The initial research phase focused upon objective one and involved conducting a systematic review, to produce a thorough, methodical appraisal of contemporary ESP literature. Using meta-synthesis provided a novel method of approaching analysis, through combining qualitative and quantitative results. The systematic review established existing ESP literature lacked evidence to describe the decision making process and how ESPs and their patients interacted in consultations, to decide upon the direction of further intervention. The review findings supported diagnostic and management decisions ESPs made, when those decisions were correlated with medical staff. The review also confirmed an improvement in ESP outcome measure reporting and more frequent use of validated measures. The outcomes provide support for the effectiveness of ESP care with MSK patients. The previously reported high satisfaction levels (McClellan et al., 2006;Kersten et al., 2007;Desmeules et al., 2013) continued to be seen.

Objectives two to five were achieved through the IPA study. The study, informed by the systematic review, shows that decision making, occurring between MSK ESPs and their patients is a complex process. ESPs undertake decision making through a spectrum of styles, ranging from paternalistic to shared, with evidence indicating that the preferred style is that of a shared process. The results now provide the field with detailed evidence of the underlying decision making processes occurring in ESP practice. This has been lacking in previous literature and mentioned only briefly in relation to patient satisfaction (Coyle and Carpenter, 2011) and quality (Reeve and May, 2009). The thesis provides

an alternative stance to previously published work on physiotherapy decision making, showing clinicians were more likely to utilise paternal decision making with their patients in both MSK practice (Kidd et al., 2011;Peersman et al., 2013;Stenner et al., 2016a) and in other clinical specialties (Young et al., 2006;Smith et al., 2010). Another key finding with regard to decision making, is that patients and clinical staff appear to engage in a more collaborative experience with mutual understanding of the decision making process. Previous studies have reported a different experience, with one party feeling the process is shared whereas the other considers the process more paternal (Harrison and Williams, 2000).

The findings show ESPs flex their decision making style, dependent upon the patient they are seeing and are able to pick up on cues to align to patient preferences. In doing so, ESPs have shown an ability to acknowledge the importance of these preferences and have developed sufficiently advanced communication skills and an awareness of patient expectations within a consultation to enable a shift in decision making styles to support patient-centred care. This illustrates how contemporary patient-centred communication and interaction can be delivered with positive experiences for both patients and staff and may explain some of the reasons why patients report very positive experiences of ESP care. Given an ESP consultation requires advanced clinical assessment and clinical reasoning processes it is important they are still able to focus upon communication and recognise patient preferences for interactions that facilitate the whole experience. As well as finding overall ESP preference is for shared styles of decision making, the

practice. There are examples of patients and ESP staff preferring a paternalistic approach and in these instances it appears to have been in situations where both parties have been united in a preference for the use of this style.

There are internal and external influences, which play a role in shaping both the ESPs' and patient's experiences of decision making. External influences for ESPs include peers and other clinical staff working in the MSK pathway and the information they provide to patients before an ESP consultation. For the patients, external influences are interactions they have with other clinical staff before seeing an ESP, but also how family members apply real or perceived pressures on them to make decisions. Internal influences are more psychological, causing internal dilemmas for both parties around the making of decisions and what pathway choices to take. These internal influences include feelings of anxiety, stress, worry and risk.

In drawing these themes together it has been theorised that trust and risk impact upon the decision making process. Furthermore there are illustrations of how locus of control and traits of perfectionism in the ESPs can impact upon how the clinicians approach decision making in this area of advanced MSK practice.

ESP staff have shown a clear awareness of the risks involved in their day to day practice and this has expanded on the brief mention of risk within ESP practice in previous literature (Dawson and Ghazi, 2004). Risk has been considered in more depth within this study and the context is situated within a community MSK service rather than orthopaedic setting. A considerable length of time has passed since the Dawson and Ghazi paper was published and in that time marked advances in ESP scope and breadth of clinical practice have occurred.

ESP participants in the IPA study found the risks associated with image interpretation more challenging, compared to the risks related to listing patients for orthopaedic surgical procedures. ESPs mitigated some of the risks they perceived in their practice through supportive networks of peers and medical practitioners, in associated disciplines such as orthopaedics and radiology.

ESPs are clear regarding risk in their clinical practice and the importance of patient safety in decision making. There is the potential that risk perception can stifle the practice of some ESPs, when they are balancing their role responsibilities and patient management options against their perceived risks within those decisions. As ESPs become more experienced and accepting of those risks they can function more effectively in their roles. Objective three focused upon patient perception of the ESP role. A particular dichotomy, that has surfaced in the IPA data, is the struggle patients have to understand or convey what the actual role of the ESP was. A lack of understanding was very evident before patients were seen by an ESP but continued to remain for the majority of patient participants even after an ESP consultation. Despite this, patients see the ESP as a specialist or expert practitioner and are very satisfied with ESP care and how the ESP is able to progress their care. There are implications in this finding for ESP professional practice and how MSK services and individual ESPs ensure their patients are conversant in exactly who they are seeing, their clinical background and role. This is important in terms of clinical governance, patient safety and professional practice guidelines and particularly relevant given the widespread variation in advanced practice role titles reportedly in active use throughout the NHS and

other countries (Thompson et al., 2017). It is interesting to note here that the CSP is actively petitioning for a standardisation of advanced practice role titles through its advanced practice framework (Chartered Society of Physiotherapy, 2016) and the ESP professional network is in the process of recommending the ESP title is changed to Advanced Physiotherapy Practitioner (Extended Scope Practioner Professional Network, 2017). It is hoped that these changes increase patient awareness of these roles but it will take some time for this to disseminate across the NHS and to patients who access MSK services in different localities.

Patients place trust in the ESP quite readily and do not appear to struggle to do this, despite a general lack of understanding over the ESP role. The results illustrate complex layers of trust relationships impacting upon the decision making process. The first is the patient's trust in the ESP to support decision making and their recognition as experts by the patients aids this process. The second trust relationship is between the orthopaedic surgeons and the ESPs, where the surgeons who accept referrals and surgically listed patients from the ESPs trust the decisions that the ESPs make, as well as the ESPs taking support from the surgeons that they are doing the right things which helps them develop their practice roles. Thirdly there is a wider healthcare system trust in the role that the ESPs provide and their ability to perform at this advanced level and deliver the decisions which support the models of care within which they operate.

The findings relate to existing social trust theories (Luhmann, 1979; Giddens, 1990). Here trust is linked to past experience and where positive experiences foster trust in future contacts in the same environment (or social system),

which in this instance is healthcare (Giddens, 1990). The alternative viewpoint is that patients trust the system (NHS) and, therefore, are more willing to trust representatives of that system (Luhmann, 1979). ESP staff develop and support the trust relationship by illustrating their own professional expertise and competency, which patients certainly seem to place clear emphasis on in their consultations.

Trust has a close relationship to risk and in the context of clinical decision making takes on more importance if the risks within those decisions are deemed to be greater, either by the clinician or by the patient. The IPA data suggests relationships function effectively between the ESPs and their patients, and the ESPs and the wider healthcare team. Although more negative connotations can surround the trust placed in the ESPs, illustrated by the ESPs descriptions of feeling anxious or stressed at times, in relation to their extended roles and the level of decision making and trust that comes with the increased responsibility of the role.

Interpreting the results highlights the real risk of professional burnout in ESP staff. Stress and burnout have been mentioned in previous research (Dawson and Ghazi, 2004; Fischer et al., 2013) and given the thesis findings it would be prudent to consider more targeted research into this aspect of advanced practice roles within physiotherapy and the other AHP professions. This has particular relevance given the rapidly changing healthcare environment and the potential for ESPs to be placed under greater pressure due to rising demand in healthcare services or the ways in which commissioning or policy developments may influence the clinical decisions they wish to discuss with their patients.

Results provided further insight into how ESP staff develop within their roles and consider clinical governance. ESPs in their early transition to advanced practice roles are more reluctant to make some decisions that lie at the boundaries of their personal clinical practice. They are more likely to defer these decisions to other clinicians; for example, medical consultants regarding surgery. Results indicated this is linked to how ESPs develop into their new roles and how they acquire associated skills and competences and learn how to manage the associated risks. Through proactive peer support and exposure to adjoining clinical specialties (orthopaedics and radiology), competence and confidence increase and the perceived risks reduce as the ESPs become more trusting of themselves and their clinical position, along with the increased breadth of decision making they are now responsible for.

It was clear that the ESPs interviewed for the IPA study had personal awareness of their scope of practice, clinical governance, patient safety issues and the influence these factors have on their professional practice. The IPA results provide reassuring evidence of professional awareness in the ESPs, which is required where clinicians are transitioning into advanced roles (Syme et al., 2013) involving greater and wider responsibilities for patient care.

Objective four considered reasons for high patient satisfaction in ESP care.

Patient participants in the IPA study were all very satisfied with the care the ESPs provided. There were no negative views expressed, directly related to the ESP and where the small number of negative comments were made this was in relation to more service related issues; for example, misunderstanding of the reason for attending an appointment or waiting times for investigations. Patient satisfaction links to the interaction that takes place during a consultation

involving ESP communication, information exchange and patient involvement.

All patients in the study had their expectations met by the ESP, which has a positive impact upon satisfaction.

The ability of ESP staff to directly list patients for orthopaedic surgery was specifically questioned within the IPA study to explore objective five. It was thought to be an advanced and complex decision making area, illustrating a significant change from traditional AHP practice. Limited literature regarding this area of ESP practice was available, with only one study specifically describing surgical listing (Parfitt et al., 2012). Interestingly, findings showed all patient participants who had been listed for surgery by an ESP were in no way perturbed by this occurring and were very happy for the ESP to discuss and undertake this part of their extended role. This provides the first evidence of patient's accepting this extended non-medical role. Perhaps surprisingly, ESP staff did not see surgical direct listing as a major risk, as they felt in their own practice this was a very delineated decision to make; a clear black and white call. They felt supported in these decisions by clear clinical pathways and medical support from local orthopaedic surgeons. More inexperienced ESP staff were less likely to direct list for surgery until they had built up their clinical competence and importantly had developed effective clinical relationships with the surgeons who were accepting their patients.

In fact the area of practice where the ESPs experienced a feeling of higher associated risk was with the interpretation of plain radiographs. This may be a reflection of the particular service the ESPs were recruited from and how investigations are delivered and reported, but may show the impact of local service development and practices given a lack of national standards for ESP

practice and education. Therefore, radiology image interpretation in ESP practice could be worthy of further research to consider the impact of variations in education frameworks and competency development.

## 9.3 Research methodology impact

The breadth of research methodology used to study ESP practice has been expanded as a result of this thesis. The systematic review, (Thompson et al., 2017) was the first review into ESP practice to undertake a meta-synthesis approach within its data analysis to gain a broader understanding through both qualitative and quantitative literature on ESP care in MSK practice. As well as widening the evidence base for ESP care the results of the review also confirmed gaps in the literature, which led to the design and implementation of the IPA study. IPA, originating in the field of psychology, is gradually gaining exposure in physiotherapy research (Dean et al., 2005; Cassidy et al., 2011; Cruz et al., 2014) but has never previously been adopted to research ESP practice. By gaining a more in-depth analysis of ESP and patient lived experiences of consultation and decision making practices this has expanded the ESP research base into new areas and highlighted opportunities for future study, which are outlined at the end of this chapter. It is hoped that through adopting these new methodologies future AHP researchers will consider these approaches to investigate similar questions. Embracing these methodologies can broaden research horizons in AHP study to facilitate new interpretations of practice and greater understanding of the way clinicians and patients experience the services that are delivered.

## 9.4 Recognition of potential limitations and responses

The research methods used within these studies have been appropriately selected to investigate the research question posed but, as with all research methods, it is recognised that potential limitations are present. As IPA provides an in-depth study of a particular participant group within a specific setting it is difficult to extrapolate the interpretations in a verbatim manner to other MSK settings. Qualitative research is bound to the specific context of the study and it has been argued that results cannot be generalised to further settings (Braun and Clarke, 2013). However, other authors believe the findings of qualitative research can provide an important contribution to the knowledge base in a particular field and have benefits to practitioners in other situations (Sandelowski, 2004; Yardley, 2008). It would not be unrealistic to consider the results from this IPA study in relation to other MSK services and for individuals to make a judgment as to what may be relevant in those settings. For example, the lack of any ESP and patient conflict surrounding decision making in this study may not be borne out in another setting, but the underlying findings concerning the importance of communication, ESP awareness of patient expectations and the alignment of decision making preferences may well minimise conflicts arising and be relevant across clinical settings. Some may argue that the systematic review conclusions are weakened by the fact that a meta-analysis of the quantitative papers is absent. However, the review was conducted using a robust methodology to provide reliable and accurate conclusions. The lack of a meta- analysis merely reflects the methods, data collection and analysis used within the primary studies.

The process of meta-synthesis has been debated for the risk entailed in drawing separate qualitative study findings together and potentially weakening the specific context of individual reports of experiences (Sandelowski et al., 1997). That said, it does allow greater understanding to be gained from a body of qualitative work in a particular field (Thorne et al., 2004). By employing a metasynthesis approach in this research, it was possible to provide new insights into the existing ESP research and identify the research gaps, which led to the IPA study.

In undertaking research involving qualitative methods it is important that evidence supports the rigour by which the research has been conducted and trustworthiness in the methods undertaken (Green and Thorogood, 2009). As described in the methodology chapter, Yardley's framework for qualitative research validity was adopted (Yardley, 2015), which entails four criteria: sensitivity to context; commitment and rigour; coherence and transparency; and impact and importance.

Sensitivity to context has been shown through the use of IPA as a phenomenological methodology, enabling in-depth exploration of decision making and the uncovering of previously unreported themes and phenomena. Focus groups and in-depth interviews provided the opportunity for participants to engage in the research process and provide rich descriptions of their experiences.

Commitment and rigour was applied through purposive sampling and an IPA analysis process designed to take data interpretation to a deeper level of understanding, beyond that of purely description. Scrutiny was applied

throughout the study by engaging with the supervision team who provided regular checks on the methods employed and stages of data analysis.

Coherence and transparency has been achieved through clarity in data analysis and interpretation, with supporting examples of paperwork and mind maps included in the appendices and main IPA results chapters. Data interpretations have been carefully grounded back to participant voices through direct quotes in the results chapters. The impact of the researcher practitioner position has been considered throughout the research process by careful implementation of the methods chosen and during data analysis.

Providing impact and considering the importance of the findings is strengthened by the researcher practitioner perspective and a professional awareness of where the results could have greatest impact on ESP practice and wider healthcare practice. The results provide evidence on how ESPs and patients make important healthcare decisions, concurrently indicating the impact this may have upon resource allocation, training and education, competency and skill development and effects of advanced practitioner roles upon staff health.

### 9.5 The researcher practitioner perspective

Undertaking the research and writing the thesis as a researcher practitioner posed its own set of challenge. Not least of these was the need to manage bias and ensure my practitioner awareness would not undermine the research process for both patient and ESP participants. The positive aspects of the researcher practitioner position certainly outweighed the risks and the original seed of the research question arose directly from my own extensive advanced

practice experiences. Arriving at the point of considering implications for the study findings I find my practice knowledge provides clarity as to how the results can have practice and policy impact; this is detailed in section 9.6. The journey taken to explore the decision making aspect of ESP practice has greatly enhanced and influenced my own practice knowledge and understanding. I now have more consideration for how patient interactions occur and appreciate how patient expectations and other influences impact upon decision making. Understanding patient decision making preferences will aid my clinical relationships and support more effective consultations. Having an awareness of the risks involved in the ESP role regarding stress and the potential for professional burnout will enable me to notice warning signs in myself and other ESPs in services I am involved in. I can also see the need to consider the development of further guidelines and competencies surrounding areas of practice concerning current ESPs, such as radiology interpretation. It was important to gain greater understanding surrounding ESP and patient decision making and the results of the IPA study have provided a rich seam of data which has shone a light on this area of ESP practice and how patients experience advanced AHP practice care. The unique methodological perspective opens the door to new avenues of further study. The results can inform ESP training and education programmes and also that of other health care practitioners in advanced practice roles, both nationally and internationally. Advanced practitioners will have a greater understanding of the complex processes underpinning and influencing patient consultations. They will be able to consider which factors support positive interactions and how to target the development of skills in communication and decision making. The results

provide a new perspective on ESP care and add to the total body of evidence supporting advanced practice roles and their clinical effectiveness.

The results also provide a warning to individual ESPs and organisations who employ them, to consider the risks of practitioner burnout and how to mitigate against these risks. Advanced practitioners, such as ESPs, are a small but expensive commodity, in terms of remuneration, time invested in training and skill acquisition. They need to be in a position to fulfill their role potential and deliver effective, high quality care in a rapidly changing, expanding and demanding clinical environment. The impact of these service changes and work pressure, stress and anxiety need to be recognised and protected against as much as possible.

The study has identified ESP concerns over areas of competence in extended roles; such as that illustrated by perceived risks around radiological image interpretation. This needs to be considered in terms of ESP training and also in wider consultation with professional bodies and policy makers when discussing national standards for training advanced practitioners and possibly recognised certification. Previous ESP research has commented on a lack of national training standards (Ellis and Kersten, 2001;Dawson and Ghazi, 2004;McPherson et al., 2006) and this continues to be relevant to current practitioners in light of the findings within this thesis.

### 9.6 Research impact summary

#### 9.6.1 Recommendations for practice, education and training of ESPs

 Ensure patients are conversant in exactly who they are seeing, the clinical background of the ESP and the focus of the ESP role.

- ESPs need to understand the factors surrounding decision making and the positive effects this could have on practice by reducing the chances of conflict in consultations and minimising the risks of complaints.
- Incorporate the findings on ESP and patient decision making into ESP training and education. This is important for established ESP clinicians and for new ESPs transitioning from traditional clinical roles.

#### 9.6.2 Recommendations for policy

- The findings of this research will support MSK service development and illustrate the positive benefits of ESP posts on patient care.
- The health and well being of ESPs must be considered, given they are an
  expensive commodity requiring considerable support for development
  and training. Therefore there is a need to be aware of the risks of
  professional role stress and burnout, which may lead to unnecessary
  staff attrition.

#### 9.6.3 Recommendations for future research

- Develop an observational study to further explore the interpretations
  from this IPA study and assess whether these findings are borne out in
  clinical practice settings.
- Target new research to explore the risk of professional burnout in ESP staff and how this maybe prevented.
- Consider the impact of radiological interpretation by ESPs to inform developments in ESP education and competency development.

The future for advanced practice AHP roles, such as ESPs, is positive and opportunities for such roles will always be present. It is imperative that these roles and their impact and effectiveness continue to be the subject of high quality research and it is hoped that further studies will be influenced by the findings from this thesis.

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## **Appendices**

## Appendix 1. Systematic review search strategy

## **Search Terms - Keywords**

## population

physio\* physical therap\*

#### intervention

advanc\* practi\*
consultant therapist\*
consultant physio\*
enhan\* practice\*
enhan\* scope
expan\* scope

exten\* scope
exten\* practice\*
role expan\*
role enhan\*
role exten\*
ortho\* physio\* practitioner\*
scope of practice
specialist practitioner\*
physician assist\*
advanc\* physio\*
practitioner\*
triage

#### outcome

decision making shared decision making outcome clinical reasoning patient satisfact\* patient experience

## Appendix 2. EPHPP critical appraisal tool



# QUALITY ASSESSMENT TOOL FOR QUANTITATIVE STUDIES

#### COMPONENT RATINGS

#### A) SELECTION BIAS

- (Q1) Are the individuals selected to participate in the study likely to be representative of the target population?
  - 1 Very likely
  - 2 Somewhat likely
  - 3 Not likely
  - 4 Can't tell
- (Q2) What percentage of selected individuals agreed to participate?
  - 1 80 100% agreement
  - 2 60 79% agreement
  - 3 less than 60% agreement
  - 4 Not applicable
  - 5 Can't tell

RATE THIS SECTION	STRONG	MODERATE	WEAK
See dictionary	1	2	3

#### B) STUDY DESIGN

#### Indicate the study design

- 1 Randomized controlled trial
- 2 Controlled clinical trial
- 3 Cohort analytic (two group pre + post)
- 4 Case-control
- 5 Cohort (one group pre + post (before and after))
- 6 Interrupted time series
- 7 Other specify
- 8 Can't tell

#### Was the study described as randomized? If NO, go to Component C.

No Yes

If Yes, was the method of randomization described? (See dictionary)

No Yes

If Yes, was the method appropriate? (See dictionary)

No Ye

RATE THIS SECTION	STRONG	MODERATE	WEAK
See dictionary	1	2	3

#### C) CONFOUNDERS

- (Q1) Were there important differences between groups prior to the intervention?
  - 1 Yes
  - 2 No
  - 3 Can't tell

#### The following are examples of confounders:

- 1 Race
- 2 Sex
- 3 Marital status/family
- 4 Age
- 5 SES (income or class)
- 6 Education
- 7 Health status
- 8 Pre-intervention score on outcome measure
- (Q2) If yes, indicate the percentage of relevant confounders that were controlled (either in the design (e.g. stratification, matching) or analysis)?
  - 1 80 100% (most)
  - 2 60 79% (some)
  - 3 Less than 60% (few or none)
  - 4 Can't Tell

RATE THIS SECTION	STRONG	MODERATE	WEAK
See dictionary	1	2	3

#### D) BLINDING

- (Q1) Was (were) the outcome assessor(s) aware of the intervention or exposure status of participants?
  - 1 Yes
  - 2 No
  - 3 Can't tell
- (Q2) Were the study participants aware of the research question?
  - 1 Yes
  - 2 No
  - 3 Can't tell

RATE THIS SECTION	STRONG	MODERATE	WEAK
See dictionary	1	2	3

#### E) DATA COLLECTION METHODS

- (Q1) Were data collection tools shown to be valid?
  - 1 Yes
  - 2 No
  - 3 Can't tell
- (Q2) Were data collection tools shown to be reliable?
  - 1 Yes
  - 2 No
  - 3 Can't tell

RATE THIS SECTION	STRONG	MODERATE	WEAK
See dictionary	1	2	3

#### F) WITHDRAWALS AND DROP-OUTS

- (Q1) Were withdrawals and drop-outs reported in terms of numbers and/or reasons per group?
  - 1 Yes
  - 2 No
  - 3 Can't tell
  - 4 Not Applicable (i.e. one time surveys or interviews)
- (Q2) Indicate the percentage of participants completing the study. (If the percentage differs by groups, record the lowest).
  - 1 80 -100%
  - 2 60 79%
  - 3 less than 60%
  - 4 Can't tell
  - 5 Not Applicable (i.e. Retrospective case-control)

RATE THIS SECTION	STRONG	MODERATE	WEAK	
See dictionary	1	2	3	Not Applicable

#### G) INTERVENTION INTEGRITY

- (Q1) What percentage of participants received the allocated intervention or exposure of interest?
  - 1 80 -100%
  - 2 60 79%
  - 3 less than 60%
  - 4 Can't tell
- (02) Was the consistency of the intervention measured?
  - 1 Yes
  - 2 No
  - 3 Can't tell
- (Q3) Is it likely that subjects received an unintended intervention (contamination or co-intervention) that may influence the results?
  - 4 Yes
  - 5 No
  - 6 Can't tell

## H) ANALYSES

(Q1) Indicate the unit of allocation (circle one)

community organization/institution practice/office individual

(Q2) Indicate the unit of analysis (circle one)

community organization/institution practice/office individual

- (Q3) Are the statistical methods appropriate for the study design?
  - 1 Yes
  - 2 No
  - 3 Can't tell
- (Q4) Is the analysis performed by intervention allocation status (i.e. intention to treat) rather than the actual intervention received?
  - 1 Yes
  - 2 No
  - 3 Can't tell

#### GLOBAL RATING

#### COMPONENT RATINGS

Please transcribe the information from the gray boxes on pages 1-4 onto this page. See dictionary on how to rate this section.

A	SELECTION BIAS	STRONG	MODERATE	WEAK	
		1	2	3	
В	STUDY DESIGN	STRONG	MODERATE	WEAK	
		1	2	3	
C	CONFOUNDERS	STRONG	MODERATE	WEAK	
		1	2	3	
D	BLINDING	STRONG	MODERATE	WEAK	
		1	2	3	
E	DATA COLLECTION METHOD	STRONG	MODERATE	WEAK	
		1	2	3	
F	WITHDRAWALS AND DROPOUTS	STRONG	MODERATE	WEAK	
		1	2	3	Not Applicable

## GLOBAL RATING FOR THIS PAPER (circle one):

1	STRONG	(no WEAK ratings)
2	MODERATE	(one WEAK rating)
3	WEAK	(two or more WEAK ratings)

With both reviewers discussing the ratings:

Is there a discrepancy between the two reviewers with respect to the component (A-F) ratings?

If yes, indicate the reason for the discrepancy

- Oversight
  Differences in interpretation of criteria
  Differences in interpretation of study
- 3

Final decision of both reviewers (circle one):

- STRONG 1
- 2 MODERATE
- WEAK

## Appendix 3. CASP qualitative appraisal tool

to take part)

## **Screening Questions** Was there a clear statement of the aims of the research? Consider: What the goal of the research was Why is it important Its relevance 2. Is a qualitative methodology appropriate? If the research seeks to interpret or illuminate the actions and/or subjective experiences of research participants **Detailed questions** 3. Was the research design appropriate to address the aims of the research? Consider: If the researcher has justified the research design (e.g. have they discussed how they decided which method to use)? 4. Was the recruitment strategy appropriate to the aims of the research? Consider: If the researcher has explained how the participants were selected If they explained why the participants they selected were the most appropriate to provide access to the type of knowledge sought by the study If there are any discussions around recruitment (e.g. why some people chose not

5. Were the data collected in a way that addressed the research issue? Consider: If the setting for data collection was justified If it is clear how data were collected (e.g. focus group, semi-structured interview etc.) If the researcher has justified the methods chosen If the researcher has made the methods explicit (e.g. for interview method, is there an indication of how interviews were conducted, or did they use a topic guide)? If methods were modified during the study. If so, has the researcher explained how and why? If the form of data is clear (e.g. tape recordings, video material, notes etc.) If the researcher has discussed saturation of data 6. Has the relationship between researcher and participants been adequately considered? Consider: If the researcher critically examined their own role, potential bias and influence during: Formulation of the research questions o Data collection, including sample recruitment and choice of location How the researcher responded to events during the study and whether they considered the implications of any changes in the research design Have ethical issues been taken into consideration? Consider: If there are sufficient details of how the research was explained to participants for the reader to assess whether ethical standards were maintained If the researcher has discussed issues raised by the study (e.g. issues around informed consent or confidentiality or how they have handled the effects of the study on the participants during and after the study)

If approval has been sought from the

ethics committee

## 8. Was the data analysis sufficiently rigorous?

#### Consider:

- If there is an in-depth description of the analysis process
- If thematic analysis is used. If so, is it clear how the categories/themes were derived from the data?
- Whether the researcher explains how the data presented were selected from the original sample to demonstrate the analysis process
- If sufficient data are presented to support the findings
- To what extent contradictory data are taken into account
- Whether the researcher critically examined their own role, potential bias and influence during analysis and selection of data for presentation

## 9. Is there a clear statement of findings?

#### Consider:

- If the findings are explicit
- If there is adequate discussion of the evidence both for and against the researcher's arguments
- If the researcher has discussed the credibility of their findings (e.g. triangulation, respondent validation, more than one analyst)
- If the findings are discussed in relation to the original research question

#### 10. How valuable is the research?

#### Consider:

- If the researcher discusses the contribution the study makes to existing knowledge or understanding e.g. do they consider the findings in relation to current practice or policy, or relevant research-based literature?
- If they identify new areas where research is necessary
- If the researchers have discussed whether or how the findings can be transferred to other populations or considered other ways the research may be used

## Appendix 4. Ethics approval letters for IPA study



NRES Committee Yorkshire & The Humber - Leeds West

Room 001, Jarrow Business Centre Rolling Mill Road Jarrow Tyne and Wear NE32 3DT

Telephone: 0191 428 3387

20 March 2015

Mr Jonathan Thompson
Physiotherapy Department

Dear Mr Thompson

Study title: An Exploration of the decision making process between

Musculoskeletal Extended Scope Practitioners and their

patients.

REC reference: 15/YH/0049 IRAS project ID: 164795

Thank you for your letter of 04 March 2015, responding to the Committee's request for further information on the above research and submitting revised documentation.

The further information has been considered on behalf of the Committee by the Vice Chair together with Dr Diane Farrar.

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 the REC Manager, Miss Sarah Grimshaw, <a href="mailto:nrescommittee.yorkandhumber-leedswest@nhs.net">nrescommittee.yorkandhumber-leedswest@nhs.net</a>. 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, subject to the conditions specified below.

#### Conditions of the favourable opinion

The favourable opinion is subject to the following conditions being met prior to the start of the study.

Management permission or approval must be obtained from each host organisation prior to the start of the study at the site concerned.

Jonathan Thompson Faculty of Health & Life Sciences

Nathalie Noret Chair of Faculty of Health & Life Sciences Research Ethics Committee Direct Line 876311 E-mail: n.noret@yorksj.ac.uk

13 May 2015

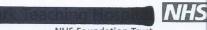
Dear Jonathan

Title: An Exploration of the decision making process between Musculoskeletal Extended Scope Practitioners and their patients.

REF: JT/27/03/2015

The research ethics committee has approved, without reservation, the above research ethics submission of 27 March 2015.

Yours sincerely



**NHS Foundation Trust** 

Research & Development Learning and Research Centre

Direct line

R&D Unit reference: YOR-A02435

13th May 2015

Mr Jonathan Thompson Consultant Physiotherapist Physiotherapy Department

Dear Mr Thompson

NHS Management Permission to undertake a research study

Trust/Site:

Study Title: Exploration of the ESP / patient decision making process

Thank you for submitting details of this trial for NHS Management Permission from the above-named Trust.

On behalf of the Trust I confirm that Management Permission to conduct the study at this site is granted. The Sponsor should accept this as confirmation that all necessary governance checks have been made. Please note that this NHS Permission is based on the documents included on the following list and any subsequent amendments must be notified to the R&D Unit.

Protocol	Version 2.0
Consent Form(s)	Version 4.0
Participant Information Sheet(s)	PIS – Version 4.0 PIS (ESP) – Version 4.0

Please notify the R&D Unit when you recruit your first participant to the study. The Trust is required to record this information as soon as it is available.

I hope the study goes well and please remember that the R&D Unit are here to assist you if we can.

Yours sincerely

Damon Foster Head of R&D

cc: Mags Szewczyk

R&D/T04 - Version 6.0

## Appendix 5. IPA study research protocol

#### **Research Protocol - Version 2**

**Study Title**: An exploration of the decision making process between musculoskeletal extended scope practitioners and their patients.

## **Chief Investigator**

Jonathan Thompson MSc PhD Research Student at York St John University Consultant Physiotherapist xxxx NHS Hospitals Trust

PhD Supervision Team (Faculty Health and Life Sciences)

Professor Pam Dawson Dr Samantha Yoward

## 1.0 Study Background

Extended Scope Practitioners (ESP) are allied health professionals, such as physiotherapists and podiatrists 'working at a high level of expertise who have extended their practice and skills in a specialised clinical area'

(Extended Scope Practitioner Professional Network, 2012)

They undertake clinical roles that have historically been carried out by doctors. With the changes seen in modern health care delivery and development these roles now fall within the remit of other health professionals.

The ESP's unique role provides patients suffering from musculoskeletal disorders with specialist assessment, diagnosis and management. Many of these patients have long-term conditions e.g. osteoarthritis, and ESP clinicians play an increasingly important role in their ongoing management.

ESP posts have been reported in the literature, working within the NHS, since 1989 (Byles and Ling, 1989). ESP staff have specialist training in advanced assessment skills, diagnosis and management and have the ability to order and interpret investigations to aid decision making. The scope of the ESP clinical role has expanded since their inception, and in some service settings, can now include the ability to directly list for surgical procedures e.g. joint replacement surgery. Directly listing patients for total hip replacement surgery, by ESPs, was shown to be effective and safe in a paper by Parfitt et al. (2012). This is the only published paper relating to this aspect of ESP care. Within the paper

there is no description of the decision making process, which lies behind this outcome.

United Kingdom health policy has started to place much greater emphasis upon involving patients in the decisions they make about their care (Department of Health, 2010;Department of Health, 2013). These policies aim to place the patient at the centre of NHS service delivery and are an important aspect of service evaluation and redesign. In line with these policy drivers, it is extremely important to gain a greater understanding of how clinicians and patients interact and make care decisions. There exist very few studies, which have focused upon this element of how ESP clinicians work with patients and this is one of the key drivers in undertaking this research study.

ESP led musculoskeletal services also support the UK NHS Health Outcomes Framework (Department of Health, 2011a). They are particularly aligned to the stated domains of:

- Enhancing the quality of life in people with long term conditions
- Helping people recover from episodes of ill health and injury
- o Ensuring people have a positive experience of care

By exploring the interactions and decision making processes which occur between ESPs and their patients, it is hoped this study will provide research evidence to support ESP clinicians in delivering care against these domains. If this can be achieved this study will enhance the evidence base for the future development of ESP services and support individual ESP education.

Within patient-centred care, the concept of shared decision making is key. Shared decision making moves the patient and clinician relationship away from a more paternalistic model, where the clinician made a decision in terms of what they felt was best for the patient (Da Silva 2012). With shared decision making, a partnership approach is adopted, where an information exchange occurs between the clinician and patient and they come to an agreed plan. Theoretically, this model of shared care should operate very well within ESP services, where a number of management options are often available. It is often when the patient is seen by the ESP that these decisions need to be taken. The decisions should be made alongside the patient's values and the inherent risks and benefits of each choice. This has greater significance where some of these decisions could include a surgical option, as the risks and benefits become more substantial.

My recent systematic review into ESP practice, which was completed in 2014, showed very limited insight into the workings of the ESP role. There exists limited evidence of how ESP staff and patients work together to achieve management outcomes, although patient satisfaction rates are consistently high. What is not clear is how ESPs and patients make healthcare decisions and what drives the reported high satisfaction rates. Through this study it may be possible to develop theories as to why this is the case. The systematic review also found that roles have developed over time. As ESP practices expand to take on roles such as listing patients for surgical procedures (Parfitt et al., 2012), the decision making process takes on even greater importance. A negotiation of risks and benefits of the surgery must occur and take into account the desired and realistic outcomes from both parties. This needs greater exploration and understanding.

Within the current ESP literature, there is mention of the positive impact patient involvement in decision making can bring, to patient satisfaction and perceptions of quality (Reeve and May, 2009;Coyle and Carpenter, 2011). This study will expand on these findings, exploring the mechanisms by which this occurs from both the perspective of the clinicians and patients.

## 2.0 Aims of the Study

#### **Principal Research Question**

How do musculoskeletal Extended Scope Practitioners and patients interact during the decision making process?

#### Aims

- Explore shared decision making in relation to negotiated risk and desired management outcomes.
- Gain understanding of how patients perceive the ESP role.
- Explore the factors behind reported high satisfaction with ESP care.

#### 3.0 Inclusion and Exclusion Criteria

#### **Inclusion Criteria**

Patients over 18 years of age

Patients with a musculoskeletal condition

Patients managed within an ESP led musculoskeletal service within the past three months

Patients seen by an ESP specialising in musculoskeletal practice Patients with good understanding of spoken and written English Clinician holding an ESP role currently working within a musculoskeletal service

#### **Exclusion Criteria**

Patients under 18 years of age Not diagnosed with a musculoskeletal condition Seen by a clinician not holding an ESP role Patients being managed by the Chief Investigator Patients who do not give informed consent

#### 4.0 Method

Qualitative research methods are designed to understand the why, how and what questions (Green and Thorogood, 2009). These questions may be answered by exploring the way people behave as they do, how they are affected by what occurs between and around them, and also how attitudes and opinions are formed. They allow a researcher to gain deeper insight into particular phenomena through the collection of content rich data. This data is then analysed to help understand participants' opinions, feelings and experiences. This can lead to the development of new theories and concepts, which could then be tested through further field research. Qualitative methods are frequently employed in healthcare settings and are ideal ways of exploring complex systems to gain greater understanding (Bowling, 2009).

To answer the research question of this study the method must allow an exploration of the interactions between the ESP clinicians and their patients. The aim is to gain greater understanding of what and how this is occurring. This type of research question is best answered by employing qualitative methods, which can focus on the meanings and understanding behind the interactions taking place.

This study will use a focus group to collect data from the ESP staff and semi-structured interviews to collect data from patients who have been managed within the ESP service.

#### **ESP Clinician Focus Group**

Focus groups are an ideal method for this study exploring the decision making process and clinician/patient interactions. They aim to explore ideas, attitudes and understanding, and can give the researcher a unique insight into why people think and act as they do (Plummer-D'Amato, 2008a). The focus group will be used to collect data from the ESP clinicians. An advantage of this method is in using the group setting and

interactions of participants to stimulate more insight into how they think, as they respond to viewpoints across the group (Bryman, 2008).

The members of the focus group will be recruited from one NHS Trust locality and participants will be known to each other. In using a group setting for data collection it is hoped that the group members will feel this is a 'safe' environment in which to discuss and challenge each others views and stimulate further discussions. Barbour (2007) felt this may help develop more reasoned responses and this provides a further motive for selecting this method.

As the Chief Investigator works within the same service setting as the ESP staff who will be invited to take part it has been decided that the focus group will be moderated by an independent person. This will reduce the potential impact of bias in data collection from the Chief Investigator's practitioner researcher position (Reed and Procter, 1995). The Chief Investigator will attend the focus group as a 3<sup>rd</sup> party observer making notes on group dynamics to supplement the audio recordings.

### **Patient Interviews**

Patients entering into the study will be interviewed by the Chief Investigator, using a semi-structured interview format on a one to one basis. Semi structured (in depth) interviews are frequently employed as a research method in healthcare settings (Gill et al., 2008). An in depth interview can allow the exploration of the patients experience of healthcare and their perceptions of how this occurred (DiCicco-Bloom and Crabtree, 2006). It is designed to explore views, experiences and beliefs and it is felt the one to one interview method will be a more comfortable and relaxing atmosphere for patients than a group setting. In this face to face environment it is hoped that discussions will lead to more reasoned and deeper responses. Alongside this advantage there is also the opportunity to clarify the meaning of responses to questions reducing the risk of misinterpretation (Bowling, 2009).

The interviews will be held in a quiet environment in either the hospital or university. Both the focus group and semi structured interviews will be audio recorded. This is a well recognized way of collecting interview data for analysis (King and Horrocks, 2010). Using audio recording will allow the interviewer to concentrate on communicating with the interviewee and responding to their answers. This method aims to achieve the depth of data required to greater understand the experiences and views of the participants (Turner, 2010).

The recordings will be transcribed by the Chief Investigator and data inputted into NVivo software for analysis of emerging themes.

In this qualitative research study a purposive sampling strategy will be employed. Given the nature of the research the sample size is not

governed by a power calculation. The aim is to recruit between 6-10 ESP staff for the focus group section of the study, and to recruit up to 10 patients for interview.

## 5.0 Ethical considerations and approvals

It is not expected that this study will cause any distress to participants or uncover any contentious issues. It is possible that patients may discuss experiences that require further actions beyond the scope of the research study. If this situation arises the Chief Investigator is a very experienced clinician within the research setting. They will be able to manage any situation that arose and recommend to the patient appropriate actions that could be taken.

Ethical review will be submitted through the NHS Integrated Research Application System. The study will also pass through York St John University ethics procedure and the local NHS Trust ethics committee.

Interviews will be audio taped and during transcription unique identifiers will be used, which do not reveal the personal names of the patients or staff involved. In writing up the research direct quotes maybe used but there will be no personal data linking the quotes to a named participant.

Patient addresses will be required to enable contact for data verification. This personal data will be held on a NHS password protected computer and only be accessible to the chief investigator. A master list of participants linked to pseudonyms during data transcription and analysis will be held by the chief investigator on the university's computer system and be password protected.

## 6.0 Study timeline

Data collection planned to begin in January 2015 and the study will run until December 2015.

#### 7.0 Study Process

- Invitation letters sent out to musculoskeletal ESP staff within xxxx NHS Trust and patients who have attended ESP appointments within the musculoskeletal service.
- People who respond will be taken through the participant information sheet by the Chief Investigator and given time to ask questions and consider whether they wish to take part

- Informed consent will be taken from people wishing to take part and consent forms signed.
- ESP staff will be invited to a focus group and patients invited to a semi structured interview.
- Data will be collected, transcribed and initial analysis undertaken via NVivo software.
- The data will be offered to participants after initial analysis for verification purposes.
- Following verification, data analysis will be completed by the Chief Investigator.

## **Appendix 6. IPA study patient and ESP information sheets**

## **Participant Information Sheet 1 (Patients)**

**Study Title** An exploration of the decision making process between musculoskeletal extended scope practitioners and their patients.

I would like to invite you to take part in a research study. Before you decide whether to take part, you need to understand why the research is being done and what it would involve for you. Please take the time to read the following information carefully. Ask questions if anything you read is not clear or you would like more information. Take the time to decide whether or not to take part.

### What is the purpose of the study?

This research study is designed to look into the way Extended Scope Practitioners and patients interact in order to make decisions on the care patients should receive.

This research will form part of the work undertaken toward a PhD and it is hoped will lead to greater understanding of how decisions are reached in caring for patients in an Extended Scope Practitioner service.

## Why have I been Chosen?

You have been approached about this study, because you have recently been seen by an Extended Scope Practitioner, in the musculoskeletal service, in the York area. The aim is to interview up to 10 people who have recent experience of seeing an Extended Scope Practitioner in this service.

## Do I have to take part?

It is up to you to decide. We will describe the study and provide you with this information sheet, which we will go through with you. You will be free to ask any questions regarding the study to help you understand what is involved. We will then ask you to sign a consent form to show you agreed to take part. You are free to withdraw from the study at any time, without giving a reason. If you withdraw after you are interviewed, the information you provide during the interview will be included in the study, but you will not be approached to provide any further information for the study. Your decisions will have no impact on any current or future care you receive from the service.

#### What will happen to me if I take part?

Your involvement in the research study will last approximately 6 months. This will consist of one visit for an interview with the main researcher and being

contacted after the information has been initially analyzed to review the content. The interview will take place at either one of the xxxx Hospital Trust sites or at St Johns University in York (which ever is most convenient for you). This interview will involve being asked questions related to your appointment with the Extended Scope Practitioner and how decisions about your care were reached. This interview will last between 30-60 minutes. To enable the information you provide to be analyzed by the researcher the interview will be audio taped.

To ensure your confidentiality no personal details will be taken from the interview recordings and personal names will not be used when the research is written. The audio recording will be destroyed once the research and PhD has been completed.

This research will not effect any current treatment you are receiving or waiting to receive.

You will be offered expenses to cover your travel to the interview.

## What are the possible risks of taking part?

It is not expected that there will be any risk to yourself in taking part in this study.

## What are the possible benefits of taking part?

We cannot promise that the study will help you but the information we get from the study will help to increase the understanding of how treatment decisions are reached and made. This will hopefully provide improvements to future health services in this field.

#### What if there is a problem?

If you have any concerns about any aspect of this study you should ask to speak to the researcher who will do their best to answer your questions.

If you wish to make a complaint about any aspect of this study please contact xxxx Trusts Research and Development department through the main hospital switchboard on xxxxxxxxxxx.

If during the collection of data a potential issue of clinical malpractice is disclosed this will be investigated outside of the research study process in conjunction with the Therapies Directorate profession lead and may require involvement of the Health and Care Professions Council in their role as the regulatory body.

#### Will my taking part in this study be kept confidential?

All information which is collected about you during this study will be kept strictly confidential.

The information, which is collected during the interviews, will be made anonymous during the research so results will not contain any real names or ways of linking the information to a particular person. Only the researcher will have a list, which links the coded data to participants. This list will be held on a secure password protected computer at the university, only accessible to the researcher.

The digital audio recordings of the interviews will be stored on a secure password protected computer only accessible to the researcher.

The securely held master list of participants and the audio recordings will be destroyed after the PhD studies are completed. This is expected to be within 5 years.

## What will happen if I don't want to carry on with the study?

If you withdraw from the study after the interview, the data collected during the interview will be included within the study analysis but you will not be asked to contribute at any other point during the study

## What will happen to the results after the study?

The data collected will be used for the purposes of this research study and will be included within the researchers PhD thesis. Results will be published in research journals and used within conference presentations. No participant will be identifiable within the written reports of the study.

Participants will be offered the opportunity to receive a summary of the results of the study.

Thank you for taking the time to read this information.

#### Contact details of the researcher:

Mr Jonathan Thompson MSc MCSP Consultant MSK Therapist Physiotherapy Department



## Participant Information Sheet 2 (ESP)

**Study Title** An exploration of the decision making process between musculoskeletal extended scope practitioners and their patients.

I would like to invite you to take part in a research study. Before you decide whether to take part, you need to understand why the research is being done and what it would involve for you. Please take the time to read the following information carefully. Ask questions if anything you read is not clear or you would like more information. Take the time to decide whether or not to take part.

#### What is the purpose of the study?

This research study is designed to look into the way Extended Scope Practitioners and patients interact in order to make decisions on the care patients should receive.

This research will form part of the work being undertaken toward a PhD and it is hoped will lead to greater understanding of how decisions are reached in caring for patients in an Extended Scope Practitioner service.

#### Why have I been Chosen?

You have been approached about this study because you are an Extended Scope Practitioner in a musculoskeletal service in the York area. The aim is to interview up to 10 Extended Scope Practitioners who specialize in musculoskeletal care.

#### Do I have to take part?

It is up to you to decide. We will describe the study and provide you with an information sheet, which we will go through with you. You will be free to ask any questions regarding the study to help you understand what is involved. We will then ask you to sign a consent form to show you agreed to take part. You are free to withdraw from the study at any time, without giving a reason. If you withdraw from the study after the focus group interview, the data collected during the group will be included within the study analysis but you will not be asked to contribute at any other point during the study. Your decisions will have no impact on any current or future role you hold within the service.

### What will happen to me if I take part?

Your involvement in the research study will last approximately 6 months. This will consist of one focus group and being contacted after this has taken place to review the content following initial data analysis. The focus group will take place at York St Johns University. The focus group will involve being asked questions and discussing your role as an Extended Scope Practitioner and how you reach decisions with your patients about their care. The focus group will last between 60-90 minutes. To enable the information you provide to be analyzed by the researcher the interview will be audio recorded. The focus group will be led by a clinician/researcher who is independent of the study and the lead researcher of the study will be present in a purely observational capacity.

To ensure your confidentiality no personal details will be taken from the interview recordings and personal names will not be used when the research is written. The audio recordings will be destroyed once the research and PhD has been completed.

You will be offered expenses to cover your travel to the interview.

## What are the possible risks of taking part?

It is not expected that there will be any risk to yourself in taking part in this study.

#### What are the possible benefits of taking part?

We cannot promise that the study will help you but the information we get from the study will help to increase the understanding of how treatment decisions are reached and made. This will hopefully provide improvements to future health services in this field.

#### What if there is a problem?

If you have any concerns about any aspect of this study you should ask to speak to the main researcher who will do their best to answer your questions.

If you wish to make a complaint about any aspect of this study please contact xxxx Trusts Research and Development department through the main hospital switchboard on xxxxxxxxxx.

If during the collection of data a potential issue of clinical malpractice is disclosed this will be investigated outside of the research study process in conjunction with the Therapies Directorate profession lead and may require involvement of the Health and Care Professions Council as the regulatory body.

## Will my taking part in this study be kept confidential?

All information which is collected about you during this study will be kept strictly confidential.

The information, which is collected during the focus group, will be made anonymous during the research so results will not contain any real names or ways of linking the information to a particular person. Only the researcher will have a list, which links the coded data to participants. This list will be held on a secure password protected computer at the university, only accessible to the researcher.

The digital audio recordings of the interviews will be stored on a secure password protected computer only accessible to the researcher.

The securely held master list of participants and the audio recordings will be destroyed after the PhD studies are completed. This is expected to be within 5 years.

## What will happen if I don't want to carry on with the study?

If you withdraw from the study after the focus group, the data collected during the focus group interview will be included within the study analysis but you will not be asked to contribute at any other point during the study

## What will happen to the results after the study?

The data collected will be used for the purposes of this research study and will be included within the researchers PhD thesis. Results will be published in research journals and used within conference presentations. No participant will be identifiable within the written reports of the study.

Participants will be offered the opportunity to receive a summary of the results of the study.

Thank you for taking the time to read this information.

## Contact details of the researcher:

Mr Jonathan Thompson MSc MCSP Consultant MSK Therapist Physiotherapy Department

## Appendix 7. IPA study participant consent form

Participant Identification Number for this trial:

Name of Researcher: Jonathan Thompson

## **CONSENT FORM**

Title of Project: An exploration of the decision making process between musculoskeletal extended scope practitioners and their patients.

Pleas	se initial box				
1.	I confirm that I have read the information sheet dated 02/03/2015 (version 4) for the above study. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily.				
2.	. I understand that my participation is voluntary and that I am free to withdraw at any time without giving any reason, without my medical care or legal rights being affected.				
3.		thesis, research artic		e made anonymous and in professional journals and	
4.	I understand the interv are completed the aud			e research study and PhD	
5.	I understand that all the manner.	e information I provide	e will be dealt v	with in a confidential	
6.	I agree to take part in t	he above study.			
Nam	e of Participant	Date		Signature	
	e of Person g consent	Date		Signature	

## Appendix 8. IPA study ESP focus group topic guide

## Focus group topic guide

Introduction from Fran and myself

Thanking people for their time and explain process and each of our roles in FG.

Ensure all consent forms complete

Explain that group will be taped and confidential nature of the material Agree ground rules and take verbal agreement from each participant – to be taped

Complete a seating plan for the room

Note the demographics of each participant – age + years of ESP experience – Jon

- 1. Ask each participant to introduce themselves and how many years of ESP experience they have
- 2. What does being an extended scope practitioner mean to you?

How would you see the ESP role compared to your previous

clinical

roles

Do you approach things differently in this role

3. Can we now talk about the consultation. How does this look?

Where do you see the role of the patient in the consultation How do you feel about your role in a consultation

4. How do you arrive at a management plan?

What do you feel about your role / the patient's role in this process?

What is your experience of this? – where easy / where difficult How do you decide what to do? What drives this process?

5. How do you feel about making decisions in your role?

As an example if considering to directly list a patient for a surgical procedure? Or considering referral of a patient for orthopaedic opinion who you think requires surgery How do you manage these feelings?

6. How do you perceive risk in this process (decision making) in the context of patient safety? (governance)

Have these feelings changed with experience? How do you think this change has happened? (or not)

7. Does anyone have anything else they wish to add about the topics we have discussed?

## Appendix 9. IPA study patient interview guide

## Patient interview guide

Introduce self/study and interview format/use of audio recorder	
Tormat/ use of audio recorder	Prompts and sub questions
Can you tell me about the reason for attending an ESP appointment?	When did this happen?
What did you understand of the ESP clinicians role?	Have you had any previous experience of seeing an ESP?
What happened during your appointment with the ESP?	Can you give more detail of what happened? Provide as much detail as possible What did you feel / think about
How was your appointment compared to your experience of seeing other specialists e.g. GP/ medical consultant	How was it similar? How was it different? Was this a positive or negative experience?
Did the ESP discuss options of treatment with you?	How did this occur? Did you feel involved in this discussion? Do you feel the ESP took your views into consideration?
Were you able to make a decision about how to manage your condition?	How did this happen? Was it easy to make the decision? If not can you explain why
What was the outcome of the appointment?	How did this occur?
How did you feel about the outcome?	Could you explain why you felt like this? If not satisfied or happy then why? If surgery and placed on the waiting list – comfortable with this decision and not seeing surgeon before the operation?
Do you have anything else you would like to add?	

Questions should relate to a person's lived experience – their own experience not theoretical explanation

Aiming for as complete a description of the experience as the person lived it

Phenomenological interview – seen as encounter / active engagement / explores meaning and experiences of significance

Try to be natural / empathic and genuine – not formal and distanced