Sport and exercise medicine in NHS England: the pathways of sport-related injury patients and social costs

This item was submitted to Loughborough University's Institutional Repository by the/an author.

Additional Information:

- A Doctoral Thesis. Submitted in partial fulfilment of the requirements for the award of Doctor of Philosophy of Loughborough University.

Metadata Record: https://dspace.lboro.ac.uk/2134/24731

Publisher: © E. Pullen

Rights: This work is made available according to the conditions of the Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International (CC BY-NC-ND 4.0) licence. Full details of this licence are available at: https://creativecommons.org/licenses/by-nc-nd/4.0/

Please cite the published version.
SPORT AND EXERCISE MEDICINE IN NHS ENGLAND: THE PATHWAYS OF
SPORT-RELATED INJURY PATIENTS AND SOCIAL COSTS

by

Emma Pullen

A Doctoral Thesis

Submitted in Partial Fulfilment of the Requirements for the Award of

Doctor of Philosophy of Loughborough University

August 2016

© E. Pullen (2016)
Abstract

This thesis explores the general public's experiences of sport related injury (SRI) as they utilise Sport and Exercise Medicine services in NHS England. It focuses specifically on: the treatment pathways to, and utilisation of, one Sport and Exercise Medicine (SEM) clinic in NHS England; the social and economic 'costs' incurred as a consequence of SRI; and the extent healthcare utilisation and 'costs' coalesce to structure SRI experience. The study employs a qualitative methodology based on a two phase research design that retrospectively maps the pathways of patients (n=19) up until their treatment at the SEM clinic (focusing on social and economic 'costs'), and prospectively, as a number of patients (n=4) continue their treatment at the SEM clinic, thus illustrating how pathways and 'costs' feed each other in problematic ways. Findings demonstrate that patient pathways to SEM are relatively lengthy and inefficient due to a lack of knowledge of SEM initiatives for SRI treatment amongst both GPs and patients. This leads to indirect referrals, increased workload in primary care and the utilisation of general orthopaedic secondary care services. It further highlights a number of social and economic 'costs' incurred through SRI, such as diminished social wellbeing, increased emotional labour, poor health behaviours and workplace absenteeism, which are exacerbated through inefficient patient pathways and patient dissatisfaction with general orthopaedic treatment. The thesis is the first study to shed light on the pathways of SRI patients in the NHS and the treatment experience of SEM clinics in NHS England. It demonstrates the extent SEM initiatives – justified on the basis of improving the efficiency of pathways and satisfaction of treatment for SRI patients – could be more effectively implemented and identifies a number of important implications for the future sustainability of physical activity health promotion policy and the wider social and economic productivity of exercising public populations.
# CONTENTS PAGE

List of Figures and Tables ........................................................................................................ i

Acknowledgments .................................................................................................................. ii

Introduction .......................................................................................................................... iii

1. CHAPTER ONE – CONTEXT

1.1. The Physical Activity and Health Relationship .............................................................. 1

1.2. Framework of Neoliberal rationality and ‘Healthism’ ..................................................... 3

1.3. Epidemiology of Sport Related Injury (SRI) .................................................................. 6

1.3.1. Demographics ........................................................................................................... 7

1.3.2. Long term consequences of SRI – economic and social costs .................................... 11

1.3.3. Epidemiology of elite/specific SRI .......................................................................... 16

1.4. SRI Treatment ............................................................................................................... 17

1.5. Sport and Exercise Medicine (SEM) development and initiatives ................................. 17

1.6. Research Aims ............................................................................................................... 21

2. CHAPTER TWO – LITERATURE REVIEW

2.1. THEORETICAL

2.1.1. Introduction ............................................................................................................... 23

2.1.2. Self-Care and Control of the Self ............................................................................. 24

2.1.3. ‘Healthism’ and Self-Care in the Consumption of Sport/Exercise/Physical Activity (PA) .................................................................................................................. 27

2.1.4. Criticisms of Discourse and Power .......................................................................... 33

2.1.5. Figurations, Power and Social Process .................................................................... 34

2.1.6. Balances of Involvement and Detachment ................................................................ 37

2.1.5. Conclusion ............................................................................................................... 41

2.2. EMPIRICAL

2.2.1. Introduction ............................................................................................................. 44
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.2.2. SRI Research</td>
<td>45</td>
</tr>
<tr>
<td>2.2.3. Experiences of SRI in professional/elite sporting populations</td>
<td>46</td>
</tr>
<tr>
<td>2.2.4. Experiences of SRI in non-elite sporting populations</td>
<td>57</td>
</tr>
<tr>
<td>2.2.5. Patient Pathways with Illness and/or Physical Injury in the NHS</td>
<td>61</td>
</tr>
<tr>
<td>2.2.6. Conclusion</td>
<td>66</td>
</tr>
<tr>
<td>3. CHAPTER THREE – METHODOLOGY AND METHODS</td>
<td></td>
</tr>
<tr>
<td>3.1. Introduction</td>
<td>68</td>
</tr>
<tr>
<td>3.2. Methodological Approach</td>
<td>68</td>
</tr>
<tr>
<td>3.3. Research Design</td>
<td>72</td>
</tr>
<tr>
<td>3.4. Sampling</td>
<td>73</td>
</tr>
<tr>
<td>3.5. Participant Access and Data Collection Site</td>
<td>77</td>
</tr>
<tr>
<td>3.6. Participants</td>
<td>78</td>
</tr>
<tr>
<td>3.7. Researcher Biography</td>
<td>79</td>
</tr>
<tr>
<td>3.8. Ethics</td>
<td>80</td>
</tr>
<tr>
<td>3.9. Methods</td>
<td>81</td>
</tr>
<tr>
<td>3.10. Data Collection Process and Tools</td>
<td>81</td>
</tr>
<tr>
<td>3.11. Data Analysis</td>
<td>84</td>
</tr>
<tr>
<td>3.11.1 Phase 1 Analysis</td>
<td>85</td>
</tr>
<tr>
<td>3.11.2. Phase 2 Analysis</td>
<td>87</td>
</tr>
<tr>
<td>3.12. Reflections on Research Process</td>
<td>88</td>
</tr>
<tr>
<td>4. CHAPTER FOUR – PATIENT PATHWAYS AND SEM</td>
<td></td>
</tr>
<tr>
<td>4.1. Introduction</td>
<td>92</td>
</tr>
<tr>
<td>4.2. Role of the GP and Secondary Care Services</td>
<td>95</td>
</tr>
<tr>
<td>4.3. Patient Control</td>
<td>104</td>
</tr>
</tbody>
</table>
List of Figures and Tables

**Figures**

3.0. Overview of Phase 1 Sampling Process ................................................................. 75
3.1. Overview of Phase 2 Sampling Process ................................................................. 76
3.2. Thematic Analysis Steps for Phase 1 ................................................................. 85
6.0. Extract From a letter Received by one Patient ......................................................... 148

**Tables**

3.0. Phase 1 Patients ........................................................................................................... 78
3.1. Phase 2 Patients ........................................................................................................... 79
4.0. Overview of Patient Pathways .................................................................................... 93
Acknowledgments

To Dom and Patrick for providing me with this opportunity and believing in me. Thank you for your patience and guidance throughout the process.

To the participants who took part in the study. Thank you for your time and allowing me the opportunity to hear your stories.

To my family for their love and support. Without you none of this would have been possible. You have been inspirational to me and given me the ability to see inspiration in myself.

To my colleagues (the original ZZ.0.07) for the debates, advice and laughter over the last three years.

To Becky, for all things figurational and fun. Thank you for all the great times we have had together.
Introduction

Following the London 2012 Olympic Games, the BBC reported an increase in sport related injury (SRI) among the public, claiming this increase to be a consequence of the ‘Olympic legacy’ which inspired individuals to take part in increasingly greater levels of sport/exercise/PA (BBC, 2012). Drawing upon research from BMI Healthcare, the article claimed running, football, and gym sustained the highest rate of predominantly soft tissue of injuries. Given this, the article called for preventative strategies which ‘help make the most of their [population] exercise and prevent injury’. More recently, the BBC reported on a similar issue, claiming that sport is increasingly ‘dangerous’, resulting in severe forms of SRI’s, with a distinct lack of detailed data existing on how these are treated in the NHS (BBC, 2015).

Examples of reports such as these briefly expose the complex social issue of SRI in the public population, an issue that has previously been identified through epidemiological research (See, Nicholl et al 1995). This body of research evidenced that a significant proportion of the population had sustained a SRI which results in ‘unquantifiable’ social and economic costs. However, exploring these ‘costs’ and the affect it has on the social and economic functioning of populations has been given little detailed attention, perhaps unsurprisingly considering the ‘politicization’ of sport/exercise/PA in its relationship to health, the economic ‘costs’ associated with physical inactivity on the NHS (See, Allender, 2007), the subsequent focus on sport/exercise/PA as a medical ‘intervention-for-prevention’ strategy, and the increasing governmental interest in physical activity health promotion (PAHP).

Despite the lack of attention given to the ‘costs’ of SRI, the need for a preventative strategy in tackling this problem has been idealised through significant changes made in the healthcare provision for SRI. The recognition of Sport and Exercise Medicine (SEM) as a medical speciality, and its integration within the operational structures of the NHS, provides an explicit pathway for patients seeking medical treatment for SRI (and return into sport/exercise/PA) aiming to improve the efficiency of current pathways, particularly through more generic musculoskeletal (MSK) services. Although this organisational change
has been implemented, there remains a similar lack of research into the effectiveness of SEM in improving the treatment pathways of patients with a SRI as there is to understanding the ‘costs’ incurred through SRI.

This thesis will develop these under researched and interrelated areas through a qualitative framework, contributing to knowledge on the ‘unquantifiable’ social and economic ‘costs’ of SRI, the pathways of patients with a SRI, and the impact of SEM initiatives on these pathways. It will draw on data collected from 19 patients who are receiving treatment at one SEM clinic in NHS England, illustrating their journey through the NHS up until their treatment at the SEM clinic, the social and economic ‘costs’ incurred, and the extent pathways and ‘costs’ coalesce to shape their experience of living with SRI. This thesis will therefore seek to answer four interrelated research aims. These include:

1. To illustrate the pathway of patients with a SRI as they receive treatment from one SEM clinic in England within the NHS.
2. To identify the extent SEM initiatives are being developed at a patient level through the integration of SEM into public healthcare and the impact this has on patient pathways.
3. To highlight using a qualitative inquiry the long term social and economic ‘costs’ of SRI of those patients (n=19) that have received treatment at the SEM clinic.
4. To illustrate how chronic SRI is managed over time using a partly prospective approach of patients (n=4) who are continuing with their treatment at the SEM clinic illustrating the interaction between patient pathways and the incurred social and economic costs.

In exploring these aims, the thesis will be organised around seven chapters. Chapter one – context – will provide a broad overview of the conceptual themes that underpin this research, a more detailed outline of the epidemiological research on SRI and the key initiatives of SEM. The conceptual themes include, firstly, a discussion of the ‘politicisation’ of sport/exercise/PA, particularly the neoliberal logics that facilitate and embed current understandings of sport/exercise/PA in discourses of ‘healthism’ (Crawford,
and contribute to establishing its role within PAHP materials. Secondly, an overview of the epidemiological studies conducted on SRI in public populations is provided, illustrating the parallel ‘risk’ involved in the consumption of sport/exercise/PA which largely goes unrecognised in PAHP. Thirdly, a detailed description of SEM as one potentially fruitful treatment strategy is given, with a focus on the key initiatives it aims to develop followed by a critique of the current research conducted on its implementation. This chapter will close with a rationale for extending these interrelated research areas and the research aims which this thesis will explore.

Chapter two – literature review – will be split into two sections. Section one will highlight the theoretical framework used in the analysis of the research findings and section two will provide a review of previous sociological research on SRI and patient pathways. To begin, section one draws primarily on the work of Foucault (1980; 1982; 1988) and Elias (2000) and specific aspects of Bourdieu (1984) to illustrate how specific mechanisms of governance through discourses of ‘healthism’ are used to construct normative ideals of ‘healthy’ bodies and made manifest in PAHP discourse. Specifically, it focuses on how forms of ‘subjectification’, particularly self-care, are utilised in the governance of the contemporary ‘civilised’ body that align with neoliberal logics and the objectives of government to ‘privatise’ health and engender a moral obligation for the responsible and entrepreneurial citizen. Building on Foucault’s use of social power, and recognising the need to understand power in social process as well as practice, a review of Elias’s (1978) use of ‘figurations’, ‘game models’ and ‘involvement and detachment’ will be discussed. Following this, an overview of how these theoretical frameworks may be used fruitfully applied to understand interaction, practice and process, as the central components of sociological analysis, and where and how each concept will be used in the analysis of the findings, will be identified. Section two will review the sociological literature on SRI and patient pathways critiquing the extent to which this body of work can inform current understandings of the thesis aims. Firstly the review will focus on studies of SRI and the medical management of this across both elite and non-elite sport population, followed by a review of the previous research on patient pathways. Given that there is no current research on the pathways of
patients with a SRI, a review of patient pathways will focus on conceptually similar work, that of the pathways of patients with illness and/or physical injury.

Chapter three – methodology and methods – will provide an outline of the how the research was designed and conducted. An initial section on methodology will describe the methodological positioning (with reference to ontology and epistemology) and the research design. This includes a description of sampling, access and data collection site, participants, researcher biography and positionality in the research process and ethics. Following this a section on methods will provide an overview of the data collection process and tools and data analysis. This chapter will end with a reflective account and commentary of the research process and NHS ethics, with a focus on the extent certain challenges established through NHS research governance shaped the focus and intent of the thesis.

Chapter four will constitute the first of three findings chapters and will document and analyse data which explores the following research aims: to illustrate the pathway of patients with a SRI as they receive treatment from one SEM clinic in England within the NHS, and, to identify the extent SEM initiatives are being developed at a patient level through the integration of SEM into public healthcare and the impact this has on patient pathways. This chapter is analysed using Elias's (1978) concepts of figurations and game models and draws heavily on the concept of involvement and detachment. Findings from this research aim indicate that there is no standardised pathway for patients with a SRI into SEM services even when this secondary care service is highly relevant for the treatment of their condition. It evidences that the majority of patients were referred by their GP into other forms of secondary care services, for instance, outpatient physiotherapy, and the transition between primary and secondary care is relatively lengthy and largely inefficient. For example, the transition between care services is often constituted by changing appointment dates and/or a lack of correspondence. The indirect referrals into SEM for the majority of patients were a consequence of a general lack of knowledge by GP's and patients as to the role of SEM services in the NHS. Arguably, the role of GPs is made further complicated by the increasing marketization of the NHS that may impact on the process of referral and therefore indirectly impact patient
pathways into SEM. Findings indicate that, as a result of the inefficient pathways, patients utilise primary and secondary care services multiple times, become relatively alienated from the direction of their pathways and experience patient dissatisfaction. These findings demonstrate a clear need for the increased level of organisational integration and knowledge of SEM services in NHS England, particularly if the promise of SEM is to be fully achieved, and if patient satisfaction is to remain a key measure of quality within NHS England.

Chapter five will document and analyse data which explores the following research aim: to highlight using a qualitative inquiry the long term social and economic ‘costs’ of SRI of those patients (n=19) that have received treatment at the SEM clinic. Findings from this research aim highlight the frequency of significant, and serious, social and economic costs incurred by patients who have sustained a SRI and is analysed predominantly using Foucault (1980; 1982; 1988) and drawing on specific aspect of Bourdieu (1982) and Elias (1979) where appropriate. Economic costs include workplace absenteeism, unproductive working hours, and, in some cases, termination of career path. Social costs include a form of neoliberal identity disruption that stems from a commitment to ‘healthism’ that induces substantial emotional labour and impacts negatively on social well-being. Findings demonstrate that this form of identity disruption influences patients’ health behaviours, notably inducing choices associated with poor health, for instance, increased levels of alcohol intake and poor eating habits. This form of identity disruption stems from a commitment to sport/exercise/PA as a form of self-care that insinuates specific aspects of ‘healthism’ through the neoliberal logics of minimal government intervention and individual choice, market fundamentalism and risk management manifesting. Findings indicate that, for individuals that are receptive to this form of self-care, sustaining a SRI traps them, both physically and emotionally (through neoliberal identity disruption) in the pre discursive realm of ‘unhealthy’, therefore perpetuating the problem of physical activity levels and health behaviours of populations central to the PAHP argument. This demonstrates the problem of the sustainability of PAHP policy messages, and the wider paradox of ‘health economics' that underpin narratives of physical activity and health.
Chapter six will document and analyse data which explores the following research aim: *To illustrate how chronic SRI is managed over time using a partly prospective and longitudinal case approach of patients. (n=4) who are continuing with their treatment at the SEM clinic illustrating the interaction between patient pathways and the incurred social and economic costs.* This chapter highlights the points in which the inefficiencies of patient pathways particularly before their arrival into SEM, make manifest particular social and economic costs, demonstrating the extent these coalesce to drive patients’ experiences’ of healthcare. It evidences that pathway inefficiencies impact on the economic costs to the patient, with these costs being incurred through inefficient pathways rather than being a product of patients’ (dis-)ability to work. It further demonstrates how the relative alienation patients experiences from their pathways over time contribute to the severity of social costs. This chapter further illustrates, prospectively, patients’ journey through their treatment at the SEM. It illustrates how treatment at the SEM is relatively quick and, for the majority of patients, leads to full recovery and increased patient satisfaction. However, on regaining increased physical capacity, patients often re-engage in sport/exercise/PA and sustain a subsequent SRI. This chapter reinforces previous findings that highlight the importance of efficient pathways and referrals into SEM services for patients with a SRI by evidencing improved patient satisfaction, efficient treatment, and the potential to reduce the wider, problematic social and economic costs of SRI.

Chapter seven – the conclusion – will provide an overview of the thesis and summarise the findings of the four research aims. It will outline in detail the practical implications this thesis has on SEM and NHS organisation, patient experience, and PAHP policy, and its theoretical contribution to sociological knowledge. The chapter concludes that, as currently arranged, SEM fails to fulfil the goals behind its organisational development. Where patient pathways are not being clearly established for patients with a SRI, SEM remains a relatively marginalised service and has little impact on reducing the cycle of inefficient pathways. The implications of this are – for the NHS - largely economic, particularly in service usage and the efficiency of healthcare delivery across wider MSK services. However, other impacts
include poor patient experience and dissatisfaction with the pathways through the NHS for SRI patients. Given the political focus on improving patient experience in the NHS, and utilising this as a key measure of market quality, clear and efficient patient pathways are increasingly important to establish. SRI has further implications for the persuasiveness of the PAHP argument which fails to recognise the social and economic costs of SRI and foregrounds the ‘health economics’ of increased sport/exercise/PA. Identifying the social and economic costs of SRI obfuscates the social and economic productivity and the evidence base for a wide cost saving to society, therefore posing a problem for the long term sustainability of PAHP policy. The theoretical contribution of this thesis builds on the implications to PAHP policy in greater detail, by exposing the paradox of PAHP policy under the current discursive conditions of neoliberal health economics, and poses a position from which this implication can be utilised for the development of PAHP for greater sustainability and longer term impact. To close, an indication of potential future research areas that build on the findings of this thesis will be discussed. This includes developing research that explores patient referral into SEM from the GP perspective and contributing to the wider picture of the pathways of patients with a SRI. Further avenues for potential research include conducting multidisciplinary research that takes into consideration the qualitative findings of the social and economic costs, translating these findings into measurable figures that are likely to have greater impact on influencing government PAHP agendas.
Introduction

1.1. The Physical Activity and Health Relationship

The relationship between physical activity/exercise/sport and health forms a critical cornerstone in current neoliberal government health agendas. This is unsurprising considering the wealth of research conducted in the last half century that documents a relationship between population health and physical activity (PA) (See, Anderson at al. 2000; Hawley, 2004; Hawley and Gibala, 2009; Krstrup, et al. 2000), particularly the positioning of PA as an antidote to a long list of cardiometabolic diseases (Gard and Wright, 2004; Strasser, 2012) and what is currently termed the inactivity ‘pandemic’ of modern societies (Kohl et al, 2012).

Early recognition of the PA/health relationship is reported by Fentem (1979) who claimed that habitual exercise was specifically linked to a reduction in individuals' risk of disease such as coronary heart disease. Over a decade later, Fentem (1994) substantiated his claim further, taking a broader view of the benefits of PA by advocating that “individual participation in adequate amounts of regular physical activity can improve health and prevent disease” (p.1291). Fentem (1979; 1994) is not a lone voice in such assertions. Current research continues to document this relationship, iterating the PA/health relationship in the case of cardiometabolic diseases such as stroke (Silvia-Smith et al, 2013), COPD (Garcia-Aymerich et al, 2014) and obesity (Hill, 2004), forms of cancer (Arem et al, 2013) and, further, to other aspects of health such as the effective management of mental health disorders (e.g. Searle et al, 2014; Carek et al, 2011) and workplace psychosocial health or ‘wellness’ (Brown et al, 2011). Research legitimising the PA/health relationship continues to dominate research agendas, substantiating the importance of PA across all socio-demographic population groups such as young adults (under 18 years of age)(see, Gannotti et al. 2007) and older population groups (over 60 years of age)(see, Hurley and Roth, 2000; Tseng et al. 1995; Winett and Carpinelli, 2001).
Indeed, the scholarly attention to the PA/health relationship is particularly fruitful. Stemming from this relationship is also a plethora of research that documents the economic benefits of PA, producing a wealth of health economic analyses that focus on the benefit of PA in reducing the cost of healthcare delivery in the treatment of cardiometabolic diseases. As a result of the position of PA in the PA/health relationship (i.e. as the critical activity in reducing the risk of disease), physical inactivity therefore becomes the direct ‘cost’ to healthcare, viewed as the precursor to future healthcare delivery within the National Health Service (NHS). For example, an NHS report states that ‘an inactive person spends 38 more days in hospital than an active person, and utilises 5.5% more GP visits, 13% more specialist services and 12% more nurse visits than an active individual’ (NHS Sport and Exercise Medicine: a fresh approach, 2012). The economic burden of physical inactivity is placed in the context of direct financial data by Allender et al (2007) who estimate a cost of £1.06 billion to the NHS in healthcare delivery as a result of physical inactivity in the year of 2002, with later research by Scarborough modifying but essentially substantiating this economic impact, placing the figure at £0.9 billion between 2006-07. More recent financial data from the British Heart Foundation publishes similar costs between the year of 2009-10 (See, British Heart Foundation, 2013). Whilst the above data is conducted by research that aims to address the economic cost to the British NHS, the research trend is indicative of a wider, global shift in a focus on the ‘health economics’ of increased PA. For instance comparable studies have been conducted by Cadihac et al (2011) and Zhang (2013) in Australia and China, respectively.

The implications of this emerging ‘health economics’ are that the consumption of PA/exercise/sport is therefore viewed as a ‘form of treatment’ in healthcare in both reducing the mortality rate of cardiometabolic disease and the cost of treating such diseases. Indeed, this is epitomized by the joint American Medical Association (AMA) and the American College of Sports Medicine’s (ACSM) ‘Exercise is Medicine’ (Sallis, 2009) strategy which advocates the use of PA/exercise/sport as an ‘intervention- for-prevention’. Indicatively, in 2007 the AMA called for “all health care providers to assess and review every patients’ physical activity programme at every visit” (See, Russell, 2013). This approach has certainly
been influential in Britain, with the employment of exercise referral schemes (ERS) in the NHS. The ERS ‘prescribes’ PA through the general practitioner (GP) at the primary care level, for those populations who are ‘at risk’ of, or suffering from, cardiometabolic diseases, as an economically effective means in reducing healthcare delivery (Dugdill, Graham and McNair, 2007). The scheme operates via referral from primary care to an exercise professional who recommends and structures forms of PA and exercise (NICE, 2014) with the intention of improving patients’ health and general well-being. Much of the scholarly attention concerned with ERS has focused on the economic benefits of the scheme, determined by the financial cost of the programme analysed against the cost of treatment for various cardiometabolic diseases per patient (See, Anokye et al. 2011; Pavey et al, 2011; Roine et al, 2009). Whilst the cost-effectiveness of the scheme has been identified as uncertain¹ (See for example, Pavey et al, 2011) the volume of attention paid to its economic benefit, in addition to the wider focus on ‘exercise is medicine’ is particularly indicative of a neoliberal ‘health economics’.

1.2 Framework of Neoliberal Rationality and ‘Healthism’

The ‘Exercise is Medicine’ (Sallis, 2009) and ERS initiatives illustrate how the PA/health relationship has become reconceptualised from a social problem (e.g. as identified by Fenten (1974)) to one of an economic and thus inherently political issue (Piggin and Bairner, 2014). This reconceptualization is increasingly illustrative of neoliberal rationality, often defined across the social sciences as a set of conditions that constructs society and the behaviours of citizens on marketization principles (Munck, 2005).Whilst neoliberalism has received much critical attention across the literature and remains a largely contested term (Gane, 2014) within particular contexts, there is general scholarly consensus to its broad epistemological foundations (Mirowski, 2013). For instance, as Polanyi (2001) writes, broadly, neoliberal rationality assumes that ‘instead of economy being embedded in social relations, social relations are embedded in the economic system’ (p. 60) conditioning the relationship citizens have with themselves

¹ This uncertainty is due to concerns over the validity of studies that attempt to analyse forms of estimates behaviour changes along economic (cost-benefit) lines.
and wider society. Neoliberal rationality is characterised by the following key features: minimal government intervention and greater individual ‘choice’; market fundamentalism and, risk management (Ericson et al, 2000). These function to shape the corporeal conduct of individuals and make manifest a self-imposed analytical emphasis on self-regulation (Rose and Miller, 1992).

This is particularly identifiable within, and forms the base of, neoliberal health governance, where this rationality is brought into effect, and operates through, the discourse of ‘healthism’ (Crawford, 1980). The term ‘healthism’ locates the issue of personal and population health within a broader social, political and cultural framework (Ayo, 2012) and demonstrates how the key features of neoliberal rationality operate to constitute contemporary understandings of the healthy body and bring the issue of personal health in line with the enterprising citizen (Lupton, 1995; Rose and Miller, 1992). For instance, minimal government intervention and greater ‘individual ‘choice’ shifts the instruction of health from the state to the individual locating health as a determinant of lifestyle ‘choices’ and not a social and economic determinant of the state. This leads to a ‘championing’ of personal responsibility for health through self-regulated practices (re-)positioning health inequalities as a matter of free choice. Such a responsibility shift is made increasingly possible by market fundamentalism, through the expansion of health markets and the commodification of health constituting practices (Galvin, 2002). For example, there is an array of services and goods available to responsible and self-regulating individuals to consume for their health needs and management of lifestyle. Management via consumption is made increasingly manifest via the rationality of risk management. Health risks operate though the discourse of ‘healthism’ to legitimise personal responsibility by creating a moral reason for the preoccupation with the healthy body. In doing so, normative notions of ‘healthy’ are associated with reduced risk and the increasing economically and socially enterprising citizen (Lupton, 1996; Petersen, 2000).

Demonstrating the operation of this rationality, Lemke (2001, p. 201) argues,
'the strategy of rendering individual subjects “responsible” (and also collectives, such as families, associations, etc.) entails shifting the responsibility for social risks such as illness, unemployment, poverty, etc., and for life in society into the domain for which the individual is responsible and transforming it into a problem of “self-care”.

The ‘responsible’ citizen to which Lemke (2001) makes claim is directed through the increasing consumption of PA and exercise by individuals. Consumption induces the self-management of lifestyle risks where PA is associated with the economically and socially enterprising individual, operationalising a technology of ‘governing at a distance’ (Teghtsoonian, 2009) that directs PA as a self-interested and ‘free’ choice of populations that aligns with the objectives of contemporary governments.

‘Healthism’ is illustrated through physical activity health promotion (PAHP) policy that continually iterates a need for increasing PA to tackle the social and economic problem of inactivity. For instance, in 2014 four national PAHP policy documents were published in the UK alone: Turning the tide of inactivity (UK Active, 2014); Moving More, Living More: The Physical Activity Olympic and Paralympic Legacy for the Nation (Cabinet Office, 2014); Tackling Physical Inactivity – a coordinated approach (All party Commission on Physical Activity, 2014); and Everybody Active, Every Day (Public Health England, 2014).

Such policy rhetoric embeds neoliberal health governance and is continuing calls, across all policy publications, for increased consumption of PA, exercise and forms of sport. For instance, ‘Moving More, Living More’ advocates participation in football and organised running events for populations to increase PA consumption.

Against this backdrop, the role of PA/exercise/sport in western, contemporary societies is significant and highly valued. This is epitomised by the number of people doing PA/exercise/sport documented at the empirical level by government surveys. For instance, the ‘Taking Part Survey’ of 2013/14 issued from the Government Department for Culture, Media and Sports (DCMS) claims an increase in participation across all age groups (including the 75 plus age category) of those that took part in at least one session of
exercise once a week (DCMS, 2013). Sport England (2013) also identify this trend claiming an increase of 31.4% of those that participate in sport at least once a week when comparing data from the ‘Active People Survey’ published in 2005/06 to the more recent survey published in 2012/13. These figures may be unsurprising considering PA/exercise/sport’s social position as a highly politicised and economic vehicle at an agency and policy level. However, what is surprising is that PAHP policy continues to iterate the existence of a physical inactivity pandemic in spite of these figures.

As much as rising PA levels may be lauded as policy success for those individuals who are receptive to, and comply and consume PA/exercise/sport, research suggests that a large proportion will consequently sustain a physical injury. Whilst this goes largely unrecognised in the PAHP, the sport and health ideology more generally (Waddington, 2000), and the current pursuit to a neoliberal ‘health economics’, there exists a body of epidemiological work that indicates that both the frequency and cost is significant. The epidemiological work on SRI documents the number of individuals who have sustained an injury as a result of participation in various forms of PA/exercise/sport, paying particular attentions to the demographic of population groups with a sport related injury (SRI) and the social and economic consequences of sustaining injury.

1.3 Epidemiology of Sport Injury

As noted, the epidemiological research on SRI is diverse and can be broadly divided according to three research foci. The diversity of this area is reflected in the lack of methodological consistency across studies, particularly with respect to the methods of reporting SRI and therefore the analysis of categorisation, frequency etc. (Brookes and Fuller, 2006). Indeed, this is largely a consequence of the diversity of MSK injuries generally, particularly in their categorisation as acute or chronic SRI. Characteristically, acute injuries have a clear diagnosis resulting from the fashion by which they were

---

2 Critically, data from this survey in contrast to the ‘Taking part survey’ was published a year prior to the London Olympic Games and so may be more reflective of steady social trends.
sustained. For instance, a collision with an object/person results in structural damage to the body such as a break, fracture or lesion. The recovery process is often a specific time depending on the severity of the structural damage sustained (See, Flint et al, 2013). For acute injuries, there is a well understood sequence of events consisting of the point at which the injury was sustained followed by a recovery period. Chronic injury is far more complex in aetiology, diagnosis and the recovery process. For example, they are often sustained absent of a collision (such as in the case of overuse injury), require greater periods of time for recovery and can often go undiagnosed. Furthermore, in certain instances, acute injuries can result in chronic, on-going, injury symptoms (See, Welch and Hunting, 1999).

Despite of the diversity of MSK injury, epidemiological studies have sought to report the incidence rate of SRI with three specific aims. These are, firstly, epidemiological studies that are concerned with documenting the demographics of population groups who have sustained an injury; secondly, studies that determine the longer term consequences of sport injury through identifying a set of economic and social ‘costs’ that are incurred by the injured individual; and thirdly, studies that focus on injury rate in specific sports and/or injury rate within professional/elite level sport.

1.3.1 Demographics

Epidemiological studies that document the demographic patterning of SRI incidents have been conducted globally, across European countries (see, Baarveld et al. 2011; Bedford and Macauley, 1984; Boyce and Quigley, 2004; Cuddihy, 1990; Murphy et al, 1992; Schneider et al. 2006; Spence and Taggart, 1994); the United States (Burth and Overpeck, 2001); Australia (Finch et al. 2011); and Asia (Sadat-Ali, 1985). Predominantly, findings remain similar across UK and European based studies relating to demographic patterning (focusing on the prevalence of injury within categories of gender and age), the means by which the injury was sustained, and the type of injury sustained.

Typically epidemiological data on the demographic patterning of SRI has been collected via accident and emergency (A&E) departments and/or primary health care and focus on adult populations. A&E is viewed
by epidemiologists as an ideal data collection avenue due to the large numbers of individuals that are admitted with a SRI (Boyce and Quigley, 2004). It has been previously claimed that an estimated 1-1.5 million people attend A&E departments in Britain who have sustained an injury through PA/exercise/sport participation (Nicholl et al, 1991) highlighting the extent to which this avenue of healthcare is utilised by public population groups.

Studies that collect data via A&E departments are largely in concert in their demographic findings. For example, research documents similar trends in regard to gender and age difference of SRI incidents and the most common sports in which injury is sustained. Trends are consistent across a decade of literature. For instance, earlier work by Watters et al. (1984) claim that 88.7% were sustained by males. Of the 2270 patients, 78% were aged under 26, indicating a high incident rate in young adults, with 41% of injuries categorised as lower limb and soft tissue and most commonly sustained through football, rugby and running. Twenty years later, Boyce and Quigley’s (2004) findings largely parallel Watters et al (1984), for instance, with a higher percentage of SRI in young adults, particularly males, and commonly sustained through football and running. Findings from Watters et al (1984) document that, of 273 patients admitted to A&E with a SRI, injury incidents were highest in men in the 16-20 age category, with lower limb, soft tissue injuries accounting for 60% of all injuries. Similar to Watters et al (1984) Bloyce and Quigley (2004) found that injuries were most commonly sustained through football and rugby.

Studies that collect data via primary care demonstrate comparable trends to those studies conducted in A&E (See, Baarveld et al. 2011; Finch et al. 2001; Jones and Taggart 1994). For example, Finch et al (2001) collected data via an auditing of patients (n=6476) attending Musculoskeletal (MSK) sport injury clinics in Melbourne across a period of 1 year between 1997-98. Finch et al (2001) claim that the mean injury age was 25.4 years with 68.8% of patients being male. These findings remain consistent with European studies. For instance, Baaveld et al. 2011 collected data via General Practitioners (GPs) and found the mean age of patients seen with a SRI was 30.6 years. The cohort was predominantly male and with the highest incident rates from football.
However, whilst these trends remain comparable, temporally and geographically, and across the different care contexts, the fact that such studies can only provide estimated or partial representations of injury incidents is indicated by the variation in research designs. Much of the above research suggests a high proportion of soft tissue injuries resulting from sports participation (see, Baaveld et al, 2011; Boyce and Quigley, 2004). However, other epidemiological studies, such as Schneider et al (2006) categorise via ‘acute injuries’, ‘open wounds’ or ‘other injuries’ compared to, for instance Baaveld et al (2011) and Boyce and Quigley (2004) who categorise according to ‘limb location’ and ‘type of tissue’ injury. The categories of injury type/site used can vary considerably across studies and therefore are specific to research designs limiting the ability to extrapolate the data to generate more indicative pictures. Furthermore, the studies provide ‘snap shot’ epidemiological data due to, particularly, the generally short length of duration which data is collected. Whilst this ‘snap shot’ highlights the potential problem of sport injury, it perhaps underemphasizes the extent of the problem that longitudinal research designs may demonstrate. Further still, the categories provided in respect to the types of sports in which injury is sustained may also affect the representational value of the studies. Whilst studies identify the most common sports available for people, such as football and running etc., the coding of these categories can be viewed as restrictive or not representative of the number of more contemporary sporting activities available to individuals and thus may prevent particular injuries from being recorded. There is a wealth of recreation and sporting activities that are known to be risky in terms of susceptibility of serious injury and/or death such as climbing, base jumping or surfing, that are increasingly popular in western culture (Creyer et al. 2003; Palmer, 2004; Puchan, 2004). Furthermore, there is now a western trend to engage in ultra-marathons, organised distance running and iron-man-esque type challenges that involves heightened intensities and thus strains on the physical body (Lepers, 2008; Knechtle et al. 2011). Sports such as these rarely have a category in epidemiological studies and this may restrict injuries sustained from these sports from being recorded.
This critique has been noted recently by Gray and Finch (2015) who collect epidemiological data within the category of ‘fitness activities’ which, perhaps due to its growing, and more recent cultural activity in the last 5 years, has been largely misrepresented in the previous epidemiological work. Gray and Finch’s (2015) work highlights how employing these injury categories, the demographic patterns of previous epidemiological work are altered. For instance, they note a more balanced proportion of injuries between the sexes. One reason for this difference may be due to the type of PA/exercise/sports included in this research design further illustrating the partial nature of research findings inherent in the epidemiological approach.

Finally, and regardless of design and researcher consensus, the data given across these studies provide only the ‘tip of the iceberg’ (Finch and Cassell, 2006) of the frequency of SRI incidents. This is largely due to the data being collected through A&E or primary care and therefore only representing the demographics of those seeking treatment for their SRI within healthcare structures. There is a large proportion of individuals who incur a SRI that self-manage their injury and seek alternative treatments and/or use private healthcare. For instance, research has demonstrated the relatively small percentage of people that seek medical attention for sport injury through healthcare (see, Garrick et al., 1986; Requa, DeAvilla, & Garrick, 1993; Richie, Kelso, & Belluci, 1985). Inclusion of these population groups could potentially change the demographic representations of SRI incidents. Mitchell et al. (2010) highlight this issue in response to this criticism of epidemiology studies. In a population based study conducted in Australia that utilised the New South Wales population health survey, data was collected on the treatment avenues for sports injuries. Self-treatment, use of a physiotherapist and no treatment were documented as the three most prevalent forms of action. The percentage difference of these three forms of treatment compared to use of GP and admission to A&E were significantly higher. For example, 33.3% of females visited a physiotherapist compared to 4.2% using A&E departments. The study by Mitchell et al. (2010) also demonstrates gender differences regarding the avenues of healthcare chosen in response to an injury. Percentage differences suggest that more females seek other forms of healthcare, such as
physiotherapy, chiropractor, osteopath and acupuncturist. A higher percentage of males attend A&E and choose no treatment over other forms of healthcare. No data on the type of injury or severity of injury was collected by Mitchell et al (2010), and, as useful as this study is, it provides only a partial picture of a potentially more complex phenomenon.

Finally, data collected from primary care units such as admission to A&E departments are often acute and severe and require immediate treatment. Chronic, overuse and non-traumatic injuries, and injuries which are perceived by the individual as subjectively less severe, are less likely to be accounted for at A&E departments and, alternatively, may be treated by health professionals within the private sphere such as physiotherapist, chiropractors etc. As a result of the case inclusion criteria for A&E and primary healthcare epidemiological studies (for example, single visits to GP or A&E) data that highlights multiple visits by any one patient and/or referrals to certain other avenues of care are excluded.

Perhaps the most comprehensive epidemiological study to date, if we are to consider the above critique of previous work, was funded in the UK by the Sports Council and conducted by Nicholl et al (1995). Nicholl et al.'s (1995) research was conducted over a 4 year period using postal questionnaires to assess the demographics of SRI incidents. Postal questionnaires were sent out via GPs to patient practice lists yielding a population sample of 29000 within the age category of 16-45 years in England and Wales. The questionnaires utilised by Nicholl et al. (1995) also allowed both recurrent and new injuries to be reported and thus a broader illustration of the nature of SRI. Nicholl et al.’s (1995) findings highlight that 29.7 million injuries occur per year in England and Wales alone as a result of sport/exercise participation. In keeping with the previous demographic trends, 75% of the 29.7 million injuries were sustained by men, with football and rugby as the top two sports in which injuries were most commonly sustained from. These injuries were predominantly soft tissue injuries. Of the figure of 29.7 million provided by Nicholl et al. (1995), it was recorded that 9.8 million of these injuries were noted as “potentially serious, result in
treatment, or in participants being unable to take part in their usual activities” (p.232). Nichol et al.’s (1995) work reveals a more indicative and representative picture of the SRI issue, particularly in respect to the scale of the problem as a result of the longitudinal research design and access of patients not specific to a particular healthcare context. Furthermore, Nicholl et al. (1995) further identify the proportion of injuries that have a lasting effect on an individual’s physical capacity, illustrating that there may be a large proportion of SRI that can be considered chronic.

Despite the issues identified with the research designs of much of the epidemiological studies, this work highlights that SRI incidents present a significant social issue for healthcare delivery. In an attempt to illustrate this problem, a body of epidemiological studies pay attention to the effects of this problem, particularly in terms of the economic and social impact it has on an individual. This is explored in the next section.

### 1.3.2 Long term consequences of sport injury – economic and social ‘cost’ of SRI

Epidemiological works that focus on the long term consequences of SRI pay attention to sets of ‘costs’ incurred through injury to the individual. This body of work is predominately concerned with the consequences of SRI for economic production, such as time off work as a result of injury and/or the costs per head of treating the injury (See, Dekker et al, 2003a; Dekker et al, 2003b; De loës, 1990; Sandelin et al, 1985; Gabbett, 2001). Whilst there is acknowledgment of categories such as the loss of sporting participation and recognition of social costs such as depression (Richmond et al, 2009) studies that explore these ‘costs’ remain extremely limited in number.

For instance, early work by Sandelin et al (1985) provides descriptive data on the average weeks of absence from work in a study of acute sports injuries (dislocations, fractures, sprains, wounds and contusions) in Finland across a period of up to 24 months. On average, sick leave lasted three weeks, with 27% of patients claiming physical problems proceeding two years from the initial SRI incident. Although there is no direct reference to the calculation of accumulated ‘costs’ associated with these
figures, they locate the rate of sports injuries as an "economic problem, since over 60% of the injured are in permanent employment" (p. 103). More recent work by Dekker et al. (2003a) builds on these figures. Dekker et al. (2003a) followed up patients 1-4 years after their initial treatment for their SRI. Of these patients, 96% had taken time off work with 32% still experiencing ongoing physical problems induced by their SRI on an average of 2.8 years following initial treatment. The data does not proceed to identify a specific economic ‘cost’ in sum per se, but Dekker et al. (2003b) suggest that both potential labour lost and the resultant benefit payments to absentee workers reflect a significant financial cost of SRI, particularly when one takes into account the large numbers of patients suffering from SRI. Other research by Dekker et al. (2000a) makes reference to ‘sporting time lost’, claiming that over half the sample were absent from sport for more than a year, but fails to explain if this is a specific consequence of injury (as opposed to e.g. personal autonomy). It is therefore difficult to categorise this as a social ‘cost’ resulting from injury.

Research by De loës (1990) and Van Mechelen (1997) is far more extensive in illustrating economic costs, providing a representation of the absence from employment as a result of SRI in addition to providing numerical data on treatment cost per injury (De loës, 1990) and overall estimated medical costs as a result of sports injuries (Van Mechelen, 1997). For instance, De loës (1990) focuses on the direct economic costs of SRI in the Netherlands; i.e. the cost of medical treatment of the sport injury. De loës (1990) states that out of 1,083 outpatient visits (over a 1 year period) sports injuries accounted for 3% of the visits and 0.7% of SRI required in-patient care. The total amount of sick leave taken from that population sample accounted for 3,477 days and the cost of treatment per head was estimated at a mean cost of injury as US$ 335. Research by Van Mechelen (1997), also conducted in the Netherlands, calculates the direct and indirect costs of SRI, with the indirect costs constituting the “expenditure incurred in connection with the loss of productivity due to increased morbidity and mortality levels (loss of working time)” (p.178). Indirect costs included the 1.073 million working days lost by individuals with a sports injury over a period of a year in addition to an estimated figure provided by Van Mechelen (1997) for the
money paid out in sickness benefits from insurance schemes. Taking into account both indirect and direct costs, Van Mechelen (1997) estimates a figure of US$ 225 million. Whilst Van Mechelen (1997) is predominantly concerned with the longer term economic costs to injury, he does identify the incurrence of social costs or what he refers to as the ‘unquantifiable costs’ of sport injury. Van Mechelen (1997) claims this to be “the harmful effects of a sports injury on the psychosocial life of the individual or his (sic) family” (p.178) but continues to acknowledge that these costs cannot be quantified through the research design employed.

More current research on the economic costs of SRI is typically sport and/or injury specific and focused on specific populations. For example, research by King et al. (2011) attends to the indirect costs of amateur rugby injuries in New Zealand, focusing on the costs of injury treatment and entitlement claims made as a result of a rugby injury. King et al. (2011) states that cost of treatment and compensation of rugby injuries requires addressing due to the excessive costs calculated. Later work by King et al (2014) continues to focus on rugby, identifying costs of accident compensation for concussions only sustained through rugby. Work that focuses on specific population grounds attends to children or young adolescents. Examples of this include European based work by Dorine et al (2011) that economically analyses the cost of PA injuries in children aged between 10 and 12 in the Netherlands.

Whilst these studies are predominantly European based (with the exception of King et al, 2011) the sample size, research design, and economic analysis (i.e. direct, indirect or cumulative) vary between studies and so, in similar vein to the epidemiological work that maps the demographics of SRI, provides sets of economic ‘costs’ that are difficult to compare across studies. In addition to this, figures are frequently dated and therefore bear minimal relevance to current economic circumstances, particularly as costs are valued depending on culturally specific healthcare organisations. Importantly, the data on these economic ‘costs’ often fails to describe the underlying context to these ‘costs’ incurred by individuals. For instance, Sandelin et al (1985) claims that over 60% of individuals with a sports injury remain unemployed therefore creating an economic ‘cost’, however, there is little explanation as to why
these people have remained unemployed, such as through active choice or physical (dis-)ability. The latter reason would thus change the severity of the economic costs incurred through SRI.

The attention paid to the social ‘costs’ across this research remains limited. At present, there are no epidemiological studies that concentrate on the social costs of SRI as a specific form of inquiry. As noted, some studies do identify that social costs exist, for instance van Mechelen’s (1997) work, but fail to explore this further. Epidemiological work has been conducted on physical injury outside of sport, with a number of studies documenting the social ‘costs’ of lifestyle injury, for example, road traffic accidents (O’Donnell et al, 2005; Richmond et al. 2009; Stein et al. 2006; Van der Sluis et al, 1998). These are often theoretically framed through a psychological perspective, predominantly based upon methods of questionnaires and structured interviews that can be critiqued along similar lines to the sport epidemiological work. Regardless, albeit in a limited way, they do contribute to the mapping of the social ‘costs’ of injury. For example, Richmond et al. (2009) suggest that 18.1% of individuals are diagnosed with some form of depression post injury and that many individuals engaged in fewer social activities and lose their social network post injury. Although these findings are based on physical non-sporting injury, it does provide a suggestion that broader social costs do exist and need to be considered.

There may be several reasons why the social costs of SRI go unacknowledged. Firstly, the quantifiable and positivist research designs employed (i.e. questionnaires and surveys), decontextualise individual social experiences and therefore limit the scope to explore the types of social costs involved. The sets of criteria used within these types of data collection methods will change the very ‘types’ of social costs that are recorded and only allow descriptive or statistical data on such costs to emerge. In this regard, this work may be able to identify the existence of such costs but say less about the severity of these costs and the effect such social costs may have on wider areas of an individual’s social life. In short, such quantitative methodologies do not lend themselves to developing a holistic picture of an individual’s social experiences of SRI. Secondly, much of the epidemiological research that seeks to acknowledge sets of ‘costs’ tends to be a short term process that forms a single initial assessment followed by a final further
assessment. There remains little, if any, time period between these assessments to explore the long-term consequences of SRI. Indeed, any social costs that are recorded are those that are incurred from less chronic injuries due to the time span of the research designs. However, it is likely that more chronic, long term injuries have the most enduring effect on an individual’s life and therefore may incur the most severe social ‘costs’. As such, this body of research may also only highlight the ‘tip of the iceberg’ of the ‘costs’ of SRI in a similar way to the epidemiological work that documents the demographics of SRI. Both bodies of research underrepresent the significance of the ‘costs’ associated with sport injury in addition to the number of people that are injured. Consequently, epidemiological research designs lose the situational contextuality and temporal grounding required to fully assess any sets of social ‘costs’ incurred across an individual’s injury time.

1.3.3 Epidemiology of elite/specific sporting injury

Across the epidemiological work explored so far, it can be identified that the majority is dated in the 1990’s (Taggart, 1994; Murphy et al, 1992; Nicholl et al. 1995). The exception to this is more recent works by Baarveld (2011), Finch et al. (2011) and Schneider et al (2006). Recent epidemiological work appears to be more limited in focus, paying attention to the epidemiology of particular injury areas, population groups and types of sporting activities. For instance, there is a proliferation of epidemiology studies that focus, notably, on knee (Majewski et al. 2006; Gage et al. 2012; Zwerver et al. 2011), and ankle injury (Fung et al. 2007; Doherty et al. 2013). There is also evidence of current work focusing on specific type of activities that have been misrepresented by the earlier epidemiological work. As noted previously, Gray and Finch’s work (2015) documents injury rates within fitness activities such as aerobics, weightlifting and palates. Additionally, a large body of epidemiological work is concerned with injury rates within both specific types of sport and elite populations, for example, elite level athletics (Alonso et al. 2010; Eduoard et al. 2013), baseball (Posner et al. 2011), swimming (Wanivenhaus et al. 2012), skiing and snowboarding (Florenes, et al. 2012) and road cycling (Clarson et al. 2010).
To that end it can be suggested that epidemiological work on sport injury in public populations has fallen out of fashion within current SRI research agendas; specifically, studies that document longer term consequences and sets of costs of sport injury in the public. The previous epidemiological work (e.g. Nichol et al. 1995) that focuses on sport injury in the public clearly identifies the significance of sport injury as a public health burden and its potential economic implications, but remains over a decade old. Unlike current epidemiological work, it therefore appears to have little relevance in government research, funding, policy lobbying and legislation (Buse et al, 2005; Bowen and Zwi, 2005) in the climate of neoliberal health promotion. This is evidenced in PAHP policy guidelines which continue to iterate the need to increase the consumption of PA/exercise/sport across public populations with no reference to the potential risks of ongoing injury. The dated studies therefore provide limited information

Moreover, in light of the criticisms of much of the epidemiological work, it can indeed be argued that this is also largely a result of the lack of reliable information of the sets of costs incurred through SRI and how this data affects PAHP policy setting (Mitchell et al. 2010). To add here, it may also be that the epidemiological work cannot capture the socially and economically burdening consequences of injury within individuals' day to day lives and so the recognition that injury has a much longer and lasting effect on populations’ physical and social capacity remains limited. As Finch (2012) and Timpka et al. (2008) claim, the establishment of sport injury as a public health problem requires further evidence of the burden sport injury causes in the public domain.

1.4 SRI Treatment

Although calls have been made for further evidence of sport injury as a public health problem (see, Finch 2012 and Timpka et al, 2008) organisational change within the British NHS has led to the management of sport injury forming part of a wider and recent healthcare strategy. This is a result of the development and recognition of Sport and Exercise Medicine (SEM) as a medical speciality to be delivered within the structure of public healthcare.
1.5 Sport and Exercise Medicine development and initiatives

Despite the prominence of SEM within sports organisations, particularly within the domain of elite/performance sport, it is only since 2005 that SEM has been granted the status of medical speciality by the UK Department of Health (Cullen and Batt, 2005). The primary goal of this was deliver SEM across primary and secondary care in the NHS accessed by public populations. This particular initiative is largely a result of the continuing effort to increase public consumption of PA/exercise/sport considering its poignant role as a ‘form of treatment’ in responding to the increasing cardiometabolic diseases and ‘obesity pandemic’ (Abernathy et al, 2002). Although this establishment of SEM in public healthcare is a British development, it does reflect the global trend that places sport/exercise/PA as key to the social and economic health and well-being of nations. In this regard, the development of SEM is primarily designed to address the PA/exercise/sport and health relationship by coordinating strategies which operationalise PA interventions (Cullen and Batt, 2005). However, as part of this initiative, SEM is also placed to manage the treatment of SRI, and other musculoskeletal (MSK) injuries, and further to develop the pathways of individuals with SRI through public healthcare structures (O’Halloran et al, 2009). In addition to delivering SEM within primary and secondary healthcare, the Department of Health has provided key funding to develop the infrastructure of specialist SEM centres in order to support the delivery of SEM in locations outside of hospital settings. This included the development of the National Centre for Sport and Exercise Medicine (NCSEM) across 3 UK sites aiming to co-locate specialist SEM practitioners, health practitioners and researchers in order to optimise the delivery of SEM within the public sphere.

The delivery of SEM to the NHS in both primary and secondary care is expected to bring several key benefits which has been outlined in the NHS information document ‘Sport and Exercise Medicine: A fresh approach’ (2012, p. 11). Among others, these include:

- “Provide locally based musculoskeletal services”
- “Provide multidisciplinary teams to provide a single point of referral for patients requiring specialist help”
- “Establish SEM clinics to work alongside existing orthopaedic, physiotherapy and emergency department services in identifying, treating and rehabilitating acute and chronic MSK disorders”

These initiatives reflect SEM’s focus on MSK health (including SRI) by specialist SEM practitioners within healthcare structures. Importantly, the latter is documented further, with claims made that “MSK disorders affect almost every individual at some stage of their life making them a common reason for repeat consultations with a GP, accounting for up to 30% of all primary care consultation” and that “musculoskeletal injuries are referred back to GPs creating an increased workload in primary care, suboptimal injury management and longer waiting times for intervention. There is evidence of overall patient dissatisfaction within this healthcare experience” (p.20). The delivery of SEM within the public is therefore designed to reduce the workload created through SRI and provide clinics which are utilised effectively as a vehicle for improving the efficacy of patient pathways and thus the ‘suboptimal injury management’ of patients. Indeed, this is clearly identified as a key initiative in ‘Sport and Exercise Medicine: A fresh approach’ (2012) with the claim to “ensure that clear patient pathways exist so that the patient journey between primary and secondary care is seamless” (p.25).

At present, little is known as to whether the development of SEM within public healthcare and its proposed key benefits have had any impact on patients with a SRI. Research that documents the effectiveness of SEM clinics in public healthcare is extremely limited, with any previous research conducted concerned with SEM’s proposed role and benefits prior to its actual development and operational progress as a medical speciality within the NHS (see, Thompson et al, 2004; Abernathy et al, 2003). An exception to this is research by O’Halloran et al (2009) that focuses on the views of various healthcare practitioners’ to the role of the SEM physicians in delivering SEM within the NHS. For instance, O’Halloran et al (2009) used a questionnaire based survey method to map the views of GPs, orthopaedic surgeons and public health consultants in order to establish the perceptions of the position of SEM in the NHS as it attempts
to strike a balance between PA intervention and the management of SRI. Questionnaire design included multiple choice questions on various aspects of SEM’s integration into the NHS, explains areas such as the split in the focus of SEM as ‘exercise as medicine’ and SRI management, the referral process and practitioners’ understandings of SEM more broadly. Findings are therefore based on a quantitative analysis of the questionnaire responses providing statistical data on the percentages of healthcare practitioners who agree to particular points regarding SEM within the NHS. Findings indicate that 63% of respondents believe that the role of SEM should be split between both exercise interventions and management of SRI, 64% agreed that their practice would benefit from SEM whilst 50% felt that patients should have the choice to self-refer to SEM clinics rather than be referred by primary care. Importantly, 31% of respondents felt they lacked in knowledge and understanding as to what SEM specifically delivered within the NHS.

O’Halloran et al’s (2009) study provides the starting point to understanding the delivery of SEM within the NHS. However, the findings also present some issues for the operational progression and establishment of SEM in the NHS. Firstly, just over half of the healthcare practitioners (64%) viewed SEM as benefiting their particular healthcare practices in addition to a disparity in views with regards to referrals, with some healthcare practitioners feeling that, in order for pathways to be established, patients should be able to self-refer. This highlights that SEM may not be favoured as a useful avenue of care by certain practitioners as they do not perceive it as beneficial and that referrals are not necessarily being driven by primary care. Secondly, the split of SEM’s role in tackling cardiometabolic diseases and managing SRI appears to be favoured by just over half (63%) of the healthcare practitioners suggesting that there is a disagreement amongst healthcare practitioners as to how important SEM is to either of these two initiatives and thus if either initiative is perhaps being driven over and above the other. Finally, the low percentage of respondents who felt that they had a good knowledge of SEM presents a challenge to understanding the need for SEM in the NHS. This suggests that the broader knowledge of SEM across other NHS care areas remains significantly low and may indicate a limited degree of SEM integration to date. Indeed,
based on these findings, the initiative to “ensure that clear patient pathways exist so that the patient journey between primary and secondary care is seamless” (p.25) may present some difficulties if healthcare practitioners within primary care (such as GPs) have limited knowledge/value of SEM and are thus driving the referral process effectively.

O’Halloran et al’s (2009) study presents a platform on which to further develop research on the integration of SEM within the NHS, particularly this integration from the patient perspective, qualitatively exploring the lived experiences of those patients as they encounter SEM clinics within the NHS. Currently, no research exists in this area and thus little is known about the integration of SEM within the NHS for patients over a decade on from its establishment as a medical speciality within public healthcare. In light of SEM’s initiative to manage SRI and improve patient pathways, research on patient pathways as they proceed through SEM clinics within the NHS is particularly appropriate and opportune.

1.6 Research Aims

Against the backdrop of this chapter, there is a clear need for several interrelated lines of inquiry that could develop an understanding of SRI among the public. Firstly, and in response to calls from previous scholars (See, Finch, 2012 and Timpka et al 2008), there is a need to highlight the scale of public SRI that further addresses it as a consequence of the relationship between the PA/exercise/sport and health relationship and therefore as a continuing problem for neoliberal health economics and PAHP policy guidelines. Outlined by the review of the epidemiological literature, there is a lacuna in which to develop knowledge and understanding on the long term social and economic ‘costs’ of SRI in the public. This particular area of research requires development in order to highlight the problem of SRI and its continuing impact on health economics driving PAHP policy. Based on the limitations of previous work, this may be better developed using a qualitative approach that provides scope to understand the contextual position of these ‘costs’ within the lives of individuals and unpacks the underlying social conditions which structure the severity of such costs and explores the so-called “unquantifiable costs”
(Van Mechelen 1997). Thirdly, the system through which the public manages SRI within the NHS is also significant. This is particularly relevant considering the recent organisational change within the NHS relating to the provisions of SEM as impacting on the management of SRI and the efficiency of the pathways for those with a SRI in the NHS. Documenting patient pathways and patients’ experiences provides an understanding of the efficiency with which organisational changes has been implemented. At a structural level this is important to potentially improve the economic viability and efficacy of this process, for instance, through standardising care pathways to reduce service delivery costs. Additionally, at an individual or patient level, this is important to improve well-being through reducing the time an individual is ‘in’ the NHS system and thus reducing the time an individual is living with the social and economic costs of SRI.

Therefore, the aims of this research are four fold:

1. To illustrate the pathway of patients with a Sport related injury (SRI) as they receive treatment from one Sport and Exercise Medicine (SEM) clinic in England within the NHS.

2. To identify the extent SEM initiatives are being developed at a patient level through the integration of SEM into public healthcare and the impact this has on patient pathways.

3. To highlight using a qualitative inquiry the long term social and economic ‘costs’ of SRI of those patients (n=19) that have received treatment at the SEM clinic.

4. To illustrate how chronic SRI is managed over time using a partly prospective approach of patients. (n=4) who are continuing with their treatment at the SEM clinic illustrating the interaction between patient pathways and the incurred social and economic costs.
2. CHAPTER TWO - LITERATURE REVIEW

As highlighted in chapter one, there is a need to take a qualitative and contextual approach to understanding the experiences of SRI in public populations in order to develop the thesis aims. This chapter provides a platform from which this can be achieved through a review of the literature that is directly and conceptually relevant to exploring these aims. This first section of this literature review develops a theoretically informed analysis of the body, drawing upon social theory that views the body as a socially transformative entity that gives meaning to its experiences within a given set of social conditions. This section will therefore provide an overview of the theoretical underpinnings employed in the analysis of the findings. The second section will provide an overview of the empirical qualitative research conducted on SRI and other conceptually relevant research areas, illustrating in detail the current lacuna of knowledge on this topic and thus the broader rationale for undertaking the thesis.

2.1. THEORETICAL

2.1.1. Introduction

The site of SRI - the body - forms the ontological feature of study within the sociology of health and medicine with much attention paid to the construction and experiences of the ‘healthy’ body in a given set of medical arrangements (Turner, 1999). Given the taken for granted, and rather conflated relationship between sport/exercise/PA and health, this chapter will explore this relationship taking an eclectic approach to social theory by drawing upon specific concepts articulated, primarily by Foucault (1980;1988) and Elias (1978; 2000), with some additional reference to specific aspects of Bourdieu’s (1984) work. The theoretical concepts articulated within this section will inform the analysis of the research findings (especially chapters four and five), with particular concepts being used where appropriate to provide a relevant analytical lens to the data. Specific theoretical concepts to be used will be identified at the beginning of chapters four and five. The aim of the section is therefore to provide a broad theoretical and detailed understanding of the relationship between the embodiment of ‘health’ within current socio-political conditions of neoliberalism, with a focus on the mechanisms and processes of public health
governance in the (re-)production of corporeal behaviours and health experiences. Firstly, a focus on the extent to which the body is made a subject under specific conditions of neoliberalism will be explored, paying particular attention to Foucault’s concepts of ‘subjectification’ and regimes of self-care in the construction of what Elias would term the ‘civilised’ body. Following this, these concepts will then be applied to the context of PAHP and the governance of sport/exercise/PA consumption as a contemporary regime of self-care. Attention will then be paid to the use of power within Foucault’s work and, in critical evaluation of this, a focus on the Eliasian (1978) concept of ‘game models’ and the concept of ‘involvement and detachment’ will be proposed as an alternative, and more fruitful tool for the analysis of power. To that end, a summary of the how the specific aspects of Foucault (1980; 1988) and Elias’s (1978) work can be taken together to make a valuable theoretical contribution to the thesis aims will be highlighted.

2.1.2. Self-care and control of the self

Foucault (1980; 1988) and Elias’s (2000) work is particularly valuable when developing an understanding of body corporeality in various political economies. Both authors have an interest in identifying the “principles of order within the world” (p.98) with a focus on modes of state governance and “the processes and mechanisms that produced the situations which human beings found themselves” (Smith, 2001. p. 97). Whilst there remain several significant differences in the ontologies of both authors work, the broader focus on the body as a subject under socio-political arrangements, makes these authors a useful starting point for the analysis of the social costs of SRI.

The concept of discourse, a term central to Foucault’s (1980, 1988) work is defined as stabilising historically bound social knowledge critical to the governance (Foucault, 1988) and control of the self (Elias, 2000). Across Foucault’s work, discourse acts to constitute, and works within, language structures to form the base of social experience and create the conditions under which knowledge is generated and structured. It is discourse that sets the conditions for, and objectifies, a certain order of social, cultural
and historically contextual ‘truths’, validating particular ways of knowing and social meanings that serve to inform and sustain modes of body practices (Rabinow, 1984). Illustrating this, Foucault (1980) writes, “each society has its own regime of truth, its ‘general politics’ of truth: that is, the type of discourse which it accepts and makes function as true” (p.131). However, for Foucault, the concept of discourse is equitable with social power. That is to say, where the object of discourse creates a particular ‘order of things’ or cultural ways of knowing, power relations are systematically operating, reflected in the cultural practices discourse privileges and the localisation of these practices in non-discursive contexts (e.g. institutions and structures). Foucauldian power as implicated within discourse therefore becomes a necessary ‘force’ in the construction of all social relations.

However, it is the location of individuals in this discourse/power relationship that is critical in Foucault’s work as it creates the process by which the body gives meanings in its experiences within broader social contexts (e.g. political economies). This is defined by Foucault as ‘subjectification’ and describes the process (or processes) of self-constitution, or, where the self becomes invested in a given set of social practices through being made a subject via moral accountability that aligns with the object of discourse. The sense of moral duty an individual associates with their behaviour is critical for the process of subjectification. Foucault (1997) claims that through the context of moral obligations insinuated in discourse, the subject/object relationship can be made manifest and allow “discursive forms [to] articulate objects and subjects in their intelligibility” (Butler, 1995 p.138). Thus the object of discourse always invariably implicates ethical conduct and moral duties in which the process of subjectification and the active (re-)production of social practices can be achieved. In this regard, subjectification plays an important role in Foucault’s work as it makes individuals subjects through their receptiveness and moral concerns to particular knowledge forms.

Importantly, the process of subjectification stimulates the self to invest in particular modes of bodily practices and body-self relationships (self-constitution) depending on the object of discourse. One mode of bodily practice produced through the process of subjectification is that of self-care (care of the self).
Self-care describes the relationship between the corporeal exteriors and embodied behaviours of the self, or as Foucault (1982, pp.10-11) writes, self-care constitutes,

> a certain form of attention, of looking. Being concerned about oneself implies that we look away from the outside.....The care of the self implies a certain way of attending to what we think and what takes place in our thoughts.... [It] also always designates a number of actions exercised on the self by the self, actions by which one takes responsibility for oneself and by which one changes, purifies, transforms and transfigures oneself.

Foucault argues that through the process of self-care, subjectivities are constituted via the actions of the self on the physical body and forms of corporeality depending on the moral prescription implicated in different forms of discursive practices. It creates an illusion of meaningful agency, of ontological security (Giddens, 1991) and biography (Bury, 1988) to the structured corporeal behaviours of the body that become internalised to the point whereby these behaviours become associated with an inner necessity. These subjectivities therefore structure body-self relationships and ontological views of the world and others, what Bourdieu (1984) and Elias (2000) define as a ‘habitus’. In this respect, self-care is intelligible through the ‘liberating’ effects of discursive power; through the illusion of agency and moral duty that subjectification creates. However on the contrary, this liberation is, in itself, a form of self-managed control of the body, made possible through discursive power in maintaining relations between the body, self and society. However, self-care and the concern with the self is further a way of looking “from the outside” (Foucault, 1982) to the surveillance of others in their corporeal conduct. Thus, it is not simply a necessity and moral obligation over the conduct of the self, but rather, one that extends to construct the self in the image of others who are equally implicated in the moral responsibilities to self-care and the normative standards of the body that this subjectification produces. Self-care therefore manifests a ‘folding over’ of discursive power to become the force in the relations between bodies as the surveillance is both inward and outward, or ‘a way of acting upon an acting subject or acting subjects by virtue of their acting or being capable of action’ (Foucault, 1982 p.789).
Whilst discourse and self-care are concepts primarily associated with Foucault, Elias effectively describes how the responsibility and social pressures controlled by what Foucault would see as the object of discourse manifests in the corporeal conduct and habitus of the body, developing a ‘civilised’ body that ‘exercise[s] stricter, more continuous… more moderate and more nuanced self-control over a growing number of aspects of their feelings and behaviours’ (Dunning and Hughes, 2012). Elias’s concept of the civilised body is closely aligned with self-care, with the individual always exerting constant control and surveillance over their behaviours implicated through a sense of responsibility and inner necessity. However, where increasing control is made manifest over the conduct of the body across various political economics, there is invariably a sense of ‘shame’ or ‘fear of failure’ in losing control of their behaviours, or failing to adhere to the moral obligations of normative regimes of self-care and becoming the socially deviant body. This cultivates a sense of vulnerability in the control of the body and stimulates a permanent state of awareness that “induces foresight and prudence” (Lemke, 2012, p. 48) in the conduct of the self. For regimes of self-care and control of the civilised body, the fear of failing and vulnerability is particularly motivating, and thus stimulates individuals to engage in normative forms of self-care, perpetuating normative practices and forms of sociality.

2.1.3 ‘Healthism’ and Self-Care in the Consumption of Sport/Exercise/Physical Activity (PA)

The Foucauldian perspective on self-care and the process of self-constitution invokes particular aspects of neoliberal rationality and can be framed in the larger social and political context and shifting object of discourse. Where the object of discourse shifts over historical and socio-political contexts, changing forms of self-care are made manifest via the corporeal behaviours of individuals and remain symptomatic of wider forms of changing governmentality or bio-politics that align with the aims and objectivities of contemporary government (Rose, 1996). Contemporary government focus on a health discourse is an example of this shift and has been termed ‘healthism’ by Crawford (1980). It is a discourse made possible via specific aspects of neoliberal rationality that invoke a particular form of self-care in the constitution of a modern, ‘civilised’ body that defines and facilitates the ‘making of the ‘good’ and ‘healthy citizen’ (Ayo,
2012:100) as a duty, obligation and correct ‘choice’ imposed by good citizenship (Rose, 1996). As part of the ‘healthism’ narrative, the uptake of sport, exercise and PA are directed as the ‘correct’ choice of individuals, and an aesthetic preoccupation with the physically active body is promoted, aligning with the objectives of PAHP materials and government health promotion lobbying.

As previously identified in chapter one, specific features of neoliberal rationality include; minimal government intervention and championing of individual choice; market fundamentalism and, risk management (Ericson et al. 2000). These logics are made manifest through the discourse of ‘healthism’ as a contemporary form of health promotion in the form of responsibility and regulation, consumption and health risk. Foucault’s concepts of self-care and discourse demonstrate the processes by which ‘healthism’ is received, embodied and (re-)produced in the constitution of the physically active body.

(a) Responsibility and Regulation

The neoliberal rationality of minimal state intervention and championing of personal responsibility sees social issues (such as physical activity consumption) (re-)conceptualised in economic terms and apparently non-political sites (e.g. the body) constructed vis-a-vis this relationship (Burchell, 1993; Rose, 1996). This is increasingly established through the reduction in structural state intervention, increasing privatisation and the emphasis on the ‘local’ (e.g. the body) as site for action (Rose, 1996). Foucault (1982) demonstrates how this shift in the ‘order of things’ and relations of power become systematically reflected in non-discursive contexts (e.g. localised institutions such as the school, the hospital and the body etc.) facilitating different forms of operation and regulation in the promotion of social and economic conditions.

This specific neoliberal logic is promoted in the discourse of ‘healthism’ where personal health and uptake of PA is endorsed through government rhetoric, lobbying and health promotion strategies as a rational, socially and economically productive activity that becomes bound up in the responsibility and regulation of the self (Lemke, 2012; Massumi, 1992). Thus, where there is an increasing privatisation of the state,
there is a ‘privatization’ of health (Wiest et al, 2015). With the onus of ‘health’ on the individual and as a private matter, the focus on self-care, has, in turn, become increasingly persuasive and particularly strategic in the management of population health. ‘Healthiest’ forms of self-care allow for a reflexive, pre-occupation with the aesthetic body, where exerting relative control (Elias, 1979) and self-surveillance over health behaviours such as with PA and exercise is not seen as a narcissistic action or obsession (Rose, 1990) but a social and economic responsible action. Thus, self-care makes PA and exercise a form of regulated inner necessity in the construction of a health ‘habitus’ (Bourdieu, 1982).

(b) Consumption

The ‘privatisation’ of health to be an aspect of personal responsibility is made increasing possible through the act of consumption. The discourse of ‘healthism’ promotes the consumption of health, with consumption equitable to personal responsibility and regulation, and an integral to good care of the self (Galvin, 2002). However, consumption is only made possible through the conditions of market fundamentalism – a specific feature of neoliberal rationality. The ‘free market’ ideology of contemporary, neoliberal economics allows for an increasing number of ‘markets’ and therefore social practices and ‘choices’ available for the consumption of health where the responsible healthy citizen is required to be a consumerist subject. Smith-Maguire (2008) demonstrates how the expansion of the health market through products, practices and places (e.g. gyms, health clubs and exercise based apps) became increasingly important for populations receptive to ‘healthist’ forms of self-care. Within the consumerist practices of health, consumption reflects forms of capital (corporeal capital in particular) for the responsible and entrepreneurial individual, with a ‘healthiest’ habitus constituted by a reflexive self-care and substantiating the surveillance of normative idealised healthy bodies. These markets provide various forms of knowledge bases which act to provide normative guidelines, and direct the ‘choices’ of individuals for the ‘correct’ form of self-care. For example dominant ideals of the healthy body and forms of self-care direct the consumer to exercise and PA through the consumption of gym memberships (Smith-Maguire 2008).
(c) Health Risks

The issue of health risks are particularly strategic in the embodiment of ‘healthism’ and interconnected with the logic of neoliberal rationality. Health risks have been linked with the changing landscape of public health in social and political contexts, in particular, the object of medical discourse with its focus on health risks as not simply a medical issue, but a wider and contemporary problem of social and economic security.

Armstrong (1995) is frequently cited in the analysis of this shift, particularly his use of the concept of ‘surveillance medicine’ to describe the changes in the target of medical discourse over time and the ‘medicalisation’ of social practices and contexts in the growing governance of existential health risks. For instance, Armstrong argues that the technical changes that occurred in the field of clinical medicine (e.g. x-rays and scans) allowed the interior of the body to be viewed in relation to the exterior, and developed systems of aetiological classifications that established causative relationships between illness states, risk and lifestyle behaviours. This subsequently altered the discursive conditions of medicine, shifting the discursive ‘order of things’ (Foucault, 1973) away from the ill/healthy dichotomy of traditional medicine to constitute webs of bio-statistics that categorised population groups depending on their embodiment of ‘risk’. These conditions transformed the entire population into asymptotically ill individuals and therefore placed the entire population under a level of medical ‘surveillance’. Armstrong (1995) describes how risk factors became existentially implicated in the corporeal behaviours (lifestyle choices) and exteriors of individuals (Jutel and Buetow, 2007), inextricably conflating the function (health) and form (aesthetics) of the body (Smith-Maquire, 2008). Discursive constructions of good and poor health were therefore based on the subjective corporeal exteriors of individuals, with risk factors integral in the mediation of these ideals. Contemporary forms of health became based on how the “healthy body looks, how the healthy body performs, and how the healthy body functions” (Wiest et al, 2015). Subsequently, the surveillance of the self (and invariably others) became increasingly medicalised, as the ‘clinical gaze’ (Foucault 1973) of the healthy body became increasingly associated with the constitution of the self and
thus an issue of self-care. The most apposite example is the surveillance of ‘fatness’ as synonymous with poor health and an increasing marker of health risks. For instance, the UK Public Health Association and Faculty of Public Health defines “excess of body fat” as “frequently resulting in significant impairment of health and longevity” (2003, p.1).

However, health risks create a wider social condition of existential uncertainty as it is associated with the social and economic functioning of populations, all of which were now at (some) risk, and therefore (re-)conceptualised as in need of remedial attention. Subsequently, population health necessitated governing as a mechanism of security (socially and economically) manifesting a medicalization of society (Conrad, 2007) across public and private sectors in the permanent calculation of risk for the ontological security of populations. For example, the economic cost of the ‘obese’ and overweight population (or those carrying “excess of body fat”) has been estimated to be approximately 27 billion in 2015 (Public Health England, 2016) and therefore impacting on the economic security of populations. Social life became increasingly ‘medicalised’, cultivating a “new health consciousness” (Wiest et al, 2015) and the increasing subjectification of populations to forms of ‘healthism’.

For instance, in the analysis of ‘Men’s Health’ magazine, Crawshaw (2007) demonstrates how media became concomitantly associated with a discourse of public health, characteristically drawing on risk in the conflation of form and function of the body. Crawshaw (2007) illustrates this via an extract from Men’s Health magazine (April, 2003, p.81), which claimed that the, ‘simple fact is that if you leave your GP’s surgery having been told your cholesterol levels are low and you’re in good shape…doesn’t mean you’re not at risk of a heart attack’ (p.1605).

However, the preoccupation with health risks and the medicalisation of society achieves an increasingly important role in the discourse of ‘healthism’ and therefore becomes highly strategic in self-care. This is primarily because the concepts of risk fulfil an important moral and dividing function in stimulating populations to adhere to self-care and aim for continual improvement of their bodies. Rose (2007) has
conceptualised this as a ‘new vitalism’ (p.49) claiming that risk cultivates and heightens the “obligations that individuals and families have monitoring and managing their own health” (p.63). This is particularly illustrative in the context of PA consumption (framed in PAHP (see section 1. chapter one)) where the emphasis on ‘risk’ within these materials is used as a strategy to motivate populations to consume sport/exercise/PA for the monitoring of their health in the construction of the ‘civilised body’.

The concept of risk in PAHP discourse materials ultimately serves to divide population groups based on their consumption of sport/exercise/PA. For instance, claims such as “In the UK, if all inactive people were to become active, 12% of stroke cases could potentially be prevented” (British Heart Foundation, 2015) form the discursive foundations of PAHP messages. Risk strengthens the dichotomising of moral frameworks (insinuated in discourse and which produces forms of subjectification) and the social distinction between bodies (Elias, 2000), therefore making the object of discourse increasingly more convincing in stimulating populations to various forms of self-care. In PAHP, the active body is at less risk of chronic disease and therefore reflective of social capital and the entrepreneurial and civilised citizen that is responsible in the management of the self (Halse, 2008; Murry, 2005). In contradistinction, the inactive individual is ‘risky’, irresponsible, lacking social capital, and a problem for the social and economic security of populations (Lemke, 2012). However, whilst risk serves to segregate, it further makes manifest the arbitrary social hierarchy and value of identities by ‘normalising’ particular bodies and therefore implicating forms of symbolic violence (Bourdieu, 1984) against anything that constitutes the ‘other’. As Lupton (1995) writes in illustration of this, “The self that is being privileged and normalized in such discourses is that of the enterprising and entrepreneurial self, the individual who is interested in and willing to take action to improve his or her health status” (p.61). Whilst this legitimises one’s moral responsibility to sport/exercise/PA by privileging and socially valuing the act of consumption, it further acts to make the fear of failing at this self-care increasingly chronic, necessitating an increasing act of surveillance. This motivates the consumption of sport/exercise/PA as an important regime of self-care, cultivating a “moralising [of] individuals’ responsibility to embody, practice and ultimately consume” (Wiest
et al, 2015) in the ontological security of health risks and social distinction as a ‘civilised’ and responsible citizen.

For contemporary governments this dividing practice operates to direct the ‘choices’ of populations into sport/exercise/PA that aligns with the objectives and aims of public health agendas who view PA as increasingly important to the social and economic productivity of population health (see, p. 33) in the management of health risks. This therefore establishes a perceived ‘distance’ of government control in population health, but results, paradoxically, in the increased implication of government objectives in the everyday practices of populations (characteristic of neoliberalism).

2.1.4 Criticisms of Discourse and Power

Foucault’s concept of subjecification is therefore useful to understand the practices of self-care implicated in the governance of healthism (e.g. PAHP) made possible through specific features of neoliberal rationality. However, the emphasis Foucault places on practice, whilst useful in this instance, renders it relatively static when considering the extent wider social processes impact on directing the ‘choices’ of individuals in a given set of social arrangements (for instance, in their interaction with structured healthcare). Individual ‘choices’ to engage in forms of corporeal behaviours will be influenced by particular sets of processes within complex sets of social relations and structural systems that create both intentional and unintentional consequences that have an influence on these ‘choices’. This is where Foucault’s concept of subjecification falls short and the wider criticisms made in respect to the primacy of discursive power in Foucault’s work are common. Such charges are largely as result of Foucault’s subject being a ‘pure’ effect of power with all subject action intentionally established vis-à-vis modes of subjection. Subsequently, there is no subject ontologically prior to power and thus subject action is invariably and completely reduced to discourse (Shilling, 2012). This subtly reasserts the dichotomy of structure/agency that is inherent in traditional sociological thinking, not necessarily through the ontological separation of structure and agency, but, rather, the deconstruction of the subject to the point
where Foucault removes any reflexive agent that interacts (through intentional and unintentional actions) in social processes. Consequently, this creates difficulties when considering how subject actions are reflexive to, and active within, wider social processes over time that shape experiences, and not just a product of discursive power and subjectification (Shilling, 2012). Thus Foucault’s work is useful to understand when one develops the extent practices of governance are made manifest and form the motivations in the corporeal behaviours of the subject, but far less so when social processes and changing social practices are integrated into the analysis (Rose, 1996).

2.1.5. Figurations, power and social process

Given the above criticism, Elias’s concepts of figuration is more valuable in application when developing an understanding of the role of the subject in social processes. This is achieved by moving away from the more static notion of discursive power as the primary ‘force’ in all human relations, to viewing power as relative and constantly shifting according to the context of various social arrangements and systems. Elias (2000) describes these sets of social arrangements as ‘figurations’, or specifically, complex webs or chains of human interdependencies produced by the interweaving of innumerable separate people across a variety of social contexts. The chains of human interdependencies that underpin all figurations are a product of the highly relational capacity of human beings as populations are functionally interdependent through economic (employment), social (family/friendship), and material (consumerism) needs that form the ontological security of basic human life. For instance, whilst these chains of interdependencies are easily identifiable in family and/or friendship groups through the human need for social interaction, they further exist across much wider social spheres. For example, and particularly in contemporary governments characterised by a high division of labour, increasingly complex modes of employment, market economies and symbolic forms of leisure, individuals/groups are necessarily connected and dependent on one another via their reliance on these social elements of contemporary life. Under such conditions, populations are increasingly functionally interdependent and bound up in complex figurational structures embedded in multiple and complex social systems and institutions.
It is within these connective chains of interdependencies that constitute various figurational arrangements that Elias’s particular conceptualisation of power is manifest. Thus, for Elias (2000), power is not a product of discourse, but is a structural product of figurations. It is, therefore, not a ‘force’ that forms the subject, but is yielded by subjects based on the “functional interdependence between people” (p.69) and the degree of ‘control’ and agency individuals can exercise within chains of interdependency. Subsequently, the position of any individual/group (symbolically and/or in their monopoly of particular resources) in a given figuration illustrates the extent of relative power they are able to exercise over other individuals/groups within that figuration. For example, where individuals are connected in a figuration illustrative of a particular social institution, the symbolic hierarchy of specific positions within that institution, and thus the functional interdependence this creates between individuals, will lead to a relative power difference. Those, who yield greater relative power, will therefore have greater control over other individuals within the figuration. However, these power relations are never static or absolute, but constantly relative to both individual/group and highly contingent to shifts in figurational conditions. For instance, less significant, short term shifts in figurational conditions, such as a change in the employment status of an individual, may lead to an individual yielding relatively less power at any one time, whilst longer term and wider socio-political shifts (e.g. a shift toward ‘healthism’) may have greater impacts on particular groups (e.g. public health lobbyist groups) having greater relative power. Changes in the figurational conditions therefore affect the functional interdependence between individuals/groups and the differentials of power each individual/group may yield at any one time. As a consequence, power relations are constantly shifting and subsequently lead to intentional and unintentional subject action that stimulates social processes within various figurational arrangements. Elias (1978) illustrates this, claiming that the effects of power are “felt, not at random but according to the structure of the figuration which they [individuals/groups] are enmeshed, by people who may well be quite unknown to each other and unaware of their mutual interdependence”(p. 258)
In illustrating this highly relational form of power, Elias (1978) uses the concept of ‘game models’ to metaphorically describe the shifts in power relations between individual/groups in and across figurations. Drawing upon the analogy of a ‘game’ to resemble a figurational structure bound by sets of institutional rules and systems, and ‘players’ to illustrate the relationality of individuals/groups active within that figuration, Elias demonstrates how particular ‘moves’ (actions) can be made by players that lead to variety of unintentional and intentional consequences. These moves ultimately drive the direction of the game (an analogy of a social process being played out) but do not necessarily lead to the intended outcome of the game that either player may have anticipated. The ability to produce intended outcomes is largely contingent upon the ‘relative strength’ of either player, a further analogy used to illustrate the relative control each individual/group may have within the figuration. This control is contingent on their relative power, symbolically and/or through access to resources which an individual/group may yield at any given time (depending on the figurational conditions), thus allowing a ‘player’ to have more influence in directing the outcome of that game.

Extending this metaphor of the ‘game’, Elias uses the example of a two person game to demonstrate a simple chain of interdependency whereby one individual yields greater power over another. Whilst, both players possess some relative power (as there would be no game without this element of balance) the player with the greater relative power is able to direct the process of the game to their advantage. Thus, the two person game model illustrates an interaction within a chain of interdependency that results in intentional actions being produced and a short term process being played out. However, in the case where the game is much larger and there are numerous players each with more subtle gradations of relative power, the game outcome is far less similar to any single set of intentions. Where players have correspondingly similar degrees of relative power the game passes beyond the control of any one player.

Such complex and dynamic game processes cannot be dislocated from the emotional and rational aspects of human behaviour which reflexively drive the processual nature of social life. Elias’s (2004) concept of involvement and detachment is particularly fruitful in the analysis of this reflexive interaction.
and used to demonstrate the extent of emotional, rational and symbolic investment as it shapes interactions between individuals and groups.

2.1.6. Balances of Involvement and Detachment

Elias’s (2004) concept of involvement and detachment is key to challenging the assumption of the ‘individual subject of knowledge, locked into ways of thinking and acting that are somehow isolated from others’ (Mansfield, 2007, p.123), a dichotomy subtly reasserted in Foucault’s (1982) work, explained above. By starting with the conception of human beings as both rational and emotional actors to varying degrees and across varying social contexts, Elias (2004) avoids the relationship between human experience and knowledge being theorised within a binary of objectivity and subjectivity, a binary that fails to account for the relational capacities of human beings, the involvement of individuals and groups with varying forms of interests and values across different contexts, and the wider processual nature of human interdependencies. For example, the relationship humans have with different forms of knowledge, based on shared interests and values, and thus how this knowledge is used to inform experience, is always based on a degree of relative involvement and detachment (Mennell, 1998). Detachment is defined as one’s capacity for self-regulation, for detachment both ‘cognitively (rationally) and affectively (emotionally) from a given situation or bodily state…a property of all human beings, part of the condition of being human’ (Dunning and Hughes, 2013, p140). Human beings’ capacity for relative detachment has been driven by changing structures of society led by an increasingly complex division of labour, higher degrees of routinisation, mechanization and materiality, and thus the development of ever greater abilities for self-regulation and self-control.

Elias (2004) claimed that these conditions, and the impact of such conditions on the development of ‘secular’ or modernist ideologies, led to a ‘systematisation’ of knowledge, or what Foucault (1982) would describe as ‘an order’ of things’ within contemporary life. This included the institutionalization of specific knowledge forms that, in part, led to a legitimacy of particular discourses within contemporary society, for
example, modern medicine and disciplines of the ‘hard’ sciences. Elias (2004) explains how these forms of knowledge embody ‘autonomous evaluations’, that is, politically ‘legitimised’ facts and forms of evaluation inherent to their development based on relatively high levels of detachment. For instance, relative detachment though regulation and control (e.g. inherent to forms of naturalistic experimentation and statistical analysis) are required to establish this knowledge and demonstrate, in contemporary society, a level of rationality that embodies its discursive legitimacy. The relative detachment of this knowledge through the embodiment of autonomous evaluations thus influences the cultural conditions of individual’s relationships to these forms of knowledge and the ‘habitus’ of individuals. For example, individuals bound up in figurations where forms of relatively detached scientific knowledge are most prevalent (e.g. medical institutions) may embody a greater capacity for relative detachment, or relatively detached dispositions, in their relationship, values, interests and experiences in relation to others. One example of this is in the relationship medical practitioners have with patients. For instance, medical practitioners are required to make relatively value-free assessments of patient conditions in order to establish a diagnosis that is based on a controlled analysis of the ‘facts’ or evidence of the development of a condition.

‘Heteronomous evaluations’ is the condition of knowledge based on relative involvement. Individuals’ capacities for detachment (Elias, 2004), for high levels of cognitive and affective regulation, are always blended with involvement, or the investment in embodied affective states. Where knowledge forms based on ‘autonomous evaluations’ (such as in the hard sciences represent relative detachment), knowledge that embodies ‘heteronomous evaluations’ (that is, the intrusion of values and interests) represents relative involvement. An example of heteronomous evaluations can be seen in the social sciences where the interests and involvement of values are part of knowledge production (Elias, 2004). This is largely different to the hard sciences and the embodiment of autonomous evaluations, where, as Elias (2007, p.72) claims,
‘scientists have learned that any direct encroachment on their work by short term interests….is liable to jeopardise the usefulness which their work may have…the problems which they formulate and, by means of their theories, try to solve, have in relation to personal or social problems of the day a high degree of autonomy; so have the sets of values which they use; their work is not value –free, but it is, in contrast to that of many social sciences, protected by firmly established professional standards and other institutional safeguards’.

The relationship between involvement and detachment, and the balance between autonomy-heteronomy, is thus never absolute. As Elias (2007) claimed, ‘one cannot say of a person’s outlook in any absolute sense that it is detached or involved’ (p.68) with human behaviour shifting between relative involvement and detachment to varying degrees. It is conceived of as shifting equilibrium ‘between sets of mental activities’ (Elias, 2007) which constitute the relationship between individuals and groups, the relationship with particular forms of experience, knowledge and inquiry, and individuals dispositions and habitus.

However, the complexity of the concept of relative involvement and detachment is interconnected with social processes in sets of figurational conditions as any given action made within a particular game is always based on actions that include a blend of autonomy-heteronomy. For instance, multiple groups and individuals can be relatively involved and detached at various and changing points, thus changing the direction of the ‘game model’ and the wider social process. This complexity is described by Elias (1978), he writes,

‘Both players will have correspondingly less ability to control the figuration of the game, for it will become less dependent on each players’ private plans and intentions for the game. But conversely each player’s general strategy in the game and his every move will be increasingly dependent on the changing figuration of the game process. The character of the game will change, gradually ceasing to be the accomplishment of a single plan and becoming a social process’.
This may ultimately lead to a game process resulting in several intended and unintended outcomes. This becomes increasingly more complex as the ‘game’ is played on several tiers or, rather, where there are several figural structures coalescing at a given time. Under these circumstances, those players or groups who yield a high degree of relative power within one figural structure are likely to produce unintended consequences for individuals/groups within a different (but necessarily interconnected) figuration. Thus, “out of the interweaving of innumerable individual interests and intention – be they compatible, or opposed and inimical – something eventually emerges which, as it turns out, has neither been planned nor intended by any single individual. And yet it has been brought about by the intentions and actions of many individuals” (Elias, 1978).

This is demonstrated by Stuij and Stokvis (2014) who illustrate how this ‘interweaving’ of individual/group interests across several figural structures over time has led to dominant discourses on sport/exercise/PA and health being established. Taking the case of the Netherlands, Stuij and Stokvis (2014) describe how the chains of interdependencies between governments, sport organisations, research institutions and interests groups became increasingly complex in response to the shifts in the relative power of each group, shifting balances of involvement and detachment and changing functional interdependencies. For instance, Stuij and Stokvis (2014) note how the government, as a relatively more powerful group within the figuration due to its monopoly over funding mechanisms, subsidised research institutions and groups focused on conducting health, PA and exercise based research to aid the legitimisation of current health discourse. Health research became based on autonomous evaluations through the legitimisation of facts, figures and statistics and via naturalistic medical inquiry developing a relatively detached discourse within the political figurations of contemporary government. This provided the conditions for a shift in ‘the object of discourse’ (Foucault, 1982) legitimising and centralising consumption of forms of sport/exercise/PA as an increasingly beneficial means to increasing population health.
As PAHP policy became aligned with ‘healthism’ a population health agenda formed via the relatively detached autonomous evaluation of health risk and exercise consumption, which in turn served the interests of government, as the most powerful and relatively involved group within this figuration. However, Stuij and Stokvis (2014) claim that this resulted in other unintended consequences that coincided with several developments despite the initial objective of using sport/exercise/PA as a prescription for health. These include a broader cultural shift away from sport in the context of sport clubs and for sport sake to sport becoming conflated with definitions of exercise and physical activity and discourses of health. This subsequently resulted in the entrance of private sector interest groups, of the increasing ‘marketization’ of PA, and of health manifesting increasingly complex networks of relationships based on shifting balances of involvement and detachment. Thus, as the illustration by Stuij and Stokvis (2014) evidences, current PAHP and the discourse of ‘healthism’ have been driven by intended and unintended consequence of shifting power relations in complex networks of figurations that include multiple groups with varying degrees of involvement and detachment in serving their own objectives. These shifts, and the subsequent changes in functional differences and figurational conditions, transform the relative involvement and detachment of knowledge, and lead to individuals’ relationships with particular knowledge forms and social practices (e.g. healthism) being shaped over time.

2.1.5. Conclusion

This chapter has explored several aspects of Foucault (1980; 1982; 1988) and Elias’s (1978; 2000) work to describe how sport/exercise/PA and health are embodied through discourses of ‘healthism’ (Crawford, 1980) made possible by specific neoliberal logics (minimal government involvement and greater individual ‘choice’; market fundamentalism; risk management) identified by Ericson et al. (2000). It has demonstrated how ‘healthism’ is manifest in a process of self-care (Foucault, 1982) based on contemporary ideals of the ‘civilised’ body (Elias, 1978; 2000). It has critically evaluated Foucault’s (1980; 1982; 1988) use of power and the potential problems it poses when focusing on how power is manifest within a social process. However, it has demonstrated that taken together, both Foucault and Elias can...
offer a valuable theoretical framework to understanding how practices are made manifest through underlying social processes. Foucault’s work is useful in highlighting how the body interacts, through forms of self-constitution or self-care, with discursive practices that are reflective of a particular discursive or epistemic ‘order of things’ (Foucault, 1980). Such an ‘order of things’ (e.g. ‘healthism’) legitimises and locates contemporary understandings and sets of values placed on health, sport/exercise/PA and the normative body, regulating the ‘choices’ of individuals and particular ways of understanding, increasingly instrumental in the strategic and contemporary governance of population health (Lemke, 2012).

Whilst this view of the subject is useful where there is a focus of body practices and governance, it is also a relatively static view when attempting to understand how social processes are ‘at play’, and a subject active within this, in the manifestation of particular discourses at a given time within a set of social arrangements. It is here that Elias’s (1979; 2004) work becomes increasingly valuable, as his view of power as a figurational condition, and constantly in flux provides a more appropriate theoretical base in which to explore social processes. Through the concept of figurations, particularly the analogy of game models, the processes of shifts in power and the subsequent shifts in figurational conditions that act to legitimise particular discourses at different times, can be identified. Within the wider focus on figurations, the concept of involvement and detachment has been used to demonstrate the cognitive and affective capacities of social actors and the reflexive engagement of these capacities in shaping the interests, values and relationship of actors and the wider processual nature of human interdependencies. It has demonstrated how the relative involvement and detachment of particular knowledge forms shapes the autonomy-heteronomy balance of actors in their relationship to knowledge and the extent this, in turn, shapes the values, interests and relationships of individuals across various social arrangements.

The concepts expanded in this chapter will be used in the theoretically informed analysis of the research findings in chapters four and five. In chapter four, Elias’s (1979; 2004) concept of game models and involvement and detachment have been used to illustrate the pathways taken by patients with a SRI as a complex social process or ‘game’ where the shifting balances of power lead to intended and unintended
consequences which ultimately drive the pathways of patients. Elias's (2004) concept of involvement and detachment provides a further and interconnected layer of analysis, illustrating how the shifting and reflexive values and interests of patients across chains of interdependency within the wider pathway structure the balances of autonomy-heteronomy. This demonstrates how particular forms of relationships between actors, and with the wider figuartional conditions and structure, impact on the 'moves' taken by patients and healthcare practitioners and result in particular sets of outcomes.

In chapter five, Foucault's (1982) concept of self-care and Elias's (2004) concept of the civilised body have been used to analyse the motivations of individuals in their relationship to sport/exercise/PA and the resulting social 'costs' incurred where self-care cannot be sustained in the face of SRI. This form of self-care and normative conception of the civilised body is contextualised in the broader context of 'healthism' as identified by Crawford (1980) facilitated through specific neoliberal logics identified by Ericson et al., (2000). Where relevant, and where aligned with the concept of self-care and the civilised body, specific aspects of Bourdieu's (1984) work is used within the analysis. This includes specific reference to Bourdieu's concept of symbolic violence and social capital to provide a further theoretical lens in the analysis of individual motivations to sport/exercise/PA consumption.

Unlike chapters four and five, the findings presented in chapter six are presented as confessional tales in a medical ethnographic form and will not have the same level of explicitly theoretical analysis given to the previous findings chapters. The next section of this chapter will review the empirical research on SRI and other conceptually relevant areas study, providing a rationale for the research aims and demonstrating the original contribution of this thesis.
2.2. EMPIRICAL

2.2.1. Introduction

Section one of this literature review has provided a theoretically informed analysis of the body using the work of Foucault (1980, 1988), Elias (1978) and specific aspects of Bourdieu (1984) to illustrate how the social, transformative properties of the body (the site of SRI) are structured by socio-political conditions. Under contemporary social conditions, where the focus and on the discourse of ‘healthism’ is utilised as a strategic tool in governing populations ‘at a distance’ (Teghtsoonian, 2009), the uptake of sport/exercise/PA is increasingly important.

However, in the instance where SRI is sustained, the experiences of being injured are likely to produce patterned sets of social and economic ‘costs’ and practices that are shaped by the interaction with contemporary discourses, wider medical structures such as the healthcare system, and the people who form the injured persons’ more immediate network of social relations. This section reviews the empirical studies conducted on SRI across competitive and public population groups and conceptually similar areas of work that includes a review of studies on patient pathways and patient experience more generally. In so doing, it will provide a platform for developing a rationale for the research aims of this thesis.

As noted in chapter one, studies of the injured sporting/exercising body and the social and economic ‘costs’ of sport related injury (SRI) incurred have been reviewed through the epidemiological research that is predominantly quantitative in its research design and analysis. As advocated by Brookes and Fuller (2006) the methodological variations (in research design, analysis and reporting methods) viewed in the epidemiological study of SRI contributes to a lack of consistency in developing a clear representation of the extent of incidence in public populations, particularly with regard to establishing actual consequences of SRI as it presents a social issue through the knowledge of ‘costs’ incurred and the conditions under which such ‘costs’ develop. In addition, the quantitative, static focus of the epidemiological research provides limited knowledge on patient pathways. Given the integration of SEM into public healthcare and
the development of SEM initiatives in managing SRI, there is a need to qualitatively explore patient pathways for those with a SRI as they utilise SEM and the wider affects this has on the social costs incurred through SRI. To that end, this chapter will now examine the qualitative, empirical research on SRI with the critique of this work informed by the analysis of the sociological theories in the previous section of this review. Attention will be paid to the extent any ‘costs’ can be identified from this literature and how far it goes to exploring injury experience as it is shaped and managed by healthcare pathways. In so doing, we can gain a broader understanding of the focus of the current empirical work within the area of SRI, further strengthening the rationale for this thesis.

2.2.2 SRI Research

Research on sports injury using a qualitative approach is considerably capacious; indeed, this area of research is far from scant of academic studies that span across disciplines, predominantly in sociology and psychology. However, the majority of this research is focused on the experiences of sports injury in competitive and/or elite sporting populations and correlative there is a dearth of studies paying attention to non-elite, amateur, public sporting populations.

Given that the intention is to understand how injury experience and healthcare pathways coalesce, particularly in mapping the pathways of patients with a SRI through SEM in public healthcare, a conceptually similar research area will be considered following the review of the sports injury research. This will include a review on patient pathways within the NHS and will aim to gain a greater understanding of how patient pathways impact upon the ‘costs’ incurred through injury and/or illness. This review will therefore critique three bodies of literature under the following sections:

1. Experiences of sports injury in professional/elite sporting populations
2. Experiences of non-elite/public sporting populations
3. Patient pathways in the NHS
To that end, a summary of the reviewed research and the direction this can take us in exploring SRI within the context of healthcare will be considered.

2.2.3 Experiences of SRI in professional/elite sporting populations

In many respects this body of work is symptomatic of the wider problem of sport injury incidence within these populations groups. As was highlighted in chapter one, current epidemiological work has focused on the number and location of injuries occurring within elite sport populations (see, Alonso et al. 2010; Eduoard et al. 2013; Wanivenhaus et al. 2012). Substantiating this claim, Podlog and Eklund (2006) note that the qualitative interest in sport injury has been, in part, a result of the increasing incident rates advocated by the epidemiological work within this area. Consequently, this research area begins to answer calls from the epidemiological work to explore the social aspects of SRI, or the unquantifiable ‘costs’ using a qualitative form of inquiry.

Qualitative research in the area of sports injury in elite sporting populations extends across the sociological and psychological disciplines. Despite the difference in disciplinary inquiry, both research areas are in concert in their focus on elite sporting population groups competing at national/international level within their various sports. Sport injury studies within the psychology discipline are typically concerned with athletes return into elite sport following injury (see, Podlog and Eklund, 2006; Bianco et al, 1991 Quinn and Fallon, 1999; Johnston and Douglas, 2000; Bianco, 2001; Mainwaring, 1999; kvist et al, 2005) and their experiences of rehabilitation programmes. For instance, Bianco et al (1999) documents the injury experiences of elite skiers and Quinn and Fallon (1999) utilise a more varied sample incorporating 136 elite athletes across 25 different sports.

Findings from both these studies indicate that SRI incurs an emotional response, often disrupting individuals’ emotional well-being in various ways. For example Bianco et al (1999) claim that the skiers in their study experienced emotional disturbances as a result of sustaining an injury and that this continued through their rehabilitation programme. Bianco et al (1999) further suggest that the extent of
emotional disruption was dependent on factors such as the type of injury and the ability to recover to full sporting capacity. These findings are largely in concert with studies across this area of work; with Quinn and Fallon (1999) also claiming that injury in elite athletes induces a disruption to their emotional wellbeing. Studies in this area (Bianco et al., 1991; Quinn and Fallon, 1999) begin to suggest that there is an emotional ‘cost’ of SRI that can cause a disruption to emotional well-being. They further document that this ‘cost’ continues throughout the recovery of a person’s injury. Despite this, the analysis beyond simply the reporting of this ‘cost’ remains limited and thus expands little on the epidemiological work of SRI ‘costs’. For instance, apart from documenting this finding there remains limited description as to how athletes experience and socially manage these emotional disturbances. This may be a result of the psychological inquiry where the analysis of injury experience is often based on conceptual models that frame injury experience via internal cognitive processes. For example, Quinn and Fallon (1999) employ a questionnaire method designed on ‘mood state scales’ as a form of data collection. Whilst it is acknowledged that questionnaire data lends itself to reporting the occurrence of specific phenomena, it lacks the interactive process that methods such as interviewing can provide, therefore limiting the scope for exploring the situated contexts of particular experiences (See, Sparkes and Smith, 2014; Kvale and Brinkmann, 2009). One could argue therefore that the analysis of injury experience within the psychological work has a tendency to decontextualize the social relations bound up in injury experience and the ‘costs’ involved. This can often privilege thought processes over the social and embodied foundations of concepts such as emotions and may reduce the social context of injury experience to cognitive categorisation. In addition to this, sport injury studies within this area of psychology predominantly focus on acute, trauma injuries. For instance, the majority of injuries documented in Bianco et al.’s (1999) study were ACL injury. As previously noted, one characteristic of acute injuries is that they typically have a defined recovery, or rehabilitation period and therefore lend themselves to studies with a measurable rehabilitation period as seen in both Bianco et al.’s (1999) and Quinn and Fallons (1999) work. Subsequently, these studies tell us very little about the experiences of chronic, on-going injury. These
criticisms taken together are most relevant when exploring chronic injury, largely because chronic injury has no single defined recovery period and the associated forms of injury discomfort/pain has been known to have an existentially, social element (Kotarba 1977; 2004).

Kotarba (1977) makes a twofold case for the existential social element of chronic pain that can be extended to the analysis of some forms of chronic injury. Firstly, he argues that many forms of pain/injury are often experienced absent of visible, physical symptoms such as lesions to the body. With no immediate and visible presence of an injury and any associated pain, these forms of chronic pain/injury can only be made visible through social interaction. In being made visible through social interaction, the structuring of discourse, i.e. the use of metaphorical conventions, socio-culturally conditions the understanding and knowledge of injury. Subsequently, whilst the discomfort of chronic pain/injury is felt at an embodied level, its ‘being’ is primarily felt, explored and given an identity at a social level. Secondly, chronic pain/injury can be extremely complex and often fails to fit a medical paradigm of diagnoses followed by a set recovery (Flint et al, 2013; Malzack, 2005). Consequently, people who suffer from chronic pain/injury have to find ways to live with it in a socially interactive process of meaning making. This often involves, as Kotarba (1983) notes, an attempt to locate meaning in diagnosis through non-medical channels and/or find ways to make sense of the injured body via social activity and re-storying of the self (Bury, 1982; Denzin, 1989; Williams, 1984). It thus becomes a search for meaning that is “essentially and inevitably social” (Kotarba, 2004, p. 101).

Given the above, the sociological literature on sports injury is more fruitful. Studies within the sociological literature on sport injury continue to attend to competitive, elite sports populations with the exception of several studies that are concerned with non-elite populations, for example, Allen-Collinson (2005) and Sparkes (1996). However, these studies differ from the psychological work on injury in that they are less concerned with the process from injury onset to recovery. Rather, the consistent feature of the sociological research is the attention on the experiences of continuing sport participation of athletes whilst suffering with a sport injury and the normalisation of pain and injury within the culture of sport (Curry,
1994; Nixon, 1992, 1993; Roderick et al, 2000; Roderick, 2006; Howe, 2001; Fenton, 2004; Fenton and Pitter, 2010; Pike, 2004; Charlesworth and Young, 2004). Included in this research area is also the focus on gender, and the significance of gendered discourse in the normalisation of pain and injury within sporting cultures (e.g. Messner, 1990; Spencer, 2012; Smith and Sparkes, 2004; Young et al, 1994).

Early studies by Nixon (1994; 1996a; 1996b) serve as a cornerstone of sociological research into pain and injury with much of his work paying attention to the normalisation of pain and injury in professional, elite sport. In particular, Nixon (1996a; 1996b) is concerned with the social conditions and relations that foster elite athletes’ behaviours of continuing participation despite pain and injury. He pays attention to the interaction of discourses, beliefs and social interactions that assimilate to (re-)produce cultural messages in elite sport spaces which act to normalise pain and injury experiences. In doing so, Nixon employs a content analysis of ‘sports illustrated’ (Nixon, 1993) which informs a questionnaire termed the Risk, Pain and Injury Questionnaire (RPIQ) utilised in later studies (Nixon, 1996a; 1996b). The RPIQ assesses the views of elite athletes that aim to evidence the underlying discursive conditions of elite sport and thus how elite sport operates to normalise pain and injury. Findings indicate that pain and injury among athletes were commonplace, with 69.7% of athletes who took part in the study claiming they had sustained a significant injury at some point in their sporting careers and with both males and females reporting playing whilst injured, accepting ‘playing hurt’ in order to gain success as a normal part of their sporting careers. Notably, Nixon documents that the network of social relations between athletes exerts a social pressure to continue playing whilst injured to the extent that this pressure is accepted as contingent to the sporting status of the athlete. Broadly, Nixon’s research argues that the normalisation of pain and injury amongst elite athletes is not specific to particular sporting cultures per se, but rather suggests that it is rooted in the very structures that preserve the discourse of ‘playing hurt’ across sporting environments. Consequently, playing sport despite the presence of pain and injury may be a condition of sporting structures and their affective discourses at a competitive, professional level of play.
The findings of Nixon (1996a; 1996b) provide a contextual backdrop on pain and injury, exploring the extent pain and injury occurs in elite sport, the normative acceptance of this within sporting cultures, and the cultural constructions of pain and injury experience that have been widely cited and built upon amongst the majority of work within this area. Critics of Nixon’s (1996a; 1996b) work are largely concerned with the construction and use of the RPIQ as a data collection method (see, Roderick, 1998; Walk and Wiersma, 2005). Authors argue against its methodological posture, claiming issues regarding the construct validity of the RPIQ scale and the extent that the scales used do not necessarily correspond to the discursive constructions of pain and injury experience that the RPIQ purports. Despite the criticism of validity, Nixon’s work remains instrumental insofar as it documents a host of cultural conditions and the effect of social relations and networks in the experience of injury. In so doing, Nixon highlights the social base of injury experience that Kotarba (2004) makes claim to, demonstrating how injury is highly contingent on the socio-cultural conditions and discourses under which it is experienced. In this regard, we can use Nixon’s findings to suggest that any ‘costs’ involved in sustaining an injury will be conditioned via the cultural discourse and interactions that shape an individual’s experience of injury.

However, this is as far as Nixon’s (1996a; 1996b) work can go in shedding light on the experiences of injury in public populations. Firstly, the focus of his work is on US college sport and the underlying discourses that shape injury experience. For the public population active under a very different set of discourses (e.g. amateur sport organisations), injury experience, and the extent this population group ‘play hurt’ is likely to be different. Secondly, and a result of Nixon’s (1996a; 1996b) RPIQ as the primary data collection method, the findings produce a very static representation of injury experience. In similar vein to the critique of the psychological literature on sport injury (e.g. Quinn and Fallon, 1999), Nixon’s work tells us more about the extent pain and injury is normalised rather than how injury experience constitutes practice. That is, we get little sense of how the dialectic relations between the discursive

3 The way University sport in The United States and North America is organised reflects elite sporting structures. This is reflected in the monetary and coaching support provided for athletes, the provision of private SEM services, and the hierarchy of international competition opportunities (Houlihan and Green, 2007).
structuring of elite sport and the normalisation of pain and injury shape an athlete’s social reality and establish or constrain social practices. Finally, there is no insight in Nixon’s (1996a; 1996b) work as to how injured athletes manage their injury using forms of healthcare provision despite their continuing participation with pain and injury. This may be connected to the lack of insight into how injury is practiced, but it may be more so that elite athletes will experience healthcare provision through the organisation of elite sport and thus seek minimal medical advice from outside this organisation (See, Waddington and Roderick, 2002; Malcolm and Safai, 2012; Malcolm and Scott, 2012).

Indeed, the provision of healthcare and the degree to which elite sport injury experience and healthcare provision coalesce forms part of the focus of Howe’s (2001) research. Drawing on Bourdieusian notion of habitus as a heuristic in developing an understanding of practice, Howe (2001) focuses on the extent to which injury experiences in elite athletes are shaped by the healthcare provision used under the organisational structure of professional sport to shape injury practices. In this respect, we can suggest that Howe (2001) provides a greater insight into the dialectical relations between athlete experiences of injury and the structuring of elite sport. Taking the case of a professional Welsh Rugby club, Howe (2001) argues that the rugby players normalise pain and injury experiences to achieve continued play and that this constitutes, and (re-)produces, the socially symbolic practices, or Bourdusian notion of Doxa, internal to the ‘rugby club habitus’. Howe (2001) argues that this habitus has been shaped by the discourse of professionalism over time with the introduction of financial incentives and the capitalist agenda of elite sport. He continues to argue that the ‘rugby club habitus’ reflexively shapes perceptions of pain and injury in the club and that embeds a ‘preventative paradigm’ in the administration of medical provision by club physiotherapists. Howe (2001) continues to suggest that sport medicine provision by the club physiotherapists is based on the management of an athlete’s injury to allow for continued play and that this therefore shapes the ‘play with pain’ practice internal to the rugby club habitus.

In underpinning his study using the Bourdieuian concept of habitus, Howe’s (2001) research goes some way to understanding how SRI in elite sport organisations develops sets of practices that contribute to
the normalisation of pain and injury that much of the sociological literature makes claim to (Curry, 1994; Nixon, 1992, 1993; Roderick et al., 2000; Roderick, 2006; Howe, 2001; Fenton, 2004; Fenton and Pitter, 2010; Pike, 2004; Charlesworth and Young, 2004). His work aligns to, and builds upon, Nixon’s (1996a) claim that the structures of sport impose a cultural discourse that normalises playing despite the presence of pain and injury and this is predominately a condition of professional sport. Howe’s (2001) work further provides a brief insight into how injury is managed in elite sport using sport medicine.

Despite this however, Howe’s (2001) work is limited in several ways. Firstly, there is a preoccupation in this work with the economic structures of professional sport, suggesting that it is the impetus behind the club’s changing habitus and the practice of playing despite being injured. Subsequently, the players’ experiences of pain and injury tend to be rationalised as a consequence of economic structures. In this regard, the findings provide little scope for analysis beyond the players’ experiences of injury as a result of the economic incentive of continued play. Subsequently, there is no scope to explore any wider social costs incurred through injury experience within the athletes’ experiences of the rugby club or in wider social contexts such as of the ‘rugby club habitus’. For instance, injury practices are likely to differ in social spaces, where the ‘rugby club habitus’ does not lend itself to the normative corporeal behaviours (i.e. outside of the confines of the club) and therefore practices and dispositions instinctively shift. Secondly, whilst the focus on the economic structure remains to some extent relevant when exploring injury experience of elite sporting population group in a professional sports club, this analysis makes the findings far less applicable to understanding non-professional sporting populations’ experiences of pain and injury which cannot be connected to a money incentive. In this regard, the ‘economic costs’ incurred through injury in public populations would be radically different considering their experience of injury is not shaped by an economic imperative and whereby sport and occupation are structured separately. Thirdly, whilst Howe (2001) argues that there has been a change in the professional status of the rugby club habitus over time, the data presented illustrates a static, singular experience of injury that does not draw upon how this this has changed in the process of the ‘professionalisation’ of the rugby club habitus.
Indeed, professionalism forms a process that cannot be simply and directly connected to monetary rewards as Howe (2001) implies or the way in which sport medicine is practiced in the club (see, Malcom, Sheard and Smith, 2004). This critique may largely be a result of Howe’s (2001) theorising at a Boudieusian ‘habitus’ with little reference to, or exploration of, the wider discourse of professional rugby and the mechanisms of professionalism that relationally shape interactions between actors and particular contexts. As Bourdieu and Wacquant (1992) explain, “For Bourdieu, habitus, capital and field are necessarily interrelated, both conceptually and empirically” (p.96-7) and reiterated by Maton (2012) “to talk of habitus without field and to claim to analyse ‘habitus’ without analysing ‘field’ is thus to fetishize habitus, abstracting it from the very contexts which give it meaning and in which works” (p.60). Finally, the provision and practice of sport medicine which Howe (2001) identifies is one that is based within and funded by the structures of the rugby club with specific organisational agendas (such as maintaining a professional status) and sets of established rules. Although his reference to the sport medicine practices within the rugby club is limited, one may expect it to be largely different to the current organisation of sport medicine within the NHS.

This latter point of critique has broader relevance to much of the research considering the focus on elite sport (e.g. Roderick et al, 2000; Roderick, 2006; Fenton, 2004; Fenton and Pitter, 2010; Pike, 2004; Charlesworth and Young, 2004). Where attention is paid to the use of healthcare by elite athletes with a SRI, the focus remains on SEM practices exercised within the structures of elite sport (Roderick et al, 2000; Roderick, 2006). However, knowledge of this has little impact when attempting to understand the management of SRI in SEM under the structures of public healthcare. This is primarily because the organisational practices of these forms of SEM are different despite their mutual orientation.

Work by Roderick (2006), Waddington and Roderick (2002) documents the differences in medical practice in elite SEM compared to public healthcare in relation to medical ethics. For instance, Roderick (2006) argues that the ‘need for returns’ discourse (essentially financial returns but literally also a return to play) that underpins professional sport is made manifest in the SEM practices of these organisations
in ways distinct from public healthcare. Taking a process orientated approach in his analysis of the organisational structure of elite sport, Roderick (2006) argues that the chains of interdependence between players, coaches and club doctors are maintained via power differences similar to other occupational contexts. The player is valued insofar as his occupational status, or ability to work and provide financial returns (Roderick, 2006), in the figuration between coaches and club doctors leading to a power imbalances in the figuartional structure. In particular, this imbalance is illustrated through the concealment or continuation of play with injury by player and other parties within the figuration in order for a player to maintain their occupational status and gain financial returns. This is best illustrated in the data from Waddington and Roderick’s (2002) study with a player claiming that “if he was a normal physio [and] he’d got a private practice, of course he wouldn’t mention things his patient had said. It is a slightly different situation in a football club . . . because the manager’s his boss” (p.120).

This figurational structure is characteristic of the organisation of elite SEM and, consequently, open discussions take place concerning the health of a player with the team manager regardless of issues of confidentiality pertaining to medical information. This interest concerning the extent of the player’s injury becomes knowledge for all groups within the chains of interdependency as various parties have different investments in the ‘need for returns’ discourse that underpins figurational structure. This echoes claims made by Nevin and Silk (1998) who note that medical information concerning an athlete’s health is largely held by particular groups within the structure of professional sport to extend an athlete’s career for the purposes of the club rather than, necessarily, the player’s longer term health. In comparison to public healthcare, there are significant differences. For example, within public healthcare, the relations between patient and practitioner (such as with the GP) exhibit greater conformity to confidentiality ethics designed to protect the interest only of the patients’ health. With no other groups that have an interest or investment on behalf of others in this particular figuration (e.g. club managers) there subsequently exists no conflict or investment in accessing patient information with regard to their health status. Therefore, public
healthcare practices are based on curative assumptions over the concealment of injury for wider monetary interests (Waddington and Roderick, 2002).

These differences in medical ethics between SEM in elite sport and public healthcare are highlighted across the research. For example, Curry (1994) claims this to be inherent in elite high school sport in the USA and more recently Safai (2003) documents this at the Canadian intercollegiate level suggesting that tensions exists between sport medicine physicians and players working within the university sport structure that illustrates an interplay between a ‘culture of risk’, or playing hurt, and a ‘culture of precaution’. Safai (2003) claims that these tensions are a complex negotiation based on a need to get injured athletes back to play whilst promoting a level of precaution to allow athletes to fully recover. However the ‘culture of precaution’ remains a manifestation of elite sport, as the desire to health athletes is for their continued and the associated financial gains. Numerous other scholars have documented this across various professional sports’ (see, Coupland, 2014; Malcolm and Scott, 2014; Malcom; 2009; Malcom, 2011). Similarly, Turner and Wainwright (2003) attend to professional Ballet, stating that, ‘discomfort, pain and injury are masked by a ballet culture that is committed to the notion that ‘the show must go on”’ (p. 272). Indeed, and taking into account research within this area, Malcolm (2011) argues that elite SEM aligns more with occupational medicine than public healthcare if we consider the conflicting obligations in the organisational structure of elite sport and the ethical issues pertaining to confidentiality.

In summary, research on SRI in elite sporting populations (e.g. Nixon, 1996; Howe, 2004; Roderick, 2006) are useful in highlighting that continued participation in sport despite the presence of pain and injury is a common injury experience within elite/professional sporting populations. However, across this research there is little recognition of wider social costs that the ‘playing with pain’ experience incurs in this population group, such as a decrease in social well-being, depression etc. This may be a result of the limited context in which this work explores SRI experience. For example, there is little recognition that SRI and the physical (dis-)ability that this causes to the body may manifest itself in experiences outside of the sport club/organisation context and impinge on more than just the athlete’s ability to participate in
sport. In this regard, these studies are constrained by their focus and offer limited insight into understanding injury experience as it is affected by the (dis-)ability of the physical body more broadly and therefore any knowledge of the wider context of SRI in which social costs may be made manifest and sustained. It does provide an insight into the economic cost of sport injury, such as loss of professional, working status and occupation; yet, as this is a specific condition of the professional population group in which these studies are conducted in, the severity of such an economic cost in public populations is likely to be far less.

Furthermore, across this research area the term ‘injury’ becomes all-encompassing, often conflated with the concept of pain and with a lack of distinction as to the nature of the injury. For instance, noted in the chapter one, there is a difference in acute and chronic injuries, specifically in respect to the recovery period of an injury, impacting on the types of social and economic costs incurred and how an injury is medically managed. Across the literature, injuries remain largely undefined with minimal recognition or description of the type of injury or for how long an athlete has been injured. Complementing this conflation is the interchangeable use of pain as it is forms a dialectical relationship with injury. Whilst not wishing to deny that pain forms part of the experience of SRI, particularly in the case of acute injury (see, Malzack, 2005), in the case of chronic injury this relationship manifests itself in diverse ways. For instance, there may be an absence of pain despite the diagnosis of a chronic injury; alternatively, chronic injury may remain undiagnosed with the presence of chronic nociceptive and neuropathic pains. Indeed, pain and injury do not necessarily form the dialectic relationship (see, Friebel et al; Zappaterra, 2014) that the SRI literature lends credence to. Additionally, this literature typically underplays more general feelings of bodily discomfort that can be experienced in the case of injuries but may not constitute, or be interpreted as, ‘pain’.

Finally, the differences in the medical treatment and management of injuries within the organisational structure of elite sport compared to public healthcare (Roderick, 2006; Waddington and Roderick, 2001) suggests that it has limited relevance or currency in understanding the medical management and patient
pathway of injury outside of elite sport and the differences in the initiatives between SEM of elite sport compared to SEM within the NHS. This is particularly true if we consider the difference in both sets of sport medicine organisations with regard to origin of funding, sets of established rules and practices (i.e. confidentiality agreements and third party investments) and the different paradigmatic assumptions (cure and preventative) between elite sport medicine and the NHS. Evidence of this difference can be seen if in the Sport and Exercise Medicine initiatives outlined in the ‘Sport and Exercise Medicine: A fresh approach’ (2012) document provided by the NHS, discussed in section 1.4 of chapter one.

2.2.4. Experiences of SRI in non-elite/public sporting populations

Within the sociological work on SRI there is a dearth of research that moves away from the focus on elite populations and pays attention to SRI experience in public, essentially amateur sporting populations (see, Allen-Collinson 2005; Dashper, 2013; Pike 2004, 2005; Sparkes, 1999). For instance, Pike (2004; 2005) focuses on SRI in a group of amateur rowers, whilst Allen-Collinson (2005) and Sparkes (1999) employ an auto-ethnographic approach providing insight into chronic SRI in long distance running and recreational exercise, respectively. Importantly, these studies do document the use of public healthcare and thus take a step towards understanding medical provision outside of the formalised medical arrangements that exist under structures of professional/elite sport. Therefore, this population group is perhaps more consistent with general, sporting/exercising, lay public population groups as they seek their own medical pathways and have greater agency in the types of medical care employed.

Pike’s (2005) work provides the most detailed insight into the medical access and practices employed by a group of amateur rowers with a SRI. Pike (2005) claims that the primary motivation for the rowers to seek medical care was largely a consequence of the emotional stress (feelings of anxiety and depression) that they experienced as a consequence of being injured with the majority of rowers seeking complementary or alternative medicine (CAM) such as the use of osteopaths and chiropractor as an alternative to public medical care. Pike (2005) suggests that the reasons behind the preference for CAM
over NHS treatment is partly a result of the rowers’ agency and active involvement in their treatment when using CAMs and their general dissatisfaction with their GP’s understanding of the rowing injury, with one rower claiming that the GP “didn’t know anything about sports injuries” (p.207). Furthermore, Pike (2005) notes that 44% of the rowers continued to row whilst seeking medical treatment and that the use of CAMs allowed for a relief of symptoms compared to prolonged, formal NHS treatment, therefore allowing continued participation. Pike (2005) argues that the motivation for continued participation is less about financial incentives than the continuation of a coherent and established self-identity that is symbolically formed through interaction in the rowing club context. The rowing club becomes a cultural vehicle from which people can maintain, with corporeal integrity, valued self and group identity. Therefore the use of CAMs and continued participation is partly a consequence of maintaining ontological security in the coherency of a self and group identity that SRI can act to disrupt.

Pike’s (2005) work forms a point of departure from the preoccupation previous sociology work has had on the elite/professional population group, paying attention to the injury experiences of amateur sporting persons’ which begins to get ‘closer’ to public population groups. Her work on access to medical care for this population group suggests that the severity of emotional stress caused through injury, or rather the extent ‘social costs’ involved (e.g. depression and anxiety), motivates individuals into seeking healthcare. This suggests that the types of treatment, healthcare choices of individuals and the ‘social costs’ incurred through injury are largely interconnected, indicating that patient pathways and healthcare structures may have a significant impact on the extent social costs are managed and/or sustained. Despite this, the majority of injured rowers in Pike’s (2005) study primarily used CAMs that are underpinned by a ‘relief over cure’ paradigm (Kant and Sharma, 2000) mirroring the professional sport ‘preventative paradigm’. This therefore provides minimal insight into how SRI is managed in public healthcare beyond the evidence that the NHS remains underutilised. Thus, whilst this work indicates that social costs of SRI might be the motivation behind seeking medical treatment, it largely remains a matter of conjecture.
The choices made by the injured rowers to use CAMs compared with NHS care may be a result of the population group of Pike’s (2005) sample. Whilst the sample can be identified as amateur, they still remain a part of a competitive sport club organisation that may shape their experience of SRI in similar ways to professional sport populations despite the absence of the occupational imperative and money incentives. For instance, the group identity of rowing club members, and the potential power imbalances that are figurationally generated in any set of social relations, are likely to contour the experiences of SRI in ways that are different to those of a person who participates in sport/exercise outside of competitive group set-ups (e.g. gym users and walkers). However, if we are to consider the rowers’ experiences of using their GP, it may also reflect the condition of sport injury management in the NHS. Indeed, this is of relevance taking into account the publication date of Pike’s (2005) work as prior to the establishment and operation of the field of SEM in public healthcare. Give the recent integration of SEM into the organisational structure of the NHS, the experiences of people with a SRI visiting their GP may be different to that presented in Pike’s (2005) work and, for instance, the numbers of those visiting the GP with a SRI, and following a more integrated treatment pathway, may have increased. In this respect, Pikes (2005) work may not be indicative of the current experiences of those using the NHS with a SRI. Furthermore, whilst Pike (2005) provides an insight into the (lack of) medical access we get little understanding of the actual experiences of an individuals’ treatment over time and thus any insight into patient pathways. For instance, Pike (2005) describes how a small proportion of rowers accessed medical care through their GP but there remains minimal description beyond that as to the sequence of referrals and treatments taken by the rowers. This may suggest that the rowers did not continue accessing treatment for their injury through the NHS preceding their visit to the GP. Nonetheless, Pike (2005) provides a static and singular picture of injury experience in the NHS and thus limited reflection on patient pathways, care delivery and/or injury management within the NHS.

In similar fashion to Pike (2005), the remaining studies in this area provide only a partial insight into the use of public healthcare for public populations with a SRI. Allen-Collinson (2005) and Sparkes (1999) are
in concert in their methodological posture, employing auto-ethnographic approaches constituted by a series of first person reflections that document chronic SRI experience over time. For example, Allen-Collinson (2005) documents the use of private healthcare that consists of singular, pay-per-visit consultations and thus has little applicability to exploring patient pathways in public healthcare. Similarly, Sparkes (1999) draws upon both the use of private and public healthcare in the continuing management of a SRI but as this is not chronologically ordered it hardly constitutes a pathway. Despite both authors’ focus on injury over time, these studies provide little insight into a process particularly in respect to patient pathways and the process of referrals and treatments over time. As a consequence, knowledge on the degree to which the experience of SRI and the associated social costs are conditioned by healthcare pathways remains limited. Moreover, the use of first person accounts of SRI and healthcare by Allen-Collinson (2005) and Sparkes (1999) generates little scope to suggest that any social costs experienced are indicative of public populations with a SRI as no parallels can be drawn from a wider sample of individuals who may share similar positions of sociality, experience similar social conditions and political economics (e.g. neoliberalism) and thus incur similar sets of costs.

Any ‘social costs’ that can be established from these studies are concerned with the fracturing of ontological security and sense of identity that occurs from what Dekker et al (2000a) noted as ‘sporting time lost’. This is less to do with the disruption to a sporting group identity that Pike’s (2004; 2005) work argues, but rather, the inability to continue the body project (Shilling, 2012) of ‘healthism’ or ‘fitness’ that is central to neoliberal ‘self-care’ regimes. For instance, Sparkes (1995) notes the inability to gain the “buzz of intense exercise” and the motivation to “mould my body, shape myself in a way that I wanted” (p.472) as a result of his SRI, causing anxiety and dissatisfaction with his physical body. This is perhaps unsurprising given that both Allen-Collinson (2005) and Sparkes (1999) do not participate in competitive group and/or club sport. This indicates that one social cost of public, amateur sporting populations that results from ‘sporting time lost’ is disruption to ontological security and a neoliberal identity that is bound up in current, neoliberal discourses of health and ‘self-care’.
Whilst this research area provides an insight into SRI in public populations, studies in this area remain few in number and provide a limited understanding as to the social costs of SRI. Most notable, is the disruption ‘sporting time lost’ has on the coherence of a neoliberal identity in continuing regimes of ‘self-care’ but this is not indicative of wider populations and remains a matter of conjecture. Moreover, a clear understanding of public healthcare pathways by those with a SRI and the use of healthcare provision continues to remain incomplete with these studies primarily focusing on the use of private healthcare. Within this area, research exists that pays attention to severely disruptive SRI that result in neurological impairment (See, Rees et al, 2003; Reklund et al, 2008; Smith and Sparkes, 2005; Smith and Sparkes, 2002; Smith and Sparkes, 2004; Smith, 2013; Sparkes and Smith, 2003; Sparkes and Smith, 2005; Sparkes and Smith, 2008). This work primarily focuses on spinal cord injuries that result in permanent disability and therefore whilst important to note for its contribution in the area of SRI, is largely inapplicable due to the significant differences in injury category. For instance, categories of permanent disability and sport injury are shaped by different sets of social relations in western culture (See, Stewart et al, 2011; Sparkes and Smith, 2003) that condition the way in which these two different injuries are perceived and understood. Therefore, any social and economic costs incurred through neurological impairment to that of SRI will be dramatically different. In addition to this, SRI and neurological impairment are largely different in how they are medically managed, not least that neurological impairment remains permanent, but rather, the patient pathways will be significantly different for each (See, Reklund et al, 2008). To that end, it may be more fertile to focus attention on a conceptually similar area of work, one that is concerned more broadly with the analysis of patient pathways.

2.2.5 Patient pathways with illness and/or physical injury in the NHS

As previously noted, documenting the pathway through the NHS that people who have sustained a SRI undertake is important for two reasons. Firstly, we can begin to illustrate how SRI is managed and treated in order to gain knowledge of the extent SEM initiatives and the development of this field have served to improve the efficacy of care delivery. Secondly, establishing knowledge on patient pathways sheds light
on the interaction between patient well-being and injury management. Indeed, ‘social costs’ of injury are highly contingent on the efficiency of care delivery and transitional pathways between primary and secondary care. At present, no research exists that documents the patient pathways of individuals with a SRI. Indeed, the research on non-sport related MSK injury is extremely scant with the majority of work concerned with patient experiences and drawing upon specific NHS healthcare practices (see, McPhail et al, 2010 and Franzen et al 2006). Research by Mallett et al. (2014) does focus on MSK injury but is primarily concerned with the cost-effectiveness of self-referral (SR) pathways to physiotherapy alone. However, there is a pocket of research on patient pathways where the focus is on people with chronic pain disorders and/or differing forms of illnesses and is worth reviewing here for its conceptually similar focus and research design. For example, research by Jones et al. (2001) documents patient pathways of people with schizophrenia and Durham et al. (2014) who focused on patient pathways of those people with chronic orofacial pain (COFP). These studies hold particular relevance as they are concerned with the NHS per se and predominantly employ a prospective research design that typically lends itself to exploring patient pathways in situ and over a specific time period (See, Durham et al, 2014; Jones, 2011; Taylor et al, 2007). These studies are explored in greater depth below.

Durham et al. (2014) employ a prospective, longitudinal research design over a 24 month period embracing a large group of patients (n=240) diagnosed with chronic orofacial pain (COFP). Durham et al (2014) note that, for the most part, the pathways for patients with COFP are often constituted by continual, cyclical referrals and multiple consultations that ‘trap’ the patient within the NHS system for an unnecessary duration of time and with little impact on the management of the condition through treatment. Therefore, the focus of their study is on the experience of the care pathway and its impacts on those with COFP, paying particular attention to the use of health services and costs incurred through these services throughout the patients pathway.

A single structured interview with patients was employed in the initial stages of patient recruitment, with the aim of documenting patient demographics and their experience of healthcare and COFP treatment in
the NHS thus far. Following this, a ‘Health Service and Patient Cost Questionnaire’ (See, Wordsworth and Thompson, 2001) was issued at 6 monthly stages across the study duration. This aimed to document in a highly standardised way any economic ‘costs’ incurred as a result of the duration of time spent within the healthcare system, including such things as the amount of time absent from work and the number of referrals and consultations each patient had experienced as a result of the condition. Questionnaire data subsequently allowed the authors to develop an economic modelling of incurred cumulative impact on each patient, providing a quantitative picture of the ‘economic costs’ of patient pathways.

In summary, Durham et al. (2014) claim that the pathways for those patients suffering with COFP continue to be inadequate (as noted from previous research in the area of COFP) resulting in economic inefficiencies within health service delivery for COFP treatment. This is exemplified by the poor transition between primary and secondary care, from early diagnosis onto appropriate treatment. Although Durham et al. (2014) do not document any economic costs incurred for the patient from the ‘health service and patient cost questionnaire’ (such as money lost through reduce income) they do continue to suggest that “psychological comorbidities” (p.7) such as anxiety develop as a result of the inadequate care pathways for patients. This stated, there is little first person description of how such “psychological comorbidities” are experienced on a day-to-day basis and if these are a result, in part, of any economic costs incurred by individuals through the condition. This may be a result of the emphasis placed on the quantitative dimension of the research design. Despite adopting a mixed methods approach, the initial, single and structured interview formed the only means to accessing qualitative data and thus wasn’t employed prospectively by the authors. In this respect, establishing further the experiences of the pathways taken by the patients, and to what extent the inefficiency of these pathways impacted or sustained these “psychological comorbidities” is unknown. Moreover, the extent the qualitative data may throw light on any quantitative relationships found through the economic costs similarly remains limited due to the quantitative emphasis of this study.
Despite this, Durham et al.’s (2014) work does substantiate several key points. Firstly, the establishment of clear patient pathways for individuals with a particular condition is critical to benefiting the efficacy of health service delivery and reducing wider economic costs of a particular condition to the NHS. Therefore, the well organised integration of SEM into the NHS, and thus the improved transition between primary care, is likely to impact, and economically benefit, health service delivery for MSK injury. Secondly, a patient’s social well-being is affected by the efficacy of these pathways and thus, we may argue here, any social costs incurred as a result of a particular condition are affected by patient pathways. This may well be a result of the time in which certain social costs are experienced, if for instance, an individual is experiencing cyclic referrals and consultations with little effect on the recovery of their condition. Indeed, it may be claimed that the efficient integration of SEM will have, including its wider economic impact, a greater social impact on patients who have incurred significant social costs. This said, findings from Durham et al.’s (2014) study must be considered with caution, primarily as COFP only affects a small proportion of the population (Wolf et al., 2008) and is far more complex in diagnosis and treatment (Aggarwal et al., 2011) than SRI, or MSK injuries more broadly. Therefore, it is more likely that the pathway for patients with this condition is more complex. Furthermore, unlike MSK injuries, there is no specialist field (i.e. SEM) or explicit strategy for delivering efficient pathways for patients with this condition (See, Beecroft et al., 2013).

With this latter point in mind, research by Taylor et al. (2007) is perhaps even more applicable to the research in this thesis. Taylor et al. (2007) focus on the patient pathways of those with a chronic illness, but pay particular attention to the effectiveness and integration of the Expert Patient Programme (EPP) in the development of patient pathways. Although both SEM and EPP are largely different in their operational structure, services and strategies, they do share the broader initiative to reduce the cost of healthcare delivery via varying strategic thinking on the delivery of services. In the case of EPP, the aim is to reduce the number of patients with forms of chronic illness in hospital care, in a similar way that SEM intends to reduce the number of repeat consultations within primary care from individuals with sport
related MSK injuries. Therefore, this study may provide insight into patient pathways as they are affected by the integration of a specific and relatively new organisational service in the NHS, driven by government funding and policy. The initial findings from Taylor et al. (2007) indicate that EPP is operational in reducing the number of outpatient visits made by patients with a chronic illness, in particular, the use of physiotherapy and thus improving the economic inefficiency of pathways for patients with a chronic illness. However, in similar vein to the critique of Durham et al.’s (2014) study, there is little qualitative data that substantiates the economic analysis. For instance, we continue to know little about how patient well-being and experience of the NHS improves or how EPP has wider, social, impact on patient pathways.

These studies document patient pathways and the largely economic consequences of inefficient care delivery. Durham et al (2014) document how this affects patient well-being but there is little ‘lived’ insight into the anxiety patients experience through ineffective healthcare delivery due to lack of qualitative methods utilised in the study. For both studies, the emphasis on a quantitative approach in attempts to gain an understanding of pathways is useful when viewing the pathway as a ‘whole system’ and thus providing a wider analysis of its economic efficiency. This approach can inform us that these pathways remain inefficient and therefore not cost-effective, but unable to tell us why. This is largely because this approach fails to understand the multiple power relations in such pathways, for instance, which points in health service delivery of patients’ pathways are most influential, or have the most power to drive the patient through the pathway. In order to ‘map’ this and to understand the various ‘parts’ of the system or patient pathway a qualitative approach is required. For instance, the use of Elias’s (1978) concept of figurations and game models described in section one may lend itself to establishing the various sets of power arrangements ‘in play’ across patient pathways and thus pinpoint where health service delivery is inefficient and thus can be improved. This further provides an analysis of the fundamental interplay between agency and structure, Therefore, we may begin to understand how patient experiences and the ‘social costs’ incurred are connected with, and impacted by, the patient pathways in the NHS.
2.2.6. Conclusion

In summary, the reviewed research exploring experiences of SRI in professional/elite and non-elite/public sporting populations shows an absence of data documenting the experience of chronic SRI in public populations. Where work has been conducted (e.g. Allen-Collinson, 2005 and Sparkes, 1996), there is little offering of a chronological and indicative picture of the experiences of chronic SRI as they are shaped by wide structural arrangements and political economies, primarily, because both these authors use autoethnographic or self-narrative approaches that utilise single, first person reflections of past experiences of injury. At present then, we know very little, from a qualitative approach, about the ‘social costs’ incurred through chronic sport-related injury, and even less about the ‘economic costs’ incurred, for example, the experience of financial losses from time off work as a result of injury and the extent these costs interact and affect an individual’s well-being. Furthermore, both bodies of research provide very limited insight into how injury is treated though public healthcare with studies conducted prior to the recognition and integration of SEM. Subsequently, we know little about: a) the social and economic costs of chronic SRI; b) about how such injuries are normally treated; and c) the pathways taken by people with a SRI. The third body of work reviewed focuses on patient pathways for particular illness and/or physical injury within the NHS and sheds additional, but still limited light, on this research problem. Research in this area indicates that social costs are often extended if patient pathways are inefficient, and that the transition from primary to secondary care is critical to the overall efficiency of the pathways. At present, there is minimal research that documents patient pathways of those suffering with a MSK injury and no research on patient pathways of those suffering a chronic SRI. The latter point is somewhat surprising considering the establishment of SEM and the subsequent establishment of SEM clinics to manage sport related injury within the NHS over a decade ago. Therefore, there is a distinct lack of research that focuses on the experiences of individuals with a chronic sport related injury and what can be termed the ‘social and economic costs’ of injury and the pathways of those individuals in public healthcare through established SEM channels.
Conducting this review of literature has therefore more successfully identified the clear demand and opportunity for research in this area than it has, perhaps, been in assembling ideas and concepts that are directly transferable into this research context. In what follows, I draw explicitly upon specific theoretical concepts outlined in the theoretical section of this literature review appropriate to the analysis of chapters four and five. With this in mind we turn to a discussion of the methodological considerations and design of the primary research aims informing this thesis.
3.1. Introduction

This chapter will document the methodology and methods employed in this study. Firstly, the methodological approach (with reference to the ontological and epistemological underpinnings), research design and specific aims will be discussed, with the consideration of these aspects important in theoretically informing the research process (Denzon and Lincoln, 2005). Following this, the methods employed in the thesis will be discussed which will include a review of the sampling process, data collection techniques and ethics procedures. The process of data analysis and data representation will form the subsequent section, and to that end a reflection of the research process will be provided.

3.2. Methodological Approach

As stated in the rationale, this study informs the lacuna of research that documents the pathways of patients with SRI using SEM in the NHS and the experiences of the social and economic ‘costs’ of SRI with attention on the interaction of patient pathways and ‘costs’. Specific research aims include:

Firstly, to illustrate the pathways of patients with a SRI as they receive treatment from one SEM clinic in England within the NHS. Secondly, to identify the extent SEM initiatives are being developed at a patient level through the integration of SEM into public healthcare and the impact this has on patient pathways. Thirdly, to highlight the long term social and economic ‘costs’ of SRI of those patients (n=15) that have received treatment at the SEM clinic, and finally, to illustrate how chronic SRI is managed over time using a prospectively orientated approach of patients. (n=4) who are continuing with their treatment at the SEM clinic, illustrating the interaction between the first research aim concerning patient pathways and second research aim concerning the incurred social and economic costs.

The intention was to explore these aims using an approach that develops knowledge on the experiences of patients with a SRI retrospectively (understanding patient experience thus far) and increasingly
prospectively (as their pathway continues and patients receive on-going treatment). Accordingly then, this study was suited to being developed through a qualitative research paradigm.

Whilst a qualitative research paradigm informs a qualitative methodology, it is not necessarily defined by a single set of ontological and epistemological principles\(^4\). Rather, a range of ontological and epistemological principles are applied to varying degrees that lend credence to the intentions and aims of the research (Benton and Craib, 2011; Denzon and Lincoln, 2005). Therefore, any methodological position (in respect to the ontological and epistemological foundations) is important to consider as they actively drive the use of particular methods in the development of proposed research aims (Sparks and Smith, 2014). However, a clear methodology is important for a number of other reasons. For instance, as Lincoln (2010) argues, "[it can] tell us something important about research standpoint…tell us something about the researcher’s proposed relationship to the other(s)…and what the researcher thinks counts as knowledge" (p.7). Thus methodological positions not simply inform the employment of particular methods, but further, provide clarity on positions of reflexivity and researcher standpoint in the interpretative construction of knowledge.

Examples of various methodologies can be found across the sociological literature (See for instance, Creswell, 2007; Lincoln, 2010). Typified examples include the distinction between post-positivist methodologies that generally adopt external ontological positions (or realism) and more objective epistemologies, relative to that of constructionist methodologies, that adopt internal ontological positions and a greater degree of subjective epistemologies. To conceptualise these positions further, external ontological positions (or realism) are typically characterised by the belief of an external, knowable reality that remains independent or outside of the researcher and participant (Holton, 1993). Accordingly the aligning epistemology is increasingly objectivist, based on the ability to access this external reality to

---

\(^4\) Ontological and epistemological principles are used to drive the researcher’s attitude to the world and demonstrate how knowledge is generated (Lincoln, 2010). For example, ontological principles (ontology) raise questions concerning the degree to which ‘reality’ is objective and can be studied, whilst epistemological principles (epistemology) questions how one can gain access of phenomena depending on the ontological position.
produce a transparent and objectively knowable ‘Truth’ that remains independent of an individual. Therefore, any knowledge produced represents a “real” reality (Lincoln, Lynham and Guba, 2000, p.94) and pertain to value free forms of knowledge which can be developed objectively and largely context free. Whilst this remains a relatively deterministic form of realism, it suits specific research practices, notably quantitative methods or where context and subjective experience hold minimal value, such as the employment of methods to gather statistical datasets. Indeed, softer forms of realist ontologies exist, and which are more applicable to qualitative approaches. For instance, Critical realism (CR) is an example of one such form (Sayer, 1992; Archer, 1995). CR, whilst not denying an external reality of essential components and systems, take into account cultural and historical context that drive, what is termed as the ‘empirically knowable’, interpretations made from within these conceptual frameworks. Therefore, there is a ‘real’ reality that remains absent of experience and interpretation. However, empirical experience is not to be denied as informing social practices, ideas and knowledge (Danermark et al., 2002). These two positions share the ontological grounding of an external reality but are located, to varying degrees, in contradistinction in respect to their epistemological trajectory. Critical realism, in contrary to more deterministic realist approaches, takes an increasingly interpretivist epistemology, critical of a factual and knowable Truth to a more contextual truth that is often determined by the interplay of hermeneutic process and wider structural constraints.

Moving along this ontological and epistemological continuum, constructionist methodology advocates reality as socially constructed and contextual and thus unable to be viewed independent of, or outside the experiences of the individual. Subsequently, there is no ‘real’ or ‘actual’ knowledge of the world that is independently stable, but, rather, all knowledge is influenced by the paradigmatic shifts that subjectively shape social, cultural and historical condition which form shared human experience. Gubrium and Holstein (2009) define constructionism, stating that, “the leading idea always has been that the world we live in and our place in it are not simply and evidently “there” for participants. Rather, participants actively construct the world of everyday life and its constituent elements” (p.3). On this premise, constructionist
positions characteristically adopt a more subjective stance to a knowable truth (aligned with aspects of CR) Knowledge is thus socially constructed inside cultural frames and to ‘know’ is to make interpretations within the boundaries of communally produced knowledge. This is best illustrated by Gergen and Gergen (2007), writing, “no authoritative claim about ‘the nature of things’ stands on any foundation other than its own network of presumptions” (p.465).

This said, these are typified examples of methodological distinctions in qualitative research paradigms, however, and as previously noted, the degrees to which these positions are adopted in practice vary (for instance, positions of CR and stronger positions of relativism). Indeed, it is not to say that constructionist methodologies argue against the existence of natural or biological laws. For instance, taking a constructionist methodology, Dingwell (1992) notes how biological changes impose themselves on the body (i.e. in the case of physical injury), but that “the significance of those changes depends on their location in human society” and become meaningful through cultural and historical processes that create social “networks[s] of presumptions” (Gergen and Gergen, 2007, p. 465). However, constructionism, unlike CR, takes a more empathic focus of the significance of viewpoints and experiences of individuals in relation to context, considering the logic of experience per se, and not attempting to impose ontologically apprehensible logic on it (Charmaz, 2004).

The process of inquiry for constructionism is therefore a matter of interpretation of participants’ experiences and the process of exploring participants’ experiences with the intention of providing an illustration, or a consensus of a shared social meaning, on specific social, cultural and historically situated phenomena. Therefore, attention is paid to the ways by which participants construct meaning in their experience and the expansion of these constructions, “advancing evidence of different perspectives” (Cresswell, 2007). Given the qualitative focus and aims of the thesis, a methodology grounded in a constructionism underpinned by an internal ontology and subjective, hermeneutic epistemology was adopted in developing the research design.
3.3 Research Design

The research aims focused on exploring experiences of patients both retrospectively and prospectively and therefore the research design constituted two interrelated phases of study. Whilst documented for the purpose of this chapter as separate phases, the two are necessarily linked and build upon each other as the study developed. Both phases of study were grounded in an emergent research design (phase 1 retrospectively and phase 2 prospectively) as defined by Silverman (2014), chosen for its exploratory design that centralises an inductive and iterative research process (Avis, 2003; Sparkes and Smith, 2014). The descriptions of the two phases of study are explained below:

Phase 1:

Phase 1 of the study explored the following research aims:

1. To illustrate the pathway of patients with a SRI as they receive treatment from one SEM clinic in England within the NHS.
2. To identify the extent SEM initiatives are being developed at a patient level through the integration of SEM into public healthcare and the impact this has on patient pathways.
3. To highlight the long term social and economic ‘costs’ of SRI of those patients (n=15) that have received treatment at the SEM clinic.

This phase was conducted over a time period of approximately 13 months and gathered a larger quantity of interview data that, post analysis, presented an indicative representation of the above aims. The first research aim provided a way of retrospectively ‘mapping’ the pathways of patients through the NHS with a view to cross comparing patients’ pathways. This phase was further required as a necessary sampling technique for continuing the study into phase 2.

Phase 2:

Phase 2 of the study explored the following research aims:
To illustrate how chronic SRI is managed over time using a prospective and longitudinal case approach of patients (n=4) who are continuing with their treatment at the SEM clinic and thus reveal the interaction between patient pathways and the incurred social and economic costs.

Phase 2 was inductively informed by the data generated in phase 1 of the research. Specifically, phase 1 informed phase 2 by providing a context in which the phase 2 research aims were developed. Additionally, phase 1 data provided background information on patient biography and the condition of their SRI. This was required to sample patients for continuing the study into phase 2 (See sampling below for detail on this process). Phase 2 of study was more holistically and prospectively orientated with the intention of focusing on the interaction between pathways, social and economic costs and the management of SRI by patients, centralising the stories of a small number of patients pathways'. This was achieved by following a number of patients using a longitudinal, case study approach that spans over a time period of approximately 6-8 months and adopting an increasing ethnographic and narrative focus to data collection and representation. Consequently, the data generated from phase 2 of the study will be presented in the form of confessional tales (Sparkes and Smith, 2014) revealing complexities of patient experience through foregrounding patient voices and a less explicit theorisation of the data.

3.4. Sampling

Participants were recruited from one Sport and Exercise Medicine clinic in NHS England, informed by a set inclusion and exclusion criteria. The inclusion criteria allowed for participants to be spread demographically (age, gender, ethnicity, and employment status) and have experienced a range of injuries (including multiple and coexisting conditions). The inclusion and exclusion criteria are stated below:

Inclusion criteria:

- Patients being treated at one SEM clinic in NHS England
• Individuals who have sustained a physical injury as a result of participation in sport/exercise or physical activity practices
• An injury that is categorised as chronic (more than 6 weeks of injury time)
• English speaking
• Aged 18 or over

Exclusion criteria:

• Patients unable to give informed consent for study entry
• Patients unable to attend initial discussions for a study, and if necessary subsequent face to face meetings

Patients were recruited through two phases of sampling in concert with the phases of study defined in the research design. Phase 1 sample included 19 patients followed by phase 2 sampling which comprised 4 patients. The phases of sampling are described below:

Phase 1:

Phase 1 of the study employed a purposive sampling technique as defined by Patton (2005). This is defined as an active selection of participants based on the aims of the research. This sampling technique was appropriate for this phase as it provided an efficient process in the selection of patients that met the study inclusion criteria and were therefore suitable for exploring the research aim. The process of recruiting participants in phase 1 was achieved by the following steps. Firstly, patients who met the inclusion criteria were approached by their consultant treating their SRI at the SEM clinic and asked if they were interested in taking part in the study. This recruitment procedure was largely dictated by the conditions set by NHS ethical approval. Patients that were interested were then provided with a participant information sheet (PIS) outlining the study and its commitments in detail. Following this the consultant recorded the contact details of all patients who had a PIS and this was passed onto the researcher. The researcher then contacted the patient after at least 24 hours to ask if they were still...
interested in participating. If the patient wished to take part, a meeting was then arranged with the patient at the SEM clinic. Within this meeting, informed consent was sought and an interview of up to an hour in duration conducted. The details of 23 patients who met the inclusion criteria were recorded by clinicians. Of these 23, 19 patients were willing to be interviewed at the SEM clinic.

An overview of this process is displayed in figure 3.0.

**Figure 3.0. An overview of phase 1 sampling process**

**Phase 2:**

Phase 2 sampling employed a critical case sampling technique from the phase 1 data. Critical case sampling is the process by which a number of cases that are likely to ‘yield the most information’ (Patton, 2001, p. 236) are identified for the purpose of the research aim. This technique was appropriate for phase 2 as data from phase 1 was reviewed and a smaller number of patients identified for potential further study. Identification was based on the following terms. Firstly, the patient’s SRI was ongoing and therefore the patient was continuing their treatment at the SEM clinic (this aligns with the prospective feature of phase 2 research design) and secondly, the patient was willing to continue their participation in the study into phase 2. The process of sampling was as follows. Patients for phase 2 were sampled from phase 1 using a critical case sampling technique formed on the above criteria. The participants were then
contacted for participating further in phase 2 and given an oral explanation as to why they had been chosen for phase 2. Patients that were interested were given at least 24 hours to consider further participation in the study. The researcher then proceeded to contact the participant again for a final decision and following this, a meeting was arranged. Meetings with phase 2 participants began with reaffirmation of consent on the initial informed consent sheet. Reaffirmation of consent was fully explained in the PIS and an oral explanation was given in the patients previous phase 1 interview. See figure 3.1. for an overview of this process.

Of the 19 patients who took part in phase 1, 6 of these were contacted for phase 2. All 6 patients gave oral consent to take part in phase 2, however, 4 of these remained interested and reaffirmed their consent in writing.

Figure 3.1. An overview of phase 2 sampling process
3.5. Participant Access and Data Collection Site

As noted above, all participants were recruited from the Department of Sport and Exercise Medicine, University Hospitals of Leicester NHS Trust and therefore the participant sample was unique insofar as all participants' injury journeys converged at some point though this department. In phase 1 the Department of Sport and Exercise Medicine constituted the sole research site for data collection. The reasons for this were based upon the process of data collection within the phase 1 research design and adherence to the ethical approval guidelines provided by NHS research ethics committee (this research site had been given site specific ethical approval for conducting research interviews). Phase 2 was quite different, with the research site for data collection being a mutually convenient place decided upon by the participant (e.g. in a clinic room at the SEM clinic, participants’ home/work and/or Loughborough University). The reason for the change in research site in phase 2 of the study was relevant to the research design, in particular, its longitudinal and prospective focus. The number of interviews and time spent with the participant increased and was on-going. This therefore required a larger investment of participants’ time in the study and the data collection site needed to be more flexible. Furthermore, the rapport built with the patient increased from phase 1, following the initial interview and meeting, and thus patients felt more comfortable meeting the researcher at informal locations. It is acknowledged that the different research sites are largely different in respect to the ‘micro-geographies’ (Elwood and Martin, 2000) of the social spaces. For example, the power relations and rapport between researcher and patient changed considerably as the study progressed in phase 2 and moved outside of the Hospital space (see reflections on research process). This is provided different forms of data to emerge and more nuanced and emotional insights into the experiences of SRI were gained in phase 2 as patients became more familiar with the research topic and discussing these with the researcher.
3.6. Participants

Biographical information of each patient is recorded below for phase 1 and phase 2 of the study. This includes information on patient injury diagnoses (where a medical diagnosis had been achieved) and their approximate time living with SRI. Pseudonyms have been used to safeguard participants’ anonymity.

Table 3.0. Phase 1 patients

<table>
<thead>
<tr>
<th>Patient Name</th>
<th>Age</th>
<th>Occupation</th>
<th>Diagnosis</th>
<th>Approximate Time with SRI (years)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mark</td>
<td>24</td>
<td>Student</td>
<td>Undiagnosed</td>
<td>3</td>
</tr>
<tr>
<td>Sarah</td>
<td>42</td>
<td>Retail Worker</td>
<td>Fracture of pelvis bone.</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Undiagnosed injury in neck</td>
<td></td>
</tr>
<tr>
<td>Becky</td>
<td>30</td>
<td>Healthcare Assistant</td>
<td>Plantar Fasciitis</td>
<td>&lt;1</td>
</tr>
<tr>
<td>Lewis</td>
<td>34</td>
<td>Postal Worker</td>
<td>Undiagnosed</td>
<td>2</td>
</tr>
<tr>
<td>Daniel</td>
<td>34</td>
<td>Security Adviser</td>
<td>Hamstring Tendinopathy</td>
<td>1</td>
</tr>
<tr>
<td>John</td>
<td>22</td>
<td>Tree Surgeon</td>
<td>Unknown</td>
<td>1</td>
</tr>
<tr>
<td>Gill</td>
<td>55</td>
<td>Hospitality</td>
<td>Gluteus Medias Tendinitis</td>
<td>1</td>
</tr>
<tr>
<td>Martin</td>
<td>39</td>
<td>School Teacher</td>
<td>Undiagnosed</td>
<td>1</td>
</tr>
<tr>
<td>Tara</td>
<td>33</td>
<td>Unknown</td>
<td>Plantar Fasciitis</td>
<td>&lt;1</td>
</tr>
<tr>
<td>Laura</td>
<td>24</td>
<td>Gym Instructor</td>
<td>Bilateral Pars Fracture</td>
<td>1</td>
</tr>
<tr>
<td>Steve</td>
<td>32</td>
<td>Property Developer</td>
<td>Achilles Tendinitis</td>
<td>10</td>
</tr>
<tr>
<td>Marco</td>
<td>66</td>
<td>Retired</td>
<td>Achilles Tendinitis</td>
<td>2</td>
</tr>
<tr>
<td>Pete</td>
<td>42</td>
<td>Software Manage</td>
<td>Plantar Fasciitis</td>
<td>1</td>
</tr>
<tr>
<td>James</td>
<td>30</td>
<td>Self Employed</td>
<td>Achilles Tendinitis</td>
<td>1</td>
</tr>
<tr>
<td>Jacob</td>
<td>43</td>
<td>Police Officer</td>
<td>Achilles Tendinitis</td>
<td>1</td>
</tr>
<tr>
<td>Ross</td>
<td>21</td>
<td>Student</td>
<td>Undiagnosed</td>
<td>2</td>
</tr>
<tr>
<td>Robert</td>
<td>40</td>
<td>Librarian</td>
<td>Undiagnosed</td>
<td>2</td>
</tr>
</tbody>
</table>
Lindsey 60 Retired Achilles Tendinitis 2
Dominic 29 Mature Student Website designer Undiagnosed 2

Table 3.1. Phase 2 patients

<table>
<thead>
<tr>
<th>Patient Name</th>
<th>Age</th>
<th>Occupation</th>
<th>Diagnosis</th>
<th>Approximate time with SRI (years)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sarah</td>
<td>42</td>
<td>Retail worker</td>
<td>Fracture of pelvis. Undiagnosed injury in neck</td>
<td>2</td>
</tr>
<tr>
<td>Tara</td>
<td>29</td>
<td>Unknown</td>
<td>Plantar fasciitis</td>
<td>&lt;1</td>
</tr>
<tr>
<td>Lewis</td>
<td>32</td>
<td>Postal worker</td>
<td>Undiagnosed</td>
<td>2</td>
</tr>
<tr>
<td>Daniel</td>
<td>34</td>
<td>Security advisor</td>
<td>Hamstring Tendinopathy</td>
<td>1</td>
</tr>
</tbody>
</table>

3.7. Researcher Biography

Relevant to the epistemological and ontological positioning of the research, it is important to note a reflexive awareness of the impact of my biography as a researcher in the research process. Whilst my biography remains intersectionally situated across various categories of identity, the most explicit features of gender and age are likely to have had an impact on the data gained and the interpretation of the data. My embodiment as a young, female researcher was often more enabling for female patients (across various ages) to discuss particular aspect of their SRI experience compared to male patients, particularly of an older age. This is likely to be a consequence of a mutual identification as female and the different social constraints experienced with regard to gendered norms/ideologies. For instance, during phase 1 interviews female patients often spoke more comfortably and emotively about the social ‘costs’ incurred through SRI than males and required fewer probes during the interviews to do so. Females would often divulge more detailed experiences of the social ‘costs’ than males, and the mutual gender identification would often create a more dialogical interview experience and therefore the platform for a more detailed story to be told. For example, female patients would often use terms such as ‘you
know what it’s like’ and/or ‘us girls worry about that’. This is not to say that the social and economic ‘costs’ experienced by males and females were largely different, however, the data was, at times, more easily accessible with female patients and the way in which the experiences were manifest and communicated to me differed. During phase 2 of the research, the rapport built with the patient changed these initial dynamics and both males and females appeared equally comfortable discussing their experiences. Therefore, the data generated on the social ‘costs’ of SRI (see chapter four) may likely marginally reflect more of the female voices in the study.

3.8. Ethics

This study had been given ethical approval from Loughborough University Ethics Committee and NHS Research Ethics Committee. All NHS-based research was conducted in line with HRA guidance. A favourable opinion was granted by the National Research Ethics Committee East Midlands – Nottingham 2 on the 20th November 2014. NHS site specific approval for data collection at one SEM clinic in NHS England was granted on the 10th February 2015, from the specific hospital Trust (See appendix A for declaration of ethical approval). REC reference and IRAS project ID is stated below:

REC reference: 14/EM/1191

IRAS Project ID: 154382

This study formally commenced following NHS site specific approval on the 10th February 2015 and the first patient was enrolled on the 11th March 2015. Declaration of end of study was granted on the 25th July 2016.
3.9. Methods

3.10. Data collection: process and tools

Data was collected over an extended period of 14 months (this includes both phases). Phase 1 data collection lasted approximately 8 months and phase 2 data collection lasted up to 14 months. Phase 1 and phase 2, whilst separate phases, overlapped in the data collection process. Both phases utilised interview methods chosen for its appropriateness within qualitative research and a useful tool to harness contextual insights into individuals’ experiences (Hammersly, 1992) and explored in greater detail below. The interviewing methods included semi-structured interviewing (phase 1 and 2) and unstructured interviews and email updates (phase 2 only).

Interviews:

Phase 1:

Phase 1 employed a single semi-structured interviews (See appendix F for semi-structured interview guide) and took place in a room at the SEM clinic lasting approximately up to one hour in duration. Semi-structured interviews constituted the sole data collection tool in phase 1. The interview guide composed of 3 topic areas of specific questions relevant to exploring the phase 1 research aims. The first topic area constituted questions on the patient’s biography, background interests in sport/exercise/PA and how the patients sustained his/her SRI. For example, questions were asked such as “what do you do as an occupation?” “Tell me how long you have been doing sport for?” and “How important is sport to you?” The use of the first topic area gained background information but importantly also helped to build rapport with the patients and direct the next topic of interview questions (Wolcott, 1995). The second topic area constituted questions relating to the patients’ pathways into and through the NHS up to their point of treatment in the SEM clinic (research aims 1 and 2). This included questions relating to the types of treatment patients received, the reasons for their initial entry into the NHS and the use of various NHS primary and secondary care services. The final topic area focused on the consequences of the SRI with
questions directed around the social and economic impacts (research aim 3). For instance, questions were asked such as “how did your SRI impact on your occupation” and “did your SRI have any impact on the relationships you have with family and friends”.

The purpose for utilising semi-structured interviews over other interview methods (e.g. unstructured and/or structured) in phase 1 was to elicit descriptions whilst also ‘tracking’ the participant’s story as it connected, temporally, chronologically and prospectively (Vandermause and Flemming, 2011). This was particularly important, for this phase, focused primarily on the process of patient’s pathway over time. Thus, semi-structured interviews are employed where the interview process has an intention or structure to it, for instance, where there is a need to identify a process and/or where there are specific research aims, but, allows for a degree of flexibility in where questions may be asked at specific points in the interview (Holloway, 1997) This gives participants the opportunity to expand on specific aspects of the interview topics, whilst also giving the researcher the ability to ask specific questions at specific points depending on the participant’s story. This was useful for phase 1 as the patients’ journeys, whilst all having a common themes in the process of that journey (e.g. referral patterns), were different in respect to the time frame of journeys. Therefore the flexibility of semi-structured interviews allowed for this particular difference to be integrated into the interview questions.

The interviews from phase 1 were recorded and transcribed verbatim by the researcher and a Loughborough University transcription service to provide a structure for analysis. The interview data was then reviewed ready for analysis and the participants for further study in phase 2 were identified using a critical case sampling technique.

The reason for interviews constituting the sole data collection tool in phase 1 was a result of NHS research governance and the conditions imposed on the research design (see reflections on the research process). Despite this, interviewing is a key data collection method in qualitative research and particularly important for accessing the perceptions and experience of the participants in a dynamic dialogical process of
interpretation (Randall and Phoenix, 2009). It is therefore a method well aligned with the ontological and epistemological positioning of the research.

**Phase 2**

Phase 2 interviews were conducted at a mutually convenient location decided upon by the participant and did not prescribe to specific interview duration. The reason for the fluidity of the interview site and duration is due to the prospectively orientated nature of the study design of phase 2. The number of interviews conducted in phase 2 varied between participant’s, and while always multiple, were largely dependent on the time patients were able and willing to give to the study. Consequently phase 2 interviews ranged from 1 to 4 across a time period of approximately 6 months. Therefore, some phase 2 patients were able to provide more investment in the study than others and thus the design of phase 2 methods allowed for this. The increased number of interviews in phase 2 was designed to respond to research aim four and the focus on the management of SRI over time in view of exploring how costs, treatment and pathways coalesce. Having an open ended number of interviews allowed the researcher to meet with the patient as their SRI condition progressed over time without limitations of interview numbers. For some patients, the treatment and therefore progression of their SRI was over a short period of time (e.g. patients receiving intense treatment over a period of a month) and thus several interviews took place over this time and phase 2 patients contacted several times.

In phase 2, unstructured interviews were employed as the interview technique, often on subsequent meetings with the patient and towards the end of this data collection phase. The use of unstructured interviews aligned with the prospective orientation of this phase compared to phase 1. As the research aims for phase 2 focused on patients SRI management over time and as it progressed for each individual patient, the interview needed to be driven by the patient as they told their story of their treatment and progression. This is particularly so as the treatment patterns and social and economic costs of SRI
differed for each patient and therefore pre-set interview questions did not lend themselves to exploring this.

Email updates were employed as a second data collection tool in phase 2. The reason for this was to encourage patients to record any progressions made in their pathways through the NHS and as a reflective avenue to record any frustrations within their pathway. There was no specific number of email updates required for patients to provide. This was entirely dependent on the wishes of the patient and if the patient had the time to provide these. Whilst the primary use of email updates was to record any changes in patient's experience of SRI they may also provide a different form of data representation. For instance, the use of email provided scope for personal expression that was bounded by the contextual rules of an interview. Although phase 2 interviews were increasingly informal, the emails provided a data collection space to capture particular moments of the experience of SRI in the NHS, for instance, following a change in patients pathways (such as change in appointment times) that they felt highly frustrated and/or disappointed about. This ‘instant’ data also provided an insight into the interaction between social costs of SRI and pathways as they occurred prospectively as emotionally charged emails were often sent as a result of inefficiencies in pathways (see chapter six).

The interviews from phase 2 were recorded and transcribed verbatim by the researcher and a Loughborough University transcription service to provide a structure for analysis (Ross, 2009) and the email updates recorded for supplementation of analysis.

3.11. Data Analysis:

Data from the interview transcripts were analysed using thematic analysis which varied in its application depending on the research aims. Thematic analysis has been defined as the identification and reporting of thematic patterns within the data set (Sparkes and Smith, 2014) through a series of coding steps that can be applied with a degree of flexibility and complexity depending on the focus of the analysis. For this reason thematic analysis is an appropriate and useful form of analysis in this study, particularly as it can
be applied across both phase 1 and 2 with a flexibility to adapt the analytical process as the research aims develop. However, thematic analysis has further strengths which make it an increasingly appropriate form of analysis in this study. Firstly, thematic analysis is not wedded to, or driven by, a particular theoretical framework and therefore lends itself to applied research that focuses on producing findings accessible to wider audiences. For instance, thematic analysis is often used to inform policy development (Braun and Clarke, 2006). Given the applied and clinical nature of this research, and the focus on PAHP policy outcomes, the use of thematic analysis is therefore relevant. Secondly, the flexible approach of thematic analysis makes it useful in research with limited previous empirical knowledge, as it can provide a straightforward but contextual starting point for developing the findings. Given the considerable lack of previous research in this area, thematic analysis is largely appropriate.

### 3.11.1. Phase 1 analysis

In this phase, a standard thematic analysis was applied and focused on specific content relating to these aims identified. Figure 3.2 illustrates the analytical steps employed in phase 1 and the analytical steps are described below in greater detail:

![Thematic Analysis steps for phase 1](image)

Figure 3.2 Thematic Analysis steps for phase 1.

Adapted from Kuckartz (2014) and Sparkes and Smith (2014).

**Immersion** defines the reading of transcripts multiple times to gain a familiarity with the data set. Immersion typically constituted 2-3 readings of each transcript and during this stage initial thoughts on surface themes apparent in the dataset as they related to the research aims were jotted down. For
instance, particular notable themes relating to patient pathways and SRI experience were identified. Notable themes can be described as patterned responses given by participants that represented a particular meaning or importance in relation to the research aim (Braun and Clarke, 2008) and thus at this point the recognition of themes is a deductive and inductive blending. *Initial thematic coding* refers to a more focused application of coding themes. During the stage of initial coding, any identified themes prevalent across the dataset were highlighted in each transcript and these themes were subsequently placed into a table format (see appendix B) with the extract of data corresponding to the identified theme. For instance, extracts of data relating to experiences of SRI that reflected a recognition of social and economic ‘costs’ incurred were identified and coded under a secondary theme of ‘costs’. The prevalence of each theme was interpreted as the number of times it was articulated in each transcript at the semantic level. Thus, for the step of initial thematic coding themes were initially identified at the surface or descriptive level. Initial thematic coding was applied across the entire transcript with all identified themes collated into a single table. *Secondary thematic coding focused* the complexity of the analysis. The overarching, descriptive themes recognised during the stage of initial thematic coding were placed as overarching themes that were contextual to the dataset. The next step involved identifying sub themes through a process of secondary thematic coding and focusing on the data at the latent level. This involved examining the underlying themes central to each overarching theme, using interpretative work that is deductively informed by pre-established theoretical underpinnings. For instance, extracts relating to ‘social costs of SRI’ were focused upon and the theme of ‘neoliberal identity disruption’ was formed as a sub theme. This sub theme was informed by the theoretical literature and the wider conceptual framework of the thesis. Following this, the extracts of the overarching themes and sub themes are cross-checked for internal coherency and ‘fits’ between themes. This step aims to check that each extract evidences the sub theme and each sub theme is coherent to the wider overarching theme. Sub themes that do not necessarily fit the overarching themes are then revisited and a wider thematic context is established for the dataset. *Thematic summaries* are then established for the overarching themes. This constitutes the
defining and summarising of over-arching themes as they capture the dimension of the research aims and provide a useful summary in which tells the thematic ‘story’ of the dataset.

### 3.11.2. Phase 2 analysis

Phase 2 explored the interaction between previously established themes based on the social and economic costs of SRI and patient pathways. This thematic analysis was therefore increasingly structurally orientated as the analytical focus was on establishing the relationship between the previously determined over-arching themes (the social and economic costs of SRI and patient pathways) and how these themes interacted in the wider structure of a patient’s journey. There is no pre-established procedure for this form of analysis within the literature and therefore the process was exploratory. However, the broader steps followed are described below.

The phase 1 interview transcripts for the phase 2 participants were re-read along with the phase 2 transcripts. On doing so, a familiarisation with the wider narrative of the patient’s journey became apparent. Each patient’s journey was then categorised into three sections. These sections were defined as, **pre-SEM clinic**, **SEM treatment**, **post SEM clinic**. These sections aimed to split the patients’ journey into three parts and provide a wider structure of pathways in which themes relating to the social and economic costs and pathways could be cross-checked against. Cross-checking therefore noted the prevalence of each theme in the designated sections of patient pathways. Once this had been achieved, a latent thematic analysis that focused on why these themes were particularly prevalent under each structural section was conducted. This resulted in three new themes specific to this phase of analysis being defined. These were **trapped in transition**, **production line** and the **(re-)cycle of patient pathways** and were used as headings to describe the thematic interactions of each section of patient pathway.
3.12. Reflections on research process

This study required ethical approval from the NHS Research Ethics Committee (REC) and therefore, prior to conducting the research, a significant amount of time (approximately 8 months) was spent seeking a favourable ethical opinion and research governance approval. Securing approval led to changes being made to the initial research design so as to make the ethical process manageable and achieved in a relatively short time frame. Consequently many of the formalised ethical procedures and regulatory processes imposed by the REC impacted aspects of the research design, particularly, recruitment, sampling and use of methods. For example, initially the research design was based on ethnography across one phase of study that included the use of interviewing, observations, participant diary and photography. I aimed to follow a number of patients over a significant period of and produce an in depth, longitudinal and prospective piece of research that demonstrated the embodied impact of SRI and the pathway through treatment. This research design posed ‘material ethical issues’ for the REC and therefore gaining ethical approval became increasingly difficult and time consuming. On realising that this research design could not be achieved without significant difficulties and in the time frame we had to conduct the research, the current two phase research design was adopted and REC approval final granted. This experience is symptomatic of the increasingly difficult, bureaucratic research governance imposed on by the REC and has been documented by other researchers attempting to conduct social science research (See, Monaghan et al, 2013; Reed, 2010). However, during the conduct of the research, I came to realise the problematic impact the imposed regulatory practices had on the data and numbers of patients involved in the study.

In line with NHS ethical guidelines, recruitment had to be conducted by the clinician who was treating the patient for their SRI, and for patient details to be relayed by that individual. This form of recruitment presented several problems. Firstly, the clinician forms a critical part in recruitment of which I have little control over. It was therefore up to clinician, who had to be invested in the research, to sample individuals who met the inclusion criteria and relay the details on in the shortest period of time. It became apparent
that clinicians were relatively unengaged in the research process, as the number of patients details being relayed on to me were low (relative to the time conducting phase 1) and a significant amount of time would pass before patient details were relayed on for the next step of recruitment. This is illustrated by the number of patients recruited from the clinic (n=23) following approximately a year of recruitment time. Despite this, I managed to secure 19 interviews out of 23 potential interviewees for this phase by contacting patients as soon as I received their details from the clinician and doing my utmost to secure their interest.

Secondly, this recruitment process had a subsequent affect for phase 1 interview data and recruitment into phase 2. The first meeting between myself and the patient took place within the phase 1 interview (at a room in the SEM department) as the recruitment design did not allow for any contact or meeting with the patient prior to that. Therefore, building rapport with the patient on the initial meeting was increasingly important, primarily for ethical reasons (to place the patient at ease and feel comfortable) but further, so the patient would openly discuss their experiences and remain potentially interested in continuing in the study. This was a difficult task as the interviews lasted up to an hour in duration, and many patients were ‘fitting them in’ between appointments and other responsibilities (e.g. between work or child care). Consequently, much of the first part of the interview was based on greetings and friendly discussions regarding their occupation and biography in addition to explaining about myself and the PhD research. Whilst this is an important part of any interview process, approximately half an hour of the one hour slot was taken up with initial greetings and building rapport. As the study progressed, this one hour time slot become increasing unfeasible and therefore, if patients were able and willing to, I took the pragmatic decision to extend interviews for as long as possible. Although this is illegitimate from a research governance standpoint, there was a clear need to draw on situational reflexivity for the purpose of gaining data.

This particular aspect of the research has had an impact on the development of the thesis. For example, following the initial greeting, the majority of patients would use the interview time to voice their frustrations
with the NHS and their pathway. This may have been a result of the ‘immediacy’ of this frustration, particularly as the patients were being interviewed in a room at the SEM department. On recognising this, I changed the structure of the interview schedule to focus on the ‘costs’ of SRI first. However, it became clear that patients were more comfortable discussing their pathways’ (and their frustrations with these) and this was eliciting interesting data. Subsequently, the early phase 1 data, at times, reflected a lack of depth regarding patient experiences of SRI and ‘costs’ as they were more concerned with ‘venting’ about their pathways. Consequently, chapter four is relatively longer compared to chapter five and six, reflective of the data collection process.

Following the difficulties in recruitment for phase 1 (i.e. building rapport) the knock on effect was that there was limited interest by patients to continue their participation in phase 2. Once they had voiced their frustrations with their pathways they appeared to lack interest in continuing with the research process. However, those patients who were interested in phase 2 (n=4) were highly committed to continuing with the research process and were increasingly instrumental in gaining more nuanced and in depth data on patient experience and ‘costs’. Phase 2 patients were interviewed at a mutually convenient/location of choice, which was often the cafe in the Hospital or at Loughborough University, and the increased rapport and interaction, meant that after they spent longer discussing their experiences. This was reflected in phase 2 data with this data capturing a more emotional dimension to their SRI experience. Furthermore, phase 2 patients provided textual data within the interviews which would aid ‘opening up’ the discussion. For instance, patients would often bring their letters of correspondence with the Hospital, personal diaries (unsolicited by me) and email updates providing useful insights into personal frustrations. Phase 2 of this study was therefore increasingly important for the research outcomes given the challenge to the recruitment process imposed by NHS Ethics and the affects this had on gaining data on the experiences and ‘costs’ of SRI. This phase was also critical for the prospectively orientated nature of the research. Whilst phase 2 is prospective, many of the patients who were receiving treatment at the SEM clinic viewed this as the last part of their NHS journey, particularly as many had spent such a long time prior to the
SEM clinic in the NHS. Their treatment at the clinic lasts approximately a month, and was relatively quick and intense, with a follow up consultation several weeks after. Consequently, I would try to meet patients during their treatment and after their follow up consultation. However, as a result of their treatment patterns, the phase 2 research was relatively shorter than phase 1, and the prospective nature of this was difficult to capture when writing up the findings in chapter six. Thus, the intention of chapter six is to demonstrate the prospectively orientated research design, however, this is not always as clear as I intended it to be.

The importance of NHS ethical procedures in the protection of patient, researcher and organisation is undoubtedly required, however, the regulatory processes and increasing governance poses direct and indirect difficulties when conducting qualitative research. This has been termed ‘ethics creep’ (Reed, 2010) and concerns have been raised as to the extent it ‘strangles’ qualitative, social science research (Hammersley, 2010), particular within the healthcare setting. This ultimately limits the extent certain qualitative approaches and research designs can be adopted, for instance, ethnography, and therefore questions how much we can really explore, and learn from patient experience.

Having outlined the methodology and methods employed in this study, chapter four will document and analyse the findings from patient pathways and the utilisation and integration of SEM (research aims 1 and 2).
4.1. Introduction

As has been previously documented, no current research exists on the pathways of patients in the NHS with a SRI. Despite the establishment of SEM within public healthcare, and its key initiative of developing the efficiency of transitional pathways of patients with a SRI or other MSK conditions between primary and secondary care, there remains no empirical evidence that documents the experiences of these pathways by patients using SEM clinics. This chapter explores this under researched area, drawing on interview data in the analysis of the pathways taken by patients (n=19) with a SRI who are receiving treatment at one SEM clinic in England. It documents the efficiency of pathways between patient’s initial entry into the NHS via primary care through to their referral into SEM. It further assesses the extent to which recent organisational change within the NHS relating to the provisions of SEM in the effective management of SRI has been fully integrated and pathways standardised across the sample of patients in this study. This chapter therefore analyses the following research aims stated in the introduction.

1. To illustrate the pathway of patients with a SRI as they receive treatment from one SEM clinic in England within the NHS.
2. To identify the extent SEM initiatives are being developed at a structural level through the integration of SEM into public healthcare and the impact this has on patient pathways.

Providing a context for these findings, Table 4.1 presents a numerical overview of patient pathways. This includes the number of visits taken by each patient to their GP, the referral pattern and the duration of time patients had been injured. Whilst it can be acknowledged that the pathways taken by each individual patient are far more complex than can be illustrated here, there are several important factors that can be identified from table 4.1. Firstly, the common feature amongst this sample is that 2 of the 19 patients interviewed had a direct referral from their GP to the SEM clinic therefore indicating no standardised
pathway from primary care to SEM secondary care service. From the initial stages of the pathway (GP access), the majority of patients remained within the NHS system, but utilised various secondary care services frequently. This took a period in excess of 1 year. Secondly, as a consequence of the recruitment of participants, numbers of patients who were chronically injured at the time of interview was significant, indicating that many had yet to complete their pathway within the NHS.

Table 1. An overview of patient pathways.

<table>
<thead>
<tr>
<th>Patient</th>
<th>Number of visits to GP</th>
<th>Direct referral to SEM</th>
<th>Approx. Time with SRI (years)</th>
<th>continuing SRI treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>4</td>
<td>No</td>
<td>3</td>
<td>Yes</td>
</tr>
<tr>
<td>2</td>
<td>3</td>
<td>No</td>
<td>2</td>
<td>Yes</td>
</tr>
<tr>
<td>3</td>
<td>2</td>
<td>No</td>
<td>1</td>
<td>Yes</td>
</tr>
<tr>
<td>4</td>
<td>2</td>
<td>No</td>
<td>2</td>
<td>Yes</td>
</tr>
<tr>
<td>5</td>
<td>3</td>
<td>No</td>
<td>2</td>
<td>Yes</td>
</tr>
<tr>
<td>6</td>
<td>2</td>
<td>No</td>
<td>2</td>
<td>No</td>
</tr>
<tr>
<td>7</td>
<td>3</td>
<td>No</td>
<td>2</td>
<td>Yes</td>
</tr>
<tr>
<td>8</td>
<td>1</td>
<td>No</td>
<td>1</td>
<td>Yes</td>
</tr>
<tr>
<td>9</td>
<td>2</td>
<td>No</td>
<td>2</td>
<td>No</td>
</tr>
<tr>
<td>10</td>
<td>1</td>
<td>Yes</td>
<td>1</td>
<td>No</td>
</tr>
<tr>
<td>11</td>
<td>4</td>
<td>No</td>
<td>8</td>
<td>Yes</td>
</tr>
<tr>
<td>12</td>
<td>2</td>
<td>No</td>
<td>2</td>
<td>Yes</td>
</tr>
<tr>
<td>13</td>
<td>2</td>
<td>No</td>
<td>2</td>
<td>Yes</td>
</tr>
<tr>
<td>14</td>
<td>1</td>
<td>Yes</td>
<td>1</td>
<td>Yes</td>
</tr>
<tr>
<td>15</td>
<td>2</td>
<td>No</td>
<td>2</td>
<td>Yes</td>
</tr>
<tr>
<td>16</td>
<td>2</td>
<td>No</td>
<td>2</td>
<td>Yes</td>
</tr>
<tr>
<td>17</td>
<td>3</td>
<td>No</td>
<td>2</td>
<td>Yes</td>
</tr>
<tr>
<td>18</td>
<td>2</td>
<td>No</td>
<td>2</td>
<td>Yes</td>
</tr>
<tr>
<td>19</td>
<td>2</td>
<td>No</td>
<td>2</td>
<td>Yes</td>
</tr>
</tbody>
</table>

This findings in this chapter have been analysed using Elias’s (1979; 2004) concept of ‘game models’ and ‘involvement and detachment’, reviewed in chapter two, with the purpose of developing a process orientated understanding of patient pathways. As previously discussed (see, chapter two) value of game models in analysing patient pathways is largely that it lends itself to understanding the social relations of particular ‘parts’ of complex figurational structures. The NHS forms one of the largest organisations in
Britain (Strong and Robinson, 1999) and therefore constitutes a highly complex, rule governed figuration comprised of a number of independent groups with varying functional roles. For this reason, the need to ‘suspend’ parts of this figurational structure, and focus on particular chains of interdependency between groups is necessary to selectively focus on patient pathways of those with a SRI. Game models are therefore used to demonstrate each pathway as a specific game within the wider NHS structure with the analysis focusing specifically on the actions taken by patients within specific chains of interdependencies that lead to both intended and unintended consequences, effectively driving the pathways of patients into SEM services. It demonstrates the shifting power relations within the wider game process and the extent these power relations lead to effect transition of patients into SEM services. The Eliasian (2004) concept of involvement and detachment will provide a further layer of analysis to the shifting power relations inherent in the game process. The concept of involvement and detachment is specifically used to address the shifting relationship(s) particular groups within the patient pathway (i.e. patient, GP and SEM practitioner) experience in the contemporary figurational conditions of public healthcare. This includes the interests and values of patients and medical practitioners, and the shifting balance of autonomy-heteronomy, inherent in the relationship to medical knowledge that constitute sets of actions made by each group within the game process. Where and how each of these concepts are used to inform the analysis is provided in greater detail below.

The application of game models (Elias, 1978) will be utilised throughout the analysis to provide a broader context for analysis augmented, where relevant, with the concept of involvement and detachment (Elias, 2004). The analysis will be focused on in three parts. Firstly, attention will be paid to the analysis of the chains of interdependencies between the GP, patient and secondary care services, focusing on this as a single tier game model on one level. This will be analysed under section 4.2. This section will focus on the power relations between the GP and the patient (as one social process structuring patient pathways) and the role of secondary care in the progression of these pathways. The concept of involvement and detachment will be used to highlight how the respective interests and values of the GP and the patient
facilitate the power relations in the GP-patient interaction and result in intended and unintended actions. Secondly, the patients' understanding and experiences of their pathways will be examined under section 4.3. The extent to which patients become 'alienated' from their pathway, medical knowledge and medical practitioners, and thus experience diminished control as players in the game will be analysed, as will the effects this alienation causes on the intended outcome of patient pathways discussed. The concept of involvement and detachment will be drawn on, where appropriate, in the analysis of (or lack of) patient control, focusing on the actions of patients in their pathway to find a medical meaning to their SRI experience. Finally, the integration of SEM and its influence on shaping patient pathways will form the latter part of this analysis. This is explored under section 4.4. This section will be focused on SEM integration as two-tier game model and the extent to which both games exert a degree of influence in shaping the pathways of patients. To that end, the development and integration of SEM initiatives and the impact on patient pathways will be addressed with reference to the theoretical analysis and to the wider consequences this has on patient pathways and the social and economic costs of SRI.

4.2. Role of the GP and Secondary Care Service

Game models draw metaphorically on the ‘relative strength of players’ (Elias, 1978). Elias uses these ideas to replace the concept of power ratios when defining the imbalances of power between specific groups of individuals within figurations. As the Eliasian notion of power remains a structural characteristic of figurations, the relative strength of players is constituted by an individual's position and function within the chains of interdependence in a specific figuration. When focusing on the power relationship between the GP and the patient it is useful to suspend this part of the game and view it for analytical purposes as a two person game on one level. Within this particular game model, we can view the GP and the patient as two distinct players in one game with a significant power imbalance existing between them. In this specific game model, the GP has a relatively high degree of power over the patient and therefore a greater ‘capacity to compel’ (Elias, 1970) the patient's ‘next move’ within the game. In addition to the GP having the greater capacity to compel the patient, the GP has a greater capacity to control the direction
of the game process whether through intended or unintended consequences. In this instance, the GP’s actions are the primary driver of the overall process of the patient’s pathway.

This power imbalance between the GP and patient is made manifest through several interrelated factors inherent to the structure of this specific chain of interdependency. In one instance, it is largely a product of the organisational structure of the NHS. The GP is the ‘gatekeeper’ of the NHS and their role is key to directing patients into secondary care. The GP is, therefore, the primary player in controlling the utilisation of secondary care delivery (See, Zolkiewski, 2004; Shapiro, 1995). This is further illustrated in table 4.1 highlighting that the majority of patients visit their GP multiple times before gaining access to secondary care services, be it SEM or otherwise. Arguably then, by default of this organisational structure, the game between the GP and the patient in this specific figuration is already highly imbalanced in terms of power relations.

This power relationship was highlighted throughout much of the interview data and was particularly illustrative in one patient’s account. Steve had sustained his SRI in 2007 and during this time had utilised both primary and secondary care services multiple times, including four visits to his GP and referrals into both podiatry and physiotherapy services. On each of these visits, the direction of Steve’s pathway was controlled by the decisions made by his GP. Steve explained:

So you went back to the GP and then they actually referred you back to where you’d come from?

Yeah, yeah. And the last appointment with the biomechanics lady [podiatrist] was probably about six months ago and she discharged me

Did you tell her that you were still suffering?

Oh yeah. Yeah, yeah, and had stopped running, she didn’t seem very interested in resolving the problem or, you know. Like I said, she misdiagnosed it and everything else behind that is a brick
wall. So you're just left in one consultant's hands and if they get it wrong or if they're not too interested, then that's pretty much the end of the journey. They just bat you back to the GP and then it's their call, and they weren't doing a great deal

Steve's account was typical of interviewees' experiences illustrating the GP as an instrumental part in the direction of their pathway. It highlights how the figurational structure fosters an inherent power imbalance as a result of the GP’s organisational position as ‘gatekeeper’ to secondary care services leading to a greater relative strength of the GP through being in ‘control’ of access to secondary care services and thus in directing the pathway.

However, this power imbalance reflected in Steve’s claim was further shaped through the patients’ lack of knowledge of secondary care services and therefore the game process beyond what the patient can ‘see’ i.e. the GP. For instance, whilst Steve is clear in the role the GP plays in the wider figuration of the NHS, he is far less clear on the role and definition of the other secondary care services he has utilised illustrating a lack of knowledge, and therefore relative power, in influencing the GPs decisions in the direction of the pathway. This is reflected in the non-definitive “they” Steve used to describe the secondary care services presenting a ‘faceless’ care pathway following his visit to the GP. The claim by Steve, “they just bat you back to the GP and then it’s their call” demonstrates the instrumental position the GP has in patient pathways and the lack of patient understanding and clarity as to the different secondary care services utilised.

The role of secondary care services Steve recalls was typical of other patient’s accounts of their pathways. The majority were largely unsure as to what secondary care they had utilised and the rationale for their referral. This is illustrated in an extract from an interview with Gill who had very little understanding of the department she had been directed into as an outpatient.

I went back to the GP and he then referred me to the hospital
What was that for? And did you get referred to Orthopaedics?

Oh I don’t know, yes I suppose it would have been, I am not sure

Arguably, the poor patient knowledge on the secondary care services to which patients are referred illustrates the insignificance of these services in successfully treating their SRI. These services appear to become a part of patient’s pathways but, for the majority, did little to progress their pathways through treatment. This remains the case in instances where patients are knowledgeable about what secondary care service they have been referred to. For instance, Lewis described,

*The physiotherapy was the first [secondary care service] and that went on for months and that’s basically, well that didn’t do anything*

This is further illustrated in Becky’s claim. Similar to Lewis, Becky had been referred to outpatient physiotherapy as secondary care by her GP but this had limited impact on improving the condition of her SRI and therefore following this went back to her GP.

*I went GP then referred me to the physiotherapy then I had to go back to the GP again because it didn’t make a difference*

The reason for this power imbalance between the GP and the patient in driving patient pathways and the subsequent often unsuccessful referral into secondary care services that is characteristic of patient pathways may be an effect of the varying levels of involvement and detachment across these chains of interdependency. As degrees of involvement and detachment by any one group in a figuration works on an axis - that is, each being both relatively involved and detached in the same instance – (Kilminster, 2004) both the GP and the patient may experience often conflicting involvement and detachment at any one time. This is largely a result of the intrusion of autonomous and heteronomous evaluations in either groups’ relationship with the SRI condition, medical knowledge and the institutional procedures that govern the movement of patients through the figurational structure and thus shape the actions of either
group and the smaller social processes over time and which therefore change the overall direction of the pathway.

For example, the relationship the GP has with the patient is formed via autonomous evaluations of the patients medical SRI condition. This is based on a controlled sequence of diagnostic tests that lends itself to a high degree of autonomy with the social context of the patients experience in the assessment of the ‘problem’. For instance, understanding the wider social and economic ‘costs’ of the patients SRI experience has limited, if any, relation to the medical assessment the GP has to make in the limited time frame and place of the GP-patient interaction within the wider figurational structure and thus the GP has developed a ‘habitus’ that ‘safeguards against the intrusion of heteronomous evaluations’ (Elias, 2007, p73). Arguably, the GP has a relationship with the medical knowledge of the patients SRI and the interests of the patient that is relatively detached. On the other hand, the patient has a relatively high degree of involvement in their relationship and encounter with the GP. For instance, the patient is heavily self-invested in their condition, accessing a medical diagnosis and seeking treatment. This is based on the significant intrusion of heteronomous evaluations by the patient, based on the high degree of personal, social and emotional investment in their treatment pathways and the ‘lived’ experience of their SRI as it fits in the wider context of their lives. Under these conditions, the patient has a relationship of relative involvement in the interaction with their GP, viewing the success of this interaction as serving their self-interests. This can be further understood in relations to Kotarba’s (1977) work on chronic injury/illness highlighted in chapter two. Kotarba (1977) described how the embodiment of chronic forms of injury are often felt at the embodied level but, where there is no immediate lesion to the body, injury is often given meaning at a social level through interaction. For the patient, the interaction with the GP provides a unique process of meaning-making, as a way to make sense of the injured body in the context of a medical diagnosis, and thus the importance of this interaction demonstrates the increasing degree of relative involvement by the patient.
These varying degrees of involvement and detachment are illustrated in many of the claims made by patients. For example, the claim made below by Steve highlights the autonomy and relative detachment of the GP in the diagnosis of his SRI describing him as ‘non-committal’ in his approach. Steve’s claim further illustrates the relationship of relative detachment he has as a patient to the medical profession and medical knowledge. For example, his description of the GP as the ‘professional’ reflecting a relationship that places the GP and associated knowledge as a legitimate and valued group (i.e. professional) group in the interaction:

But they’re the professionals and I was just guesstimating what else was going on. So yeah, from being told that, the GPs were very non-committal about anything

The extract from Dominic demonstrates a similar level of autonomous evaluation and relative detachment in his encounter with the GP. Dominic visited his GP between 4-6 weeks after he sustained his SRI, and described the GP as being ‘totally disinterested’ in the extent of his condition.

When I presented to the GP I couldn’t run, I was still having pain after prolonged walking. So I presented with those symptoms, and I have since read what he concluded from the discussion and I am really unhappy with his take on events. Basically he said, do some quad strengthening exercise and forget about it. I didn’t feel like doing some static sit down quad things were making an impact. He really didn’t listen to me about it all… what I wanted was to be sent for some proper diagnostic tests… I can’t run without severe pain, I can’t be active in the way I was before. He really didn’t seem that interested in investigating what the issues were, he was totally disinterested in the human side of it and he just seemed to brush it all off as if it was not relevant to the discussion we were having.

As previously mentioned, the relevance of the ‘human side of things’ or the intrusion of heteronomous evaluations in the GP’s medical assessment is viewed as Dominic as absent from the interaction
demonstrating the establishment of a relatively detached relationship or ‘habitus’ by the GP established through their development within the medical field.

However, whilst the GP is relatively detached in their relationship with the patient and conducting medical assessments, they are simultaneously relatively involved in the institutional procedures, safeguards and professional standards that govern the GP’s position within the wider figurational structure. For instance, the complex social-political conditions that underpin the continuing development of this figurational structure have led to greater degree of self-investment in the referral procedures that further act to shape patient pathways. For example, political reforms to the NHS that focus on budget targets by contemporary governments have targeted GP referral processes (Walter et al, 2012). This has led to the referral process being (re-)conceptualised in economic terms, a specific form of neoliberal logic as identified by Ericson et al. (2000), and the thus locating this responsibility as part of GP management processes. This specific figurational condition drives the intrusion of autonomous evaluations and greater degree of involvement by the GP in the referral process, as GP’s remain invested in, and place greater value on, the management patient referral. Under these conditions, the balance of power between the GP and patient remains relatively unbalanced, with the GP monopolising much of the power over the decisions made in the movement of patients into secondary care.

However, in circumstances where there is a shift in the equilibrium of involvement and detachment and balances of autonomy-heteronomy, there is similarly a shift in the relative strength of either player. For example, in the GP-patient relationship, the shift from relative autonomy of the GP to allow for a greater heteronomous perspective subsequently lends greater power to the patient to control their pathway. That is to say, when a GP places greater emphasis on understanding the wider social context of the SRI in a patient’s life, there is a shift in the balance of power, and a greater ability for the patient to direct game to produce an intended outcome. This is achieved by the GP providing a ‘space’ in the interaction for the expression of the social costs experienced by the patient through their SRI. For instance, Ross’s encounter with his GP is particularly illustrative of this. Ross explained:
I went back to the GP and she just said “well what do you expect us to do?” I actually liked that question because I said well I would like a scan, I have lived with it for 2 years at least I will finally know what the problem is. I think the conversation was a lot more personal, as if she sympathised with my problem. But that is maybe because I had told her I had had it for 2 years. I don't know if she would have sent me for scan if she didn’t ask the question.

Mark had a similar experience with his GP. He explained:

The GP had no idea to be honest when I explained the issue she just said “well what do you mean” and I explained and she listened. So I said well is there any way you can refer me so I can get proper specialist help?

You asked to be referred to see a specialist?

Yes and it worked because here I am.

Ross and Mark’s accounts of their interactions with their GP’s are the only accounts across the sample of interviewees in which the GP made a referral decision based on the intrusion of heteronomous evaluations in the patient assessment leading to a greater degree of relative involvement and power for patient’s request for a specific NHS service. In the majority of accounts, where the GP continues to remain a relatively authoritative, patients described how their requests for specific services were blocked by the GP. For example, Sarah claimed.

So I went to see my doctor and I said to them I need you to refer me to the sports medicine clinic, the sports injury department. I had been about 5 years before from an earlier running injury.

So you asked to be referred there?

Yes. I asked to be referred there and they said no.
Despite Sarah being the only patient in the study who was aware of the existence of the SEM clinic as a secondary care service available for the treatment of SRI prior to her referral, her request to the clinic had limited impact on her GP and the subsequent direction of her pathway. In contrast to Mark’s account where there is an increase in the level of patient involvement, changes the relative power of each individual in this interaction and the power of the patient to direct their pathway. Consequently, Sarah’s pathway in the NHS was extended by a further 6 months before she was referred to the SEM clinic.

The complexity of the GP referral process and the potential unintentional conflict that arises through shifting balance of involvement and detachment in the direction of patient pathways is evident in the advice offered to Robert by his GP. On his initial visit, the GP advised Joshua to seek private physiotherapy for his SRI causing Robert to feel frustrated at the lack of ‘patient centred’ care. As Robert alludes to, the directing of patients into personally funded healthcare is particularly illustrative of a ‘marketised’ ideology outlined by Ericison et al. (2000) and which, in turn, serves to create a sense of conflict within the GP-patient interaction.

*Unless it’s functionally impacting the day to day they weren’t interested in referring. I said I can’t be active in the way I used to be, I need to be active, it’s a big part of my work-life balance and he said the best we can do is give you the name of a private sport physiotherapy.*

**So they advised you to go to private physiotherapy?**

Yeah, yeah. When I pressed him he said if you are that bothered you can pay for it. Well actually I can’t…His willingness to see the NHS as a signposting thing to private treatment is a pretty sad reflection on GPs. It’s just, like the fundamental ethos of a patient approach. It just doesn’t seem to be present.

Where pathways are ‘blocked’ by the GP, the severity of patients’ SRI can worsen leading to problematic physical consequences. For instance, the extension of Sarah’s pathway by the GP resulted in the deterioration of her injury leaving her partly (dis-)abled for a duration of 4 months. On referral to the SEM
clinic, Sarah was finally made aware of the severity of her SRI and the need for a direct referral by the SEM consultant. Sarah explained that,

*So when I saw the SEM consultant she said “I wish they had sent you straight here”… I was on crutches for 4 months and had to have a wheelchair at the airport.*

The deterioration of patients’ SRI as a result of GP referral decision is further illustrated in the interview extract below. John explained how the GP referred him into outpatient physiotherapy for a second time despite the lack of recovery he had made using this service.

*I went back to the physiotherapy a second time because after 18 months I still wasn’t recovering.*

However, following two referrals into outpatient physiotherapy, John continued to explain how he was still suffering with his SRI.

*I walked into town the other day, right, its 2 miles and I got back hobbling. I couldn’t walk.*

For many patients, the choice of referral by the GP in driving their pathway and the relative detachment they experience in the GP encounter is particularly frustrating for patients with a SRI. For patients, the referral decisions made by the GP are often seen as illogical and needlessly extending their pathway. This is illustrated in the interview extract below.

*I thought if we know it won’t solve the issue because it’s not a physiotherapy issue, why am I going to physiotherapy why don’t they just cut that out, have a scan on it then go okay what’s the best way of treating this then* (Laura)

### 4.3. Patient Control

The varying levels of involvement and detachment and the functional differences in the GP-patient encounter arguably increase the complexity of the referral patterns made by GPs for patients with a SRI. This complexity will have an effect on the players in the ‘game’ as the more complex a game becomes
the less able a player is likely to be to make specific and intended moves in the attempt to direct the outcome overall (Elias, 1979). With greater complexity and increasing functional differences between groups, the less the game can be directed as part of an individually controlled and tangible plan. Rather, as Elias (1979) claims, the game becomes largely intangible with player's having increasingly limited foresight into how the game will develop. In this instance, a player is unable to ‘put together a mental picture of the course of the game’ (p. 84) and thus judged from their position in the figurational structure, players may become slowly disassociated or ‘alienated’ from the game. This ‘alienation’ is indicative of patient’s pathways in the NHS and an effect of the static pathways experienced and the relationship of relative detachment experienced by healthcare practitioners (particularly in their interaction with the GP).

The interview data implies that patients have limited understanding or foresight of the overall process on entering in the NHS. This is initially a result of poor knowledge of the organisational structure of care services when entering into the NHS but is perpetuated by the pathway process, particularly the inefficient transition from primary to secondary care and the lack of clarity for the patient surrounding the rationale of the referral process. This is illustrated in the claims made by patients in description of their pathway.

For example,

*Then the GP said “there is a route we have to go down”. You know, what route? I don’t know, and that went on for quite a few months (Lewis)*

*I feel like I've had to jump through some hoops because that's the way the process is that, that, that, and then if none of that works then we'll do this which I think is okay, if by doing those processes somewhere in their might solve the issue (Daniel)*

Perhaps most revealing of patients’ alienation from the pathway is the account given by Martin who reflects a high degree of alienation and uncertainty in the direction of his pathway whilst simultaneously illustrating the emotional involvement and increasing heteronomy relationship in attempting to gain a clear medical diagnosis of his SRI and source effective treatment.
It’s so frustrating, this is half the problem, it’s the journey, they (GP) haven’t told me what it is and it’s been 2 years. I’m trying to get things done and you have to take so many routes just to get here (SEM clinic) and the first time somebody actually said what it was here when I saw the consultant here but they need proof in a scan, that’s the first time, and nobody has told me what I could have done. You know you are making assumptions yourself…. this is the frustrating thing about it, nobody has told me I have done this you know what I mean, it’s all like it could be this it could be that, it can’t be. The physiotherapist said it was a muscle imbalance which I guess means one side is stronger than the other or I don’t know, I don’t know.

From the patient’s perspective the referral process from primary to secondary care appears to be inefficient, specifically with respect to the length of time it takes for this pathway to be connected and the ‘indirect’ routes taken to achieve this. This inefficient transition between care services has been documented in previous research that focuses on the pathways of patients with chronic forms of illness (reviewed in chapter two). For instance, previous research by Durham et al. (2014) on patients with COFP is particularly evident of this, drawing parallels with the experiences of SRI patients in the consequences that result from poor care delivery transition. This includes the length of time patients remain ‘in the system’ in the hope of receiving a form of medical diagnosis. As Martin claims, the pathway to gain an effective referral into secondary care took 2 years and during this time he was given limited explanation of diagnosis or the direction of his pathway.

Even in instances where patients do have a clear referral and direction for their pathway, they are often met with logistical complexity as appointments are moved last minute extending patient pathways by significant lengths of time with limited explanation. This has not yet been documented as an issue in previous research on patient pathways (see, Durham et al., 2014 and Taylor et al., 2007) and therefore unique to this sample transitioning into SEM services with a SRI. The account given by Lewis below reflects this.
My appointments have been all over the place recently due to me having to wait for an MRI on my left knee due to the football injury I sustained a while back. My appointment from the 17th September got moved to 28th October.

In some instances, patients are not informed as to the date of their appointments following a referral and are left attempting to ‘chase’ an appointment leading to frustrations in their lack of autonomy in controlling their pathway. For example, Sarah explained,

“It’s ridiculous having to wait 6 weeks when your referral is marked urgent but what can you do. I have left a message for the consultant stating that it’s been 6 weeks. I spoke to the MRI booking team today who said it’s not been seen yet by a radiologist so goodness knows when that will be.”

The inefficient referral process may be an unintended consequence from the increasing complexity of the NHS under socio-political conditions. However, a wider consequence for patients is an extended pathway and increasing feelings of helplessness and alienation in their pathway. Elias (1979) argues that players in an increasing complex game gradually become aware of their lack of autonomy in controlling the game leading to a disorganisation of the functions of players, or rather, an inability for a player to understand their purpose. This is particularly illustrative in the patient accounts given above as the pathway, from the patient’s perspective, is highly disorganised and constituted by processes over which patients feel they have little control. As Lewis illustrates in his claim to ‘trying to get things done’ and Daniel’s claim of ‘jumping through hoops’, patients are attempting to control the game outcome and the direction of the pathway into secondary care but become increasingly aware of their control in doing so and the extent they are part of a wider and seemingly intangible plan. Under such conditions patients perceive their pathway as less of an individual plan. This is further perpetuated through the extending of pathways via indirect referral, unclear explanations of referral into secondary care services, and changing appointment dates.
In becoming increasingly alienated from their pathway and aware of their lack of control in the figurational structure, patients appear to become increasingly relatively involved and emotionally invested in locating the meaning of their SRI through other channels. This is perhaps unsurprising as across the sample a clear medical diagnosis was generally only achieved on referral into the SEM clinic as the key secondary care service with expertise in treating MSK conditions. This is reflected in the claims made by patients below.

*But I am happy the guy (SEM consultant) here said it was tendonitis but the next step will be a scan and advise treatment that way* (Pete)

*He (SEM consultant) listened to my story and said yeah I think it’s this planta fasciitis let’s do this MRI scan so after I went in and had an MRI scan and went back after and he said yes this is the problem and showed on the screen* (Tara)

However, due to the length of patient pathways prior to their entry and treatment at the SEM clinic, a clear medical diagnosis is often not achieved for several months or, in some cases, years after sustaining a SRI. Whilst a medical diagnosis can change during this time, often from the development of other issues related to their chronic SRI, often it is the case that GPs offer little insight into any form of diagnosis based on the autonomous evaluations and fail to support patients’ emotional involvement in giving a medical explanation to their SRI, evident in patient’s perceptions of them as ‘non-committal’ (Steve) in their approach. In the circumstances where patients are increasingly alienated from their pathway but, as an effect of this, increasingly invested in locating meaning to their injury via a medical context, patients often start “making assumptions yourself” (Martin). It is perhaps understandable that patients like Martin become more involved in medical diagnosis as they become frustrated with the inability to control their pathway and experience potentially increasing social and emotional ‘costs’. Indeed, this has been previously noted in the literature (See, Allen-Collinson, 2005 and Sparkes, 1999) where a lack of rapid treatment leads individuals to experience a diminishing sense of social well-being.
One outcome of this set of conditions is that patients utilise alternative healthcare practices. Previous research that documents the experiences of non-elite sporting population utilisation of alternative healthcare (see, for instance Pike, 2005) document the focus of these healthcare practices as ‘relief over cure’ of which provide a sense of a form of recovery despite the short term effects.

Martin’s account is reflective of this. Throughout the 2 year period spent utilising the NHS in attempts to gain some form of diagnosis and treatment for his SRI, Martin sought other forms of private healthcare, primarily an osteopath. During this time, Martin experienced an absence of SRI symptoms allowing him to continue with social activities and providing a sense of medical ‘relief’. Despite the short term relief from the osteopath Martin continued to have problems which redirected his pathway back into the NHS. This is revealed in the extract below.

_I thought I can’t have this for the rest of my life so I went to an osteopath. Someone said he was pretty good and in a month I was better, I was out of bed and I didn’t have any problems at all really_ 

**So because of that experience (in the NHS)?**

Yeah I thought going to an osteopath would be a good thing. It hurt standing and washing up so I thought I went to the osteopath and he said the hips are fine it’s just muscle and I had a few sessions with him and he said that should be able to help but it did get a bit better but then the injury got to the point and it affected my circuit training and I thought no this isn’t right there is something else going on here so I went back to the GP

The use of other healthcare practices is largely symptomatic of the increasing relative involvement of patients in their SRI condition and the emotional investment they experience in making ‘medical’ sense of their injury. The use of alternative healthcare, whilst providing short term relief, may also provide a greater degree of heteronomous evaluations and relative involvement by the medical practitioner treating their SRI. Arguably, the utilisation of alternative healthcare, whilst providing short term relief of symptoms,
may also provide a context of greater balances of involvement and detachment between patient and healthcare practitioner that may aid, to a certain degree, the emotional and social ‘costs’ of SRI.

Becky utilised private physiotherapy after her pathway in the NHS was blocked in the transition from primary to secondary care and as a means to locate a medical-meaning.

*This is your GP?*

*Yeah my GP. He gave me a jab and I thought yeah it’s got rid of it, well I can feel a bit but I can cope with it, and then it wore off 6 months later so I went back with the same problem and he gave me another one and again it wore off*

*So you decided to seek private physiotherapy?*

*yeah thinking yeah it was my glutes or my knee. I thought I knew what was going on*

*Did he say the same?*

*well he did and then he was like, well they were saying oh it could have been this joint or this. But then what happened was I started getting neck pain and back pain too and then the private physiotherapist finally said to go back to the doctor.*

Whilst private healthcare may provide a channel for patients to gain a medically framed definition of their SRI, the use of private healthcare may only act to reinforce the alienation patients experience with their NHS pathway. Primarily, private healthcare may establish further dislocation from the patient pathway as the functional differences between both the patient and the NHS become increasingly separate, while their pathway through the NHS remains static as they seek other care. Furthermore, the use of private healthcare by patients inadvertently extends their pathway in the NHS as patients find temporary relief before being re-directed back into NHS care as physical symptoms associated with their SRI continue to re-occur.
In light of this, the knowledge of the direction of the overall pathway and the transition from primary to secondary care may be particularly valuable for patient pathways. Firstly, it may prevent increasing alienation from the overall pathway that leads to unintended consequences such as the use of private healthcare practices which appear to ‘mask’ the SRI problem which has no clear diagnosis or treatment. This subsequently has the potential to increase the length of patient pathways as the private healthcare is often sought on an interim basis between multiple and fruitless GP visits. For instance in the case of Martin, the use of private healthcare intentionally or unintentionally directs them back into NHS care to continue their pathways with limited further knowledge as to the diagnosis of their SRI. This is perhaps unsurprising, as has been noted from the literature, private healthcare practices are often underpinned by a ‘relief over cure paradigm’ (See, Pike, 2005). This therefore inadvertently extends both the patient pathway and the length of time patients are living with an injury. Private healthcare practices may provide short term relief from the social costs of their SRI and provide a means to locating meaning of their SRI within a medical context but may fail to have a longer-term impact on their recovery. This has wider effects on the social and economic cost of injury and the sustainability of PAHP policy (see chapter five).

Secondly, increased knowledge of the direction of their pathway for the patient, efficient referral into secondary care and an understanding of the treatment being received allows them to view it as an individual and tangible plan reducing the increasing and level of involvement in the pathway. This may lead to the patient having greater foresight, understanding and perceived control over the pathway and thus enabling increasing engagement with their pathway.

Of all the interviewees, James's account is most illustrative of the above claims. Prior to an encounter with a locum GP and a direct referral to the SEM clinic, James had little understanding of the pathway dictated by his GP and did not obtain a clear diagnosis of his SRI. The direct referral and explanation by the locum GP changed the direction of his pathway but provided further knowledge, control and foresight to the direction of the pathway. James explained,
The impression I got – I may be completely wrong – but maybe a locum isn’t so aware of any budget constraints or constraints the practice itself has put on the GPs to refer people but…. everything he said made sense. And with that problem, confirm it with an ultrasound, because an ultrasound can do that, that made sense. Referred me to a specialist. That made perfect sense. And after all of those years, in that fifteen minutes, this locum had done what I felt could have been done maybe……four or five years— I appreciate, whilst things were settling in my foot or whatever, there were a few red herrings going on there, but yeah, that whole process could have happened a lot earlier.

The direction and control that patients experience when they can view their pathway as an individually tailored plan is reflected in the claim made by Ross following a referral to the SEM clinic.

*But I am so happy when I came here (SEM clinic), when he said we will do an MRI I feel like in just saying that we made progress.*

Although a clear transition from primary to secondary care via direct referral appears to be valuable for improving patient pathways, referral into appropriate secondary care services is also critical to this process. Whilst the referral decision by the GP is complex and affected by various socio-political pressures, the development of SEM establishes an appropriate secondary care service for GPs who encounter patients with a SRI. Prior to the development of SEM previous research has highlighted a limited understanding of SRI by the GP (See, Allen-Collinson, 2005; Pike, 2005) and the provision in public healthcare for the management of SRI (Allen-Collinson, 2005; Howe, 2004). The process of referring patients with a SRI into appropriate secondary care may have been more difficult as there may have been a lack of understanding around the appropriate secondary care services for patients to be referred. However, given that SEM is now an established secondary care service for patients with a chronic SRI the availability of an appropriate service should lead to an improvement in the pathways of
patients with this condition between primary and secondary care. This, however, is not necessarily the case as we see in the following section.

4.4. Pathways to SEM

The findings indicate that the majority of patients visiting their GP with a chronic SRI were referred into a secondary care service that was ultimately not effective. Indeed, the interview data does evidence that nearly all of the patients interviewed had continued their pathways into other forms of secondary care, of which patients had little knowledge, and which provided limited progression towards their recovery. In these circumstances, patient’s recovery remains relatively static and therefore they will often visit their GP multiple times with similar chronic symptoms. This is illustrated across the interview data, with claims similar to Gill - “so I went back with the same problem”- frequently recurring in patients’ accounts of their pathways. John’s claim below is similarly indicative:

[I was] sitting in meetings and training course at work I couldn’t, I had to stand up. I got used to the codeine and it killed my back pain. So I went back to the GP, third time

Although the sample of patients interviewed have been directed into SEM and were therefore currently utilising this secondary care service, the reason for patient pathways being directed to the SEM clinic is largely an unintended consequence of micro social processes connected to the wider patient pathway. In these instances, the game process changes as a new player becomes part of the wider chain of interdependency and in turn makes specific, and unintended, moves that shape patients’ pathways. As GP’s are unlikely to refer patients to the SEM clinic, the pathways into SEM is often an unintended consequence. This was illustrated in the account given by Tara who explained that she had had a referral to the SEM after an unintended interaction with a receptionist who was aware of the SEM clinic.

I was querying a mix up between my private healthcare… they had invoiced my blood tests I had at the hospital. I had blood tests as well with the MRI to check for arthritis, and the lady on the phone that I was asking about the mix up asked what was wrong and I said yeah its planta
fasciitis and she said oh have you heard of the sport medicine clinic. So I went back to my doctor and said do you know about the Sport Medicine clinic.

A further example of this was in Martins pathway where his unintended encounter with a locum GP sent him directly to the SEM clinic. Martin accessed primary care multiple times resulting in him visiting four different GPs in the same practice over a period of 8 years. Of these multiple visits, Martin was referred to the same secondary care service twice despite the first referral process having little effect on the recovery of his SRI. Martin claimed,

_I might have seen four different GPs at that practice…The saving grace is, having been discharged from her, I went back to Blueforest Surgery and there was a locum there – so, a temporary doctor – and he felt my heel, said, "It's Achilles tendinopathy," straight away, he'll get it confirmed with an ultrasound. Within four weeks I had a referral to (SEM clinic)…. Well, it was like, oh god, this locum's going to get into trouble because he's just given me an ultrasound and getting me to see a specialist. That was unheard of before him._

The lack of direct referrals into SEM by GPs, despite these being an appropriate secondary care service, may be a consequence of the organisational structure under current reforms and the complexity this creates around the decisions for GPs in the process of referring patients. However, a further explanation is that the lack of direct referrals may be a consequence of SEM being a relatively marginalised group in an increasingly complex and established organisational structure. Given this, the game model takes on a different form that has wider consequences for the utilisation of SEM. Elias (1979) notes that as a game becomes highly complex (that is with an expanding number of groups), and the functional differences between groups become increasingly distinct, a game will split forming several tiers or levels an which the game is played. Whilst all players of these groups remain interdependent, that is they are a part of the same figuration, players within the different groups will coordinate in separate games and therefore may not be directly dependent on the game being played on other levels.
This analysis of a two tier game model is applicable when considering the interactions between the established NHS figuration and the more recently formed SEM. For instance, whilst SEM remains a part of the wider NHS figuration its arrangement as a relatively new area in this figuration, and its specific function, forms a separate game on a different level where the coordination of the game takes place in a different circle of activity. SEM maintains interdependency with the wider NHS figuration. As a secondary care service it is interdependent with primary care, but has little direct influence in the actions of this game. In sum, it is interdependent with, but also largely reactive to, the wider NHS figuration. However, whilst we could argue that this structure is the case for all secondary care services in the NHS, the marginalisation of SEM in the wider NHS figuration with regard to its function structures the relative interdependency between the different tiers of games.

This may be a result of the lack of relative detachment in the production of SEM specific knowledge and its relationship to the wider medical discipline. For instance, given the generally short term social processes that have occurred in its development, it may be that SEM has yet to substantiate and legitimise the disciplines internal autonomy, particularly in relation to the detached and internal autonomy of ‘traditional’ medical knowledge (Elias, 2004). Thus the formulation of its clinical legitimacy and key initiatives in have yet to be firmly established and recognised as a relatively new medical speciality, and in the early stages of its development progress as a body of knowledge, may have limited autonomy within the medical field. Therefore both the development and structuring of SEM knowledge may perpetuate its marginalised position in the wider NHS figuration.

However, the result of this arrangement is that each group possesses varying ‘reciprocal power chances’ (Elias, 1978). As has been noted, groups working within primary care (e.g. GPs) maintain a large degree of power in controlling patient pathways and this already large power differential is further increased by SEM functioning as a marginalised area within the wider figurational structure. Where the power differential in two tier games is significantly large, the above tier game, which dominates the figuration, has the ability to influence the game being played on the second tier and thus the overall outcome of the
process. Under conditions where there is limited knowledge of the role and function of SEM in primary care (above tier game), in addition to the material power invested in primary care to progress pathways of patients, the direct referrals and the establishment of a clear pathway has yet to be fully achieved. This serves to further increase the functional differences between groups and the interdependency of these groups in the wider figuration. This is illustrated in an extract below from an interview with Laura.

*So had you heard about the sports medicine clinic before then?*

*No no*

*Never heard of it?*

*No not with the NHS no, I mean I know there are sports places but not with the NHS*

Other accounts given indicate similar experiences. For instance, John claimed that his GP appeared to have no knowledge of the SEM clinic with his pathway directed into SEM via advice from a physiotherapist following 17 weeks of largely ineffective treatment. John explained to me,

*Did you get the impression that he already knew about the SEM clinic?*

*Well I don’t think he knew it existed, probably didn’t when he saw me”*

*You weren’t aware you could get any sport related medical provision on the NHS or that there was an SEM clinic?”*

*No I just thought I was going to have to live with it, so I’m hoping we can see some light at the end of the tunnel now with the correct treatment….. Once I had spoken to the physiotherapist who had told me about the sports clinic (SEM) what I felt from that is there is something more they can do, I didn’t know what but the fact it had been mentioned I thought there is a next level up as it were and that was available to me*
Whilst generally patients have little knowledge of SEM prior to referral to the SEM clinic, this recognition of the role of this secondary care service following treatment is clear. Unlike other secondary care services patients have utilised prior to their referral into SEM, patients were far more knowledgeable as to the role, function and treatment they have received at the SEM clinic. When asked about the SEM clinic and what treatment they had received, patients were highly descriptive and aware of the steps taken in their progression through the SEM clinic. For example, Sarah explained, 

I saw the consultant at the sport medicine clinic and after pulling me about she wanted an MRI scan of my lower back and hips because when she examined me I had discomfort… the MRI showed this hip (right) was fractured on top and this hip (left) was fractured underneath. This one, right one, is the most serious one.

The reasons that patients appear to have a much clearer understanding of SEM as a secondary care service may of course be that the majority of patients are still continuing their care at the SEM clinic as a result of the chronic conditions of their SRI and therefore are more immediately aware of this service in the progression of their pathways. However, it may also be that patients recognise the greater relevance of the treatment they are receiving and view this treatment as a progression of a previously static pathway. Importantly, accessing SEM leads to a medical diagnosis, facilitating a process of sense-making that had not been achieved using other secondary care services.

Given the data, the integration of SEM into public healthcare and the impact SEM is having on the pathways of patients with a chronic SRI in the NHS is limited and misaligned with the aims and initiatives of this secondary care service (See ‘Sport and Exercise Medicine: A fresh Approach’). The initiatives sought to resolve the multiple visits to the GP by patients suffering with SRI that led to “increased workload in primary care, suboptimal injury management and longer waiting times for intervention” (p.20). However the data illustrates that multiple visits to the GP and suboptimal injury management is a common experience for patients before their pathways are directed to the SEM clinic. For instance, the account
given by Daniel is particularly indicative of this whilst further reflecting the long waiting times patients experience in the referral process and the complex and time consuming transition from primary to secondary care.

Yeah I was getting back pain so I went to the GP and she said it might not be a tendon it may be your back. She said you need to see a specialist so I waited about 4 weeks for the appointment and then waited for another 4 weeks to get the appointment. I waited ages for that appointment and couldn’t make it with work so I said can I be referred somewhere else to someone else and they said not if you want to be referred you have to go back and see your GP. GP gave me medication, didn’t help, I went back again and she said oh I think you could go to another specialist and then sent me here (SEM clinic).

The extracts from patients below further reveal the sub-optimal injury management experienced via referral into secondary care that appears not to provide the appropriate treatment for patients SRI.

Nothing seemed to be working. I was up here once every 2 or 3 weeks for a quick 5 minutes in with physiotherapy and just keep doing what you are doing but there was no progression with fixing the injury you know (Ross).

He (GP) referred me for physiotherapy, so I started there at the Hospital, after 18 months I had plateaued. (John).

The hospital is too generic. I told them my activity levels and how much I was working and they just said do the stretches 10 times a day and there was no progress I just seemed very generic.

I had seen the signs for the sport med clinic but I didn’t realise it was an option. I only got here by chance anyway (Lindsey).

Delivering on the SEM initiatives however requires developing the internal autonomy of the discipline and consequently its medical legitimacy and an increase in the awareness of the service by the patients and
wider groups that constitute the organisational figuration. In particular, this would entail raising awareness of those groups in primary care such as the GPs who have the greatest power in controlling patient pathways into the utilisation of secondary care services. The development of SEMs legitimacy and GP awareness of the service will work reciprocally in improving the integration of this group into the wider figurationational structure. For instance, improving GPs’ awareness may lead to the increasing utilisation of SEM reciprocally establishing the chains of interdependencies between primary and secondary care for patients with a SRI and therefore legitimising SEM in the wider organisational figuration.

4.5. Conclusion

This chapter identifies that the pathways of patients with a SRI are frequently inefficient and time consuming with a high proportion of patients not being directly referred into SEM despite, it appears, this ultimately being the secondary care service for the treatment of their condition. The lack of a direct referral inadvertently creates a high degree of workload in primary care with patients visiting their GP multiple times and/or the utilisation of secondary care services that are not appropriate to SRI treatment. The referral patterns of patients are largely a consequence of the organisational structure of the NHS with the GP as the ‘gatekeeper’ of their pathways. As a more powerful group in the NHS figuration, GPs are critical to driving patient pathways into appropriate secondary care. But the lack of knowledge by GPs and patients regarding SEM delivery and the socio-political processes that affect the complexity of the referral process by GPs, acts to reinforce the inefficient patient pathways and does little to substantiate the transition from primary care into SEM. This is made increasing complex by the shifting balances of relative involvement and detachment across chains of interdependencies by patients, GP’s and SEM practitioners and that result in shifting reciprocal power chances for the patient in making specific actions to direct the outcome of their pathway. For instance, the high degree of relative detachment of GP’s in their interaction of patients often removes the capacity and space for patients to make direct and informed requests on referral. This leads to poor integration of SEM in public healthcare and constrain SEM initiatives being fully achieved. The cumulative effects however are the extension of patient pathways
with patients utilising care for extended periods of time and thus living with a SRI through sub optimal injury management.

However, extended pathways also create detrimental social and economic costs for the patient. For instance, unplanned economic costs are incurred through statutory sick pay, job losses and policy sustainability whilst the social costs are constituted by the ongoing (dis-)ability of patients and the wider impact on patient's emotional and social well-being. These are explored in chapter five.
5. CHAPTER FIVE - THE SOCIAL AND ECONOMIC ‘COSTS’ OF SRI

5.1. Introduction

Chapter four highlighted the relatively inefficient patient pathways in the NHS for people with a SRI, which stems from the lack of integration of SEM within secondary care services. The implications of these inefficient patient pathways include an increased utilisation of other NHS resources as the pathways of patients are often, and needlessly, extended leaving patients ‘in the system’ for prolonged periods of time. Whilst this has consequences at an organisational level (for instance, the underutilisation of SEM and the increased workload in primary care), the effects of extended patient pathways also highlight specific ‘costs’ to the patient that have consequences for the wider social and political economy. These specific ‘costs’ are termed here the ‘social’ and ‘economic’ costs of SRI and will be discussed here in relation to the following research aim:

To highlight using a qualitative inquiry the long term social and economic ‘costs’ of SRI of those patients (n=19) that have received treatment at the SEM clinic

To address this aim, firstly, the motivations of individuals who participate in sport/exercise/PA will be considered to foreground the analysis of the social and economic ‘cost’ of SRI. This will be analysed predominantly through a Foucauldian governmentality framework (Foucault, 1990; 1991) using the concepts of self-care and discourse (Foucault 1988), but at specific points, Elias’s (2004) concept of the civilised body, and the Bourdiesian (1984) concepts of social capital, distinction and symbolic violence will be drawn on in section 5.2.1 in the analysis. These concepts will be used to theoretically analyse the motivations of individuals’ uptake of PA/exercise/sport to demonstrate how the wider framework of neoliberal rationality, drawing on the specific mode of ‘healthism’ and the features of responsibility and regulation, consumption and health risks, are inculcated in individual’s motivations and attitudes towards participation in sport/exercise/PA.
Following this, the social and economic ‘cost’ of SRI will be delineated and the extent to which these ‘costs’ are shaped by contemporary neoliberal health narratives and forms of governance will be analysed. To that end, implications of the social and economic cost of SRI will be considered with a specific focus on patient wellness, patient pathways, and the sustainability of PAHP policy.

5.2. The Embodiment of ‘Healthism’

As noted in chapter two, the ‘politicisation’ of sport/exercise/PA is underpinned by the discourse of ‘healthism’ made possible through specific modes of neoliberal rationality that conceptualise it as a problem of self-care (Foucault, 1988) for all populations. Foucault’s (1980; 1991) work on governmentality, and the extension of this by Rose and Miller (1992) and Rose (1996), highlight how self-care promotes governance ‘at a distance’ (Teghtsoonian, 2009) through placing apparently non-political sites such as individuals under a web of self-governance that align with political objectives. This is achieved through promoting responsibility and regulation of health, the consumption of self-constituting health practices and the minimisation of health risks (Lemke, 2012). The data presented below demonstrates how the embodied motivations of individuals in the consumption of sport/exercise/PA align with the key features of ‘healthism’ facilitated.

5.2.1. Self-care through Regulation, Responsibility and Consumption

The regulation of population health through the consumption of sport/exercise/PA practices is evidenced in the continuing publication of PAHP policy documents and the broader marketing of health economics (Smith-Maguire, 2008). The materials of both these discourses centrally the uptake of position sport/exercise/PA in the dominant health narrative of western culture which reflects a normative and direct equation between health and physical appearance (Campos, 2004; LeBesco, 2009; Gard and Wright, 2005). Under contemporary governments this narrative (of health as appearance) is situated as one which has concomitant economic benefits (see for example, Moving More, Living More, 2014) for the wider population. Under these conditions, sport/exercise/PA is positioned as a socially constructed issue.
with increasingly important economic impacts. For example, inactivity decreases populations’ ‘workplace productivity’, increasing absence from work (Everybody Active, Every Day, 2014) and therefore has a significant impact for the wider economy.

It is this equation of health and weight and its relationship to social and economic responsibility (Greco, 1993), substantiated in the last three decades through the discourse of ‘healthism’, that frames the self-regulatory practices of PA consumption and manifesting a process of self-care (Foucault, 1988). However, this form of self-care and self-regulation through the uptake of exercise has an important aesthetic dimension.

A particularly explicit example of the conflation between health and weight is illustrated in an extract from an interview with Becky. When asked if her exercise is important for her health, Becky’s response focused on physical weight, making this aesthetic dimension possible through her consumption of ‘spin classes’ and gym membership.

**Has it [exercise] got anything to do with health?**

*Oh definitely, I have quite a few friends that are grossly overweight. But yeah I have always kept, well I have put weight on now, but I used to go to spin classes, which I can’t do now because it hurts my foot, but the exercise is important for my weight.*

Previous research conducted in the experiences of SRI in non-elite sporting populations have demonstrated the self-regulation of the body through sport/exercise/PA and the equation between health and weight. For instance, Sparkes (1999) demonstrated how ‘shaping’ his body was an important part of his motivation to participate in sport and exercise and that this presented, to some extent, of what Shilling (2012) refers to as the contemporary ‘body-project’ of healthism. However, the claims made by the interviewees illustrated a far more dramatic conceptualisation of sport/exercise/PA as a means of ‘prescription’ through self-care and their active consumption of this. For instance, the explanation given by Jacob demonstrates an explicit and empathic relationship between control, regulation and his physical
weight, with an emphasis on monitoring output through exercise consumption to ‘balance’ his lifestyle choices bound up in an aesthetic dimension.

As you get older it gets more and more difficult and it gets hard to lose the middle age spread. I don’t want to put on weight. And then I see pictures of me when I stopped playing sport and seeing how big I was. I was quite big I think I got to 16 stone at one point. But that’s why I got to the gym, if I go out for a meal I always think oh I will go to the gym tomorrow and I do exercise you know for that extra poppadum or something. My output and input I am trying to measure it you know.

For Jacob, self-care is made possible through his access to health markets, in his case gym membership, to facilitate his focus on active regulation, stimulated by the neoliberal logic of market fundamentalism. Similarly, Lyndsey’s described the extent to which she monitored and explicitly regulated her exercise consumption in line with a regime based on a fitness programme she prescribed to, again, demonstrating consumption as a means to self-constitution.

Is there an emphasis on weight?

Yes, I struggle because I am eating out 2 or 3 nights a week and there is nothing I can do about that, its work. But I am on a fitness programme where I can eat 1200 calorie a diet and only top it up with exercise. But I have noticed a fall in what I can have extra because I’m not getting in my exercise.

Unlike previous research (e.g. Allen-Collinson, 2005 and Sparkes, 1999) into the experiences of non-elite sporting populations, sport/exercise/PA plays a far more explicit and instrumental role in the care of the self, constituting individual’s ontological security and primary motivations for doing sport/exercise/PA. The explanations given by many of the interviewees were equally as explicit as Lyndsey’s response. For example, Tara, Steve and Gill explained,
I have done the Chester half marathon quite a few times as well….it was a way of trying to lose weight for summer (Tara).

I am a stone heavier than I used to be because I haven’t been able to run I’m certain (Steve).

Look at Joanna Lumley, and she is older than us, so how do they do it? Well they are strict with themselves, you have to be strict with yourself. I don’t want to be fat in old age….. I have a young mind, the body slows down but you have to keep your body trim and it’s all down to exercise (Gill).

The explicit self-regulation and responsibility to regimes of self-care that promote exercise/PA/sport as a practice of ‘healthism’ reflects, as Foucault (1973) argues, the establishment of an ‘order of things’ in everyday language through the categorisation and arrangement of identities and behaviours in various webs of meanings that maintain tangible forms of social value; for example, the categorisation of the overweight individual as not simply unhealthy but also perceived as ‘inactive’ ‘lazy’ ‘immoral’ and ‘not willing to commit to change’ (Murray, 2005, pp. 154-155). Arguably, the connotations invoked by such behaviours are of limited social worth in a culture that perceives good health (and therefore weight) as socially and economically enterprising. However such conditions, social capital (Bourdieu, 1984) is loaded in the normative ideals that bridge form and function of the body (Featherstone, 1991; Shilling, 2012) strengthening the discourse of ‘healthism’ and the self-constitution of a ‘slim’ and ‘toned’ form as also one that functions as a responsible, enterprising, controlled and civilised citizen (Elias, 2000). However, it is less through the categorisation of these identities than the symbolic violence such categorisation establishes that strengthens the promotion of ‘healthism’ and increasing self-regulation. The dominant and normative ideals of the body, and the social capital attributed to these, dialectically reinforce the comparative, non-normative ideals as of lesser social value. The extent to which this operates solidifies the dominant ideals of the body as one of perceived superiority serving to exacerbate symbolic violence against comparative bodies (Bourdieu, 1984). Thus, the greater social worth placed
on the slim, toned and physically active body in contemporary culture perpetuates the ‘violence’ insinuated though the derogatory language (such as lazy and immoral) towards the overweight and inactive body.

Symbolic violence against those who are perceived as less active and therefore overweight was illustrated within the data. The interview extracts below evidence this.

I am better off doing running than being a couch potato. I can’t stand people who have pot bellies you know, I am nearly 60 and I am still flat. I weigh myself every day (Mark).

I’m noticing the knock-on from that [SRI injury] already. You know a potbelly. Fortunately I’m very active in all the other work that I do, but exercise-wise, I don’t do any training for that now (Lindsey).

I am quite body conscious I think, if I see myself in a photo and my belly is sticking out you know, it’s not good. I don’t want to be the muscles from Brussels I just want to be normal (Daniel).

The pejorative use of ‘couch potato’ and Mark and Lyndsey’s similar use of ‘potbelly’ highlight the extent symbolic violence operates in the regulation and responsibility of individuals to self-care through sport/exercise/PA. Mark’s clear distaste of particular body shapes is reinforced via the social value he places on the active body maintained through his regular consumption of running. The extract taken from Daniels interview is particularly illustrative of how the relational ideal of the ‘normative’ body manifests in individual consciousness. Daniel’s claim, ‘I just want to be normal’, reflects the dividing practices of discourse through the categorisation of identities, indicating a slim and toned body as the cultural ‘normative’. As previously mentioned, the use of pejorative claims and insinuation of explicit symbolic violence has not been documented in previous data relating to the experiences of non-elite sporting populations (e.g. Sparkes, 1999, see chapter two) and thus arguably not the central motivation, at least, in their uptake of sport/exercise/PA. However, this is somewhat paradoxical when ‘overweight’ is empirically, increasingly ‘normal’ in contemporary societies, and indeed the reason why PAHP I so
politically centred. The use of such pejorative language further indicates the extent to which the regular consumption of sport/exercise/PA is viewed as a superior and worthier regime of self-care in the production of the contemporary normative and civilised body.

5.2.2. Self-Care through the Management of Health Risks

Whilst the categorisation of identities and the insinuation of symbolic violence operate to govern the consumption of sport/exercise/PA as a form of self-care, the emphasis placed on existential insecurities via ‘health risks’ functions as a further strategy. For instance, the categorisation of unhealthy and inactive bodies is equally the categorisation of these bodies as ‘risky’ and therefore one which contributes to a wider social risk and economic problem for both populations and government. This is particularly illustrated in PAHP materials, for example, Everybody Active, Every Day (2014) which states that ‘inactivity directly contributes to 1 in 6 deaths’. The inactive are seen as at greater risk of various forms of chronic disease, and ‘disease creates costs’ and prevents ‘economic growth’ (p.8). The health risks associated with physical inactivity are therefore not simply a problem for the self and a personal sense of ontological security but for wider society as those individuals categorised as ‘at risk’ are held responsible and accountable for controlling their bodily risks in attempts to reduce their social and economic burden (Petersen, 2000). Under these conditions, the concept of ‘health risks’ stimulate personal responsibility and self-regulation to sport/exercise/PA whilst fulfilling an important moral role (Lemke, 2012) and one that is particularly relevant to the discourse of ‘healthism’.

However, it is the implication of fear through the concept of risk that serves as a segregatory function or dividing practice in the categorisation of bodies. Whilst discourses of risk set the appropriate conditions for governance, the fear of becoming a particular body, of deconstructing one’s sense of ontological security, stimulates the adherence to self-care (Foucault, 1988) with the constant calculation of risk establishing a ‘permanent fear of failure’ (Lemke, 2010, p.49) for the healthy citizen. In this context, ‘fear

Sport/exercise/PA as self-care is constructed through ‘healthism’ as a means of reducing the risks associated with inactivity (such as obesity and various other chronic conditions). The extent this is internalised by individuals engendering their motivations for consuming sport/exercise/PA has not been documented in the previous literature on the experiences of non-elite sporting populations despite the implication of an aesthetic motivation, or what Sparkes (1999) claimed as ‘shaping’ the body.

In the extracts from interviews with Ross and Jacob the stimulation to self-care via the management of health risks is particularly revealing. Both patients appear to ‘calculate’ an increased level of risk to their health and view sport/exercise/PA as a means to taking responsibility in the management of this risk, further exposing the relational dimension of neoliberal ideal as it is situated vis-a-vis the failings of others.

2 weeks after his 65th birthday, my dad, he dropped dead, you know, and then after that I was obsessive about doing exercise you know…. I think the running helps (Ross).

It’s good to lead an active life and I’m conscious about the heart, I don’t want to end up overweight in an armchair. But also my granddad and uncle died of heart attacks at my age. It runs in the male side of the family so that is something in my mind too. Too stay fit for that point of view (Jacob).

Similarly, Mark uses his brother as an example of what he perceives he is ‘at risk’ of becoming.

I think I need to do these things to keep healthy, to keep in the same shape you know. My brother is 10 or 15 years younger than me and he is out here (points to stomach) and I am a bit afraid of that happening to me you know.

Although discourses of risk foster a ‘fear of failing’ as a healthy, responsible and civilised citizen, their operation as a governance strategy in the consumption of sport/exercise/PA and ‘healthism’ has
problematic effects. Often, those individuals who are receptive to this discourse and therefore invested in sport/exercise/PA become committed to maintaining this self-care and the forms of social productivity and capital it represents. For example, when asked what it was about sport she enjoyed, Gill explained,

*It was the feeling of feeling good and pushing yourself, yeah, and if you feel good, look good, it goes into your everyday life, you seem to get on better, things work better for you, you make better decisions.*

Gill's claim illustrates the dominance of the ideologies of ‘healthism’ in her attitude towards sport/exercise/PA. Whilst there is a clear link between health and aesthetics, evidenced in her claim ‘feel good, look good’, the commitment to social productivity is also evident in her claim that sport/exercise/PA makes ‘things work better for you, you make better decisions’. Where such a neoliberal commitment is manifest in individual’s motivations towards sport/exercise/PA, the fear of failing, of becoming something other than the compliant, civilised citizen is heightened. Thus, where one fears failure, the investment to maintaining self-care becomes an almost compulsive preoccupation. For instance, patients typically claimed,

*If I couldn't run at 6 minute mile pace then I wouldn't do it, it wouldn't be worth it. I keep battling away. (Dominic)*

*I just love the buzz and the sense of achievement. If I go out on bike or cross trainer I set a time and even if I beat my time by 3 seconds it's like brilliant and I don't get annoyed. (Tara)*

*I set myself a challenge in the gym and there is no way I will not complete that challenge. (Daniel)*

*I am still competitive. I still push myself to beat my times. (Mark)*

For many of the patients, sport/exercise/PA becomes a benchmark for ‘achievement’ (as Joanne explicitly states) and attaining this on a daily basis both creates the expectation of further achievement and facilitates resilience when such promise is (inevitably) unfilled. For instance, Lewis claims to be ‘battling’
away in his preoccupation with maintaining a specific running pace that he has set as his benchmark of success with anything slower viewed as a worthless. Similarly Joanne and Maggie, who both attended the gym as their exercise/PA, set challenges to continue to ‘work’ on their self-care and improve their socially productive and perceived social worth.

Across the claims made above, the fear of failure was evidently positioned alongside personal accountability fostering a compulsive preoccupation in maintaining regular sport/exercise/PA. The consequence of this is that it often facilitates resilience to individual’s commitment to regular sport/exercise/PA and can drive people to continue despite the risk that excessive sport/exercise/PA consumption can entail. It arguably places a self-governed pressure on patients to continue participation and maintain enterprising performance in their various sport/exercise/PA practices. Under these conditions, individuals will often push themselves physically and it is at this point that SRI is most likely to occur.

5.3. The Social and Economic Costs of SRI

5.4. Social costs

The experience of SRI has consequences and sets of social ‘costs’ for patients that, in severe cases of SRI, lead to damaging effects for their well-being. The most common social cost entailed was the experience of what has been termed biographical disruption (Bury, 1988). This is defined as the disruption to the coherency and structure of an individual’s ontological security (Giddens, 1991) and biography/identity and is known to have damaging effects on the well-being of individuals to varying degrees (See, Sparkes, 1999). Indeed, previous research on the effects of SRI have paid attention to the degree of biographical disruption experienced by individuals, with an emphasis on the extent the physical (dis-)ability caused by SRI affects the corporeal experience and therefore the integrity of an individual’s body-self relationship (Allen-Collinson, 2005; Sparkes, 1999). In this instance, and to varying degrees of
severity, people may experience emotional labour that can have damaging effect on an individual’s social well-being.

Central to the biographical disruption experienced by patients with a SRI is the inability to maintain sport/exercise/PA as a regime of self-care and therefore the corporeal integrity of the moral and healthy neoliberal citizen. As the motivation for sport/exercise/PA participation is largely a means of ‘prescription’ in the ideal neoliberal identity rather than constitutive of leisure, the disruption of SRI affects the extent this prescription can be achieved. Robert’s claim is particularly evident of this.

I was getting very depressed not being able to go to the gym every few days, I felt very unfit and I was putting on weight, and that’s the main motivation why I would go to the gym. It’s not because I love running it’s because I don’t want to get fat.

For Mark, the structured and frequent visits to the gym were based on his investment in maintaining a sense on ontological security in self-care, specifically the fear of becoming ‘fat’ and therefore failing as a neoliberal subject. His claim is evident of his investment in the gym as instrumental to maintaining a neoliberal identity rather than a desire and/or enjoyment of the practice in itself. Similar biographical disruption was evident in Tara’s account. Tara’s claim of not being able to ‘get on with things like I used to’ and thus feeling ‘lazy’ demonstrates the disruption to her structured form of exercising and the affect this has had on the perception of her status as a neoliberal subject.

But I don’t know what to do if it’s a long term thing and I start to put on more weight. I am still walking too fast I know that but I’m like I can’t, I like to get on with things like I used to, thing is I feel lazy. My mum says you are not lazy you have to rest but right now I feel lazy.

So when you can’t do your walking and rest your foot it makes you feel lazy?

Yeah really lazy
Similarly to Tara, Gill explained how SRI disrupted her sense of being a good neoliberal citizen, again using the term ‘lazy’ to describe the feelings she has about her (inactive) self.

\[\text{It’s depressing because I have always been very active and then I was stuck at home just feeling lazy. It was a major shift in my life.}\]

These sentiments are indicative of the neoliberal motivations of patients in the uptake of sport/exercise/PA as self-care and the commitment invested in the maintenance of this practice. However, the conditions and logic under which the neoliberal identity is sustained makes this a particularly problematic form of disruption for the individual’s well-being. For instance, the perception of regular sport/exercise/PA as a culturally superior and worthy regime of self-care and identity and the strategy of fear that operates to maintain forms of self-care makes manifest this disruption as the ultimate failure of the neoliberal citizen. With this form of biographical disruption, patients feel they have ‘become’ the identity that is dialectically positioned as a socially lesser valued form of self, losing a previously achieved social worth and therefore becoming the failed neoliberal citizen. As a consequence of this, individuals who are unable to sustain sport/exercise/PA become self-deprecating in the value they place on themselves. For example, Mark explained how he felt when he was unable to participate in regular work activities as a result of his SRI, categorically aligning himself with the socially less valued identities and stigmatised groups.

\[\text{At work I want to do the activities and sports and get involved, so when it comes to the occasion I have to sit out with people who are old and fat and smokers and I’m standing with them looking like that when all the lads are all getting kitted out and playing. It does get me down… I am conscious I have probably put on half a stone since the injury and it’s difficult to get rid of.}\]

The self-deprecating attitude individuals have in the face of SRI, and their forced withdrawal from their commitment to self-care (Foucault, 1988) has damaging effects on their social well-being. In particular it appears to foster harmful behaviours that become associated with the lesser valued identity they
perceived to have ‘become’. For instance, Becky revealed how she ‘used to be health conscious and active’ and has now become ‘fat and lazy’ describing how she engaged in the associated unhealthy behaviours of this lesser valued identity following SRI.

I used to be health conscious and active, and now it’s just fat and lazy. You end up binging on bad food. If you’re not in that exercise regime then you get bad habits. The stress at work gets you into bad habits, eating late, eating rubbish…Take away, drinking red wine.

Similar forms of behaviours were described by other interviewees.

Not being able to do my hill walking has really hit me. It’s a big part of what I like to do. It’s my recreation and I can’t do that now. My downtime isn’t relaxed any more…I’m not relaxing as much as I used to. Now I drink to relax, I need to because I do a stressful job and then its weight gain.

(Mark)

It has affected me because I have put weight on… I feel overweight… I’m replacing exercise with other things, my drinking has gone up. All the things that are bad for my health. (Becky)

Yeah I mean I could sit back, eat whatever I want, watch the television, jog off to the pub now and again and wherever we go on holiday and just sit there. When you get depressed you eat more and that’s why I have put weight on. It’s a vicious circle. (Sarah)

Across the data, the ‘vicious cycle’ of behaviours that Sarah claimed was a common experience for individuals with a SRI. The consumption of harmful behaviours such as increased alcohol consumption is a recurring theme in patients’ descriptions exemplified in the extracts from Mark and Becky. Where the commitment to self-care through regular sport/exercise/PA cannot be sustained as a consequence of SRI, the awareness of becoming a lesser valued self, and failing as a good neoliberal citizen, appears to manifest in the internalisation of behaviours associated with such failings and the self-labelling of the poor, neoliberal character. This is particularly evident in the lazy/fat duality which patients are not able to
distinguish between when they self-label. This serves to legitimise the symbolic violence and social worth (Bourdieu, 1984) associated with such categories of identities and substantiates the privileging of the neoliberal body.

However, the behaviours associated with the social costs of neoliberal identity disruption have far greater implications for what we may term the wider social economy. For instance, one implication is that it manifests an unintentional consequence of reducing the health of populations beyond simply a physical limitation. Whilst SRI, by definition, is damaging to the physical health of populations, it is arguably more damaging on the level of one’s social health and therefore has a far greater social impact on population health than can be assessed in conventional epidemiological surveys. It is particularly evident that individuals become increasing ‘unhealthy’ through their social behaviours (increased alcohol consumption and unhealthy food choices) associated with the ‘bad’, neoliberal citizen in which they self-identify following their inability to maintain sport/exercise/PA as self-care (Foucault, 1988). Under these conditions, SRI may serve to exacerbate population poor health despite the initial neoliberal willingness of this population group to commit to the uptake of sport/exercise/PA. Therefore, SRI does more than physically limit individuals; it transcends potentially healthy populations into the constructed realm of unhealthy, (re-)producing the issue of population health for the social economy. It can also be claimed that, under these conditions, neoliberalism health discourse increasingly polarises population (ill-)health under binaries of fit/healthy/happy and fat/depressed which in turn fuels neoliberal policies. For instance, under such a clear binary the relative health gap gets wider and more established, making the political benefits of PAHP seem, on the surface at least, greater. However, the political benefits may only be fulfilled by the very failings of PAHP and therefore whilst it may appear that PAHP is improving population health the benefits are self-fulfilling and thus unsustainable in the longer term.

In severe cases of SRI, such as those that require consistent, on-going treatment and/or experience a considerable amount of pain, other social costs include significant emotional labour. In these instances,
patients described feeling ‘depressed’ ‘down’ and ‘unhappy’. This is illustrated in the extracts from interviews below.

It’s had a mental effect on me, I’m not happy, I’m worrying about my food and the consequences.

My weight fluctuates because I will binge. It has had a big impact on me emotionally and mentally (Jacob)

When it was really bad I couldn’t sit, I couldn’t sleep, I couldn’t work, I went to work on painkillers.

And that’s what causes the depressed feeling, the caffeine and that can put you on a high and the painkillers but it makes you feel worse (Gill)

Both Jacob and Gill experienced an emotional impact from SRI. For Jacob, this is manifest in anxiety over his physical body, leading to weight fluctuations as he engages in the behaviours associated with biographical disruption of the good neoliberal citizen. Gill’s experience of the emotional labour of SRI is perhaps more severe. Gill, who experienced significant periods of chronic pain in the early stages of her SRI, relied heavily on prescribed painkillers to manage the pain. She explained how this affected her emotions, describing a ‘depressed feeling’ when the SRI was highly disruptive to her everyday routine. Where chronic pain is present in patient’s experience of SRI, the emotional labour associated with the management of this pain has implications for wider social relationships. In these instances, patients described the pressure placed on these relationships (primarily relationships with close family) and the manifestation of emotions in their social interactions. For instance, Robert explained how his relationship with his daughter was unnecessarily strained as a consequence of the emotional labour he experienced in periods of chronic pain associated with his SRI.

It’s because I have always been active and I have always been able to do things and now if my daughter falls asleep on my lap I can’t ever get up out the couch because I am in so much pain.

I mean socially it has massive impact because you just live in pain and I would say my family life has suffered which for me is the worst bit…. Yeah I get aggravated more easily by the things she
does because I am already in a bad mood because of the pain I am in. I perhaps go a little bit over the top more than I should. I tell her off, and I feel like I am taking it out on people, on the closest people too me. She pushes and I haven’t got the.... You know I’m just in pain and I sometimes have to take myself out the room and I know I am about to go off and it’s not good. (Robert)

Thus, there are significant social costs involved in sustaining a SRI that go beyond physical impairment. This includes biographical disruption of the neoliberal identity in which individuals were emotionally invested, actively aligned and experientially engaged with, constructing sport/exercise/PA as the pinnacle of contemporary self-care and venerating the social worth of the active body. The implications of this disruption are the internalisation of a lesser valued self that appears to drive sets of potentially harmful behaviours, such as increased consumption of alcohol and unhealthy eating habits, through a self-internalisation of the worthless and bad neoliberal citizen. In severe cases of SRI, other social costs include significant emotional labour revealed in feelings of depression and strains on social relationships. Taken together, these social costs imply that SRI has wider consequences for population health and the social economy. Whilst the data identify social costs associated with SRI, there are also economic costs that have unforeseen affects for the wider economy.

5.5. Economic costs

One of the major economic costs of SRI is absenteeism from work that, to a greater or lesser degree, can entail financial pressures for patients (Dekker, 2003a; 2003b). Whilst nearly all patients had experienced time off work to meet their appointment times at the SEM clinic, some patients with more severe forms of SRI had experienced limited workplace productivity, change of job role, statutory sick pay, and even termination of career path. For example, extracts from Mark, Dominic and Gill’s interviews illustrates the spectrum of economic costs.
Because I tend to do a lot of the work myself, it’s just got to be done. Some jobs are more painful than others. So, if I’m going up and down ladders, then that’s putting pressure on the heel. It will slow me down. Things still get done, but it takes longer. (Mark)

I was in the same role but had to take away some of my responsibilities. I didn’t have a choice I wasn’t fit. You have to be re-trained every year and I couldn’t do the re-training because of the injury so they have had to say I’m sorry but you will have to give it up, do a different role. It’s all gone now, I won’t get back on that course before I finish (retire). (Dominic)

I was out of proper payment just on sick pay for about 8 months. (Gill)

Mark is self-employed in the construction industry and therefore disadvantaged in being able to utilise time off work on statutory sick pay. Whilst this meant that Jack had limited financial pressures as a result of his SRI, he typically worked through pain leading to limited workplace productivity. For Dominic, the physical limitations imposed on him by his SRI meant he was unable to complete the training required to maintain his career path. Consequently, he was forced into a different role with reduced responsibilities with this being particularly difficult for Dominic who enjoyed the active nature of his occupation in the police force. Gill who worked in retail had a significant period of time absent from work on statutory sick pay. Whilst Martha was reluctant to discuss the financial pressures this imposed on her, the extent of time absent from work indicates a problematic consequence for the wider economy. Indeed, the duration of time Gill was absent from work was not uncommon in the accounts of SRI given by patients. More problematic however, is that, out of the sample or 19 patients, 3 had to leave their occupation as a direct result of being physically limited by their SRI. For example, Jacob explained how his SRI physically limited him to the extent that he was unable to continue working in the tree nursery due to the severity of his injury. This left him facing a potentially catastrophic economic cost.

It was in the tree nursery. I was digging trees all day every day so it was heavy manual labour.

They gave me sick leave for it but it was statutory sick pay so I was really on the bare bones
with it. So I started volunteering I was statutory sick pay. I couldn’t do the job and I would have been on statutory sick pay for a long time so I had to leave. It would have been a good couple of years before I could lift trees again so regardless of what job I got after I would have had to leave anyway.

The economic cost of Jacob’s SRI had significant impacts on his life. The financial pressure and loss of occupational routine fed the social costs such as increased emotional labour and strained social relations. Also concerning was Jacob’s recognition that without the support of his dad he may potentially have been left homeless.

It was horrible. I couldn’t do an awful lot. I was living with my girlfriend at the time but we split up shortly afterwards and I had to move into my dad’s house after that. I was sitting around the house all day and not in the best of moods so it could have contributed to the break up. He [dad] said I could stay there until I found another job then I would have to move out. Without him I don’t know what would have happened.

Jacob’s situation poses a significant economic problem considering his age of only 23 years. For Becky, aged 55 years, the decision to stop working, imposed upon her by the chronic and severe nature of her SRI, had less severe economic costs. She explained,

The injury has stopped me from working but I’m lucky though, I mean I want to be able to make a choice but I have had to stop working because of it because I can’t do it. Well I’m lucky, work it’s just pocket money now. But other people would be in dire straits, if work was work and they had this [injury] and they couldn’t work they would be in right trouble. I have my partner so I am ok. I am one of the lucky ones. If I was on my own I would have to keep struggling on. I wouldn’t know what I would do.

Becky recognises the severity at economic impacts a SRI can impose on individuals in situations unlike hers. For the majority of the population, or in cases of individuals with less wealth and/or financial security,
where occupations are a means to a financial end (or as Becky explained where ‘work is work’) the economic consequences of SRI can have potentially catastrophic consequences. Under these conditions, any economic costs would feed social costs in problematic ways. For example, loss of occupation and financial security could potentially leave individuals in a position unprotected by any social structural support that dramatically affects individual’s quality of life.

 Whilst the economic costs, such as workplace absenteeism and utilisation of statutory sick pay have previously been identified within the epidemiological literature on sport injury, there is one economic cost that much of this literature has failed to recognise, namely ‘opportunity cost’. This economic cost is recognised as the loss of potential economic benefits/productivity by individuals who make a ‘choice’ to adopt alternative job roles and/or reduce their working hours as a result of their SRI. Pete is an example of somebody who has experienced ‘opportunity costs’. For Pete who was a mature student heavily invested in developing his employment capacity and close to completing his course, the impact of his SRI (both physically and socially) led him to take a suspension and therefore incur ‘opportunity costs’ by reducing the time he could be returning (in terms of employment) on this investment. Pete described this ‘opportunity cost’.

    I didn't take time off work but I am doing now, party in recognition of the fact that the last 12 months have been difficult, and I haven't been working the way I could be. I have taken a suspension from my course but finishing my course and getting out into the world of work is an opportunity for me. Every month I spend doing this is a month I spend not progressing in life.

 The implications of these costs for the economic functioning of populations and contemporary governments are substantial. Whilst paradoxically sport/exercise/PA is viewed as a means to boost ‘workplace productivity’ and the reduction of absence from work (Everybody Active, Every Day, 2014), the experiences of those who have sustained a chronic SRI from forms of activities such policies iterate as beneficial forms of self-care, commonly experience workplace unproductivity and increased
absenteeism. In this context, individuals with a SRI become the very economic burden which governments and PAHP policy attempt to reduce through increased sport/exercise/PA. The resultant workplace absenteeism and lack of productivity represents an unintended and ultimately paradoxical policy outcome. Without recognising the experiences of individuals who encounter often severe SRI, and therefore the extensive economic costs associated with SRI, the risks associated with sport/exercise/PA are almost entirely absent from the broader PAHP narrative. Arguably then, the economic logic of the neoliberal rationale of sport/exercise/PA uptake as economically enterprising and beneficial for wider society is highly flawed.

A second problem of the flawed logic of in PAHP materials is that chronic SRI creates a self-defeating and unsustainable outcome for policy makers. For example, patients with a SRI are physically limited, and often chronically, to the point that regular sport/exercise/PA cannot be achieved despite an underlying commitment and willingness. Across the data, the theme of ‘giving up’ on sport/exercise/PA was common. The extracts from interviews below illustrate this.

*I haven’t done any sport or exercise for over 2 years. Whenever I tried to it was just coming back each time….I can’t cycle or run.* (Sarah)

*I stopped believing that I could be active again. I had given up on sport.* (Gill)

*I used to get excited and pumped up driving to the gym and getting in the gym and now I get there and think what I can actually do… I have stopped going to the gym completely. I was doing little bits you see but it hurt. My gym membership was up for renewal in June and I’m not going to bother renewing it because I went from 4 times a week to 1 and then half an hour here and then nothing really. But I just, something snapped in my head and I thought I’m not going anymore. I’m not going to do it if it hurts me.* (Robert)
I think up until two years ago (before injury), I was running regularly. The last time I ran in pain was probably about a year and a half ago and I've just sort of given up on that now. In fact, it was a year last winter, when the clocks went back, I stopped running.

Patients with a SRI are therefore in contradistinction to the target group of PAHP policy materials, as they remain inactive due to their physical limitations imposed on them by SRI, rather than their inherent lack of motivation, ‘laziness’ or ‘immorality’ (Murray, 2005). Under these circumstances PAHP policy becomes unsustainable as a receptive and willing target population are rendered inactive through physical (dis-)ability. This is made further problematic if one considers the health harming behaviours that occur as a consequence of the social costs of SRI such as the increased consumption of alcohol and unbalanced diet, leaving populations physically and socially unproductive in the practice of ‘good health’. In this instance, PAHP discourse not only has the potential of leaving populations physically (dis-)abled but further increasingly unhealthy as individuals become increasingly alienated form the identity of a healthy, neoliberal citizen.

An extract from Daniel is particularly revealing of the lack of sustainability of PAHP policy. Daniel often chose to walk part of his journey when working in London, a politically desirable choice advocated in various PAHP campaigns such as the Transport for London (TFL) Scheme that aims to increase the number of public transport users walking part of their journey (TFL, 2015). Daniel explained how, after sustaining his SRI, he now struggles to walk more than a few minutes without pain, making this scheme, along with other PAHP schemes, an unviable option.

Say before I would have got off 3 tube stops before where I was going in London and walked if I was working in London, but now I get off where I’m supposed to be (Daniel)

Consequently, PAHP policy becomes unsustainable under conditions of SRI and ultimately self-defeating as activity leads to injury which leads to inactivity.
5.6. Conclusion

This chapter has illustrated the social and economic costs patients entail through chronic and often severe SRI, and the wider implications these costs have on the social and political economy. For instance, implications to the social economy include a reduction in individual’s well-being for those heavily invested in the neoliberal active self and the stimulation of behaviours targeted by other health promotion campaigns. For the political economy, the economic costs of SRI such as increased workplace absenteeism, decreased workplace productivity and utilisation of statutory sick pay decrease the economic health of this population group, thereby obfuscating the net health cost-benefit and neoliberal logics central to PAHP agendas. Considering this, the neoliberal rationale that reconceptualises regular sport/exercise/PA consumption as having significant social and economic benefits remains illogical as the evidence base: a) foregrounds the benefits whilst obscuring the economic and social costs; and b) consequently ignores the self-defeating role of PAHP in limiting the capability of citizens to comply in the face of SRI. To that end, the disinterest of government departments in the issue of SRI due to the lack of observable and measurable costs (Finch, 2012) requires addressing. This is particularly the case when one considers the extent to which the qualitative data highlights the lived experiences of the social and economic damage of SRI and the impact this can potentially have on wider society.

In light of the data that evidences the social and economic costs and the implications of these costs for contemporary governments, the importance of clear and efficient patient pathways for those with a SRI becomes particularly relevant. If PAHP agendas continue to iterate the neoliberal narrative that centralises the concomitant benefits of sport/exercise/PA, then, as Pollock and Kirkwood (2008) claim, PAHP should be accompanied by a parallel strategy for the treatment of SRI. SEM has been established as channel for the management of SRI; however, the existing inefficiency of the pathways for patients with a SRI (discussed in chapter four) serves to exacerbate the social and economic costs of SRI. Specifically, the extended and often directionless pathways experienced by patients do little to provide appropriate diagnosis and treatment that, in turn, may reduce the duration of time patients remain inactive.
and absent from work with a SRI. The interaction of patient pathways with the social and economic costs of SRI is discussed in greater detail in the next chapter.
6. CHAPTER SIX - THE INTERACTION BETWEEN PATIENT PATHWAYS AND ‘COSTS’

6.1. Introduction

Chapter four illustrated the relatively inefficient pathways for patients with a SRI in the NHS, driven in part by the marginalisation of SEM within the NHS and patients’ and GPs’ limited knowledge of SEM services. Chapter five highlighted the social and economic costs incurred through SRI for these patients, identifying the damaging consequences chronic and prolonged forms of SRI have for patient’s social well-being and the potentially problematic effects for the wider social and political economy. Whilst these two findings have been highlighted independently for heuristic purposes, the interaction between pathways and patients’ experience of the social and economic costs of SRI, particularly as patients progress through their pathway and receive ongoing SRI treatment, is significant. For instance, given the relatively inefficient pathways of patients with a SRI and the evidence that on-going SRI incurs often damaging social and economic costs, the extent inefficient pathways may serve to make manifest specific costs (and vice versa) at specific points is important to explore. This chapter therefore focuses on the interaction between patient pathways and the social and economic costs of SRI, exploring the fourth and final research aim that follows a number of patients’ (n=4) prospective journeys and illustrated this interaction.

Drawing primarily on data from phase two of the study this chapter explores the extent to which various social and economic costs are made manifest and experienced in the overall structure of patients’ pathways. It focuses on the points in which the previously highlighted inefficiencies of patient pathways, such as the transition between primary and secondary care delivery, may exacerbate specific social and economic costs for the patient. As a consequence of the case study research design employed in phase 2 of the study this chapter differs to chapters four and five, particularly in the extent it foregrounds the voices and more personal stories of four patients in greater depth and provides a more nuanced insight into the logistical and emotional difficulties of navigating their pathway. Therefore, unlike chapters four and five, this chapter takes a more narrative centred approach in data representation and analysis, with the emphasis placed on centralising patient stories and less of a theoretically informed analysis of the
data. Rather, the analysis demonstrates the points at which inefficient patient pathways may become particularly detrimental to patient well-being and increasingly problematic for both the patient experience and the organisation of public healthcare. The key points in this process can be described as trapped in transition, production line and the (re-)cycle of patient pathways.

6.2. Trapped in Transition

As highlighted in chapter four, the majority of patients had initially sought medical provision through their GP in the primary care setting. Indeed, this was the point in which the NHS pathways for all participants in phase 2 of the study began. For the most part, patient knowledge of the medical provision available for the treatment of SRI in the NHS was limited, with Sarah being one of the very few patients in the study who was aware of the existence of the SEM clinic. This was a result of her accessing this service for an earlier SRI injury and therefore having prior experience of SEM services.

Sarah’s pathway is therefore particularly interesting as her prior knowledge is likely to have influenced the direction of her pathway and decreased the duration of her process through the NHS. For example, and as noted chapter four, increasing awareness and knowledge of SEM across both groups has the potential to improve the transition of pathways. In this instance, Sarah had clear patient knowledge of this service and therefore wielded relatively more power in her interaction with the GP on entering into the NHS. While, one might expect this to make Sarah’s pathways relatively efficient, on her initial visit to the GP, her request to be referred to SEM was denied.

“This is doctors for you, I knew exactly where I had to come but he says “no no” I will send you for a scan”. [Extract from interview 1 March 2015]

Consequently, Sarah was referred by her GP to the orthopaedics department for a scan, although she was unaware what type of scan this was. However, on being referred Sarah experienced a complete lack of correspondence regarding her appointment date, and after a period of approximately 6–8 weeks, Sarah had no appointment. It appears at this point, in her transition between care delivery services prior to SEM,
Sarah becomes ‘trapped’ in the transition between her initial visit to the GP and her referral thus extending the length of Sarah’s pathway. The ‘chasing’ of appointments following patient’s referral into secondary care services, in addition to a lack of patient knowledge of which services they have been referred to, has been noted as a problem for most of the interviewees in this study and again, this was the case for Sarah regarding her appointment or what type of scan she required. Sarah subsequently intervened in her pathway by visiting the hospital department and requesting this information from the receptionist.

*It was taking a while. I went to the hospital and found out where I was referred and I spoke to a lovely lady and she said she would look at the notes and get back to me. So they looked at the notes and they said they don’t want a scan, you need an MRI scan. The other one will be pointless. I was chasing it and chasing it and finally I got it.* [Extract from interview 1 March 2015]

On finding out the date for her appointment, Sarah was also made aware that the scan her GP had initially requested (which one can only infer was either an x-ray or CT scan) was not appropriate for her condition and that, in fact, she required an MRI scan. This misinformation, gone unrecognised, could have resulted in further delays in her diagnosis and subsequent treatment. However, is also indicates an inefficiency regarding communication in patient pathways between care services for the patient.

Whilst being trapped in transition meant for Sarah a lack of information, for other patients this ‘trapping’ was a result of changing appointment dates. For example, following referral into secondary care, Martin’s appointment date changed numerous times extending his pathway by several weeks without medical treatment. This is illustrated by Martin as he explained,

*I think they did put me back a bit, I think they put me back twice but I can’t think of the time... It was frustrating because they kept putting me back a couple of times. So I got a letter saying your appointment has been changed, I think it was a couple of weeks. It was frustrating… you kind of feel trapped, and this is what I was saying to my wife a little while ago, trying to express another frustration because you kind of feel trapped.* [Extract from interview 1 April 2015]
Daniel’s pathway was similarly marked by changing appointment dates. He explained that his appointment date changed three times over several months, each time extending the duration in which he received no medical treatment for his SRI. At each point that appointments were changed, Daniel became increasingly frustrated at the lack of information provided as to why this was the case. An example of this is illustrated in figure 6 which constitutes an extract from the letter sent prior to his referral into SEM notifying him of the first change to his appointment.
Figure 6. An extract from a letter received by Daniel notifying him of changes to his appointment times prior to referral into SEM.

Whilst Figure 6 demonstrates just one of these letters Daniel received a further two that notified him of two further changes to his original appointment date. Figure 6 highlights the extension of Daniels pathway.
by approximately 6 weeks as a result of the initial change in his appointment. However, the subsequent postponements extended his pathway by an additional two months from the original appointment date. Daniel explained his frustrations with these changes, commenting on the axiom of ‘caring at its best’ as particularly ironic in his case.

It was crazy, I was basically trying to get an appointment and they just kept sending me letters changing the appointment at different times. There was one occasion they offered me the same appointment twice on two letters. It’s confusing and frustrating because with my life [travelling for work] I have to take time out of work…I am at work all week, I have Friday off for an appointment, get home and open a letter which has changed it for 4 weeks later. I got this appointment in September and then it changes to November but its middle of the week so I have to sort work out for that. Then I get this other letter, different text, different font, and it says remember this appointment it’s going to change. Then I got another letter and that puts me back again. I phoned them after this one because I was confused and there was no interest at all, it was just like sometimes we have to change appointments. Basically 4 days booked off, different days, for one half hour appointment. Yeah caring at its best. [Extract from interview 1 May 2015]

The reason for changing appointment dates may be a consequence of the relative demand for services treating MSK conditions. Although waiting times have been identified as problem for MSK patients for this reason (Ferguson and Cook, 2011) this could also explain changing appointment dates. Clearly, many patients with a SRI utilise MSK services on referral into secondary care (such as outpatient physiotherapy) despite the existence of SEM, and whilst these services benefit SRI patients’ conditions (to a greater or lesser degree), the lack of integration and marginalisation of SEM may serve to intensify this problem as they continue to be directed into wider MSK care services.

Not only does changing appointment dates extend patient pathways and therefore the length of time patients are in the system, creating potentially economic inefficiencies at the organisational level, but, for
the patient, this inefficiency in their pathway maintains economic costs such as time off work, plus the emotional costs described in chapter 5, for a significant period of time after onset of SRI. As evidenced in Daniels’s claim, the time taken off work to meet appointments that were changed several times sustains the wider economic cost of workplace absenteeism. This economic cost seen within the progression of patient pathways isn’t necessarily a direct result of the pain and physical incapacity patients experience from SRI, and therefore the inability to work, but rather, a direct consequence of the inefficiency of patient pathways that often needlessly extends the time patients are living with a SRI. This economic ‘cost’ is one that has not been identified in the previous epidemiological literature on SRI or noted in the experiences of SRI of non-elite sporting populations and can only be understood within the context of patient pathways as a product of pathway inefficiencies. Thus at this point in pathways, the economic costs of SRI are still being incurred.

However, these pathway inefficiencies are not simply a problem of care pathways from primary care into wider MSK services. For Martin, the inefficiencies to pathways and the resulting economic ‘costs’ were still be experienced on referral into SEM. Whilst, for the majority of phase 2 interviewees being; being ‘trapped in transition’ was experienced prior to referral into SEM, for Martin this was an ongoing issue for the duration of his pathway.

Martin explains in an email update sent several months after his first phase 1 interview

*I’ve been meaning to get in contact with you as my appointments have been all over the place. My appointment from the 17th September got moved to 28th October but them today I received a phone call telling me that they’ve now received my MRI results and have had a cancellation so my appointment is now this Wednesday 9th September at 11am. This means that I’m going to have to leave work midway through my day. Unfortunately I haven’t managed to change my job as yet.* [Extract from email update September 2015]
For Martin, the economic costs incurred were made particularly difficult. His occupation as a postal worker required him to be physically active for the majority of the working day and therefore sustaining a SRI affected his occupational productivity leading him to try and find a change in work duties with less physical demand. However, the economic costs to Martin were made increasingly difficult as his appointments were changed impacting upon the productivity of his working day in order to attend the changed appointment time.

For Daniel, who remained utilising secondary care prior to SEM for much longer than Martin, there remained limited progression. However for Sarah, her pathway was directed into SEM services approximately 8-12 weeks following her MRI scan. She explained,

So I had the MRI scan and they said it will probably be about 6 weeks. The results weren’t coming through, they weren’t coming through I was chasing them and I was at the doctors chasing them because I was in agony, I was in a lot of pain at this point now. So I finally went to the doctor to get the results. That would have been the 18th so it took over 6 weeks before I got the results. I got the results then and went to see the doctor and he said oh you have fractured your hip. So now we will refer you to the sport medicine department. [Extract from interview 1 March 2015]

As a result of the GP’s decision not to immediately refer Sarah to the SEM clinic and being trapped in the transition between care deliverers, Sarah’s pathway to the SEM clinic following her initial visit to the GP took approximately 3-4 months. It took this long due to the time she spent locating her MRI appointment and then waiting time for her MRI results. However for Sarah unlike the other phase 2 patients, her prior knowledge of SEM aided her pathway to the clinic and may have potentially reduced the time it took to access SEM services. The forced intervention in her pathway at the point in which she was trapped in transition had an impact of reducing what could have potentially been a much longer wait. Despite this however, the implication of her GP’s decision arguably extended this, reinforcing the importance of this
particular group in the decisions made with regard to the progression of patient pathway into appropriate secondary care.

The experience of feeling trapped in the transition, notably between primary and secondary care for Daniela and Sarah, and in the case of Martin during his treatment at SEM, at this point manifests patients’ experience of relatively alienation from their pathway. On initial entry into their pathway, patients begin to recognise the complexity of the system and their lack of influence over its overall direction. During this time, all four case study patients attempted to sustain their sport/exercise/PA regimes despite experiencing discomfort. For example, when asked if Sarah continued to run during this time during a later interview, she explained,

\[
\text{No I was like, well I was trying to but, I did the odd one [run] and went to the gym. I did maybe 5 miles and took painkillers. I managed a 2 mile run mid-week but everything was hurting.}
\]

[Extract from interview 2 October 2015]

At this earlier point in their pathways, patients experience uncertainty due to the lack of a clear medical diagnosis. This is highlighted in chapter four, illustrated by patients' lack of knowledge of their referral patterns into secondary care and their 'guessing' of a diagnosis prior to accessing SEM. A clear diagnosis was typically only achieved for the participant once they were seen in the SEM clinic. Under these conditions, patients remain largely unaware of the, often serious, nature of their SRI. This may explain, in part, why so many patients continue to participate in sport/exercise/PA as they have little, if any, medical knowledge of their condition prior to referral into SEM. However, they do have a fear of failing as a good, healthy neoliberal citizen is also particularly common and this serves to heighten a sense of ontological insecurity in this form of self-care (Foucault, 1988) arguably contributing to their continued participation in sport/exercise/PA.

For example, the strength of the motivations of patients to self-care through sport/exercise/PA has been identified in chapter five and it was similarly the case for Sarah who claimed that 'I exercise to be healthy
and I suppose it’s all to do with weight and to keep my weight down’. Arguably, the ontological security to the self, sustained through the continued commitment to this self-care regime (Foucault, 1988), becomes initially disrupted at the point in which patients sustain SRI and become conscious of the intrinsic uncertainty SRI presents to the care of the self and the structuring of these practices. However, this uncertainty is mobilised extrinsically by the experience of being ‘trapped in transition’ and the lack of security and direction their pathways offer in regaining their ontological security. Under these conditions, patients become increasingly ontologically insecure and aware of the fragility of their neoliberal identities.

Whilst we know that this identity is already largely susceptible to failing as a result of its cultural position and social worth, in the instance where patients become trapped in transition, ontological insecurity is driven in part by the fear of failing (Lemke, 2010) with this a very real threat, and the fear of becoming the unhealthy and immoral body due to their potential inability to maintain self-care, becoming increasingly significant. Driven by a lack of patient knowledge on pathway progression and SRI diagnosis, patients appear to continue, or at the very least, try to continue, their sport/exercise/PA and secure a degree of emotional gratification and control over an increasingly vulnerable neoliberal body through reverting to routine. This is illustrated by an extract from Daniel who was in the process of waiting for a diagnosis at the SEM clinic following an MRI scan. During a second interview with Daniel, he explained,

*The injury itself hasn’t really changed and I don’t know what it is. It’s more, like, it doesn’t hurt that’s the thing I don’t feel any pain unless I do any exercise….The thing is, I was going to the gym and doing little bits and it would hurt and then I would stop and go back do a little bit and it would hurt. I went from four five times a week at the gym to one, and then it was an hour and then half an hour and then I would just walk out the gym because it hurt. I kept going to the gym because it’s the only thing I can do that will help maintain the weight loss. I’m this type of person; if I don’t exercise I put on weight. I know the inside of me. I have a good resting pulse, I am quite fit, but just the outside of me is, I don’t want to put on weight because of the injury…. I went [to
The investment in sustaining sport/exercise/PA driven by the ontological threat to their neoliberal identities and the relative detachment from patient pathways becomes problematic when SRI proves to be chronic and serious in nature. The seriousness of many of the patients’ SRIs is not detected until referral to SEM and the continuation of sport/exercise/PA prior to this, made worse by the increasingly extended pathways, may at times serve to exacerbate the chronic nature of these injuries. For example, on referral to SEM Sarah was provided with a full diagnosis and made aware of the seriousness of her condition.

As illustrated by Sarah’s interview extracts, prior to this diagnosis she had been ‘chasing’ her appointment for an MRI scan and had received little information about this from her GP. Her reaction following diagnosis reflects her shock at the limited information and the severity of her situation whilst she had been trying to sustain her sport/exercise/PA routines. In the case of Sarah, a direct referral to SEM may have prevented this, reducing the time of her pathway and her experience of being trapped in transition,
and therefore potentially reducing the severity of her injury. This is evidenced by the claim made by Sarah’s SEM consultant following her diagnosis. Sarah explained,

*When I saw the [SEM] consultant she said “I wish they had sent you straight here” and I said “I asked but they didn’t”. [Extract from interview 1 March 2015]*

As noted, Sarah’s intervention in her pathway, based on her prior knowledge of SEM services had, to some extent, improved the efficiency of her pathway compared to the pathways of the majority of the patients. However, Daniel’s pathways remained largely inefficient as they were continually referred into the ‘production line’ of secondary care, extending their pathways with little improvement to their SRI condition.

6.3. Production Line

Daniels’s pathways remained largely static as he utilised secondary care services for approximately 12 months before referral into the SEM clinic. Both Daniel and Sarah have a negative experience of these secondary care services and this is indicative of the majority of participants in this study. Phase 2 patients described their experience as repetitive and routine and leading to only a minimal improvement to their condition. Daniel used the metaphor of a ‘production line’ and Martin likened his experience to being on a ‘treadmill’ reflecting their feelings of a lack of both progress and control in their respective pathways. This is illustrated below.

*You would think they would know the issue and pass that information on. But I kept repeating to people the problem. There didn’t seem to be any link. I mean Christ, I have had this for over 9 months. Even yesterday they said where are we scanning you? I was like what! I said I’m not sure, I know it’s here but I don't know what. Surely something is written down. My experience with the GP, the physiotherapy is that it's just a production line, you know, next! Not with the SEM clinic, you know, they knew what was going on. There is no real attention to detail. Do I have to*
explain everything, my expectation of each appointment, what they are supposed to do? It’s crazy. [Extract taken from interview 1 May 2015]

Daniel’s description of secondary care illustrates what he perceived as a distinct lack of understanding of his SRI by the secondary care services (e.g. orthopaedics and outpatient physiotherapy) he was utilising at this time demonstrating clear patient dissatisfaction with the pathway and the lack of communication between care deliverers. Martin’s description of his experience prior to his referral into SEM was similar.

I must admit after the physiotherapy and that seemed to be dragging and dragging, I did think well I should of gone private, would that have made a difference. Its money too, private care costs money. It was after the physiotherapy and nothing seemed to be working. There is no point coming to this appointment because it’s just going to be the same thing and keep doing the exercises. I kept thinking you know you are kind of on a treadmill and you are just going through the routine, that’s the impression I got when I left. Even I was thinking can we just move on, what was the point in that it’s not doing anything. I felt like I was wasting my time. Not all the time, but towards the end I was thinking that was a waste of time. [Extract from interview 1 April 2015].

Both Daniel and Martin’s interview extracts indicate that the secondary care services they utilised were largely ineffectual in the treatment of their SRI. In the case of Daniel’s circumstances, his perception of secondary care indicates a clear lack of attention and understanding of his condition. His claim ‘not with the SEM clinic, you know, they knew what was going on’ substantiates this, suggesting that there is distinct difference in the apparent knowledge of his condition by the different care services. Martin’s description suggested a similar problem. His experience was one of limited progression utilising outpatient physiotherapy, claiming that this service had almost limited impact on improving the condition of his SRI.
The limited progression utilising various other secondary care services, underpinned by the continuing lack of a clear diagnosis, serves to further reinforce and increase the relative alienation and dissatisfaction patients have with their pathways. This serves to intensify further patients’ experience of their medical treatment as routine and repetitive similar to being in a production line. This is illustrated in the extract from Martin who is experiencing alienation exacerbated by the lack of a clear medical diagnosis.

I don’t understand what’s going on, exactly what the injury is as well. From what I have read and from what I have been told it’s the inflammation, but to me it’s like it’s injured, it feels to me like it’s torn and the stabbing pain. But I think it’s a combination of not knowing exactly what the injury is, the treatment doesn’t seem to be working and there is no light at the end of the tunnel, I don’t know how long it’s going to go on. If it was 2 months, 3 months, 6 months just keep doing this and it will work then yeah I would be much happier. [Extract from interview 1 April 2015]

With little evidence of any improvement in their condition, the social costs of neoliberal identity disruption become increasingly prevalent. As patients struggle to sustain their sport/exercise/PA routines in the face of SRI and view their treatment as unproductive and largely ineffective, patients slowly become increasingly detached and alienated from their pathway manifesting a heightened awareness and ontological insecurity in failing as a healthy and moral neoliberal citizen. Unlike following their initial entry into the NHS where patients attempt to seek greater control and emotional gratification in maintaining self-care through sport/exercise/PA, the growing length of time experiencing relative detachment in their pathway progressively reinforces their perceptions of a failed neoliberal self to the point where patients begin to view the structure and routine of their daily life as dominated by seeking appropriate medical treatment. This preoccupation with medical treatment in the experience of SRI has been identified in previous research, particularly in the case where SRI results in chronic forms of pain, illustrated in the study by Sparkes (1999). An example of this is in the extract from Daniel.
I am sick to death of it now I just want to get my life back. That means waiting for a proper diagnosis and treatment…. My fear is that they can’t find out what it is when I know I get pain when I do exercise. I feel depressed, I feel very unfit and putting on weight. I feel like my t-shirts are getting tighter, annoyed and depressed. I don't know if I should go back to the gym and just be in pain but I can’t. [Extract from interview 1 May 2015]

Similar to Sparkes’s (1999) duty on the ‘fatal flaw’, a lower back injury that resulted in chronic pain, Martins claim demonstrates a comparable level of disruption and preoccupation with medical treatment. However, uniquely Martin’s claim further evidences the interaction between the increasing alienation from his pathway and the self-deprecating attitude that reflects neoliberal identity disruption as patients feel they have come to epitomise the ‘other’ of the neoliberal body defined as fat, unhealthy and ‘not willing to commit to change’ (Murray, 2005, pp. 154-155). These identity issues are reinforced through patient experience of feeling physically limited as they recognise that the neoliberal body is simply out of their reach under conditions where they are unable to maintain levels of physically activity. Unable to find a medical resolution, and thus increasingly insecure in their sense of well-being, patients’ are drawn to return to the behaviours which previously provided this positive identity and ontological security, aware (through pain) that it could result in negative consequences and, ironically, the source of their initial physical injury. This is further illustrated by Daniel.

I have been doing activities at work but I can’t do the regular gym routine because it hurts. So because of that I haven’t felt the pain. I know the minute I do something I will feel it. I played football for 10 minutes a few weeks ago and I couldn’t do it…. In June my gym membership was up for renewal and I thought you know what I’m not going to bother renewing it. [Extract taken from interview 1 May 2015]

The need to regain a positive identity and ontological security has been demonstrated in previous research by Allen-Collinson (2005). Whilst the quote by Daniel, unlike previous research, demonstrates
This in the context of patient’s wider social life, e.g. work, there are clear parallels that can be drawn in the strength of the physical active identity in which clearly drives the motivations of individuals to continue exercising despite the pain. For Tara, the physical limitation imposed on her by a SRI was particularly serious to the point where she described herself as disabled. Tara explained,

_I can’t work, I can’t eat, I can’t sleep. It’s like, everything I do I have to think will my foot allow me to do that. I missed a train to work because of my foot because I can’t walk quick enough to get there. I need a taxi, I would never have contemplated getting in a taxi for a half hour walk before the injury to get to the train. I was disabled but with the injury you can’t see it so people don’t understand. It’s like well people say what’s wrong with you, well I’m in agony I can’t walk._

[Extract from interview 2 August 2015]

It is quite clear from Tara’s account that her SRI had a significant physical impact. As a consequence of the relationship between the regular consumption of sport/exercise/PA as a direct marker of the good neoliberal citizen, the effect of a serious physical limitation to the point of disability not only heightens the sense of a failed self but has consequences for her well-being and quality of life. In the case of Tara, this is further characterised by a lack of social awareness and understanding of her physical disability by others, potentially emphasising the neoliberal perception of personal accountability in her own physical failings when requiring help, such as the use of a taxi, to undertake relative aspects of daily living.

It is from this point in patient pathways that more problematic social costs such as significant emotional labour through feelings of depression and unhappiness accompanied by the ‘vicious cycle’ of poor health behaviours (such as increased alcohol consumption) are often experienced by patients. This is reflected in the extract from Martin that again highlights the interaction between a lack of diagnosis, increasing length of pathway and the compounded experiences of social costs. For Martin, the significant emotional labour he experienced during this time is manifest in the strain placed on family relationships particularly with his young children and wife. Martin claimed,
A year worth of treatment and I think I am in more pain now than when I started. I think if I had had a diagnosis from the start it would have given me some indication to the length of time. But it’s going on and on…But it is my family life that is suffering the most because of the pain I am and I can’t see a light at the end of the tunnel, I mean am I going to be in this much pain for the rest of my life?. [Extract from interview 1 April 2015]

In the production line of secondary care services and/or absent of a clear diagnosis, patients with a SRI are both physically limited and experiencing often significant social and economic costs of SRI. At this point in the pathway the social and economic cost of SRI are often at their most extreme. Arguably, the experience of a medical diagnosis is central to a patient’s sense of ontological security in the context of their patient pathway. This is particularly evident in Martin’s claim as he indicated that a medical diagnosis could have reduced the alienation he feels from his pathway and provided him with a narrative, or explanation, to structure his experience of SRI. Furthermore, unlike in the stage of ‘trapped in transition’, patients are in the process of receiving medical treatment with a pre-discursive and assumed view (a consequence of the dominant medical paradigm) that such treatment will be effective in improving their condition. However, for patients at this point in their pathway, the treatment is largely ineffective and a clear diagnosis has yet to be obtained.

6.4. The (Re-)Cycle of Patient Pathways

By the time patients are referred to, and continuing treatment in, the SEM clinic and where they perceive their pathways as coming to an end, much of the social and economic costs of SRI have already become manifest and the wider impact for both the patient and economy have occurred. Whilst these costs are already being experienced by the time patients are referred to SEM, their experience of care, for the majority, appears to far more positive. For example, the extracts from Tara and Daniel below are particularly illustrative of a more positive patient experience following consultation at the SEM clinic. For instance, Daniel claims
Yeah the SEM side of it is great because he is a specialist and he was talking to me and explaining and telling me this is what’s happened and this is what’s happening. I was happy when I saw him, much happier. [Extract from interview 3 January 2016]

An extract from a second interview with Tara reveals a similarly better patient experience.

Since you have been at the SEM clinic have you been happier with your care?

Oh yes, and they get you in quickly, I saw him [SEM consultant] only a couple of weeks ago and I am having my treatment Wednesday. I am moving in the right direction now. I was really disheartened before… It’s comforting now there is another step. [Extract from interview 2 August 2015]

In most instances, the increasingly positive patient experience following referral into SEM is largely a result of patients obtaining a clear diagnosis, the appearance of a more efficient pathway and the provision of greater amounts of information regarding the treatment process. This is illustrated below by Daniel and Tara as they progressed with their treatment relatively quickly and efficiently in the SEM clinic following a clear diagnosis.

Once I got diagnosed at the SEM that was a big help. It put closure on it and I finally knew what I could and couldn’t do (Daniel) [Extract taken from interview 3 January 2016]

To be seen so quickly now and its moving along at a decent speed. He has gone through everything with me. (Tara) [Extract taken from interview 3 September 2016]

Diagnosis, information and a sense of progression involves patient with their pathways. For 2 out of the 4 case study patients (Tara and Daniel), treatment at the SEM clinic significantly improved their condition and gave them greater certainty as to the duration of their treatment, strengthening their ontological security in the control of their pathways, and improving their sense of well-being by reducing the conscious awareness of a failed neoliberal subject. This progression in their recovery enabled patients
to (re-)establish their sense of the neoliberal identity as they started to engage in forms of sport/exercise/PA and increase their sense of intrinsic security. It is at this point in patient pathways that they begin to anticipate a return to self-care, and in cases where treatment improved their physical capacity, participation in various other forms of sport/exercise/PA. The return to sport/exercise/PA, whilst arguably motivated by patients’ desire to regain control over ontological security, is further encouraged by SEM consultant’s advice to continue sport/exercise/PA, reflecting the dominant medicalization of sport/exercise/PA as a means to prescription. This is illustrated in Sarah’s claim below where her return to running appeared to be based on the instructions provided by her consultant.

*I could do a bit more walking but no running. I hadn’t done any running. I was walking about a bit. But I had to gradually do it. So I had a gradual increase of what I was allowed to do. By the end of September after treatment I was allowed to start running. 60 second jog and then recovery and I started doing Pilates I was back in the gym by then doing strength work and doing more weights. Now I am back running again I am probably a minute down on the times that would be over a whole distance, like a 10k or a 6miler. But it’s like, but I think, the injury happened March last year and its March now so it’s been a year and a big clump of that was being on crutches. I think, I’m a year older, but to be a minute down on the times compared to where I was is not bad going. It’s going in the right direction.* [Extract taken from interview 2 October 2015]

The extract from Tara’s illustrates a similar a return to sport/exercise/PA.

*My aim is to do the Edinburgh moonwalk in May. If things are going the way they are going I will be fit to get the training in and complete it. I’m able to aqua jog and cycle at the moment…But aqua jog is good, I make it competitive, a lot of women are above the water with the weights but mine are the water so I make it into a challenge…It makes me feel better I’m still tracking my food and if you add in that you have been to aqua you can add in another 300 calories.* [Extract from interview 3 September 2015]
Where patients are able to increase their levels of physical capacity, they quickly return to the neoliberal habitus that was manifest prior to the onset of SRI. This, in turn, leads them to set goals in their sport/exercise/PA routines in attempts to regain a similar level of productivity/output that they once had. For Sarah and Tara, the neoliberal motivations in their uptake of sport/exercise/PA following treatment are evidenced in their recognition of specific benchmarks of success and the self-motivated challenges. For instance, despite Sarah being injured for approximately a year, her motivations to increase her consumption and achieve the same benchmark of self-care (Foucault, 1988) productivity prior to sustaining a SRI is notable. For Tara, the completion of the Edinburgh moonwalk (of which she had to pull out of as result of her SRI the previous year) was her goal despite being in the midst of receiving treatment at the SEM clinic and being able to participate in limited sport/exercise/PA without the onset of SRI discomfort. Whilst the completion of this particular event may allow Tara to re-establish a public display of biographical continuity inherent in the ontological security of self-care, her motivation for aqua jogging continues to remain explicitly connected with a managing her physical weight. This limitation to her sport/exercise/PA capacity however did little to restrict her neoliberal motivations of social productivity through self-achievement and challenge. Arguably, these extracts indicate that, despite the experience of SRI and the social and economic costs incurred through this, the strength of the neoliberal motivations in the uptake of sport/exercise/PA remain largely unaltered with patients often aiming to return to the perceived social worth of their former neoliberal selves if and when they possibly can.

This however brings its own problems. Whilst treatment at the SEM clinic had improved patients’ SRI the neoliberal motivations that underpin their attitudes to sport/exercise/PA lead them to re-injure themselves following their renewed consumption of sport/exercise/PA post-treatment. At the end point in their patient pathways, after treatment for SRI and where patients re-establish their neoliberal regimes of self-care, 3 out of the 4 case study patients (Daniel, Tara and Sarah) sustained a further SRI injury. This is illustrated in the extracts from interview subsequent phase 2 interviews and on-going email updates.
I joined the gym again after it got diagnosed, probably went for a whole month…. I was so happy to be jogging again on the treadmill and pushing the minutes up. But then I hurt my shoulder. I think it was gym related, I think I just did too much in the gym. So I didn't bother going back, I thought I will go back in the New Year but it still hurts so I need to see my GP about it. (Daniel) [Extract from interview 2 October 2015]

I have been to sports medicine today to see my consultant and after pulling me about, she wants an MRI scan of my lower back and hips to make sure that everything is ok because when examining I had discomfort and also my back and neck ache. I will let you know what happens. Hopefully it's just muscle after upping my training! Fingers crossed anyway. (Sarah) [Extract from email update October 2015]

I was just in the pool last Sunday and hurt my back! I've been in agony for the last few days (Tara) [Extract from email update September 2015]

As evidenced from the extracts above, it is not unusual for patients to sustain a further SRI through their quest to increase the productivity of their sport/exercise/PA routines. Indeed, the experience of continued physical problems following SRI has been identified as a ‘cost’ in the epidemiological literature, with Dekker et al (2003) claiming that this occurs for an average time of 2.8 years post injury. These ‘physical problems’ that Dekker et al (2003) makes claim to may be a result of the quest to return to the social productivity of their former neoliberal selves and subsequent injuries and not directly linked to the physical limitations imposed on by initial injury. Given the neoliberal motivations seen in the uptake of sport/exercise/PA for the majority of patients, it is perhaps unsurprising that subsequent injuries occur, particularly so after a significant period of time with injury where there is a far greater benchmark for challenge and the visible achievement of success. However, this is particularly problematic as it therefore predisposes this population group to re-injury which only serves to create further non-compliance to PAHP discourse.
For instance, the neoliberal dividing practices of PAHP materials serve to categorise populations, constructing the normative and civilised body (Elias, 2000) as one that is active, healthy and socially productive in contradistinction to inactive, unhealthy and overweight, therefore driving the personal motivations of populations recovering from a SRI in the latter category as they (re-)identify with the neoliberal self. Where such a binary exists and where the implication of symbolic violence is so clearly manifest, patients will continue to self-challenge and achieve on recovery from their SRI and engage in similar forms of sport/exercise/PA behaviours that increase their likelihood of further injury. In this instance, PAHP discourse becomes increasingly unproductive and perpetuates the relative health ‘gap’ between population groups, which in turn both maintains PAHP’s self-fulfilling character and therefore is ultimately counterproductive for population health.

However, the other significant implication of re-injury is that, for some of these patients, their patient pathway and utilisation of medical care continues. For instance, Daniel, who has injured his shoulder after increasing his gym routine, is now intending to visit the GP and thus start a new patient pathway. This not only has the potential to perpetuate the social and economic costs of SRI for the patient and the potential implications of these costs for the wider social economy but further, it continues to perpetuate an economic burden for the NHS as patients continue to increase the workload within this organisation. For instance, Sarah had utilised primary care with a previous SRI and continued to access this service for her current and subsequent SRI’s. As patient pathways to the SEM clinic remain inefficient with the utilisation of a variety of MSK secondary care services, the economic burden of patients with a SRI in the NHS is greater than it could be.

Whilst Sarah, Daniela and Tara re-injured following their treatment at the SEM clinic, Martin simply remained chronically injured. For Martin, the treatment at the SEM clinic has yet to be effective in improving his SRI condition. Martin’s condition remains chronic and he was, and potentially still is, unable to participate in sport/exercise/PA leaving him with a continuing sense of ontological insecurity in his
neoliberal identity. This is illustrated in the extract from an email update during his treatment at the SEM clinic.

I have had further treatment on my Achilles tendon injury. I have had a high volume injection in to the affected area and am currently off work for a week but I'm not convinced that's going to work either as I'm back in the same kind of pain I was in before and it's taken only a few days to get back to that state. [Extract from email update November 2015]

During his pathway, Martin has been receiving treatment for over a year and has had 3 referrals and ‘3 or 4 scans’. Martin continued to experience social and economic costs as a consequence of his limited recovery, such as time off work, with his pathway on-going as he receives treatment at the SEM clinic. Martin’s pathway and his experience of SRI is an example of the chronic physical disability that can be sustained through SRI. Not only does Martin’s circumstance highlight the importance of rethinking the health economics behind PAHP materials at an individual level but it remains a further example of the wider economic burden of SRI to the NHS exemplifying the importance of SEM services, and the efficient pathways to SEM, for wider economic and social well-being.

6.5. Conclusion

In conclusion, the inefficient patient pathways to SEM interact with the social and economic costs of SRI and these feed each other in potentially problematic ways. Where the inefficiencies occur across patient pathways (such as referral into secondary care services that appear to be ineffective in the management of SRI, changing appointment times etc.) social and economic costs are increased. These inefficiencies extend patient pathways and often serve, inadvertently, to make manifest social and economic costs such as emotional labour and time off work, weakening patient’s sense of well-being through diminishing ontological security (Giddens, 1991). In cases where patients are ‘in the system’ prior to their referral into SEM, the social and economic costs incurred are particularly damaging. At this point in patients’ pathways, experiences of healthcare are also negative and these further serve to manifest ontological insecurity.
and heighten the social costs of SRI. The utilisation of general MSK secondary care services (e.g. outpatient physiotherapy) does, in some cases, improve patients’ conditions, however for phase 2 patients this secondary care was largely ineffective. Referral into SEM services appears to improve patient experience as they obtain a definitive diagnosis and appropriate treatment, significantly improving their well-being and, in most cases, recover from their SRI. Whilst re-injury is a problem at this point (and this has significant implications in itself), the data clearly indicates that SEM services improve the management of SRI for patients and therefore their experience of healthcare. This said, however, the issue remains that patient pathways to SEM services are predominantly inefficient and the majority of SRI “are referred back to GPs creating an increased workload in primary care, suboptimal injury management and longer waiting times for intervention” and that there is still significant “evidence of overall patient dissatisfaction within this healthcare experience” (Sport and Exercise Medicine: A Fresh Approach, 2012).

This finding arguably reinforces the need for the pathways of patients with a SRI to be more efficient and direct in order to reduce the time patients are receiving suboptimal injury management, creating excess workload in the NHS and, importantly, reducing the time patients experience the social and economic costs of SRI. Achieving this has several important benefits for the wider social and political economy. Firstly, it would decrease the time patients utilise healthcare, potentially reducing the economic cost for the NHS and negative economic externalities for the patients, e.g. through workplace absenteeism. Secondly, it may benefit the social well-being of patients with a SRI, or at the very least, potentially reduce the social impact of SRI if patients are able to access the appropriate treatment at SEM services more directly and with greater efficacy.

6.6. Reflections on Phase 2

The experiences of phase 2 patients evidenced in this chapter are largely reflective of the patient experiences seen in phase 1 of the study. Whilst this is not to suggest that phase 2 findings are
‘generalisable’ they are certainly recognisable (Delmar, 2010) across the population group of this study and indicative of the wider issues associated with SRI and patient pathways. However, there are issues concerning phase 2 sampling of which to be mindful of when considering phase 2 findings.

The sampling of phase 2 patients utilised a critical case sampling technique based on patients continuing their treatment at the SEM clinic for on-going chronic SRI. This was largely the circumstance for the majority of phase 1 patients, with many at the beginning of their treatment in the clinic, and therefore sampling for phase 2 became increasingly dependent on patients’ interest in the study and their willingness to be interviewed further and provide regular updates through email correspondence on their SRI. Initial sampling for this study was particularly difficult (See reflections on methods in chapter three) and this had a continued effect on sampling for phase 2 with only 4 patients willing to continue their participation. The common theme amongst these phase 2 patients, and which is likely to have influenced their participation in phase 2, was that they were typically more communicative in their experiences and generally cognisant of the difficulties in conducting research. For instance, Sarah had children, one of whom was in education therefore more aware than most participants as what PhD research entailed. However, importantly, they were relatively more engaged with the neoliberal quest for self-care, placing greater emphases on sport/exercise/PA as central to their ontological security and therefore may represent a group of highly motivated neoliberal subjects compared to phase 1 patients. Considering this, whilst evidently the neoliberal form of self-care is implicit in this population group as a whole, phase 2 patients may demonstrate a heightened and explicit awareness of their neoliberal motivations to sport/exercise/PA. Consequently, the social costs incurred by SRI may have felt, at the embodied level, particularly difficult for these patients and therefore discussing this with somebody who was invested in and open to understanding their experiences may have been, to some extent, a way for these patients to construct a level of ontological security through ‘storying’ their experience. This may be a further reason that these patients continued their participation into phase 2. Indeed, the extract taken from the end of the interview with Martin below may illustrate this.
I think that’s all my questions, is there anything else you want to talk about?

No I don’t think so. You have helped me a bit, in that a couple of things you know I never thought about before. The fact that I can’t do the sports that I think is hard and I didn’t think I would be bothered at this stage in my life but I am.

As noted in chapter three, phase 2 aimed to capture, prospectively, patients’ journey as they continued their treatment at the SEM clinic. However, once patients had reached the SEM clinic, their diagnosis and subsequent treatment was often relatively quick, particularly compared to their pathway to the SEM clinic. For example, for Daniel, Tara and Martin, phase 1 interviews took place following their first consultation at the SEM clinic and, whilst Martin’s diagnosis was unclear, Daniel and Tara were diagnosed relatively quickly and followed a subsequent treatment pattern. In the case of Tara, this involved four-six weeks of intensive treatment, one follow up consultation and, following this, was discharged. Daniels treatment pattern was longer in duration, required some rehabilitation, and therefore spanned across several months. However, the greater efficiency in the treatment led to the duration of phase 2 being relatively short in terms of data collection. Thus, whilst the phase was prospectively orientated, the findings of this prospective design are represented in the latter sections of this chapter.

The next chapter will provide an overview of the thesis and the implications to the findings presented in chapter’s four, five and six, closing with some suggestions for future research that continues to build on this topic area.
7.1. Overview of thesis and summary of findings

This thesis has explored the qualitative experiences of SRI in public populations as they receive medical treatment at one SEM clinic in NHS England. It has focused on patient pathways, the utilisation of SEM services in the treatment of SRI, the social and economic ‘cost’ incurred through SRI, and the interaction between patient pathways and the ‘costs’ incurred. This is highlighted in the four related research aims of this thesis which have been explored in detail in chapters four, five and six. The research aims are identified below:

1. To illustrate the pathway of patients with a SRI as they receive treatment from one SEM clinic in England within the NHS.

2. To identify the extent SEM initiatives are being developed at a patient level through the integration of SEM into public healthcare and the impact this has on patient pathways.

3. To highlight using a qualitative inquiry the long term social and economic ‘costs’ of SRI of those patients (n=19) that have received treatment at the SEM clinic.

4. To illustrate how chronic SRI is managed over time using a partly prospective approach of patients (n=4) who are continuing with their treatment at the SEM clinic illustrating the interaction between patient pathways and the incurred social and economic costs.

The first and second research aims, explored in chapter four, examined the pathways of patients with a SRI after initial entry into the NHS, qualitatively mapping these pathways through to patient’s referral into SEM services. Chapter four was analysed using Elias (1979; 2004) concept of game models and involvement and detachment to demonstrate the shifting power relations of groups within the NHS figuration and the conflicting values and interest of groups (e.g. patient and GP) in the figuration that resulted in intended and unintended consequences that resulted in particular (intended and unintended) outcomes. These outcomes included the utilisation of primary and secondary care services, inefficient
transition between these services, and the inefficacy of patient pathways into SEM services. Findings indicated that there is no standardised pathway for patients with a SRI to SEM services even when this secondary care service appears highly relevant for the treatment of their condition. Rather, the majority of patients were referred by their GP into other forms of musculoskeletal secondary care (e.g. outpatient physiotherapy), with the transition between primary and secondary care relatively lengthy and constituted by various pathway inefficiencies. This included significant waiting times often caused by minimal and/or lack of correspondence and changing appointment dates which extended the length of patient pathways.

Indirect referrals into SEM were largely a result of the lack of knowledge of SEM services in the NHS by both GPs and patients. The increasing complexity of GPs’ decisions, made manifest in the relative detachment of this group in their interaction with the patient and the, potentially conflicting, relative involvement in the socio-political conditions and procedures of the organisation (for instance, GP’s as a primary group in managing the ‘cost’ of patient referral), may further impact on the pathways of patients. As a consequence, patients utilised primary care (GP) and various secondary care services often multiple times in one pathway, increasing the length of pathways and the duration of time patients were managing their SRI. Under such conditions, patients saw minimal improvement in their SRI condition became relatively alienated and dislocated from their pathways and thus patient dissatisfaction with their care was particularly common. Findings from this research aim therefore demonstrate that the pathways for patients with a SRI into SEM services are inefficient and lengthy, highlighting the poor integration and knowledge of SEM services within the NHS. These findings demonstrated a clear need for the increased level of organisational integration and knowledge of SEM services in NHS England in order to improve the internal autonomy of this discipline and the SEM initiatives stated in ‘Sport and Exercise Medicine: A Fresh Approach (2012), such as ensuring “that clear patient pathways exist so that the patient journey between primary and secondary care is seamless” (p.25) to be fully achieved.

The third research aim, explored in chapter five, examined the social and economic cost of SRI for the patient. This chapter was analysed using the Foucauldian concept of self-care and governmentality,
drawing on specific aspect of Elias (2004) concept of the civilised body, and Bourdieu’s (1984) concept of social capital. Findings from this research aim highlighted the frequency of significant, and serious, social and economic costs incurred by patients in sustaining a SRI. Economic costs of SRI include workplace absenteeism, unproductive working hours, and, in serious cases, termination of career path. Social costs include neoliberal identity disruption that induces substantial emotional labour and impacts negatively on social well-being. Importantly, this form of identity disruption influences patients health behaviours, notably inducing choices associated with poor health, for instance, increased levels of alcohol intake and poor eating habits. Findings indicate that neoliberal identity disruption stems from a commitment to sport/exercise/PA as a form of self-care stimulated by the discourse of ‘healthism’, and the dividing practices of PAHP materials that situates, and gives social and economic value to, particular forms of identities. Under conditions of SRI, patients become physically limited and unable to engage in sport/exercise/PA and thereby self-label and identify with a body of lesser social and economic worth that ‘gives up’ on the neoliberal commitment to health. This ultimately renders, and largely traps (by virtue of their physical limitation) ‘healthy’ and previously active populations within the realm of ‘unhealthy’ perpetuating the neoliberal health ‘gap’. This further indicates a clear lack of sustainability in the production of PAHP policy campaigns with the aim of long term PAHP for the increasing productivity of healthy populations.

The fourth research aim, explored in chapter six, examines the interaction between pathways and the social and economic cost of SRI using a longitudinal, case study research design of patients (n=4) as they continued their treatment utilising SEM services. This chapter focused on foregrounding the voice(s) of a small group of patients, demonstrating the lived experience of SRI in the wider context of their healthcare utilisation. The data presented in this chapter was in the form of ‘confessional tales’ and is less theoretically informed in its analysis. Rather, this chapter highlighted the points in which the inefficiencies of patient pathways, particularly before their arrival at SEM, make manifest particular social and economic costs demonstrating the extent these coalesce to drive patients’ experiences of healthcare.
Findings indicate that the inefficiencies of patient pathways prior to referral into SEM (for instance, lengthy waiting times and changing appointment dates for secondary care service) created an ongoing economic cost of workplace absenteeism for the patient with this an unnecessary product of inefficient pathways rather than patient (dis-)ability. Furthermore, these inefficiencies significantly increase the length of time patients remain in their pathway without treatment, inadvertently extending the time patients were living with SRI. Findings suggest that this not only increases the relative detachment and alienation patients experience within their pathway, leading to poor patient experience of their care but, further, increases the impact of social costs over time. Therefore the likelihood of negative social well-being and poor health behaviours are established as patient pathways are unnecessarily extended by pathway inefficiencies.

On referral into SEM services patients’ experience of their care is significantly improved as they receive relatively quick and, in many instances more effective treatment for SRI, which subsequently leads to improvements in their SRI condition. However, although there was an increase in patient satisfaction in their care, the length of pathways and indirect referral into SEM had made manifest many social and economic costs of SRI and therefore the potential wider impacts created through such costs had been experienced. This reinforced previous findings that highlighted the importance of efficient pathways and referrals into SEM services for patients with a SRI, particularly as it evidences the “overall patient dissatisfaction within this healthcare experience” (Sport and Exercise Medicine: A fresh Approach 2012 p.20) that SEM integration and improved efficacy of pathways is designed to improve. Findings further evidence that, following often successful treatment utilising SEM services and thus increased physical capacity, patients (re-)engage with neoliberal forms of self-care through sport/exercise/PA and therefore in most cases sustain a subsequent SRI. This reinforces the impact SRI has on the social economy and the long term sustainability of PAHP. Furthermore, the cycle of re-injury indicated a potential and self-perpetuating economic cost to NHS organisations as it continues to create workload and treatment costs potentially exacerbated by the inefficient patient pathways into SEM.
The findings from the research aims of this thesis have most evidently contributed to knowledge in the topic area of SRI and healthcare. In particular this thesis has contributed to understanding the experience of SRI in public, exercising population groups, the pathways of SRI patients in the NHS, and the organisational integration of SEM services in public healthcare. In so doing it has responded to a distinct lack of previous research across these topic areas and yielded a number of both practical and theoretical implications which have significant socio-political currency. These are spelt out below.

7.2. Practical Implications

Practical implications from the findings of this PhD are notable in the areas of (1) SEM and NHS organisation (2) patient experience and (3) PAHP policy.

7.2.1. SEM and NHS organisation

The findings demonstrate a lack of organisational integration of SEM in public healthcare and the relatively ineffective delivery of key SEM initiatives. As currently arranged, SEM fails to meet the aim to reduce the workload SRI presents to primary care and improve the efficiency of the pathways of patients with a SRI. There is an apparent lack of knowledge of SEM services and the role SEM plays in the management of SRI (particularly by GPs) and limited understanding of SEM services by wider MSK secondary services. Under these conditions SEM remains a relatively marginalised service and appears to have impact on reducing the cycle of inefficient patient pathways and increased workload to primary care within the NHS.

The implications of this are largely economic and particularly relevant given the current political focus on reducing the cost of healthcare delivery (NHS England, 2014). Firstly, the inefficient pathways of patients with a SRI are typically constituted (and increasingly extended) by numerous referrals into secondary care services that appear to have limited impact on improving patient’s SRI. Arguably, this indicates an over utilisation of potentially inappropriate services for patients with a SRI and therefore wasted resources, combining economic costs to the NHS with limited value to patients’ recovery. Whilst a cost-
benefit analysis of this relationship is beyond the qualitative scope of this PhD, there is certainly evidence that the majority of patients remain injured throughout their secondary care and therefore the resources being utilised clearly lack effectiveness in the treatment of their specific SRI condition. Secondly, the lack of standardisation of patient pathways for SRI into SEM services may have further economic implications for the productivity and efficiency of healthcare delivery across wider MSK services. For instance, SRI patients are typically directed into more general MSK secondary care increasing the utilisation of these services across the NHS. This may serve to increase the workload presented to these forms of secondary care and thus the waiting times for all patients requiring MSK care. Standardisation of pathways for SRI patients and the improved flow of these patients into SEM services may consequently ‘free up’ general MSK services for non SRI patients, possibly reducing the burden and improving the delivery of this service for patients.

Therefore, improving the integration of SEM and particularly ensuring the transition of SRI patients into SEM services has potential economic value for the NHS and one that requires consideration if PAHP continues to remain the cornerstone of public health agendas in the future. This can be achieved through the dissemination of knowledge on SEM (particularly amongst GPs who are a critical group in directing patient pathways) and a wider understanding of this service within the organisational structures of public healthcare. Increasing the awareness and knowledge of this secondary care service may reduce the inefficiencies that currently exist in the pathways and establish a standardised route for patients with a SRI.

7.2.2. Patient Experience

There is clear evidence that the integration of SEM and efficiency of patient pathways has implications for patient experience and well-being. Patient experience is a critical part of NHS care and increasingly relevant under the current neoliberal government where the application of marketization principles engages consumer satisfaction as a key measure of quality. This is reinforced in the NICE quality
standards for patient experience in adult NHS services and aims to provide the foundation for greater patient centred services (NICE, 2015). However, the experience of some patients with a SRI in this study indicated a general dissatisfaction, with many patients having arrived at the SEM clinic through accidental changes to their pathways. Importantly, patient satisfaction improved on referral into SEM and patient experience of their treatment and care was notably enhanced. Given the political focus on improving patient experience in the NHS, the need to establish clear pathways for patients with SRI is increasingly important as the evidence highlights marked improvements in patient experience on accessing SEM. However, patient dissatisfaction in their pathways is not simply a problem for the neoliberal measure of quality within the NHS. Whilst this is an important implication for government, findings from this thesis demonstrate that poor patient experiences have unintended consequences on wider patient well-being, with evidence to suggest that it increasingly makes manifest experiences of negative social well-being (already often incurred through SRI) through a weakened sense of ontological security. This has a much wider impact on the social economy as population well-being and, whilst not a direct economic factor, have intrinsic value to the social productivity and progress of populations and therefore ramifications for economic outputs. It is therefore important to develop the efficiency of pathways into SEM services to ease the impacts poor patient experience can have on social well-being and wider social economy in addition to improving this as quality measure for patients with a SRI.

7.2.3. PAHP policy

The findings provide clear evidence that regular participation in sport/exercise/PA practices carry significant risk of physical injury that incur wider social and economic costs beyond what has previously been identified in quantitative epidemiological data on SRI. Presently, the argument driving PAHP is largely underpinned by neoliberal rationalities claiming that improved population health via the regular consumption of sport/exercise/PA has social and economic benefits such as increased workplace productivity, reduced workplace absenteeism and decreased risk of various forms of chronic disease resulting in significant cost saving benefits for wider society. However, there is little recognition across
these policy materials of the structurally inherent physical risks associated with increased sport/exercise/PA consumption due to the lack of observable and measureable costs (Finch, 2012) associated with SRI within the epidemiological literature.

This thesis evidences the risks associated with SRI but, more importantly, demonstrates the (unquantifiable) social and economic costs incurred, such as physical limitation, negative social-wellbeing and increased workplace absenteeism, plus wider costs for public health services. Considering this, the PAHP argument is largely paradoxical obfuscating the neoliberal logics associated with social and economic productivity and the evidence base for a wider cost saving benefit to society. Therefore, the risk SRI poses to populations is particularly problematic for government and has implications for PAHP policy as it: a) foregrounds the benefits of sport/exercise/PA whilst obscuring the social and economic risk this poses; and b) consequently distorts the health economics of PAHP that is central to its lobbying power.

Considering this, it is important for governments and PAHP groups to recognise the proportionate risks associated with increased consumption of sport/exercise/PA and provide a parallel strategy to reduce these risks. One strategy is to improve the healthcare provision for SRI, for example, by improving the efficiency of patient pathways for SRI. This can decrease the length of time patients are managing SRI, reduce the social and economic impacts of SRI, speed the individuals return to physical activity, and reduce the tendency of SRI to lead to exercise cessation. A further implication is the need to consider the relevance of epidemiological surveys in influencing government policy. For instance, quantitative studies have been unable to identify the experiences of SRI that clearly manifest often serious social and economic ‘costs’ which carry substantial implications for social policy. The over-reliance on quantitative data to inform government policy provides a limited understanding of more complex social phenomena and therefore can misrepresent social issues that have important social and economic impacts potentially leaving many social policies with similar paradoxical messages to that of PAHP.
7.3. Theoretical implication

The findings from this thesis expose the paradoxical logics and contradictions of the neoliberal health narrative that underpins PAHP policy materials. As noted, this has practical implications for the sustainability of PAHP arguments and the relative power of the neoliberal PAHP lobbying narratives that are used to underpin such arguments. However, it further extends the theoretical knowledge on the construction of policy narratives, particularly how such narratives operate at a discursive level, which can have significant theoretical implications for sociologists.

The contradictions of the neoliberal logics lie in the apparent dividing practices of PAHP materials that serve to promote neoliberal forms of self-care and social productivity through regular consumption of sport/exercise/PA. This is based on the dichotomising of population health that polarises groups and establishes a relative health gap that locates (ill-)health under binaries of associated behaviours and subject values (e.g. active/healthy/good citizen and lazy/unhealthy/bad citizen). This dichotomy subversively stimulates the neoliberal logics which underpin PAHP materials, and for citizens receptive to such messages, strengthens their neoliberal motivations to engage in sport/exercise/PA. However, where SRI is sustained and individuals’ become physically limited, their ability to comply with sport/exercise/PA and the PAHP messages is made difficult despite their intention. Under such circumstances, and as the evidence suggests, this produces social costs through health behaviours (increased alcohol consumption and unhealthy food choices) associated with poor health and the bad, socially less valued, neoliberal subject. Consequently, SRI appears to manifest population poor health, despite the initial neoliberal willingness of this population group to commit to the uptake of sport/exercise/PA, therefore ‘trapping’ individuals within the category of neoliberal (ill-)health behaviours under the physical barriers imposed by SRI. Where populations are ‘trapped’ in this category, they inadvertently feed the cycle of poor population health that PAHP policy centralises as requiring action in order for it to have political value, perceived benefit and government investment. Thus, SRI does more than physically limit individuals; it transcends potentially healthy populations most receptive to PAHP into
the constructed realm of unhealthy, (re-)producing the population health gap which stimulates the reproduction and benefits of PAHP materials.

Understanding this relationship and the behaviours of individuals who experience this transcendence into the realm of ‘unhealthy’ exposes the discursive weaknesses of PAHP policy and its lack of sustainability in improving population health for the long term. For instance, the relative health gap that is discursively constructed and established by the neoliberal dividing practices of PAHP makes the political benefits of PAHP seem, on the surface at least, viable. For example, the manifestation of a health ‘gap’ is politically instrumental for the lobbying power of PHAP groups who require a ‘target’ group of unhealthy individuals (who are socially and economically problematic) in the construction of a coherent health narrative. However, the practices of individuals who are unable to comply, such as in the case of SRI, demonstrate that poor health behaviours are partly informed by the very polarisation of health, which ‘traps’ populations into a less socially valued category. This demonstrates that the political benefits of PAHP are only fulfilled by its failing to recognise its discursive weakness in the construction of health, as, in the instance of SRI, the ‘target’ un-healthy population group it seeks to change are created by PAHP messages central to its campaign. Thus the benefits, whilst to some extent self-fulfilling, are unsustainable for long term health promotion. Given this, PAHP requires a paradigmatic shift in narrative for it to be successful in the promotion of sustainable and economically beneficial PA. Deconstructing the neoliberal messages that implicitly drive PAHP materials may go some way to highlighting the contradictions that lead to policy failings. However, a change in ontological position is required by policy makers if the intention is to increase entire population PA levels for the progression of long term population good health absent of structural health barriers.
7.4. Limitations and Reflections on the Research Process

This thesis explored the experiences of SRI in public population groups and their utilisation of public healthcare, focusing specifically on the integration and utilisation of SEM, the social and economic costs incurred, and the interaction of healthcare treatment and costs. In doing so, data on patient experience was collected from one SEM clinic based within Leicester University Hospital NHS Trust, and required the establishment of a research partnership between Loughborough University and Leicester University Hospital. While not the first such partnership per se, this was the first study within the school of Sport, Exercise and Health Sciences to be ‘owned’ by Loughborough university and thus there were a number of challenges faced throughout the research process that limited the study in a number of ways. These are discussed below:

7.4.1. NHS Ethical Approval

This study was conducted within the SEM clinic and therefore required full ethical approval from the NHS Research Ethics Committee (REC). With no previous experience in completing this process either by myself or within the Research Office, there was limited institutional support and advice, particularly with regard to the required documentation and the steps involved in the process. This was made further difficult by the delay in correspondence from the Research Office and the REC on particular aspects of this process. Subsequently, having begun the process October 2014, it took approximately 18 months to complete the process and full ethical approval was granted in February 2016. During this time, significant adjustments were made to the research design which included adjustments to the recruitment process and the inclusion of a two phase data collection period. This impacted the data in a number of ways, discussed in detail in section 3.12. However, logistically, the lack of institutional support and resulting length of time it took to gain ethical approval led to a compression of the time frame for completing the study. This ultimately impacted the number of patients (n=19) recruited to the study (see below, section 7.4.2) which in turn had a knock-on effect on phase 2 and led to further amendments having to made to
the study research design. This involved a notification of an amendment to the REC in order to extend the ethical approval time frame of the study, again, resulting in further documentation and time.

Whilst completing NHS Research Ethics procedures was required to conduct this study, and crucial to its clinical context, researchers who may wish to conduct further study in this area should be aware of the potential effect the NHS ethics procedures might have on the study time frame. Although my experience reflects a lack of institutional support, which might not be a factor in the future, researchers would be advised to provide sufficient time to complete NHS Ethics, building this into the research design with the expectation of potential delays.

7.4.2. Research Design

The qualitative research design of this study provided further delays to NHS ethical approval and conducting the study in the initial time frame. The NHS ethics form is typically designed for conducting quantitative, positivistic and deductive research designs and thus poses difficulties (among specific sections) in completing this. The initial, more ethnographic orientated design of this study provided great difficulty when completing the ethics form and, on completion, posed a series of ‘material ethical issues’ for the REC of which required resolving at a National REC Committee meeting. This is largely a result of REC procedures that regulate patient recruitment and the number of correspondence between patient and researcher. For example, all patients in this study were required to be recruited through the consultant treating them for their SRI therefore predefining the recruitment procedures for the study. Additionally, the number of times I would meet with patients during phase two had to be documented prior to data collection, therefore limiting the inductive and emergent design of the research process.

Following the REC committee meeting, adjustments had to be made to the research design, this has been discussed in greater detail in the thesis (see, chapter three, section 3.12), further extending the length of time in gaining ethical approval, and impacting on the data generated as the research progressed.
Whilst medical ethnographies have been conducted, challenges arise in gaining NHS ethical approval for such research designs. For future researchers in this area and aiming to conduct ethnographic forms of clinical research, being prepared for the predefined REC regulations on particular aspects of the research design (e.g. patient recruitment) may be one way to improve the efficiency of the NHS ethics process, in addition to providing a sufficient time frame for completion of this process.

7.5. Contribution to Knowledge

This thesis explored the experiences of SRI in public, exercising population groups and their utilisation of public healthcare. It has explored the pathways of patients into one Sport and Exercise Medicine - a recently integrated secondary care service in the NHS with the aim of diagnosing, treating and rehabilitating SRI in public population groups - the social and economic ‘costs incurred through SRI, and the interaction of ‘costs’ and pathways. This thesis is the first study to contribute to a sociological understanding of SRI experience in the public population with an emphasis on the interaction of SRI experiences and public healthcare and the recently established SEM service. As a result of its novelty, it makes an original contribution to knowledge in two key ways.

Firstly, this thesis makes an original contribution to the area of SEM integration in the NHS. It does so by being the first qualitative study to document the experiences and pathways of patients receiving treatment from one SEM clinic. It demonstrates a clear disconnect between the proposed benefits and key initiatives of SEM integration and the lived experience of these benefits through the perspective of the patient. The wider implications of this make further original contributions to the area of service management in the NHS. For instance, this thesis demonstrates the continuing issue of resource management and over-utilisation of GP and orthopaedic secondary care by patients, contributing to the sub-optimal SRI management and limited recovery of patients. The findings from this thesis identify a clear alternative pathway and successful treatment service for SRI patients which has the potential to reduce the
cumulative pressures placed on existing GP and orthopaedic services, freeing up these services for all NHS users, and potentially reducing the wider economic pressures placed on the NHS.

Secondly, this thesis contributes to original knowledge on the experiences of SRI in non-elite public population groups. Currently, very little qualitative research exists (with the exception of studies such as Allen-Collinson, 2005 and Sparkes, 1999) on the social ‘costs’ of SRI, and none that document the wider economic ‘costs’. This thesis builds on this dearth, identifying the lived experiences of these ‘costs’ as a result of SRI and highlighting the often severe impact of these ‘costs’ in the context of an individual’s everyday life. It extends this original contribution by identifying the interaction of these ‘costs’ with individual’s access to healthcare, demonstrating the extent public healthcare exacerbate and, at times, make manifest specific costs.
REFERENCE LIST


LeBesco K (2009) Weight management, good health and the will to normality. In: Malson H and Burns M (Eds) (pp.146–156).*Critical feminist approaches to eating dis/orders*. Abingdon: Routledge,


Pavey, T.G; Anokye, N; Taylor, A.H, Trueman, P; Moxham, T; Fox, K.R; Hillsdon, H; Green, C; Campbell, J.L; Foster, C; Mutrie, N; Searle, J; Taylor, R.S. (2011). The effectiveness and cost-effectiveness of exercise referral schemes: A systematic review and economic evaluation. *Health Technology Assessment*. 15(44), pp. 136-141.


Powers, C.M; Farrokhi, S; Moreno, J. (2002). Can exercise reduce the incidence of falls in the elderly, and, if so, what form of exercise is most effective? Physical Therapy. 82(11), pp. 1124-1127.


Shilling, C (2012). *The body and Social Theory (2nd Edn)*. London: Sage


Wyke, S; Mays, N; Street, A; Bevan, G; McLeod, H; Goodwin, N. (2003). Should general practitioner purchase health care for their patients? The total purchasing experiment in Britain. *Health Policy.* 65(3), pp. 243-259.

Wyke, S; Mays, N; Street, A; Bevan, G; McLeod, H; Goodwin, N. (2003). Should general practitioner purchase health care for their patients? The total purchasing experiment in Britain. *Health Policy.* 65(3), pp. 243-259.


APPENDICES

APPENDIX A

NHS Research Ethics documentation
APPENDIX B

Extract from phase 1 interview transcript

KEY

Bold: Interviewer

Regular: Respondent

[ ]: Uncertain word(s)

Is it the 10th?

Yes it is. So do you live in Loughborough?

Blake Road. It's that way. I've driven, but yeah.

Yeah, that's fine. That's great.

Okay.

So what is the injury then? What's the actual diagnosis of it?

It's Achilles tendinopathy. I mean, that's changed because originally the biomechanics people said it was something else So, with the ultrasound, it's confirmed the exact point of the problem. Yeah.

Has that come on from wear and tear or did something happen?

Well, yeah. I can't ever remember hitting it, tearing it. There's no moment when it's, ah, something's happened there. Like I say, over the years it probably started off more in the soles of my feet, then tendonitis, and the heel problem on my left heel. With heel raises, which I wear constantly now, the tendonitis calmed down completely and I'm left with everything sort of just centralised on the heel, on the left heel.

So I think we're getting there. I think there were lots of red herrings or other problems. It wasn't just one injury that has caused all these problems. That together with a longstanding problem on my left hip – I don't know if you've seen the report from the consultant?

No, I don't look at any medical notes.
I mean, that's got a breakdown of what he found and some of the history, which I'm happy for you to have a look at. I've brought it here.

Okay, yeah.

But yes, I think we're getting there, at long last, and there's light at the end of the tunnel. He's very optimistic that 99% of the problem will go away.

So how long has it been now since the kind of initial feeling of discomfort in—?

About ten years.

Oh gosh. Okay. So it's been a long time.

Yes, yeah.

And has that got worse over the ten years?

That's when the problem, started, and I noticed it more in the soles of my feet rather than the heel. The pain was greater there, but it would be anything from, on a scale of one to ten, some days it would be hobbling and almost needing a crutch. On a good day it could be – today's not a bad day, so I'm on a three or four pain. Not enough to limp, but it's not far off. Unfortunately, when I saw Dr Wheeler, I was having a really good day with it. There's no rhyme or reason to it. I have bad days and good days.

So on a bad day, you will be of your feet?

Well, I'll be hobbliing. Unfortunately I do a lot of physical work, so I'm on my feet all day and you're sort of hobbling your way through it. Yeah, but I will be limping some days. And again, it's not weather dependent or anything else. You wake up and it's going to be a good day or a bad day.

Have you always been quite active?

Yes, I'd say so, yeah.

So what kind of sort of sports, exercise, physical activity, that kind of stuff, do you do?

I think up till two years ago, I was running regularly. The last time I ran in pain was probably about a year and a half ago and I've just sort of given up on that now. In fact, it was a year last winter, when the clocks went back, I stopped running.

So you haven't run since then?

No, no. It's too painful to run.
Yeah. So the injury has stopped you from running?

Yes, yeah. I'm noticing the knock-on effects from that already. You know a pot belly. Little overweight. Fortunately I'm very active in all the other work that I do, but exercise-wise, I don't do any training like that now.

And when you say 'the effects', that's in terms of your health?

Health. I have a ten-year-old and a twelve-year-old, ten-year-old boy and twelve-year-old daughter. Playing football, I used to get a lot more out of it with them. I'm not making excuses because he's getting better now that he's got older, but I struggle to play even short games of football with him because I can't sprint or run. So, it's pass the ball. And I think that's probably one of the main reasons for sort of persisting with seeing the doctors and going to the physiotherapy, just that something good will come from it so that— You know, the running, it keeps me fit and a good weight. Like is said I'm noticing the pot belly. The running is just a means to...

To health?

...to maintain a fitness level and a benchmark for how fit I was. But it's more. I think as you get older you tend to not be able to recover from nights out and everything else, so you look at more -- yeah, looking after yourself. Again, it's a knock-on from the children getting older I think. This year we've been surfing a lot down in Cornwall. So we tend to go down there each year for a week or two weeks. So this year, my daughter's old enough and they've both had surfing lessons and she's really, really into it, and I really need to be with her if she's doing that sort of stuff. So that's just the next level of that'll spur me on to getting all-round fitness rather than just running, because I did suffer some very achy -- everything, having had sort of four or five hours in the sea with her.

So yes, I don't know what it will be, but I will start training, maybe weights or do something else while this is on the mend. Keep me trim. But the ultimate goal is to be able to run a sprint, more so for the football and just messing around, I think.

I enjoy the— Do you know the circuit around the out woods?

Yeah.

So it's literally four miles from my door, round the out woods, back down the south and back to my door. So that in the morning, and I was doing it with the dog, is just a nice way to start the day. It's not any more than that. I don't have ambitions to run a half marathon.

Just enjoy it for the health and fitness side of things?

Yeah I think so. Whatever the weather, it gets you out.
Makes you feel better.

 Clears your head, yeah, and increases your energy a bit. That's the other thing; I've got so lazy in the last year and a half. Having stopped running, I tend not to get up so early. I used to be a morning person and I'd go for a run, then do some paperwork, then go out to work. I'm quite happy now to lie in till seven/half seven, then do some paperwork and then go to work. So I think that's definitely been – certainly this last year, that pattern of sort of five/half five, up and ready to go.

Again, I'm not getting any younger. I've put part of it down to just getting a bit lazy in my old age, but certainly that's tying with not running and being a little bit less active because I'm not running.

So the type of work I do day-to-day wouldn't be cardio or anything. I'll be carrying stuff and, you know, if we're doing the housework, you're probably using most muscles but it's not increased heart rate and everything else. So I think I am lacking probably in the cardio that I was getting before.

So, tell me what happened in terms of your healthcare, your journey through the NHS once you became injured and it started to impede on your life?

I've got a shocking memory. I really have. That's another—

Yeah.  Maybe we should just start with the last few years—

(Laughter) Well—This time around, I don't know whether— I have thought about this and what journey I've taken since and finally see some optimism about the condition. So, going back ten years surgery, Loughborough. They referred me to the biomechanics department at the Hospital. I don't have many good things to say about them because, having been transferred to them and put into their care, I think they diagnosed it as something, which it isn't. No. It's a very, very quick assessment, an assessment that didn't really get to the crux of the problem. Now, that may be because there was another injury to contend with as well, but I felt the assessment wasn't very in-depth. There was no ultrasound or anything like that. It was just a mechanical, not look at how I— It was very, very basic. And as a result of that, I think the three, four, five years that I have been referred back to the GP haven't been any improvement at all. So I think probably there was a gap. So those first five years of doing stretches, taking the advice and—

The physio had given you—

Yeah. I started using the heel raises which, to be fair, has helped a great deal with this hip pain. I forget what it's called. There's a tight muscle there due to leg length discrepancy. So the heel raises take the pressure of the tendon and correct that. And then to be fair, probably lived with it for another three years— not seeing biomechanics or anything, lived with it for another couple of years, like this isn't getting better, it's not going away. I went to the GP surgery again and I think they got me back with the same lady at the biomechanics place.
So you went back to the GP and then they actually referred you back to where you'd almost come from?

Yeah, yeah. And the last appointment with the biomechanics lady was probably about six months ago and she discharged me.

There's not much more she could do?

No, and she hadn't done much up to then.
Example of Phase 1 Thematic Analysis

Example based on interview extract.

Initial coding

<table>
<thead>
<tr>
<th>Patient</th>
<th>Pathways</th>
<th>Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>The last time I ran in pain was probably about a year and a half ago and I've just sort of given up on that now.</td>
<td>They referred me to the biomechanics department at the Hospital</td>
<td>The pain was greater there, but it would be anything from, on a scale of one to ten, some days it would be hobbling and almost needing a crutch. On a good day it could be – today's not a bad day, so I'm on a three or four pain</td>
</tr>
<tr>
<td>I don't have many good things to say about them because, having been transferred to them and put into their care, I think they diagnosed it as something, which it isn't</td>
<td>Three, four, five years that I have been referred back to the GP hasn't been any improvement at all.</td>
<td>Unfortunately I do a lot of physical work, so I'm on my feet all day and you're sort of hobbling your way through it.</td>
</tr>
<tr>
<td>I have thought about this and what journey I've taken since and finally see some optimism about the condition</td>
<td>I went to the GP surgery again and I think they got me back with the same lady at the biomechanics place</td>
<td>I'm noticing the knock-on effects from that already. You know a pot belly. Little overweight. I have a ten-year-old and a twelve-year-old, ten-year-old boy and twelve-year-old daughter. Playing football, I used to get a lot more out of it with them</td>
</tr>
<tr>
<td>It's a very, very quick assessment, an assessment that didn't really get to the crux of the problem. I felt the assessment wasn't very in-depth. There was no ultrasound or anything like that</td>
<td>The last appointment with the biomechanics lady was probably about six months ago and she discharged me. and she hadn't done much up to then</td>
<td>That's the other thing; I've got so lazy in the last year and a half. Having stopped running,</td>
</tr>
</tbody>
</table>

Secondary coding

<table>
<thead>
<tr>
<th>Patient</th>
<th>Patient Experience of Healthcare</th>
<th>Exercise Cessation following SRI</th>
</tr>
</thead>
<tbody>
<tr>
<td>I have thought about this and what journey I've taken since and finally see some optimism about the condition</td>
<td>I don't have many good things to say about them because, having been transferred to them and put into their care, I think they diagnosed it as something, which it isn't</td>
<td>The last time I ran in pain was probably about a year and a half ago and I've just sort of given up on that now.</td>
</tr>
<tr>
<td></td>
<td><em>I felt the assessment wasn't very in-depth.</em></td>
<td></td>
</tr>
</tbody>
</table>
Costs

<table>
<thead>
<tr>
<th>Social</th>
<th>Economic</th>
<th>Physical</th>
</tr>
</thead>
<tbody>
<tr>
<td>I'm noticing the knock-on effects from that already. You know a pot belly. Little overweight. I have a ten-year-old and a twelve-year-old, ten-year-old boy and twelve-year-old daughter. Playing football, I used to get a lot more out of it with them. That's the other thing; I've got so lazy in the last year and a half. Having stopped running,</td>
<td>Unfortunately I do a lot of physical work, so I'm on my feet all day and you're sort of hobbling your way through it.</td>
<td>The pain was greater there, but it would be anything from, on a scale of one to ten, some days it would be hobbling and almost needing a crutch. On a good day it could be – today's not a bad day, so I'm on a three or four pain</td>
</tr>
</tbody>
</table>

Pathways

<table>
<thead>
<tr>
<th>GP consultations</th>
<th>Secondary Care Service use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Three, four, five years that I have been referred back to the GP hasn't been any improvement at all</td>
<td>They referred me to the biomechanics department at the Hospital</td>
</tr>
<tr>
<td>I went to the GP surgery again and I think they got me back with the same lady at the biomechanics place</td>
<td>they got me back with the same lady at the biomechanics place</td>
</tr>
<tr>
<td></td>
<td>The last appointment with the biomechanics lady was probably about six months ago and she discharged me.</td>
</tr>
</tbody>
</table>