Wegrzynek, P.A. (2021) ***Exploring stakeholder perspectives on contemporary return-to work strategies and practices for chronic pain sufferers*****. PhD thesis, Bath Spa University.**

Exploring stakeholder perspectives on contemporary return-to-work strategies and practices for chronic pain sufferers.

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A thesis submitted in partial fulfilment of the
requirements of Bath Spa University
for the degree of Doctor of Philosophy

School of Sciences

Bath Spa University

February 2021

Acknowledgements

Firstly, I am extremely grateful to my wonderful supervisors, Dr Elaine Wainwright and Dr Jermaine Ravalier for their amazing support – I could not ask for better supervisors. I would also like to thank them, and Dr Alison Lee and Professor Laura Caulfield for providing me with the opportunity to embark on a PhD and being instrumental in helping me shape my career.

Thank you to the colleagues in the department and in the office with me for the encouragement, advice, and ensuring that my supply of coffee and chocolate did not run out.

A special thanks to my family and friends for their continued backing. Finally, thank you to Pete who supported our family to enable me to follow my dream. I dedicate this thesis to our darling son, Harrison.

Abstract

Psychologically and physically safe work is good for the health and well-being of most people including those living with pain. Chronic pain remains the second biggest reason for work absence, and is economically and psychologically costly to employees, employers, and governments. This thesis investigates the most effective strategies in promoting return to work (RTW) among employees with ongoing pain.

Two reviews (one systematic, one narrative) found no conclusive evidence to support any treatment approach, although stratified, multidisciplinary interventions with workplace-oriented elements are optimal. Semi-structured interviews with employees with chronic pain (study one), occupational health physicians (study two), occupational therapists and occupational health nurses (study three) were analysed using thematic analysis.

In study one, employees with chronic pain felt motivated towards RTW and adopted an ‘active’ role in the process. Social support played a pivotal role, although workers felt pressured to be ‘100% fit’ upon returning. Employees felt expert in their pain experience, entitled to ownership of their care decision-making, and acted as knowledge conduits between stakeholders.

In study two, occupational health physicians were frustrated with current RTW processes, perceived overworked GPs as unwitting saboteurs of RTW processes, and blamed systemic issues within the NHS and reduced resources for the lack of access to multidisciplinary interventions. Study three revealed that medicalisation of chronic pain hinders RTW, and primary RTW outcomes should be driven by workers’ meaningful activity. Health professionals in study three adopt a protective role with pain clients, similar to the mentoring role suggested in study two.

The thesis’ theoretical framework, revised in the light of the empirical analyses, retains the biopsychosocial model of pain and the Job Demands-Resources model, and suggests that a successful RTW strategy for workers with chronic pain should be multidisciplinary, consider patients’ active roles, their need for support, and adopt a flexible approach to compensation. Implications for practice include extending who does sick-listing and examining volunteering as an occupational outcome.

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Publications and Impact

Publications

Wegrzynek, P., Wainwright, E. and Ravalier, J. (2020) 'Return to work interventions for chronic pain: a systematic literature review', *Occupational Medicine*, 70 (4), pp. 268-277.

Wegrzynek, P., Wainwright, E. and Ravalier, J. (2018) 'Tertiary return to work interventions for chronic pain: a systematic literature review', *British Journal of Pain,* 12 (2) Suppl 1, pp. 24-25.

Note: **Chapter Two closely resembles that of Wegrzynek et al. (2020). The chapter content has been published as a separate article in the time since the initial thesis submission.**

PROSPERO registration

Wegrzynek, P., Wainwright, E. and Ravalier, J. (2016) Individual return to work interventions for chronic pain: a systematic literature review. PROSPERO/ CRD42016048822 Available at: http://www.crd.york.ac.uk/PROSPERO/display_record.php?ID=CRD42016048822

Conference presentations

Wegrzynek, P., Wainwright, E. and Ravalier, J. "How can we change perceptions and improve capacity of returning to work amongst employees and employers?". Bath Spa University 3-Minute Thesis, Bath, April 2017.

Poster

British Pain Society May 2018 - Tertiary return to work interventions for chronic pain: a systematic literature review.

Impact

The Joint Health and Work Unit used evidence from the systematic literature review of tertiary return to work interventions for workers with chronic pain (see Publications/Poster) in a review of occupational health provision in the UK (see appendix 1).

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Acronyms

ACT	Acceptance and Commitment Therapy
AI	Appreciative Inquiry
ARMA	Arthritis and Musculoskeletal Alliance
BMA	British Medical Association
BP	Back pain
BPS	British Psychological Society
BPS[a]	British Pain Society
BSU	Bath Spa University
B&NES	Bath and North East Somerset
CAM	Complementary and alternative medicine
CBT	Cognitive Behavioural Therapy
CF	Consent form
CG	Control group
CI	Confidence interval
CoLA	College of Liberal Arts
CP	Chronic pain
CRD	Centre for Reviews and Dissemination
CRPS	Complex Regional Pain Syndrome
DCS	Demand-Control-Support Model
DHSC	Department of Health and Social Care
DWP	Department for Work and Pensions

EA	Employment adviser
EAP	Employee Assistance Program
EPP	Expert Patient Programme
ERI	Effort-Reward Imbalance Model
EU	European Union
FAPM	Faculty of Pain Medicine
FN	Fit Note
FND	Flexible New Deal
FR	Functional restoration
FU	Follow-up
GA	Graded activity
GDPR	General Data Protection Regulation
GP	General Practitioner
HM	Her Majesty
HR	Human Resources
HRA	Health Research Authority
HSE	Health and Safety Executive
IAPT	Improving Access to Psychological Therapies
IASP	International Association for the Study of Pain
ICD	International Classification of Diseases
JD-R	Job Demands-Resources Model
LBP	Low back pain

NHS	National Health Service
NICE	National Institute for Health and Clinical Excellence
NIHR	National Institute for Health Research
OH	Occupational health
OHP	Occupational Health Physician
ONS	Office of National Statistics
OT	Occupational Therapist
PAS	Pathways Advisory System
PIC	Participant Identification Centre
PICOS	Population, Intervention, Comparison, Outcome, and Study Design
PIS	Participant information sheet
PHE	Public Health England
QoL	Quality of life
RAR	Rapid access review
RCT	Randomised controlled trial
RISE	Return to Work with Individualised Supported Employment
ROB	Risk of bias
ROI	Return on investment
RQ	Research question
RSO	Research Support Office
RTW	Return to work
SA	Sickness absence

SIGN	Scottish Intercollegiate Guidelines Network
SLR	Systematic literature review
SME	Small or medium enterprise
STIA	Short-term incapacity allowance
SWAP	Study of Work and Pain
TA	Thematic analysis
TAU	Treatment as usual
UC	Usual care
UK	United Kingdom
VA	Vocational advisor
VAS	Visual Analogue Scale
WHO	World Health Organisation
WHSS	Working Health Service Scotland

Chapter One: Introduction

1.1 Chapter summary

Employees are essential to most organisations (Donovan et al., 2013), yet chronic ill-health affects a large proportion of the working population (Fayaz et al., 2016) resulting in high individual and societal costs related to sickness absence (SA) (e.g. BPS[a], 2014). The current chapter discusses the issue of returning to work and working with chronic pain (CP). Firstly, the nature of pain is discussed; subsequently, CP is defined and discussed, followed by a description of links between health and work. Recent figures from the UK and elsewhere, which relate to the impact of CP on work/return to work (RTW) and on various stakeholders, including workers, employers, the government, and healthcare providers, are presented. These statistics are discussed in light of the UK government's policy initiatives, which focus on promoting health and well-being among the working population. International differences in policy are briefly presented. Finally, classification of RTW interventions is discussed in relation to CP. Together, the presented information supports the rationale for the current project, which aims to elucidate which strategies are effective in promoting RTW among employees with CP.

1.2 What is pain and what is CP?

The concept of pain is a complex one and defining it is made difficult by its subjective nature and the differences amongst those who experience pain, as well as our inability to retain the pain experience in our memory (Merleau-Ponty, 1962). Thus, communicating about one's pain experience and its effects might be challenging. However, arriving at a correct definition is crucial to developing appropriate methods of assessment and practice (Williams and Craig, 2016). Pain is familiar in the practice of medicine but the understanding of the condition has undergone a significant shift (Crowley-Matoka and True, 2012). Initially, healthcare professionals acquired knowledge about pain conditions from their study of wounded war veterans (Crowley-Matoka and True, 2012) and the overall approach to treating pain was based on biomedical assumptions (Maltby, 2012). In accordance with the biomedical approach, the body can be compared to a machine in which parts can be either repaired with medication or replaced by employing surgical interventions (Maltby, 2012). However, the medical model is largely reductionist, simplifies the view of a health condition, and fails to consider patients' subjective experiences (Aylward, Cohen and Sawney, 2013). Pain was originally treated as a symptom of an underlying disease but its elusive nature, resisting objectivity assumed by the biomedical approach, led to an introduction of alternative models for the understanding of pain such as a biopsychosocial approach (Crowley-Matoka and True, 2012; Maltby, 2012).

According to the International Association for the Study of Pain (IASP), pain is defined as *"an unpleasant sensory and emotional experience associated with actual or potential tissue damage, or described in terms of such damage"* (IASP, 2016: Online). A diagnosis of CP is made when the pain experience, as described by its sufferer, persists for more than 3 months or beyond the expected time of healing (Treede et al., 2015), and often fluctuates over time (Von Korff and Miglioretti, 2005). The most recent IASP (2019) definition of CP reflects features of these two earlier definitions.

The properties of pain experience are defined as subjective and have been differentiated from a purely physiological process (Williams and Craig, 2016). Phillips et al. (2012) argued that apart from having the subjective qualities and involving a variety of physical, biological, and emotional reactions, the experience of pain is contextualised by socio-cultural factors. More recently, Williams and Craig (2016) argued that the cognitive and social components of pain seem to be lacking from the IASP definition. Humans have been shown to influence their internal somatic, as well as the external and social environments, through cognitive processes (Williams and Craig, 2016). Williams and Craig (2016) argued that the social aspects of pain require acknowledgement in line with the biopsychosocial model (Engel, 1980). In contrast with the biomedical perspective, the biopsychosocial model recognises the interplay between biological, psychological and social factors, and their influence on an individual's (ill) health (Maltby, 2012).

The biopsychosocial model of pain (often applied to CP as well – see section *1.3*) is usually depicted as a set of three interlocking domains (often visualised as circles), with a number of variables (e.g. an individual's beliefs, disability, drug effects, family and work circumstances) contained within each (circle). There are also multiple versions of how the variables are classified, and whether they are classed as social, psychological, biological, or a combination of those (e.g. Wainwright and Wainwright, 2019). The biopsychosocial model of (chronic) pain assumes "*psychological factors as a key component of the illness experience, both influencing and being influenced by physical factors and symptoms*" (Buck et al., 2009, p.7)

The biopsychosocial model represents a dynamic approach to viewing pain, which follows Pepper's (1942) contextual (relational) and organistic (interactive-systems) ways of explaining aspects of nature (e.g. health and illness). Namely, contextual thinking suggests that no single explanation to a phenomenon applies and explanation relies on things such as the context of the observer (Schwartz, 1982). Organistic thinking suggests that interaction of multiple causes leads to the emergence of new phenomena (Schwartz, 1982). In terms of work, a biopsychosocial perspective highlights the role of work environment (including organisational structure and practices), and personal and socio-economic context as cumulatively having impact on worker's health problems (Maltby, 2012).

The biopsychosocial model of pain has been widely accepted, albeit arguably at times in principle rather than in practice, with perceived secondary status of psychosocial factors (e.g. Edwards et al., 2016). However, Wade and Halligan (2017) note that although the biopsychosocial model was designed to provide a more holistic account of health and illness, and associated behaviours, the biomedical aspects remain important. In a more recent critique of the biopsychosocial model, Wainwright and Wainwright (2019, p.147) argue that "*[t]he biological, psychological and social remain largely siloed (albeit with intersections)*"; the authors also argue for a more pronounced representation of 'the self' within the model. Finally, Schultz et al. (2007) argued that the biopsychosocial model lacks specificity to enable its systematic empirical validation from the occupational disability perspective. It frames our thinking about elements of pain experience, rather than quantifying relationships between the variables (Wainwright and Wainwright, 2019).

Acknowledging the multidimensional aspects of pain experience, Williams and Craig (2016) proposed an updated definition of pain as *"a distressing experience associated with actual or potential tissue damage with sensory, emotional, cognitive and social components"* (p. 2420). An assessment of pain should be classed as a social event (Williams and Craig, 2016), and a form of a transaction incorporating an "*interplay between the patient and clinician"*

(Schiavenato and Craig, 2010, p. 667). Similarly, Wainwright et al. (2015) described doctor-patient negotiation of the CP certification process, revealing tensions in the process. Williams and Craig’s (2016) definition emphasized cognitive and social dimensions of the pain experience as “*essential qualities necessary to promote good science and optimum health care*” (p. 7).

However, in a recent critique of pain definitions Cohen, Quintner and van Rysewyk (2018) argue that Williams and Craig’s (2016) attempt at defining pain is not parsimonious. The authors also argue against the mind-body dualism within the IASP’s (2016) definition. Instead, Cohen, Quintner and van Rysewyk (2018, p. 6) propose a definition of pain as “*a mutually recognisable somatic experience that reflects a person’s apprehension of threat to their bodily or existential integrity*”. Cohen and colleagues (2018) suggest that their definition of pain “*integrates the subjectivity or ‘first-person’ level of experience of pain, and the challenge for the ‘second-person’ of clinical evaluation (if not also intervention) towards objective ‘third-person’ goals*” (p. 6). Interestingly, the authors also propose that their re-definition is compatible with the IASP (2016) definition of pain, described earlier.

Cohen, Quintner and van Rysewyk (2018) argue that their definition of pain might be more fitted to the clinical encounter. As such, adopting their definition in the current thesis seems implicitly correct, considering its aim of elucidating knowledge about effective RTW interventions for workers with CP. Yet, as neither the pain definition by IASP (2016) or by Cohen, Quintner and van Rysewyk (2018) are mutually exclusive, the former will be adopted here. At the same time, full consideration will be given to the significance of philosophical musings, biological relevance, attention to the subjective meaning of the pain experience, and its meaning to the healthcare professionals, as encompassed within Cohen, Quintner and van Rysewyk’s (2018) interpretation.

1.3 The problematic nature of CP

The epidemiology of CP is extremely diverse; in their study, Von Korff and Dunn (2008) observed a continuum of CP amongst their participants. CP comprises a large number of different conditions and medical diagnoses, including arthritis, low back pain (LBP), and musculoskeletal conditions or disorders (Fayaz et al., 2016; Waddell and Burton, 2006).

Allegri (2015, in Di Lernia, Serino and Riva, 2016) argued that CP does not have a purpose, as opposed to the acute pain which has an informative value (Di Lernia et al., 2016). However, Tabor, Keogh and Eccleston (2017) described pain as having an active function and a protective strategy. More recently, Eccleston (2018, p. S17) proposed that CP should be understood in terms of its 'embodied' (i.e. "*being something of the body*") and 'embedded' (i.e. "*situated within interacting social, cultural, and linguistic systems*") nature, with "*pain operating for defence against harm and in protecting the coherence of motivated behaviour in context*" (p. S21).

As described earlier in the current chapter and supported further by Toye (2015) and Di Lernia et al. (2016), the experience of pain is best understood by investigating individual experience beyond the biomedical findings. The notion of CP embodiment and its embedded nature add further weight to this claim; specifically, such conceptualisation of CP refutes the idea of the observable reality of pain experience and highlights the importance of multifaceted context in shaping how individuals make sense of their pain (Eccleston, 2018).

The subjectivity of CP experience deems it more appropriate to conceptualise CP as an illness (i.e. "*the subjective feeling of being unwell*"; Waddell and Aylward, 2010, p. 3) rather than a disease (May, 2005). This removes rigid conceptual links assuming observable biomedical abnormality and instead accepts patients' account of their pain (e.g. Cohen, Quintner and van Rysewyk, 2018). Furthermore, CP can be an example of a medically unexplained symptom (Wainwright et al., 2015). As such, CP often defies biologically reductionist methods of assessment and treatment (Wainwright et al., 2015). Subsequently, assessment of CP sufferer's ability to work can be problematic and challenging for the healthcare professionals (e.g. Larsen and Jenkins, 2005; Hussey et al., 2004).

Musculoskeletal conditions (often used as a proxy for CP) are classed as common health problems (Aylward et al., 2013). In a medical sense, common health problems can often display limited severity whilst remaining a considerable burden on those who experience them (Aylward et al., 2013), which links to the issue of diversity in symptom presentation for CP and its impact on individuals. Nevertheless, Waddell and Burton (2004) argued that common health problems in themselves do not provide a sufficient explanation for long-term incapacity. Whilst prevalence of common health problems, including musculoskeletal conditions remains high in the general population, diagnosis of common health problems does not equate to incapacity to work (Aylward et al., 2013; Aylward and Locascio, 1995). Importantly, experience of an individual plays a pivotal role in arriving at a social definition of 'sickness' and such definition differs from an objective biomedical definition of a health condition (Aylward et al., 2013). As interventions for CP are not effective (Di Lernia et al., 2016), individuals living with CP often struggle with disability and negative impacts of their conditions on their daily lives (Waddell, 1998).

The thesis employs the biopsychosocial model of CP to inform the research process. As such, CP is conceptualised as an illness or a condition (thus removing linguistic cues implying presence of an identifiable biomedical pathology), rather than a disease. Whilst acknowledging high heterogeneity in CP presentation and high levels of comorbidity of CP with other conditions (Rayner et al., 2016), CP is conceptualised here to be a single, coherent category, worthy of study as one specific target group. Whilst inherently subjective, for many people who identify as having CP, their experience comprises many common psychological features (e.g. poorer quality of life - QoL, including health-related QoL; higher rates of depression and anxiety, etc.; e.g. Breivik, Eisenberg and O'Brien, 2013). For the purpose of research, these common features allow classification of CP patients as one group, beyond their specific biomedical diagnoses. Previous studies have employed such single CP group classification when recruiting participants suffering with diverse CP conditions (e.g. Fisher et al., 2007; Wainwright et al., 2015) or assessing effectiveness of psychological CP interventions (e.g. Pike, Hearn and Williams, 2016). Recently, and for the first time International Classification of Diseases (ICD-11) proposed a category of 'chronic primary pain', which as a group of CP syndromes includes chronic musculoskeletal pain and primary headache (IASP, 2019). Such classification of CP in ICD-11 offers further support for the rationale of studying the condition as a health problem in its own right and under a single category.

1.4 What is work?

In their seminal report, Waddell and Burton (2006) defined ‘work’ as involving “*the application of physical or mental effort, skills, knowledge or other personal resources, usually involv[ing] commitment over time, and ha[ving] connotations of effort and a need to labour or exert oneself (Warr 1987; OECD 2003)*” (p. 4). Importantly, work was defined not only in terms of a ‘job’ or paid employment; Waddell and Burton (2006) included unpaid or voluntary work, education and training, as well as family responsibilities and caring as part of their conceptualisation of work. Such definition links to a concept of ‘meaningful occupation’; specifically, Clark et al. (1991) defined occupation as “*chunks of culturally and personally meaningful activity in which humans engage that can be named in the lexicon of the culture*” (p. 301). Thus, interpretation of the meaning of work in one’s life is a subjective phenomenon.

Trombly (1995, p. 967) suggested that “*meaningfulness motivates*” individuals. Thus, if work is one’s meaningful occupation, it is plausible to suggest that this could both, aid and hinder their RTW (e.g. by returning to work too quickly). Similarly, Yerxa (1993) proposed that health and well-being could be regained and maintained through meaningful occupations. Work seems important from a health and well-being perspective; Neville-Jan (2003) proposed that purposeful activities (i.e. “*activity connected with one’s life goals*”; p. 94) have the potential to provide relief from pain, which was echoed by Waddell and Burton’s (2006) assertion of ‘good work’ as therapeutic. The current project employs a wide definition of work, albeit not inclusive of all categories suggested by Waddell and Burton (2006); specifically, paid employment and self-employment are considered, both full-time and part-time. However, other forms of work are conceptualised here as other forms of meaningful occupation rather than work per se.

1.5 Is work good (for people with CP)?

Waddell and Burton (2006) postulated that ‘good work’ is good for most individuals. Black (2008) highlighted the benefits of being at work, which encompass psychological, social, and monetary ones, and apply to a wide array of stakeholders, including individuals and their families, employers, the government, and society as a whole. There is substantial evidence for the beneficial effect of work on individuals with CP, albeit caveats exist in terms of the type of CP and type of work involved, as well as due to the interaction between personal (e.g. illness beliefs) and occupational factors (e.g. job stress) (Waddell and Burton, 2006). Therefore, for some people part-time work might be better than no work at all, as it unlocks access to the monetary and societal benefits of working (Wainwright et al., 2011a). Temporary absence from work might also be therapeutic and at times deciding not to work might be the appropriate choice to make, specifically due to the nature of some job roles (e.g. McLean et al., 2005; Waddell and Burton, 2006). Nevertheless, the evidence suggests that for the majority of people, engaging in work carries benefits, both for physical and mental health (Waddell and Burton, 2004; 2006).

Wainwright et al. (2011) argued that paid employment (and thus, RTW) has more positive effects on the 'self' (defined by the authors as "*the sum of personal knowledge and experience by which we recognise ourselves as a particular human being with distinctive qualities and attributes*"; p. 137) and 'social identity' (i.e. others' knowledge about us and the related set of meanings attributed as a result of such knowledge), in comparison to being long-term unemployed or on incapacity benefit. Social interaction most individuals partake in whilst working provides them with a sense of purpose, thus strengthening their sense of self (Wainwright et al., 2011a). Wainwright et al. (2011a) found a sense of 'diminished self' amongst their study participants who were long-term incapacity benefit recipients and reported how worklessness contributed to spoiled social identity. Thus, there is a strong rationale for perceiving work as a health outcome and supporting individuals to experience the benefits of engaging in (good) work (e.g. Black and Gunnyeon, 2013).

However, it is also important to consider a contrasting view of work; in their paper, Wainwright et al. (2011a) noted the distinction between productive activity and paid employment. Grint (2005) suggested that work often failed to aid individual self-development and could at times be characterised as oppressive. Similarly, Christiansen (1999) noted that unsatisfying work has negative impacts on the self. The nature and characteristics of the job itself, allowing individuals to be satisfied, gain rewards, and to feel in control over work have been described by Black (2008) as the key criteria to operationalising work as 'good', and compliment the concept of meaningful occupation described earlier. The vast array of job types and subjectivity linked to asserting work's meaningfulness renders the assertion of its positive versus negative function challenging, whilst the latter has also been acknowledged (Waddell and Burton, 2006).

1.6 Impact of CP on work

UK figures show that 33-50% of the population suffers with CP (Fayaz et al., 2016), which after minor illnesses such as colds and coughs is the second biggest reason for SA (ONS, 2017). In recent years, musculoskeletal conditions have increasingly been recognised as a significant public health issue. Reports suggest that over 10 million people nationally are affected by musculoskeletal pain (Arthritis Research UK, 2017) and estimates increase to 28 million when CP is defined more broadly (Fayaz et al., 2016). A recent report by Versus Arthritis (2019) suggested that amongst working-age people who suffer with musculoskeletal pain, only 63% are in work. Thirty-two percent of people who suffer with CP fail to RTW within one month of being signed off work (Wynne-Jones et al., 2014). Furthermore, 34.6% of personal independence payment (a disability-related benefit) claimants in 2016 were receiving this benefit due to a musculoskeletal condition (DWP, 2016b).

The above figures translate into wider societal costs. For example, according to the British Pain Society (BPS[a]; 2014), the exact cost of treating CP is not known, but estimates place the cost of CP in disability benefits in the region of £5 billion per annum. These figures are not restricted to the UK; 100 million people in the USA suffer with CP, and costs in healthcare and lost productivity exceed the costs associated with cardiovascular and oncological conditions (Di Lernia et al., 2016). Lee et al. (2013) reported that approximately 20% of the UK's spending on healthcare goes on direct and indirect costs associated with treating spinal pain. Around one fifth of all UK GP consultations are musculoskeletal disorders primary care consultations (Jordan et al., 2010). Although SA rates have remained relatively stable over the last few years due to an increasing number of workers entering the labour market (ONS, 2017), the costs associated with CP affect a number of stakeholders. Workers face reduction or loss of income, and members of their families often spend time helping the patients manage their daily commitments (e.g. Goossens, 1999). The British Pain Society reported that "*British businesses lose an estimated 4.9 million days to employee absenteeism through work related back pain*" (BPS[a], 2014:

Online). Furthermore, the Health and Safety Executive (HSE, 2018) reported that 6.6 million workdays were lost in 2017/2018 due to work-related musculoskeletal disorders, constituting 25% of workdays lost due to ill-health. For example, 40% of sickness absence in the NHS is linked to chronic musculoskeletal pain (NHS Employers, 2014). Subsequently, the government faces significant costs associated with disability benefits provision (BPS[a], 2014). Maniadakis and Gray (2000) argued that back pain is amongst the most socio-economic costly conditions in the UK and the direct costs associated with back pain are overshadowed by the scale of informal care and associated production losses.

The implications of pain stretch far beyond those of the economic nature. CP patients often express the feelings of being stigmatised (e.g. Glenton, 2003; Marbach et al., 1990; Werner and Malterud, 2003), and feel that it is necessary to have to validate their illness to gain societal approval and/or diagnosis or treatment (e.g. Werner and Malterud, 2003; Wainwright et al., 2015). Several seminal reports originally suggested the importance of work (e.g. Waddell and Burton, 2006; Black, 2008). Some (e.g. Black, 2008) still reflect individualistic approach over the importance of social factors in workers' health and well-being, focusing foremost on the role of an individual instead: "*Individuals have a fundamental personal responsibility for maintaining their own health*" (Black, 2008, p. 109). Furthermore, Maltby (2012) argued that by making GPs responsible for assessing work ability in the sickness certification process and by workplace being a largely 'remote entity' in the sick-listing process, the Statement of Fitness to Work (i.e. the 'fit note'; FN) remains a tool supporting the biomedical approach.

The UK Equality Act requires employers to make 'reasonable adjustments' in the workplace to prevent unfair treatment of employees with disability or chronic conditions (Howard and Williams, 2013). Findings from the UK suggested that reasonable adjustments made by some employers supported RTW for their employees, with more than 70% of employers reporting a positive impact on employee motivation and employee engagement (European Chronic Disease Alliance, 2017). Furthermore, workers in the UK are able to apply for an Access to Work grant of up to £59,200 to cover adaptations in the workplace, transport, etc. (DWP, 2019). However, whilst Black (2008) supported a closer integration of occupational health (OH) services within the healthcare provision in the UK, Maltby (2012) argued that comprehensive OH support shown to be effective elsewhere (e.g. in Canada, or a number of countries in Scandinavia), is still lacking here. Considering both past, and current EU and UK policy strategy around chronic health problems and work (e.g. including integration of resources, improving public awareness, and incentives to support rehabilitation and RTW with chronic ill-health; Curtis, 2003; Black, 2008; European Chronic Disease Alliance, 2017), enhanced OH services seem both overdue, and largely called for (Maltby, 2012).

1.7 International differences in sickness benefit provision

Persistent pain affects individuals globally, but the context and systems available to support workers' RTW are determined by their country of residence, and at times the different regions within them (Lippel, 2020; Spasova, Bouget and Vanhercke, 2016). Individuals' behaviours and expectations are shaped by the values and culture they embrace (Earley and Mosakowski, 2004). A detailed description of the differences in culture and policy is beyond the scope of this thesis, but a selective summary is provided here.

Workers' employment status (e.g. white versus blue collar workers), type of employment or self-employment affect eligibility for sick-pay (Spasova, Bouget and Vanhercke, 2016). In Finland and Belgium workers receive 100% sickness benefit replacement rate, whereas the UK has an estimated flat rate of 20% (Spasova, Bouget and Vanhercke, 2016). Within the EU, the length of sick-pay duration ranges from 22 weeks (in 9 months; Denmark) to 3 years (Portugal), but in Bulgaria and Slovenia it can also be unlimited (Spasova, Bouget and Vanhercke, 2016). The responsibility for sickness benefits payments is shared, with German employers covering 75% of the cost and a much lower share elsewhere (Spasova, Bouget and Vanhercke, 2016). Countries such as Denmark, Finland, or Sweden have part-time sick-leave or benefits payments to help with retraining and retaining workers in the labour market (Lippel, 2020; Spasova, Bouget and Vanhercke, 2016). Benefits of part-time sick-leave for sufferers of chronic conditions have been highlighted (Lippel, 2020) and a recent review of obstacles to RTW found that unhelpful characteristics of compensation systems (e.g. inflexible rules) matter more than the receipt of compensation (Bartys et al., 2017).

Whitehead et al. (2009) noted that there was a discrepancy between the number of people suffering with chronic health conditions in the UK and who are at work, compared with those in other (predominantly Scandinavian) countries. Specifically, 59% of men and 50%

of women with a chronic health problem were at work in the UK, compared to over 70% of men in Denmark and Norway and 64% of women in Norway and Sweden (Whitehead et al., 2009). These findings strengthen the rationale for gaining and maintaining sound, empirically-based knowledge about the most appropriate interventions to promote RTW amongst employees suffering with CP.

1.8 What is RTW?

Franche and Krause (2002) argued that RTW "*after injury or illness is a behaviour influenced by physical, psychological, and social factors*" (p. 233). Schultz et al. (2007) described conceptualisations of RTW as a 'process' (of returning the employee back to work, such as graded RTW) and as an 'outcome' (i.e. employee working status). In general, the criteria used to define RTW tend to be easily measurable (e.g. work status, number of hours worked, time until an employee returns to work for contracted hours/pay) (Hees et al., 2012). These criteria, termed by Krause et al. (2001b) as 'administrative', are used to judge the effectiveness of RTW interventions. There seems to be lack of agreement as to what a single definition of RTW should be (Knauf and Schultz, 2016).

There are several RTW models (biomedical and forensic, psychosocial, ecological/case management and economic, ergonomic, and biopsychosocial; Schultz et al., 2007), which have been informed by biomedical, social construction, and biopsychosocial theoretical paradigms (Knauf and Schultz, 2016) and stemmed from diverse research traditions in fields including psychology, sociology, and health economics (Schultz et al., 2007). For example, the forensic model of RTW aims to provide explanations for interactions and motivations of individuals within the disability system to improve RTW decision and behaviours (Schultz et al., 2007). The biopsychosocial conceptualisation of RTW allowed for a dynamic dimension of RTW as a process to be recognised (Schultz et al., 2007). A number of common themes (e.g. focus on individual, systems, or both) within each RTW model highlight their arbitrary boundaries, albeit some have been more extensively empirically validated than others (Schultz et al., 2007).

Another model of RTW was introduced by Faucett (2005); the author conceptualised RTW for the sufferers of musculoskeletal disorders. Faucett (2005) proposed that a bidirectional relationship applies to strain, recovery, and outcomes, which need to be considered in context of the employee’s workplace. However, empirical evidence in support of Faucett’s (2005) model is required (Knauf and Schultz, 2016). Furthermore, Knauf and Schultz (2016, p. 46) suggested that future research should prioritise models which “*focus on the development and application of a multidisciplinary or interdisciplinary approach are integrative, cross-diagnostic, interactive, and translational and explore the interplay between the individual and the systems within which they function*”.

In the current thesis, conceptualisation of RTW based on re-framing the process of recovery using a work ability approach and its focus on health and well-being is adopted. Williams (2000) argued that disability is an outcome linked to social disadvantage rather than pathology within the body. The UK government’s agenda remains linked to such focus on ability (to work) and related benefits to be yielded from ‘good work’ (e.g. Black and Gunnyeon, 2013).

1.9 What is ‘successful’ RTW?

It is complex to decide how to define ‘successful’ RTW, since the process involves different stakeholders (e.g. workers, employers, healthcare providers, the government), who often have varying expectations and for whom different objectives may be important. Furthermore, there is incomplete agreement about operationalisation of RTW e.g. as outcome measure of a process (Krause et al., 2001b). Krause et al. (2001b) argued that simply being at work should not be classed as an acceptable RTW outcome, and resuming work duties does not always constitute a successful RTW outcome for employees whose personal lives remain burdened by limitations (Wainwright et al., 2015). Hees and colleagues (2012) found that workers saw work-home balance and mental functioning as the important aspects of RTW. Furthermore, evidence points to employees considering successful RTW in terms of their productivity, meaningfulness of their actions, job satisfaction, and employee-supervisor relationship (Hees et al., 2012). However, Hees et al. (2012) argued that, when defining RTW as successful, the same factors may not be classed as equally important by employers or therapists. For example, Young et al. (2005) found that workers saw their well-being (including financial and emotional) as the most important outcome in the RTW process. In contrast, the other stakeholders had a common focus on financial viability (Young et al., 2005). Young and colleagues (2005) reported that employers were most interested in productivity, satisfaction, and safety of their staff. Furthermore, accommodating an employee whose productivity has been reduced by permanent modification of their work duties may seem problematic for employers (Levack, McPherson and McNaughton, 2004).

In summary, ‘successful’ RTW tends to be operationalised using ‘administrative’ criteria (Krause et al., 2001b), and ‘sustainable’ by noting sickness leave recurrence. When RTW is achieved it is often followed by recurrence of disability, and success requires adaptation (worker/workplace) and stakeholders’ interactions aimed at achieving this (e.g. Shaw et al., 2008). The evidence suggests that in order to define RTW outcomes as ‘successful’ and RTW interventions as effective, evaluating the key stakeholders’ perspective is crucial to such assessment (e.g. Hees et al., 2012). However, the evidence on stakeholders’ views regarding successful RTW is lacking (e.g. Hees et al., 2012). Instead, studies tend to examine the RTW process, omitting the stakeholders’ perspective in defining successful RTW. Thus, the current project’s empirical studies described in *Chapters Six*, *Seven* and *Eight* aimed to address this gap in the current knowledge of RTW processes.

1.10 Classifying RTW interventions

Pignata, Biron and Dollard (2014) described two approaches for classifying interventions used by work psychologists; namely, by targets or levels. The targets framework was proposed by DeFrank and Cooper (1987) who suggested that interventions should be divided based on their target, i.e. the worker, the workplace, and both the worker and the workplace. The first class of target interventions comprise coping strategies and focus on individual workers or groups of workers in order to enhance their coping resources or to alter their stressor appraisal process, using approaches such as exercise, meditation, relaxation, cognitive-behavioural training, etc. (e.g. DeFrank and Cooper, 1987; Giga, Cooper and Faragher, 2003). Organisational interventions are work-directed and described as stress-reducing (Newman and Beehr, 1979). Pignata et al. (2014) listed the strategies employed as part of the organisational approach, which include job redesign, increasing employee participation in decision-making processes, making changes to the structure of an organisation and working environment, etc. Finally, improving things such as relationships at work, individual-workplace fit, and job role concerns are all aims of the individual/organisation interventions, which centre around the interaction of the two (DeFrank and Cooper, 1987).

An alternative framework classifies interventions by their level and comprises interventions designed to improve workers' well-being or manage employees' stress levels; within the levels framework interventions are referred to as primary, secondary, and tertiary (e.g. Kompier and Cooper, 1999). Primary interventions aim to remove stressors within a workplace (Ravalier, Wegrzynek and Lawton, 2016). Such changes might include reducing staff workloads (Pignata et al., 2014), enhancing social support, or job redesign (Ravalier et al., 2016). Secondary interventions are aimed at employees who already experience signs of stress, in an attempt to prevent the emergence of established health issues, with examples of interventions at this level including relaxation training, cognitive-behavioural training to enhance coping strategies, stress management programmes, etc. (Pignata et al., 2014; Ravalier et al., 2016). As such, primary and secondary levels are preventative and focus on healthy workers, or those who are showing signs of stress but have not yet been signed off work, respectively. In turn, tertiary interventions are reactive, addressing problems already experienced by employees, and following an event of SA, through strategies such as counselling or employee assistance programs (EAPs) (Ongori and Agolla, 2008; Pignata et al., 2014).

In the current thesis (and specifically in the literature reviews in *Chapters Two* and *Three*) tertiary interventions are conceptualised as RTW interventions when RTW for workers with CP is considered; pragmatically such operationalisation is appropriate due to the thesis focussing on improving RTW outcome among the employee population already sick-listed with CP. Although the levels framework was initially developed for strategies used to reduce or manage work stress (Pignata et al., 2014), as CP affects well-being and is often co-morbid with other conditions including stress (e.g. McGeary et al., 2016), it makes the levels classification useful to review RTW interventions for workers with CP. Furthermore, stressors such as low peer support and high job demands, referred to by studies in the context of stress (e.g. Ravalier et al., 2016), arguably include those occasioned by pain. It is also important to note, that the two approaches to classifying interventions, namely by levels and by targets are not mutually exclusive. On the contrary, as Giga, Cooper and

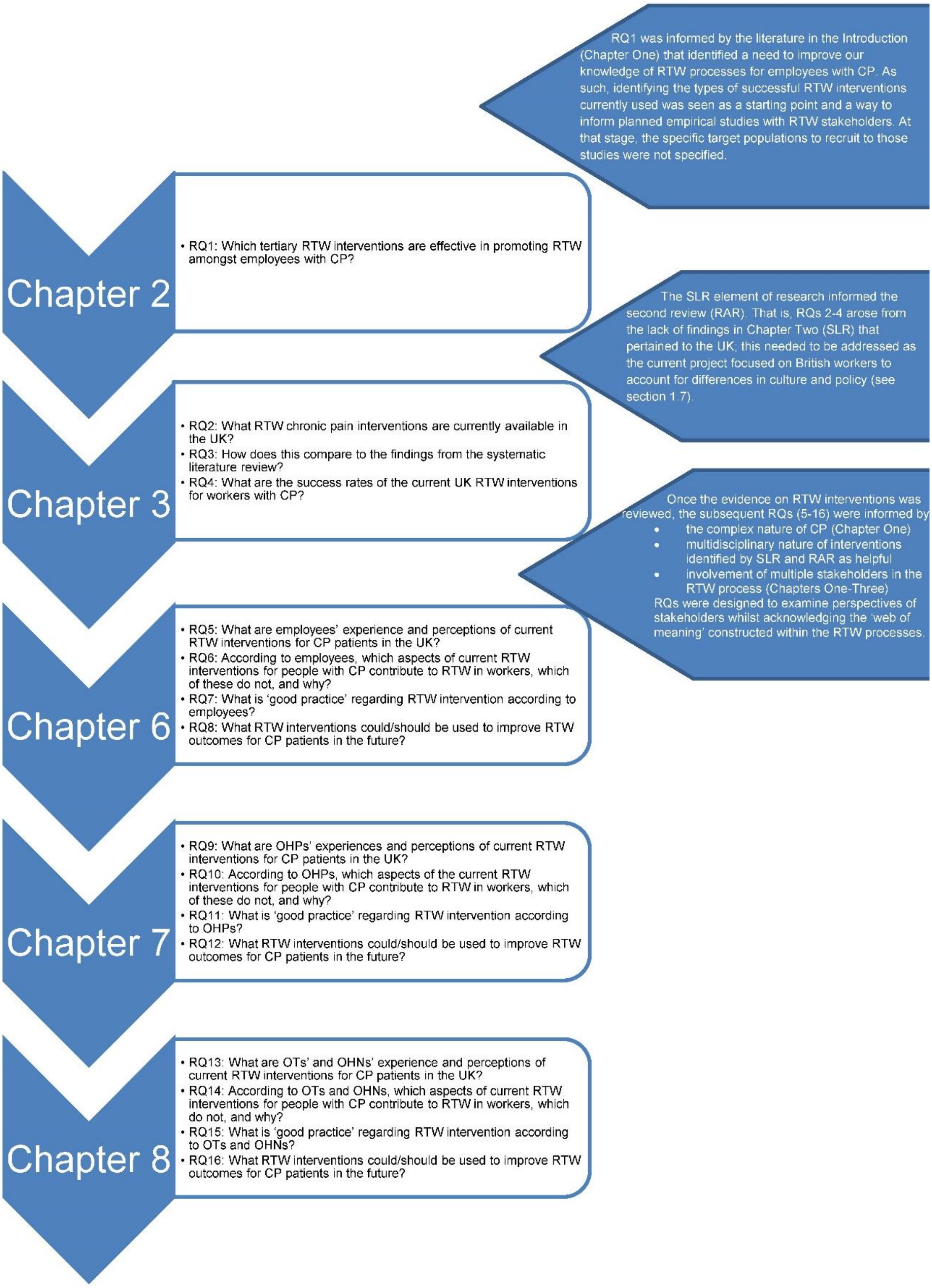
Faragher (2003) suggested, the various categories of interventions overlap across both frameworks. Subsequently, the *Theory* chapter depicts this overlap.

1.11 Aims of the thesis and the research questions

The current project aims to add some much required understanding to our knowledge of RTW processes for workers with CP, with the focus on UK workers. Specifically, the aim is to elucidate which strategies promote RTW among employees sick-listed with CP. An improved understanding of the processes involved in RTW is needed, especially since chronic health conditions (including CP associated with musculoskeletal conditions) became more common (Black and Gunnyeon, 2013; Crowley-Matoka and True, 2012). Figure 1 shows the first research question (RQ) and how the follow-up questions were developed as the project progressed. *Chapters Two* and *Three* describe systematic and rapid searches of the available CP and RTW literature, with empirical chapters (*Chapters Six*, *Seven* and *Eight*) expanding the pool of evidence utilised to answer RQ1 and the follow-up RQs presented throughout the thesis.

1.12 Conclusions

A healthy workforce is vital to the British economy and society as a whole (Bevan, 2016). However, between one-third and one-half of the entire UK population suffers with CP (Fayaz et al., 2016). Chronic ill-health in the working population represents a significant challenge for a number of stakeholders, including workers, employers, the government, and the healthcare providers (Bevan, 2016; Black and Frost, 2011; Breivik et al., 2013). Increased spending associated with presenteeism, lost productivity, long-term SA and welfare provision affects society as a whole (Bevan, 2016; Turk and Monarch, 2002). Yet, the costs associated with retaining an employee with an existing health condition such as CP (e.g. by making reasonable adjustments) are likely to be significantly lower than those associated with recruitment and training of a new member of a workforce (Palmer and Brown, 2013), albeit evaluation of such costs is beyond the scope of the current project. Strategies aimed at addressing the impact of chronic ill-health on healthcare and social expenditure remain a priority for policymakers in the UK and in the EU (Munir, 2012) and the Work Foundation (Bajorek et al., 2014) recommended that the issue of health at work should be debated in a wider context, ensuring that future government policy addresses



RQ1 was informed by the literature in the Introduction (Chapter One) that identified a need to improve our knowledge of RTW processes for employees with CP. As such, identifying the types of successful RTW interventions currently used was seen as a starting point and a way to inform planned empirical studies with RTW stakeholders. At that stage, the specific target populations to recruit to those studies were not specified.

- RQ1: Which tertiary RTW interventions are effective in promoting RTW amongst employees with CP?

The SLR element of research informed the second review (RAR). That is, RQs 2-4 arose from the lack of findings in Chapter Two (SLR) that pertained to the UK; this needed to be addressed as the current project focused on British workers to account for differences in culture and policy (see section 1.7).

- RQ2: What RTW chronic pain interventions are currently available in the UK?
- RQ3: How does this compare to the findings from the systematic literature review?
- RQ4: What are the success rates of the current UK RTW interventions for workers with CP?

Once the evidence on RTW interventions was reviewed, the subsequent RQs (5-16) were informed by

- the complex nature of CP (Chapter One)
- multidisciplinary nature of interventions identified by SLR and RAR as helpful
- involvement of multiple stakeholders in the RTW process (Chapters One-Three)

RQs were designed to examine perspectives of stakeholders whilst acknowledging the 'web of meaning' constructed within the RTW processes.

- RQ5: What are employees' experience and perceptions of current RTW interventions for CP patients in the UK?
- RQ6: According to employees, which aspects of current RTW interventions for people with CP contribute to RTW in workers, which of these do not, and why?
- RQ7: What is 'good practice' regarding RTW intervention according to employees?
- RQ8: What RTW interventions could/should be used to improve RTW outcomes for CP patients in the future?

- RQ9: What are OHPs' experiences and perceptions of current RTW interventions for CP patients in the UK?
- RQ10: According to OHPs, which aspects of the current RTW interventions for people with CP contribute to RTW in workers, which of these do not, and why?
- RQ11: What is 'good practice' regarding RTW intervention according to OHPs?
- RQ12: What RTW interventions could/should be used to improve RTW outcomes for CP patients in the future?

- RQ13: What are OTs' and OHNs' experience and perceptions of current RTW interventions for CP patients in the UK?
- RQ14: According to OTs and OHNs, which aspects of current RTW interventions for people with CP contribute to RTW in workers, which do not, and why?
- RQ15: What is 'good practice' regarding RTW intervention according to OTs and OHNs?
- RQ16: What RTW interventions could/should be used to improve RTW outcomes for CP patients in the future?

Figure 1. Genealogy of research questions.

the benefits of any health programmes with respect to a number of stakeholders involved (e.g. employers, employees and their families, the NHS, HM Treasury and the DWP). Next, *Chapter Two* describes the methodology and the results from a systematic search of the RTW and CP literature.

Chapter Two: Return to work interventions for chronic pain: a systematic literature review.

2.1 Introduction

Returning to work with, or despite CP should be supported, since reports suggest that (good) work has a therapeutic effect for most people (Waddell and Burton, 2006). However, the effectiveness of RTW interventions for workers with CP remains unclear. To address the wide-ranging consequences of CP, it is essential to identify future interventions for enabling more people to RTW appropriately. The current chapter describes a systematic literature review (SLR), which aimed to answer RQ1 introduced in *Chapter One* pertaining to the effectiveness of tertiary RTW interventions for employees suffering with CP.

One recent systematic review by Pike et al. (2016) assessed psychological interventions' effectiveness on reducing healthcare use and improving work absence outcomes. Interventions with credible psychological components did not significantly affect work absence when compared to usual care (UC), waiting list, and active control groups (CGs) (Pike et al., 2016). The authors acknowledged the difficulty of drawing overall conclusions due to the great variety of measures employed by the reviewed trials.

A cohort study into international differences in RTW found that the effectiveness of RTW interventions for chronic LBP relies heavily on the type of intervention used and national compensation policies regarding long-term sick-leave (Anema et al., 2009). The authors postulated that employing work-oriented interventions and allowing more flexibility in the way the compensation schemes are applied could improve RTW prospects for individuals with CP. Scandinavian countries which allow less strict criteria in compensation assessment and use partial benefit entitlement were reported to achieve better RTW rates in comparison to other nations (Anema et al., 2009). As such, the percentage of people with chronic health conditions who continue to work in countries such as Norway is higher when compared to their UK counterparts (Whitehead et al., 2009).

The current review aimed to analyse which tertiary interventions are successful in promoting RTW in workers with CP. As tertiary interventions aim to improve employees' psychological and physical capacity, enabling them to successfully RTW (e.g. Kompier and

Cooper, 1999), this classification is useful to review interventions for workers already sick-listed with CP. Pike at al. (2016) investigated the effectiveness of psychological treatments only on reducing healthcare use and improving work absence outcomes. They excluded headache when operationalising CP, whereas the current review included it. This strategy reflects the current project's conceptualisation of CP as a single category with common psychological features (Breivik, Eisenberg and O'Brien, 2013; IASP, 2019). Also, apart from the interventions with credible psychological components (Williams, Eccleston and Morley, 2012), the current review included other types of tertiary level interventions aimed at promoting RTW, but which did not target any specific concept or trait.

2.2 Methods

The protocol for the current review can be found on PROSPERO (CRD42016048822; Wegrzynek, Wainwright and Ravalier, 2016). Six electronic databases: PsycINFO, EMBASE, MEDLINE, PubMed, Science Direct, and the Cochrane Library of Clinical Trials were systematically searched from inception to October 2018. Eligible papers were identified using a Boolean search strategy following other reviews (Ravalier, Wegrzynek and Lawton, 2016). In addition, Open Grey and the first 10 pages of Google Scholar were also searched. The strategy employed when searching Google Scholar was based on an approach frequently used in other systematic reviews and it was deemed sufficient as the current review does not focus on specifically retrieving grey literature, when a more extensive screening would be recommended (e.g. Haddaway et al., 2015). Reference lists of all selected articles were manually checked for further articles relevant to the current review (see appendix 2 for search strategy).

The systematic method was chosen as a suitable method to collate literature regarding the effectiveness of RTW interventions because it allows "*a more reliable and precise estimate of an intervention's effectiveness*", whilst also demonstrating gaps in the literature (CRD, 2008: V). Dempster (2011) argued that systematic reviews provide a valuable source of evidence which informs the policy and practice of health professionals. The results of the SLR were used to inform the semi-structured interviews in the latter parts of the current project (*Chapters Six-Eight*), which is in line with a requirement by the National Institute for Health Research (NIHR) to provide a justification for new primary studies using SLRs (Bhurke et al., 2015).

PICOS (Population, Intervention, Comparison, Outcome, and Study Design) criteria were employed as the inclusion criteria for the current review (see Table 1). The inclusion criterion that participants had to be signed off work for 4 weeks or longer was chosen because previous reports suggested that the risk of non-RTW is associated with long-term sick-leave length prior to rehabilitation (Waddell, Burton and Main, 2003; Øyeflaten et al., 2014).

Selected articles had to be randomised controlled trials (RCTs) published in English (due to no translation budget) and evaluate the effectiveness of individual, tertiary RTW interventions for workers with CP (as defined previously; Treede et al., 2015). From the studies which included both participants on sick-leave at baseline and those who were not, trials where authors did not provide sub-group analyses or did not provide such data upon request were rejected. Similarly, when the type of pain (acute versus chronic) was unclear, authors were contacted for clarification. Twenty-three contacts/data requests were made; when no reply was received within 3 weeks, the paper was rejected.

The literature search and eligibility check were performed by the thesis' author, and subsequently papers were read by the members of the supervisory team to independently validate the inclusion/exclusion decision. The thesis' author conducted data extraction. All included trials were rated for risk of bias (ROB) using the Cochrane ROB tool (Higgins and Green, 2011) and a list of six statements was used for methodological quality assessment (Verhagen et al., 1998a; see Table 4) by two reviewers (thesis author and a member of the supervisory team) independently; discrepancies were arbitrated by the third. Inter-rater reliability was assessed using Cohen's Kappa (*K*). Meta-analysis was not possible due to heterogeneity of study characteristics, as planned a priori; see appendix 3 for minor protocol deviations.

Table 1. *Systematic literature review – PICOS (Population, Intervention, Comparison, Outcome, and Study Design)*

PICOS component	*Detail*
Participants	Workers (over the age of 18, with no upper age limit applied), employed on any type of contract or self-employed, signed off work for 4 weeks or longer due to CP
Interventions	Promoting RTW
Comparisons	Control group (e.g. UC; treatment as usual – TAU)
Outcomes	Primary – RTW (defined heterogeneously by any 'administrative' criteria such as work status, number of hours worked, length of SL, etc.); secondary - pain disability and employee psychosocial/affective factors (if provided and assessed via reliable psychometric measures)
Study design	RCT

Note. CP=chronic pain; RCT=randomised controlled trial; RTW=return to work; UC=usual care; TAU=treatment as usual

2.3 Results

2.3.1 Included and excluded studies

The initial search identified 2076 studies; once duplicates were removed, 541 titles suggested possible relevance; screening of abstracts then full-texts of the selected articles led to 8 papers being retained. An additional search of Google Scholar and Open Grey databases, and screening of references led to a further 8 papers, equalling 16 papers pertaining to 13 studies in total (see Figure 2). The majority of rejected papers were either not RCTs or focused on preventative rather than tertiary interventions. Table 2 summarises the included studies; a list of rejected studies and reasons for rejection can be found in appendix 4.

Included studies were published from 1994 to 2017 (in decades, 4 in 1991-2000; 8 in 2001-2010; 4 in 2010-present). More trials and follow-up (FU) studies were set in Scandinavian countries than anywhere else (Norway=7; Haland Haldorsen et al., 1998b; Haland Haldorsen et al., 1998c; Haland Haldorsen et al., 2002; Skouen et al., 2002; Myhre et al., 2014; Brendbekken et al., 2016; Reme et al., 2016; Sweden=3; Jensen et al., 2001; Jensen et al., 2005; Lytsy et al., 2017). Remaining trials were set in Canada (Corey et al., 1996; Mitchell and Carmen, 1994; Lambeek et al., 2010), Hong Kong (Cheng and Hung, 2007), and the Netherlands (Heinrich et al., 2009; Steenstra et al., 2006).

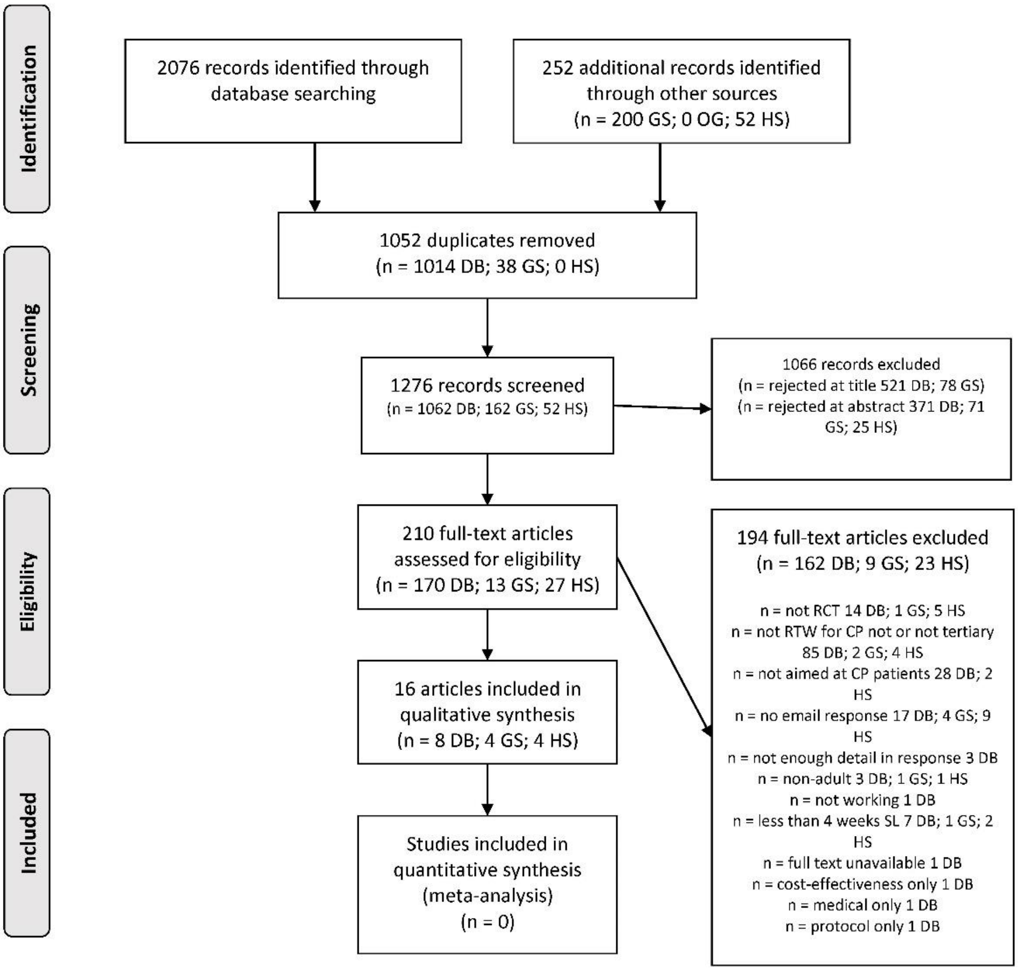


Figure 2. Article exclusion - PRISMA diagram

Note. CP=chronic pain; DB=database; GS=Google Scholar; HS=hand search; OG=Open Grey; RCT=randomised controlled trial; RTW=return to work; SL=sick-leave

Table 2. *Summary of included trials and follow-up studies, and RTW outcomes*

Study author, country	Sample size *n*	Intervention type	Control	Intervention and FU schedule	RTW	
					Measure	Results "+" or "-" (sign.)
Brendbekken et al. 2016 Norway	I=141 CG=143	Interdisciplinary Structured Interview and Visual Education Tool (ISIVET)	Brief intervention – active controls	I: 3.5 hrs at baseline, at 2 weeks with physiotherapist and at 3 months with whole team to review all plans CG: 2.5 hrs at baseline with physician and physiotherapist, followed by 2 week FU session with a physiotherapist FU: 2 weeks (I, CG) 3 months (I) 12 months (all) 24 month (all; data available for 26 months)	partial or full RTW (if more than 50% of workdays per month were spent without sickness benefits)	+ Faster RTW (via using partial sick-leave option; the highest RR was at month 7, RR=2.31, 95% CI 1.19-4.51, p=0.01)
Cheng and Hung 2007 Hong Kong	I=46 CG=48 (before dropouts I 53; CG 50)	Workplace-based work hardening with a job coach	Clinic-based work hardening	Assessment at intake, 3 sessions p/w (all), monitoring of progress reports for I and CG to ensure comparison of content, frequency, and duration FU: at 4 weeks	self-reported "resumption of occupational activities", including normal, modified, or alternative duties	+ Higher RTW (normal or modified duties) rate for I vs CG (71.7% vs 37.5%, χ^2=11.095, p=0.001)
Corey et al. 1996 Canada	I=100 CG=100 (FU interviews I 74; CG 64)	Functional Restoration	TAU	Screening at baseline 6.5 hours per day (max. 35 days, median 35, range 3-35) FU: at variable times by telephone (9-27 months and 17.9 months on average)	patient's self-reported work status ("working", or "work ready" when looking for work)	+ RTW for LBCP only (t=3.28, p=0.002)
Haland Haldorsen et al. 1998b Norway	I=312 CG=157	Multimodal CBT	GP care, no advice or therapy feedback	Baseline assessment 6 hour session 5 days p/w for 4 weeks FU: 4 weeks, 2, 6, 10, 12 months (at the clinic and post-test by the pre-test physiotherapist);	absence of benefit payments for a calendar month	- independent of CP type or gender (52% I vs 53% CG at 12-month FU)

Table 2 (cont.). *Summary of included trials and follow-up studies, and RTW outcomes*

Study author, country	Sample size *n*	Intervention type	Control	Intervention and FU schedule	RTW	
					Measure	Results "+" or "-" (sign.)
(cont.) Haland Haldorsen et al. 1998b Norway	(cont.)	(cont.)	(cont.)	Telephone contacts; Individual FUs at the clinic delivering the intervention arranged for 'risk patients'	(cont.)	(cont.)
Haland Haldorsen et al. 2002 Norway	I1=228 I2=169 CG=263 *RTW data not available (*n*=27)	(I1) Light multidisciplinary (I2) Extensive multidisciplinary	GP advice	Assessment at baseline to establish prognosis, treatment 1-2 months later (I1): 1 session followed by up to 12 additional sessions (I2): 6 hour session 5 days p/w for 4 weeks FU: all pps followed up for up to 12 months with average 3 FUs and appointments offered at 3, 6, and 10 months (study reported data based on FU for the first 14 months)	absence of benefit payments for a calendar month	+ I1 and I2 increase the possibility of RTW after 14 months by about 10% (I1 vs TAU $\chi^2 = 3.6$, df = 1, p=0.05; I2 vs TAU $\chi^2 = 4.6$, df = 1, p<0.04) Good prognosis: no treatment advantageous Medium prognosis: I1 sufficient I2 no additional effect TAU poor results I1 vs TAU (n = 71 vs n= 48, $\chi^2 = 5.5$, df = 1, p <0.02) I2 vs TAU (n = 55 vs n = 54, $\chi^2 = 3.9$, df = 1 P < 0.05) Poor prognosis: I2 best I2 vs TAU (n = 28 vs n = 26, $\chi^2 = 3.79$, df = 1, p < 0.05)
Heinrich et al. 2009 The Netherlands	I1=53 CG1=50 I2=76 CG2=75 (reported before droupouts)	(I1) Physical training (I2) Physical training with CBT and workplace specific exercises	Usual GP care	Baseline questionnaires (I1):2-3 times p/w for 1-1.5 hours, during 3 months, continued with RTW, with intensity decided at intake (I2): as in I1, with added 30 minutes for CBT FU: at 6 and 12 months; claim duration data collected continuously	"claim duration" (days of work disability compensation payments from randomisation until 12 months later) with the end classed as "less than 25% work disability" for minimum of four weeks	- (I1): In the first 6 months CG vs I1 (I1 median claim duration 181, range 119 – 184 vs CG 153, 48 – 181, log rank test, p=0.03; HR 0.5, 95%CI 0.3 – 0.9, p=0.03); ns at 12 months FU

Table 2 (cont.). *Summary of included trials and follow-up studies, and RTW outcomes*

Study author, country	Sample size *n*	Intervention type	Control	Intervention and FU schedule	RTW	
					Measure	Results "+" or "-" (sign.)
Jensen et al. 2001; 2005*[a] Sweden	I1=54 I2=49 I3=63 CG=48 (at 3-year FU ITT=208, PP=181)	(I1) Behaviour-oriented physiotherapy (I2) CBT (I3) Behavioural Medicine Rehab: combined I1 and I2	Normal routines in health-care	Assessment pre-treatment and post-treatment (I1): 20 scheduled hours per week (I2): 13-14 scheduled hours per week (I3): combined I1 and I2 All interventions lasted 4 weeks FU: 6 and 18 months, 3 years[a]	"absence from work" and early retirement post-intervention (obtained data from the National Social Insurance Board)	+ females only Risk of early retirement lower for women in I1 and I2 vs CG over 18 month FU (odds ratio I1=0.1, 95%CI 0.0-0.6; I2=0.1, 95%CI 0.0-0.8); The decrease in absence from work was higher for females in treatment groups vs CG; Total absence from work was not significantly different in CG compared with treatment groups, but absence rate for men in I2 was higher compared to other conditions (parameter estimate from covariance analysis 65, 95%CI -39-169, ns) [a]At 3-year FU women I3 group had the best improvement to absence from work (ANCOVA p<0.05, PP only) and returned to work faster than controls. Physiotherapy was better than CBT for both genders.
Lambeek et al. 2010 Canada	I=66 CG=68	Integrated care with GA and workplace focus	Usual care from a medical professional	Baseline assessment followed by a treatment plan in week 1, workplace element from week 3-12, graded activity from week 2 till RTW FU: 12 weeks, 6, 12 months	duration of sick-leave in calendar days from randomisation until full RTW for four weeks without sickness absence recurrence, and either in the same or different employment	+ At 12 months median no. of SL days for I was 82 (IQR 51-164) vs CG 175 (IQR 91-365; Mann-Whitney U test, p=0.003)

Table 2 (cont.). *Summary of included trials and follow-up studies, and RTW outcomes*

Study author, country	Sample size *n*	Intervention type	Control	Intervention and FU schedule	RTW	
					Measure	Results “+” or “-“ (sign.)
Lytsy et al. 2017 Sweden	CP employed sub-group=73	(I1) Acceptance and Commitment Therapy (I2) TEAM: Multidisciplinary Neither included work-directed interventions	No planned treatment, but pps free to receive usual care	Baseline assessment, length of Is individualised FU: 12 months	returning to health insurance (national registry data) self-report: number of reimbursed days during first year FU self-report: change in working hours self-report: increased work-related engagement	- RTW + self-reported values (all pps) RTW for employed CP pps (n=73) at 12-month FU: the results for the sub-group differed from the overall results, with a trend for I1 to have a positive effect on RTW (significance not stated), apart from self-reported change in reimbursed days where CG reported a lesser number of days utilising health insurance: Returned to health ins. % (n/group) n=73: I1:9/17 I2: 12/28 CG: 13/28 Number of reimbursed days during first year FU, median (IQR) n=73: I1:138(0-210) I2:83(0-235) CG:59(0-180) Self-reported change in working hours, ordinal variable (<0, 0, >0), % n=73: I1:20.0/40.0/40.0 I2:11.1/50.0/38.9 CG:13.0/52.2/34.8 Self-reported increased work-related engagement, %(n) n=73: I1:50 (5/5) I2:50 (9/9) CG:39.1 (9/14) All pps: self-reported change in working time I2 38.5% vs CG 22.4% (OR 2.20, 95% CI 1.09-4.44, p=0.02); self-reported change in work engagement I2 50.8% vs CG 29.9% (OR 2.20, 95% CI 1.19-4.95, p=0.01)

Table 2 (cont.). *Summary of included trials and follow-up studies, and RTW outcomes*

Study author, country	Sample size *n*	Intervention type	Control	Intervention and FU schedule	RTW	
					Measure	Results "+" or "-" (sign.)
Mitchell and Carmen 1994 Canada	I=271 CG=271	Functional restoration	Treatment by the primary care provider; principles of treatment outlined in a letter to a GP	Pre-treatment assessment 7 hours per day, 5 times p/w for 8 weeks=40 treatment days (not all pps required this duration); One clinic provided the program comprising 40 days over 12 weeks FU: 12, 24 months	working full-time, either in the same or different employment, but not part-time or in modified work duties "cessation of wage loss payments", in some cases confirmed via telephone	- RTW at the end of the 12-month FU was 79%(I) and 78%(CG), ns At 24 months the total no. of days off work was less for I and BP only pps but both were ns
Myhre et al. 2014 Norway	I=209 CG=204 (Analysed I 203; CG 202)	Work-focused rehabilitation	Multidisciplinary rehabilitation	Baseline (I) Part 1: for 3-4 weeks, 3 hours p/w (CG) Part 1: for 3-4 weeks, 3 hours p/w FU: 12 months	the first 5-week period with no sickness benefit	- RTW within 12 months: I 142(70%), CG 152 (75%) Median days before RTW: I 161, CG 158 (Breslow test, p=0.45, ns), separate sites also ns
Reme et al. 2016 Norway	I1=100 I2=103 I3=105 I4=105	(I1) Brief cognitive intervention (I2) Brief I with CBT In I3 and I4 CBT was combined with the administration of supplements	No CG	Baseline (I1): FU with a physio, option of 2 booster sessions (I2): 7 individual sessions over 2-3 months FU: 3, 6, and 12 months	transition from f/t SL to partial SL or f/t RTW (national registry data) transition from p/t SL to lower gradient SL or f/t RTW (national registry data)	- I1 superior in facilitating fast RTW vs other groups I2 (or I3, I4) had no additional benefits over I1 on RTW At 12-month FU: reduced SL and p/t or f/t RTW I1 60% I2 50% (I3 51%, I4 53%), ns Comparison of f/t RTW at 12-month FU: I1 56% I2 47% (I3 51%, I4 48%), ns The only sign. difference between treatment groups for the first 3 months of FU: pairwise comparison suggested that sign. difference related to the lower SL rate in I1 vs other groups

Table 2 (cont.). *Summary of included trials and follow-up studies, and RTW outcomes*

Study author, country	Sample size *n*	Intervention type	Control	Intervention and FU schedule	RTW	
					Measure	Results "+" or "-" (sign.)
Skouen et al. 2002* Norway	I1=52 I2=57 CG=86 (211 LBP only sub-group from Haland Haldorsen et al. 2002)	(I1) Light multidisciplinary (I2) Extensive multidisciplinary	GP advice	Baseline assessment (1.5 hours) (I1): 1 session followed by up to 12 additional sessions (I2): 6 hour session 5 days p/w for 4 weeks FU: proportion of pps back at work recorded monthly and reported at 12, 18, and 24 months, data available for the first 26 months post-treatment	absence of benefit payments for a calendar month	+ men only I1 increased fRTW in men vs TAU (LDS post hoc test, p=0.03 at 12, p=0.02 at 18, and p=0.02 at 24 months)
Steenstra et al. 2006 The Netherlands	I=55 CG=57 (ITT I 55, CG 57; PP I 36PP, CG 53PP)	Graded activity	TAU guided by Dutch Occupational Physicians guidelines	Half-hour physical examination during the first session, then 26 one-hour sessions, 2 sessions p/w FU: 12, 26 weeks	duration of sick-leave in calendar days from the first day of sick-leave until full RTW for four weeks without sickness absence recurrence, and either in the same or different employment total number of sick-leave days in the follow-up period post-intervention	- Median time until lasting RTW longer for I vs CG (139, IQR=69 vs 111, IQR=76, Kaplan-Meier survival calculation, p<0.05)

*Note: * - follow-up study; BP=back pain; CBT=cognitive-behavioural therapy; CG=control group; CI=confidence interval; CP=chronic pain; f/t=full-time; FU=follow-up; I=intervention; IQR=interquartile range; ITT=intention-to-treat; LBCP=low-back chronic pain; LBP=low-back pain; ns=not statistically significant; p/t=part-time; p/w=per week; pps=participants; RR=relative risk; RTW=return to work; SL=sick-leave; TAU=treatment as usual.*

2.3.2 Population characteristics

Table 2 shows the main characteristics of included studies (detailed descriptions are available in appendix 5). Study randomised population sizes ranged from 103 (Cheng and Hung, 2007) to 654 (Haland Haldorsen et al., 2002) workers. The length of participants' SA and type of occupations varied greatly across trials. Both male and female workers were recruited and in 10 papers women outnumbered men (Haland Haldorsen et al., 1998b; Haland Haldorsen et al., 1998c; Haland Haldorsen et al., 2002; Skouen et al., 2002; Brendbekken et al., 2016; Jensen et al., 2001; Jensen et al., 2005; Steenstra et al., 2006; Lytsy et al., 2017; Reme et al., 2016). One study's sample comprised self-employed participants (Heinrich et al., 2009), which fitted within the concept of work adopted in the current project (see *Chapter One*). Studies which described a proportion of their participants as sick-listed (Haland Haldorsen et al., 2002; Skouen et al., 2002; Lytsy et al.,

2017) and which included both participants who were sick-listed at baseline due to CP, as well as those who were unemployed (Jensen et al., 2001; Jensen et al., 2005; Lytsy et al., 2017) were also included. The authors of these studies provided sub-group analyses which allowed for review of their trials under the current PICOS criteria.

2.3.3 Return to work outcomes

Definitions of RTW varied greatly (Table 2; detailed descriptions are available in appendix 6). Data were obtained from national registers (Jensen et al., 2001; Jensen et al., 2005; Lytsy et al., 2017; Reme et al., 2016) as well as self-reported measures (Corey et al., 1996; Lytsy et al., 2017). One study's authors analysed and reported outcomes for returners and non-returners (Haland Haldorsen et al., 1998c).

2.3.4 Type of return to work interventions

There were noticeable differences across the included trials in the types, format of delivery and follow-up schedules of RTW interventions (Table 2; detailed descriptions are available in appendix 6). Most treatments were multidisciplinary. A number of the trials had workplace-based (Myhre et al., 2014; Cheng and Hung, 2007), workplace-targeted (Heinrich et al., 2009), including workplace-specific/-based exercises and visits, job coaching (Cheng and Hung, 2007) or ergonomic elements (Lambeek et al., 2010; Cheng and Hung, 2007) within them. The multidisciplinary approach also included various education elements based around Cognitive Behavioural Therapy (CBT) and goal-setting, addressing health beliefs, focusing on function and teaching active pain management techniques. Intensity of interventions varied considerably across the RCTs.

2.3.5 Type of controls and follow-up

Six papers (5 trials) compared RTW interventions to treatment as usual (TAU) (Haland Haldorsen et al., 1998b; Haland Haldorsen et al., 1998c; Corey et al., 1996; Mitchell and Carmen, 1994; Lambeek et al., 2010; Steenstra et al., 2006). Cheng and Hung (2007) used different delivery modes (clinic-based versus workplace-based) to compare their effect on

RTW. Myhre et al. (2014) compared workplace-based and multidisciplinary interventions. Several RCTs compared rehabilitation programs of varying intensity with each other (Brendbekken et al., 2016; Lytsy et al., 2017) or with each other as well as TAU (Haland Haldorsen et al., 2002; Skouen et al., 2002; Jensen et al., 2001; Jensen et al., 2005; Heinrich et al., 2009; Reme et al., 2016). As part of the intervention, some authors (Corey et al., 1996) sent recommendations for GPs to promote proactive management, encourage activity, or limit medication. FU assessments varied from 2 weeks (Brendbekken et al., 2016) to 3 years (Jensen et al., 2005) - see appendix 6.

2.3.6 Effectiveness of interventions on return to work

Seven papers (5 trials) reported statistically significant results and effect sizes to suggest that examined interventions promote RTW among CP sufferers (Haland Haldorsen et al., 2002; Skouen et al., 2002; Jensen et al., 2001; Jensen et al., 2005; Corey et al., 1996; Lambeek et al., 2010; Cheng and Hung, 2007) (Table 2). The effective tertiary RTW interventions included multidisciplinary programmes with CBT, graded activity (GA), and functional restoration (FR) elements (Haland Haldorsen et al., 2002; Skouen et al., 2002; Corey et al., 1996; Lambeek et al., 2010); behavioural physiotherapy (Jensen et al., 2001; Jensen et al., 2005); and work-hardening with ergonomic exercises (Cheng and Hung, 2007). The current section describes findings pertaining to intervention characteristics (i.e. FR- and GA-specific; those with workplace elements; those with no TAU controls), participant risk profiles, and gender effects for effective and non-effective treatments.

Corey et al. (1996) found that a FR treatment resulted in self-reported ‘working’ status in 32.4% of people in the intervention group vs 15.6% controls, which was statistically significant. In sub-group analysis of different pain sites, RTW was significantly greater among treated LBP patients but did not differ for non-back pain (see appendix 6). Corey et al. (1996) was one of two (Mitchell and Carmen, 1994) trials with FR intervention and the only one which reported its significant effects on RTW.

Lambeek et al. (2010) examined an intervention consisting of multidisciplinary integrated care, with elements of GA and CBT, and directed at CP sufferers and their workplace. The authors reported significant differences between groups in favour of integrated care for sick-leave and functional status. In contrast, Steenstra et al. (2006) found that time until lasting RTW was longer for workers with CP who attended behavioural GA intervention ($p<0.05$). The difference in the intervention components between the two trials was the multidisciplinary, workplace-directed focus of the former trial.

Cheng and Hung (2007) found that 71.7% of workers in a workplace-based intervention could RTW or to modified duties versus 37.5% receiving a clinic-based treatment. RTW self-efficacy and having a job coach were important in achieving the RTW outcome. However, several other reviewed trials that examined RTW interventions with workplace elements reported mixed results. A multidisciplinary intervention with CBT and workplace elements helped only 50% of BP patients RTW at 12-month FU, which was comparable to 58% of patients from the control group (Haland Haldorsen et al., 1998c). There were no significant differences in RTW for this multimodal treatment (52% vs 53% TAU), independent of type of CP (Haland Haldorsen et al., 1998b).

In another trial (Heinrich et al., 2009), multidisciplinary treatment with workplace elements resulted in better RTW vs TAU at 6 months, but the effects dissipated by the second FU, and none was statistically significant. However, multidisciplinary approach was more effective than physical training on its own in promoting RTW (measured by shorter benefit claim duration). The sick-leave median length was longer for the physical training intervention group versus TAU ($p < 0.05$ at 6 months; the only significant result) (Heinrich et al., 2009). A different trial (Myhre et al., 2014) found no significant differences in RTW between a work-focused intervention and a multidisciplinary treatment but did not include TAU controls. A more recent trial without TAU controls (Brendbekken et al., 2016) also found no significant differences in full RTW at FU between a new multidisciplinary treatment for employees with CP, which aimed to promote patient-therapist communication, and a brief intervention. The percentage of workers in the multidisciplinary and brief interventions who achieved full-RTW at 12 months was 44.7% and 44.8%, and at 24 months 42.6% and 36.6%, respectively. However, patients in the multidisciplinary intervention did achieve faster RTW than the group receiving the brief intervention.

When trials reported non-significant results, they often suggested a positive trend for RTW; for example, this was reported for a sub-group of CP employees receiving acceptance and commitment therapy vs those in multidisciplinary treatment and controls (Lytsy et al., 2017). The same trial suggested positive, albeit mostly non-significant effects of the multidisciplinary intervention on RTW for the whole sample including non-CP patients (Lytsy et al., 2017).

Another trial with multidisciplinary treatment (Reme et al., 2016) had four interventions and no CG; specifically, a brief cognitive intervention, brief cognitive intervention with one type of supplement, brief cognitive intervention with another type of supplement, and finally brief intervention with added CBT. The findings suggested that the brief intervention on its own was superior in facilitating RTW vs other groups, although the results did not reach statistical significance.

One trial (Haland Haldorsen et al., 2002; Skouen et al., 2002) considered stratification to light and extensive multidisciplinary treatments. The authors found that CP sufferers with good RTW prognosis, determined by a score on a screening questionnaire, do equally well with RTW in any type of intervention or TAU. For individuals with medium risk of non-RTW a light intervention was sufficient, intensive program provided no additional gains, but TAU resulted in poor RTW outcomes. High-risk profile may require extensive RTW intervention as the other two treatments gave poor RTW results. At FU (Skouen et al., 2002), light multidisciplinary treatment increased full-RTW in men only vs TAU ($p<0.05$ at 12, 18, 24 months FU). There were no significant differences for extensive multidisciplinary intervention for men or women vs TAU.

Other studies found that women had medium or poor RTW prognosis, whereas men had good RTW prognosis (Haland Haldorsen et al., 2002) and a number of different variables (e.g. psychological problems at pre-test, reducing medication) predicted variance in RTW (e.g. Haland Haldorsen et al., 1998c; Corey et al., 1996). Jensen et al. (2001; 2005) also found different effects of interventions on RTW for men and women with CP. The study compared physiotherapy, CBT, multidisciplinary approach (including CBT and physiotherapy), and TAU and found no significant differences between groups in absence from work at 18-month FU. However, women in the multidisciplinary group had the best improvement in absence from work ($p < 0.05$) at 3-year FU (32). Total absence from work was lower for women in the multidisciplinary and physiotherapy groups at 18 months (Jensen et al., 2001) and in either of the treatment groups (physiotherapy, CBT, and multidisciplinary) at 3 years (Jensen et al., 2005) vs controls, but for men CBT group had the highest absence rates. Women in the physiotherapy and CBT groups had a lower risk of early retirement vs the CG (Jensen et al., 2001). Furthermore, women in the multidisciplinary treatment group returned to work faster than controls. Interestingly, physiotherapy group obtained better RTW results than the CBT group for both men and women, and better than the CG for women.

2.3.7 Secondary outcome measures

Ten papers (8 trials) reported results for secondary outcomes as listed below (Haland Haldorsen et al., 1998b; Haland Haldorsen et al., 1998c; Jensen et al., 2001; Jensen et al., 2005; Corey et al., 1996; Lambeek et al., 2010; Cheng and Hung, 2007; Heinrich et al., 2009; Steenstra et al., 2006; Reme et al., 2016). Studies employed a variety of recognized, self-reported inventories and daily ratings on visual analogue scales (VAS) to report secondary outcomes which included: pain intensity, (health-related) QoL and sleep, frequency of doctor’s visits and medication use, and other variables listed in appendix 6.

Secondary outcomes such as pain level (Haland Haldorsen et al., 1998b; Corey et al., 1996) and intensity (Heinrich et al., 2009; Reme et al., 2016), pain activity (Reme et al., 2016), sleep (Corey et al., 1996), work potential (Haland Haldorsen et al., 1998b), subjective health (Haland Haldorsen et al., 1998b), perceived health problems (Cheng and Hung, 2007), functional status (Lambeek et al., 2010) and QoL (Jensen et al., 2001; Jensen et al., 2005) were significantly positively affected by RTW interventions in 8 papers (7 trials). Five of those papers (4 trials) were the same ones as those, in which RTW was positively impacted by the intervention (Jensen et al., 2001; Jensen et al., 2005; Corey et al., 1996; Lambeek et al., 2010; Cheng and Hung, 2007). Post-intervention, the returners had less pain and reported more psychological strength (Haland Haldorsen et al., 1998c). Some improvements in secondary outcomes may be due to these variables deteriorating with TAU (Corey et al., 1996), some were only noted for women (Jensen et al., 2001; Jensen et al., 2005). Several trials reported improvements in some secondary outcomes but these were non-significant (Corey et al., 1996; Lambeek et al., 2010; Heinrich et al., 2009) or in favour of the control group (Steenstra et al., 2006).

2.3.8 Risk of bias and quality assessment (Tables 3 and 4)

ROB was assessed for trials together with their FU studies; therefore, ROB for 13 papers was assessed. There was between moderate and good agreement (Landis and Koch, 1977) between-raters for the majority of ROB domains with the exception of 'Blinding of participants and personnel' domain where the inter-rater reliability was very good (*K*= 0.87, 95% CI 0.62-1). A high ROB rating for one or more assessment criteria was given to three (Jensen et al., 2001; 2005; Corey et al., 1996; Lambeek et al., 2010) out of five successful intervention trials. Two (Cheng and Hung, 2007; Haland Haldorsen et al., 2002; Skouen et al., 2002) had medium- and low-risk elements across all categories. For quality assessment, all 16 papers were reviewed separately as they included varying level of detail pertaining to the assessed criteria. The highest quality ratings were for groups being similar prognostically (15/16 positive scores) and the lowest was for groups having equivalent treatment time (1/16 positive scores). Only two successful trials reported details of power calculations (Jensen et al., 2001; 2005; Lambeek et al., 2010); the former was underpowered. Among the unsuccessful studies, five reported power calculations, with the majority being sufficiently powered.

2.4 Discussion

Out of 16 articles (13 RCTs and their FUs) reviewed, 7 papers (5 trials) reported statistically significant results and effect sizes to suggest that examined RTW interventions promote RTW among workers with CP (Haland Haldorsen et al., 2002; Skouen et al., 2002; Jensen et al., 2001; Jensen et al., 2005; Corey et al., 1996; Lambeek et al., 2010; Cheng and Hung, 2007), although not to the same extent for all participant groups or types of RTW outcomes. Whilst the results were varied, overall multidisciplinary interventions tended to yield better RTW results. Although not all employees with CP returned to work post-intervention, in 8 articles (7 trials) secondary outcomes such as QoL and general functional ability improved at FU.

Table 3. *Risk of bias assessment* of included trials*

Authors	*Sequence generation*	*Allocation concealment*	*Blinding of participant and personnel*	*Blinding of outcome assessors*	*Incomplete outcome data*	*Selective outcome reporting*	*Other sources of bias*
Brendbekken et al. 2016	L	L	H	U	L	L	L
Cheng and Hung 2007	U	U	U	U	U	L	L
Corey et al. 1996	H	U	U	H	H	H	U
Haldorsen et al. 1998b, 1998c*	L	U	U[a]	U[b]	U	L	L
Haldorsen et al. 2002, Skouen et al. 2002*	L	U	U	U	L	L	L
Heinrich et al. 2006	L	L	L	L	H	L	L
Jensen et al. 2001, 2005*	L	L	U	L	H	L	L
Lambeek et al. 2010	L	L	H	L	H	L	L
Lytsy et al. 2017	L	U	U	U	L[c]	L	L
Mitchell and Carmen 1994	H	U	U	H	U	U	H
Myhre et al. 2014	L	L	H	H	H	L	L
Reme et al. 2016	L	L	L	U	L	L	U
Steenstra et al. 2006	L	L	L	L	L	L	L

Note.

H = high risk

U = unclear from paper

L = low risk

* trials and their follow-up studies have been assessed together and given one rating in each category

[a] H when participants; U when personnel

[b] U when physicians; H when participant self-rating

[c] high drop-outs in self-reported outcome measures

Table 4. *Quality assessment of included trials*

Authors	*No. of withdrawals/ dropouts mentioned? If so was this by group? What were the numbers?*	*Reasons for withdrawals/dropouts given? If so was this by group? What were the reasons?*	*Practitioner training level satisfactory?*	*Therapeutic time equivalent between groups?*	*Power calculation conducted?*	*Groups similar on prognostic indicators?*
Brendbekken et al. 2016 (33)	Yes Yes I: 11 CG: 15	No No	Yes	No	Yes	Yes
Cheng and Hung 2007 (39)	Yes Yes I: 5 CG: 4	Yes, as excluded from analysis but not by group. Unable to follow treatment due to deterioration, personal reasons.	Unclear	Yes	Unclear	Yes
Corey et al. 1996 (36)	Yes No Total: 14 at intake and unclear no. at FU	Yes, but not by group. Refused treatment, non-compliance, declined FU, unreachable.	Unclear	No	Unclear	Yes
Haldorsen et al. 1998b (28)	Yes Yes Data obtained at post-test from a total of 293 (94%) of the original treatment group and 94 (60%) of CG	No No	Yes	No	No	Yes
Haldorsen et al. 1998c (29)	No No	No No	Yes	No	No	Yes
Haldorsen et al. 2002 (30)	No No	No No	Yes	No	No	Yes
Heinrich et al. 2006 (40)	Yes Yes I1: 19 I2: 26	Yes Yes Non-compliance (distance, lack of motivation, symptoms improvement, contra-indication, already treatment, not able to follow, drop-out)	Yes	No	Yes	Yes, except for history of complaints ($p<0.05$)
Jensen et al. 2001 (34)	Yes Yes Treatment drop-outs n=28 I1: 6 I2: 8 I3: 14 (proportions similar between treatments) Non-response rate for SF-36 9.7% (PP) at 18 months FU (0% I1, 9.8% I2, 8.2% I3, and 20.8% CG (differences were significant)	No	Yes	No	Yes	Yes

Table 4 (cont). *Quality assessment of included trials*

Authors	*No. of withdrawals/ dropouts mentioned? If so was this by group? What were the numbers?*	*Reasons for withdrawals/dropouts given? If so was this by group? What were the reasons?*	*Practitioner training level satisfactory?*	*Therapeutic time equivalent between groups?*	*Power calculation conducted?*	*Groups similar on prognostic indicators?*
Jensen et al. 2005 (35)	Yes Yes Total treatment drop-outs n=28 I1: 6 I2: 8 I3: 14	Yes At FU: non-responders (questionnaire)=43, deceased=6; CG no.s not given for drop-outs, at FU 42% non-response for the questionnaires in CG	Yes	No	Yes	Yes
Lambeek et al. 2010 (38)	Yes Yes Post-randomisation I: 4 CG: 1 Five further pps did not participate in I for various reasons (incl. no approval from employer), 12 received only two I elements; At 12-month FU I: 2 CG: 3	Yes Yes I: withdrawal, dissatisfied about treatment, recovered, questionnaire lost, no job, lost interest CG: withdrawal, no contact, died, no job, questionnaire lost in post, lost interest	Yes	No	Yes	Yes (differences ns)
Lytsy et al. 2017 (42)	No *not in the paper, but email correspondence suggests numbers	No	Unclear, but likely (clinic-based)	No	No	Yes, except for lower activity level for CG; differences in activity levels between I1 vs CG, and I2 vs CG sign. (p=0.01)
Mitchell and Carmen 1994 (37)	No	No	Unclear, but likely (clinic-based)	No	Unclear	Yes
Myhre et al. 2014 (32)	Yes Yes Drop-outs straight after randomization I: 9 CG: 17 11 in intervention and 8 in control considered noncompliant (participants were compliant if they attended 50% of appointments) but were included in analyses (total 405)	No No	Yes	No	Yes	Yes

Table 4 (cont.). *Quality assessment of included trials*

Authors	*No. of withdrawals/ dropouts mentioned? If so was this by group? What were the numbers?*	*Reasons for withdrawals/dropouts given? If so was this by group? What were the reasons?*	*Practitioner training level satisfactory?*	*Therapeutic time equivalent between groups?*	*Power calculation conducted?*	*Groups similar on prognostic indicators?*
Reme et al. 2016 (43)	Yes Yes Drop-outs after randomization: Only I4: 1 Primary outcome drop-outs at FU: I1: 0 I2: 1 I3: 0 I4: 0 Secondary outcomes drop-out rates listed by group	No	Unclear, but likely (clinic-based)	No	Yes	Yes
Skouen et al. 2002 (31)	Yes Yes – 3 in I1 group did not complete and had their right to have data removed. Overall, data from 208 patients (195, as RTW data not available for government employed workers)	No	Yes	No	No	Yes
Steenstra et. al 2006 (41)	Yes Yes I: 19 CG: 4 No loss of pps at FU	Yes Yes Other practitioner's interference, miscommunication, change of job, contradictions, not able to follow the regime, drop-outs, distance; In CG: <8weeks of SL	Yes	No	Yes	No (economic sector, gender, and f/t SL differed)

Note. CG=control group; f/t=full-time; FU=follow-up; I=Intervention; PP=per protocol; pps=participants; RTW=return to work; SF-36=Short Form 36; SL=sick-leave

The successful RTW interventions often comprised workplace elements (e.g. Cheng and Hung, 2007; Lambeek et al., 2010). One of the reviewed studies (Cheng and Hung, 2007) took place in Hong Kong where it is not customary for employers to help to manage employees' work disability. However, findings from Cheng and Hung's (2007) study support the idea of the importance of workplace factors and the role of a job coach in the RTW process. In addition, workplace-based intervention with a job-coach working in a liaison with employers was more effective than clinic-based rehabilitation in promoting RTW in workers with CP.

Similarly, an integrated care intervention which was directed at both employees with CP and their workplace, helped to facilitate earlier RTW in comparison to TAU (Lambeek et al., 2010). Importantly, the authors reported that lack of approval from workers' employers meant that some workers did not participate in the RTW intervention (Lambeek et al., 2010). This may be essential when considering various stakeholders’ influence on the RTW process, as Krause et al. (2001a) suggested there is an association between low supervisory support and lower RTW rate.

Previously, Anema et al. (2009) found that job re-design and adaptations to workplace and working hours were related to earlier sustainable RTW. However, contrasting results regarding the effectiveness of work-focused interventions and multidisciplinary interventions with occupational elements have been reported here (e.g. Myhre et al., 2014; Brendbekken et al., 2016). Some authors (Brendbekken et al., 2016) suggested that the limited extent of the workplace element and placing responsibility of FU at work on employees with CP might have reduced the effectiveness of the multidisciplinary approach.

Whilst trials reported mixed results regarding multidisciplinary RTW interventions, these treatments seem to provide better support for workers trying to RTW versus CBT or physical treatments alone (Jensen et al., 2001; Heinrich et al., 2009). In fact, CBT-only interventions resulted in delayed RTW versus TAU for some CP sufferers (Jensen et al., 2005). These findings echo the recent trial (Pike et al., 2016) which found no effect of psychological interventions on RTW with CP, and support a more interdisciplinary approach.

Mixed findings from the reviewed trials could be partially explained by the way in which trials operationalised RTW. Previously, similar issues related to inconsistent operationalisation of work absenteeism were reported (e.g. Kamper et al., 2015). Here, Corey et al. (1996) found enhanced RTW rates in treated workers who self-reported on the RTW measure, although the effect was stronger in other studies where RTW was assessed more objectively by examining the status of workers’ benefit payments (e.g. Haland Haldorsen et al., 2002). Corey et al. (1996) argued that the latter RTW measure lacks validity, since the termination of benefit payments might stem from reasons other than RTW. Previously, Krause et al. (2001b) also argued against the usefulness of ‘administrative’ criteria for RTW. However, Mitchell and Carmen (1994) noted that for approximately 90% of workers with CP, stopped benefit payments are a common signal of RTW.

Inconsistent operationalisation of work-related outcomes may be linked to social security systems and political contexts in the different trial countries, and could affect varying success rates. Here, 2 trials out of 5 with positive RTW intervention effects were based in Scandinavia, where the sick-pay provision differs from the provision in non-Scandinavian countries (e.g. Spasova, Bouget and Vanhercke, 2016). For example, in Norway, full sick-pay is provided for a year (Brendbekken et al., 2016). Evidence suggests, more flexible social security systems (e.g. allowing partial RTW whilst continuing to provide benefit payments) seem to yield better results and are associated with earlier sustainable RTW (Anema et al., 2009).

Elsewhere, Johansson et al.'s (1998) findings support the Swedish system which accepts that occupational training (measured by percentage of sick-leave and the number of daily hours of occupational training patients did) is the first step when returning to work after SA, either as a worker or as unemployed. Similarly, Haland Haldorsen et al. (1998a) suggested that compensation systems of various countries may impact the sick-role representation amongst CP workers. Flexibility in benefit provision alone may not lead to earlier and sustainable RTW without other cultural changes (Anema et al., 2009), such as increasing workplace involvement as suggested by the encouraging results from trials with workplace elements described above.

This review included a trial finding that matching treatments' intensity to employees' risk profiles let to better RTW (Haland Haldorsen et al., 2002). This follows Rudy et al. (1995) who argued that matching interventions to different sub-groups of patients could lead to better effects. The stepped-care approach appears to yield promising results for CP sufferers with different risk profiles in the UK (e.g. Foster et al., 2014). However, there are significant challenges to implementing stepped-care approach; for example, heterogeneity of CP sufferers requires development of effective diagnostic tools (Haland Haldorsen et al., 1998c). Extensive treatments could provide a way of treating patients with generalised pain, whereas simple strategies might suffice for patients with a more localised pain (Skouen et al., 2002). However, Haland Haldorsen et al. (1998b) found no differences in RTW between the multidisciplinary treatment and TAU for workers with CP who included back, neck, and shoulder, and differences for those with generalised pain were non-significant.

Trials included here found that multidisciplinary interventions with educational and workplace elements improved psychological variables such as reducing distress and belief that participants should be cured by their doctor (e.g. Haland Haldorsen et al., 1998b), and interventions promoted partial-RTW (Brendbekken et al., 2016). However, Turk and Rudy (1993) argued that CP patients may determine success of their therapy differently to the therapists, thus affecting RTW. Furthermore, mixed RTW results from multidisciplinary interventions could be partially due to difficulties associated with returning people with chronic health issues to employment (Wainwright et al., 2019b).

The length of time patients spent being sick-listed varied greatly across the reviewed studies. Whilst the risk for a non-RTW is associated with long-term sick-leave prior to rehabilitation (Øyeflaten et al., 2014), Staal et al. (2004) argued that participants do not tend to RTW during periods of active treatment, which could affect the results of trials of interventions with duration of several months. Furthermore, men do not tend to engage in partial-RTW, thus full-time sick-leave might be a preferred option for this sub-group (Jensen et al., 2005). However, elsewhere Watson et al. (2004) found that time was not a key factor in RTW. A multidisciplinary treatment led to RTW in approximately 40% of participants who were unable to work for more than 3 years (Watson et al., 2004) and vocational services were an important design feature of the RTW intervention. The latter is a finding echoed by the reviewed trials, as discussed earlier.

Whilst many interventions seem beneficial for CP sufferers, the differences in outcomes between interventions and comparison groups seem to dissipate with FU as expected (Jensen et al., 2001; Heinrich et al., 2009). These findings highlight the need to consider RTW interventions for CP not only in terms of their effectiveness, but also in terms of their potentially hindering RTW. Furthermore, this also has important implications for the design of future research in the area of RTW and CP, including optimising participant waiting times before the start of interventions, matching participants' (risk) profiles to intervention type and intensity, and incorporating better collaboration strategies between the various stakeholders in the RTW process.

It is also important to highlight some of the limitations due to methodological issues in the included RCTs. Three out of five successful intervention trials received a high ROB rating for between one and four assessment criteria. It was sometimes unclear whether some of the trials were blinded and non-blinded allocation is arguably the most important source of bias in RCTs (Schultz et al., 1995). However, due to heterogeneity of treatments included in the reviewed trials, it could be argued that blinding was not possible. The highest number of low ROB ratings in the successful trials was five and among the unsuccessful trials, four had five or more low ratings.

Included trials also varied in quality; limited detail in some of the older trials made it more complex to establish details of their procedure. It was unclear whether all trials conducted power calculations before recruiting their samples and in some cases, statistical power was low. As such, whilst the unsuccessful trials were not consistently lower on ROB than the successful ones, the effects of interventions might have been overestimated due to insufficient power in the successful trials, as found elsewhere (e.g. Ezzo et al., 2000). It is plausible that positive findings were associated with weaker study designs. Whilst done in some papers, any significant effects of interventions presented under per-protocol criteria would provide lower level of evidence (Shah, 2011). That said, the current findings on the importance of multidisciplinary interventions for RTW for workers with CP are consistent with those reported elsewhere (Cullen et al., 2018; Kamper et al., 2015), including the critique of methodological designs of the included studies (Kamper et al., 2015; Wainwright et al., 2019b).

The current review has limitations. The comprehensive literature search and a rigorous systematic process involving three reviewers (the thesis author and the members of the supervisory team), ensured that relevant studies were selected. However, as only the sources published in English be reviewed, it is acknowledged that there is an element of language bias which applies here. Furthermore, none of the reviewers were blind to the studies' authors or the publication. However, Moher et al. (1998) and Verhagen et al. (1998b) argued that blinding of reviewers is not a necessary requirement in systematic reviews.

Furthermore, a relatively small number of RCTs was found and those studies had varied designs and quality of RTW interventions and RCTs, heterogeneous populations, descriptions of RTW outcomes, and inclusion of a group design which somewhat opposes the idea that individual patients may resemble the average patient (Carter, Lubinsky and Domholdt, 2011). This restricts the current review's ability to be able to fully generalise the findings and raises an issue of differentiating between the effectiveness and efficacy of interventions (e.g. Steenstra et al., 2006). Equally, social interactions and social settings can influence outcomes of an intervention outside of a trial (Deaton and Cartwright, 2018). Due to the problematic, multifactorial nature of CP, effective RTW intervention might not be best identified by another RCT; thus, stakeholder perspective should be sought to account for the psychosocial factors involved in RTW with CP, including individual circumstances and priorities that an efficacious intervention ought to address (e.g. Greenhalgh, 2019). High-quality non-RCT evidence should not be discounted and scientific knowledge on RTW with CP should arguably be built by a combination of approaches to see why interventions work (instead of solely what interventions work; e.g. Deaton and Cartwright, 2018). This is why, whilst RCTs were seen as helpful with answering RQ1, qualitative studies for this project were designed to help to answer the follow-up RQs, and all added to a network of evidence.

Cost savings were not analysed in the current review. However, several studies suggested financial benefits of implementing multidisciplinary interventions (e.g. Jensen et al., 2005). Future studies summarising the evidence regarding the cost-effectiveness of multidisciplinary treatments would therefore be useful. Finally, some of the trials potentially meeting the adopted PICOS inclusion criteria had to be excluded due to insufficient resources towards translation of non-English papers, a lack of sufficient detail originally provided by the studies' authors and/or no reply to the attempted communication within a given 3-week timescale (see appendix 4 for the list of excluded studies). Thus, further methodologically robust studies are recommended.

2.5 Conclusions

There is no conclusive evidence to fully support any specific type of tertiary RTW intervention for workers with CP but multidisciplinary efforts with workplace-based or workplace-oriented elements, targeted to patients' risk profiles should be considered. Future research efforts might be best focused on exploring individuals' perspectives on efficacious RTW treatments. Researchers should also optimise operationalisation of RTW outcome. Varying results concerning RTW interventions for employees with CP from across various compensations systems suggest workers' compensation is an important area to consider for policymakers addressing RTW.

As CP is a multifactorial problem, the current review contributed to the discussion on what works for RTW with CP (RQ1), but it did not fully answer it. Furthermore, the evidence from the UK was lacking, yet the focus of the thesis is on the UK rather than on the global perspective to account for the potential impact of factors such as culture and/or policy on the RTW process (Cancelliere et al., 2016). The lack of evidence regarding UK RTW interventions and noted impact of national compensation arrangements (see *section 1.7*) meant that follow-up RQs, focused specifically on outcomes for British workers needed to be addressed (Figure 1 in Chapter One). Next, *Chapter Three* describes a rapid access literature review which aimed interrogate the literature pertaining to the UK perspective on CP and RTW interventions.

Chapter Three: UK return to work interventions for workers with chronic pain: a rapid access literature review

3.1 Introduction

The rapid access review (RAR) described below was prompted by the findings in *Chapter Two* and specifically, the lack of findings related to the current UK practice and RTW outcomes for British workers with CP. With estimates that over 40% of the UK workforce will suffer with at least one work-limiting condition by 2030, it is paramount to focus on delivering helpful interventions aimed at managements as well as prevention of employees' health issues (Bevan, 2016). The RAR approach streamlined the systematic method to access relevant evidence in a timely maner (Ganann, Ciliska, and Thomas, 2010), with an aim to answer the following RQs:

RQ2: What RTW chronic pain interventions are currently available in the UK?
RQ3: How does this compare to the findings from the SLR?
RQ4: What are the success rates of the current UK RTW chronic pain interventions?

3.2 Method

The literature search included Google Scholar, PsycINFO, MEDLINE, Science Direct, and PubMed databases. Grey literature was not specifically searched for, but it was included when the databases returned grey literature documents (e.g. policy and guidelines documents). A rapid access narrative review can be defined as a review that uses streamlined methods to interrogate the literature and which often informs healthcare system planning and policy (Ganann, Ciliska and Thomas, 2010). Rapid review was deemed appropriate to identify evidence pertaining to the 'current' UK RTW interventions for CP, since information was to be gathered from many sources to summarise and conclude *"'what we know' about the subject*" (Nilsen, 2015, p.2). The databases were searched using a number of search terms in several variations (appendix 7) to subsequently form the whole review. Terms 'chronic pain' OR 'musculoskeletal' were employed rather than 'disorder' or 'condition', since the former were seen as more inclusive than any of the latter terms.

Notably, difficulties in researching musculoskeletal conditions due to their interchangeable classification as 'disorders' and 'diseases' has previously been highlighted (e.g. Coole et al., 2013) and terms such as 'disorders' and 'conditions' have both been used by previous studies interchangeably (e.g. Zheltoukhova, O'Dea and Bevan, 2012).

Searches were restricted to include sources from 2013 through to the time the review was being undertaken and updated (May 2017-18), to reflect the focus of the literature review on the 'current' state of practice. A similar strategy of restricting publication date range was employed in other studies (e.g. Nuckols et al., 2014), to account for the risk of evidence (e.g. clinical practice guidelines) being outdated. Relevant documents were added to the review if identified via email updates from the database or by hand-searching, but dedicated searches were no longer performed past the initial update. The search of Google Scholar was restricted to the first twenty pages of results based on Haddaway et al. (2015). The titles, abstracts, and finally the full text of the identified documents were assessed for relevance to the RQs, following Waddell and Burton (2006). Relevant references from the main text of the selected articles were retrieved and assessed. Where the results from identified studies or their FU have not yet been published, the authors were contacted to discuss their findings for potential inclusion in the review. One author did respond to such request but the data supplied did not fit and thus was not used in the current review. Similar to the SLR in *Chapter Two*, papers describing surgical/pharmacological only interventions were excluded and priority was given to discussion of evidence relating to other tertiary RTW interventions. Inclusion criteria set up for the RAR (i.e. limiting the timeline to reflect the 'current' state of practice, including journal articles, systematic reviews, meta-analyses, randomised controlled trials, clinical guidelines and policy documents) were deemed adequate and the strategy robust enough, since a similar strategy to rapid literature searching had been employed by studies in the past (Ganann, Ciliska and Thomas, 2010).

3.3 Results

The database search returned evidence which largely related to the effectiveness of UK interventions on outcomes other than RTW (including perceived disability, pain disability, and QoL), and for which data on RTW were not available. Several of the located papers were protocols only or pilot studies, some of which listed work absence and presenteeism outcomes (e.g. Bishop et al., 2015). Furthermore, there was marked heterogeneity across the outcomes measured by the identified studies. Whilst a variety of outcome measures are currently being employed by CP research (Deyo et al., 2014), such heterogeneity is problematic.

3.3.1 Current (RTW) interventions in the UK

3.3.1a The importance of the multidisciplinary pain management versus the current provision

UK pain management services can be found in primary, secondary, and tertiary care settings (McGhie and Grady, 2016). Their provision has been set out in the Core Standards by the Faculty of Pain Medicine (FAPM; McGhie and Grady, 2016) and the biopsychosocial model of pain (see *Chapter One*), which was a starting point for the development of multidisciplinary programs aimed at management of CP (Gatchel et al., 2014). The multidisciplinary component of pain management framework has been shown to be a crucial component for the success of the service (McGhie and Grady, 2016). Moore et al. (2013) recently suggested that most people suffering with pain do not respond well to any single intervention, but most will respond to at least one intervention. However, most of the services in the UK aimed at people with musculoskeletal disorders do not comprise direct access to a multidisciplinary team (Jacobs et al., 2016) and thus the complex psychosocial nature of pain may not be fully addressed.

Between 2010 and 2012, the National Pain Audit was conducted in order to summarise the effectiveness of pain services in the UK and to suggest future standards of provision of service for CP patients (National Pain Audit, 2013). The findings revealed pronounced differences in the level of care provision and classification of available interventions by the service providers (National Pain Audit, 2013). For example, only 40% of Pain Clinics in England are multidisciplinary in their structure (McGhie and Grady, 2016), i.e. with an input from a psychologist, physiotherapist, and physician (National Pain Audit, 2013). Equally, many patients surveyed as part of the audit reported that the available pain services in England and Wales have been supportive and positively affected their QoL (56% of the audited clinics reported QoL improvements for their patients; National Pain Audit, 2013). The audit also recognised issues with access to secondary and tertiary pain services appointments, and shortage of resources within such services. For example, a quarter of CP patients faced a wait of 22 weeks for an outpatient appointment, with the longest waiting time reaching 90 weeks (National Pain Audit, 2013). The audit concluded a need to carry out more research in order to identify best practice, cost-effective models of care. Whilst the audit did not specifically consider RTW interventions or outcomes, work was deemed to be the aspect of people's lives most affected by pain (National Pain Audit, 2013).

3.3.1b Stratified care versus the non-specific nature of CP

In the UK, in the majority of cases where workers experience health issues, the first line of occupational healthcare is delivered by their GP (Bishop et al., 2014). The NHS website offers CP advice which also follows the stratified care principle (NHS, 2014). However, despite the potential societal benefits of stratified care (e.g. Whitehurst et al., 2015), Carrington Reid, Eccleston and Pillemer (2015) argued that clinicians are not always confident in deciding whether the administered assessment of pain has been comprehensive enough to allude to a cause, and specific guidance is lacking. Similarly, when advising patients about work GPs do not feel adequately prepared to discuss issues of work (Hann and Sibbald, 2011).

Despite the challenges regarding determining workers' RTW capacity (e.g. Wainwright et al., 2015), Johnson, Collett and Castro-Lopes (2013) surveyed over 1000 primary care professionals from 13 European countries and found that pain assessment tools were often under-used and the results were not being recorded. Among 104 surveyed UK physicians only 26% reported using pain assessment tools, which was the smallest percentage out of the surveyed countries, and compared to 48% of all survey respondents. Furthermore, 22% of UK primary care physicians reported using the tools but failing to record the results (Johnson, Collett and Castro-Lopes, 2013). Arguably, pain assessment should focus on the impact of pain on an individual's function, since many variables (e.g. situation context) might affect how CP sufferers rate their pain; yet the importance of VAS scales can be linked to establishing whether the individual's pain has changed (e.g. following an intervention).

Shortfalls within the doctor-patient communication about the biopsychosocial factors of CP also negatively affect patients' experience and expectations of treatment (e.g. Evers et al., 2017). Mills, Torrance and Smith (2016) suggested that mutual agreement between a CP patient and their GP on achievable treatment goals makes it easier to measure the effectiveness of a treatment. Furthermore, Mills, Torrance and Smith (2016, p.4) argued that '*freedom from pain*' should not be set as a typical CP treatment goal and instead things such as QoL should be adopted. Focus on addressing the effects of pain rather than its cause is what differentiates approaches to management of chronic versus acute pain (Mills, Torrance and Smith, 2016). McGhie and Grady (2016) argued that by assisting CP patients with managing and living with symptoms of their condition, the pain services play a humanitarian role.

STarT Back (Stratified Risk Assessment and Care) provides stratified care for people with LBP, which screens patients to assess their risk of permanent disability, targeting treatments of specific intensity to patients with a medium and high risk profile (Foster et al., 2018). This intervention has been shown to be effective in reducing healthcare use and work absence ($p<0.05$) (Hill et al., 2011; Whitehurst et al., 2012; Foster et al., 2014) as well as reducing the care-delivery costs and those related to days lost from work (Foster et al., 2018). The use of STarT Back in GP consultations has been encouraged (Arthritis Research UK, 2017).

UK physiotherapy practitioners working with patients with non-specific LBP often sub-classify individuals backwardly (to any of the currently available classifications, e.g. STarT Back), once they feel no progress has been achieved following the original classification (Sheeran, Coales and Sparkes, 2015). However, delivering the more intensive pain management programs because of reclassification is often hindered by geographical restrictions (Mills, Torrance and Smith, 2016). Breivik et al. (2013) found that in majority of European countries only a small proportion of CP patients (0.5 – 2%) are referred to secondary care for pain management. In the UK, only about 20% of pain patients are referred to physical therapy treatments beyond primary care (Foster et al., 2014).

An IMPaCT study by Foster et al. (2014) evaluated stratified care provided to LBP patients by GPs. The study utilised prognostic screening combined with matched treatment. Sixtythree percent of the patients in the UC group and 65% in the stratified care group were CP patients. The IMPaCT interventions focused on better clinical management of LBP, to reduce disability and improve function, including everyday activities such as engagement in work. The study found that patients recruited to the stratified model of care received 30% less sickness certifications and had 50% less time off work (medium-risk patients) versus the UC group and a mean saving related to work absence of £400 over 6 months per each employed patient was reported (Foster et al., 2014). In the FU analysis within the risk groups, Whitehurst et al. (2015) noted similar proportions of patients who reported work absence across the various phases of the IMPaCT study. Moreover, mean SA was less than 1 day in the low risk and UC groups, but medium and high risk groups reported approximately 6 fewer SA days versus the UC group (Whitehurst et al., 2015). Subsequently, Whitehurst et al. (2015) calculated £736 and £652 of absence-related savings per each medium and high risk employee, respectively. However, no sub-group analyses aimed specifically at the CP patients in the IMPaCT study (Foster et al., 2014; Whitehurst et al., 2015) were available, and the data provided by the study authors did not fit the aim of the current review, thus a final conclusion regarding work-related outcomes for those CP patients who received stratified care cannot be drawn.

3.3.1c The Fit Note

The European Agency for Safety and Health at Work (EASHW, 2016) published a report describing rehabilitation and RTW policies and systems in the EU Member States. According to the report (EASHW, 2016) the UK is amongst countries (including Belgium, France, Iceland, Italy, Luxembourg, and Switzerland) where a well-developed framework for rehabilitation and RTW is hindered by the lack of coordination between the providers of the various steps of care. Subsequently, RTW is not being adequately addressed with workers on sick-leave until the end of their absence from work (EASHW, 2016). However, recent policy changes mean that the RTW services in the UK have been moving towards a more integrated and comprehensive model (EASHW, 2016). The main objectives in this shift in approach were to propose strategies to reduce the number of people who might move away from work due to health issues, as well as reducing the costs associated with SA for all stakeholders involved, including workers suffering from reduced socio-economic status, employers paying sickness benefit, and the state paying health-related benefits.

Several flagship policy documents have been produced in the recent years, which steered the change in approach to CP management. In April 2010, following the 2008 Black review, the Statement of Fitness to Work (i.e. the FN) was introduced in the UK as a replacement of the sick note (Lalani et al., 2012). The aim of the new format was to implement an extended categorisation of fitness to work (i.e. 'fit', 'unfit', or 'may be fit' to work), and subsequently for the necessary adjustments to be addressed when employees 'may be fit' to work. A key ideological underpinning here is to highlight evidence that one does not have to be 100% fit to have a productive working life (Walker-Bone and Black, 2016). A second key ideology behind the FN concept is that healthcare professionals (often but not exclusively GPs) can assess workability. However, this is challenging (Dorrington et al., 2018; Wainwright et al., 2015). A key point of utility of the FN was to encourage partial RTW, based on strong evidence from Nordic countries that this leads to better occupational health outcomes (Markussen, Mykletun and Røed, 2012). The introduction of the FN was to help to facilitate RTW by stressing the importance of the psychosocial benefits of re-joining work (e.g. Waddell and Burton, 2006) and aiding the communication between the RTW stakeholders (Shiels et al., 2013), whilst acknowledging the nuanced nature of being fit to work (Lalani et al., 2012). Specifically, Waddell and Burton (2006) and Black (2008) argued that there are benefits of RTW for people who are sick or disabled, from a therapeutic, societal, and economic perspective. However, detrimental health effects from work have also been noted, and the nature of work and social context highlighted as important considerations when recomending RTW (Waddell and Burton, 2006). When the FN was introduced in the UK it was accompanied by a national education program for GPs, OH professionals, patients, and employers; e.g. specific guidance was published in the British Medical Journal to help GPs with effective questioning and formulation of recommendations related to RTW (Coggon and Palmer, 2010). This was designed to ease the logistic transition of the FN as it was operationalised in primary care (Wainwright et al., 2011b).

Following the shift in the UK's sickness certification policy, one of the main recommendations from the Fit for Work Europe study (The Work Foundation, 2009) was that the national governments in EU countries should consider introducing a version of the FN for workers suffering with musculoskeletal disorders, as was adopted in the UK. Similar changes to the sickness certification processes, which have built on the FN, have recently taken place elsewhere (e.g. Australia; Coole et al., 2015b). The UK FN was designed to change employees' conceptualisation of illness (Lalani et al., 2012) and become the government-supported positive intervention. Shiels et al. (2013) found that the FN is likely to have had an impact on facilitating RTW and thus reducing the length of SA. Furthermore, Chenery (2013) reported that 71% of employees found the FN useful in helping to identify adjustments promoting RTW. However, Shiels et al.'s (2013) findings have to be taken with caution since they compared studies which were conducted across different time-points and with significantly different samples of participants. Moreover, further evaluation of negotiating fitness to work revealed patients' mixed views regarding the usefulness of the FN (e.g. Wainwright et al., 2011b; 2015).

Introducing the FN approach should have helped to shift the general focus from employees' incapacity to their capacity. Subsequently, the British Pain Society's guidelines stress the importance of using FNs, and incorporating any advice describing patients' altered ability to work and required adjustments (Lee et al., 2013). However, a relatively low number of 'may be fit' to work categories have been used by GPs (Black and Frost, 2011; Chenery, 2013) prompting the government to recommend a more systematic monitoring of sickness certification (DWP, 2015). Coole et al. (2015b) argued that the lack of education and training in completing FNs affects GPs' confidence in following the certification process effectively. Subsequently, the content of FNs is lacking useful information (e.g. comments on how patients' functional status is affected by their condition, which stakeholder should be utilising to improve RTW outcome; Coole et al., 2015b). Similarly, Money et al. (2015) found that prior training (e.g. in occupational medicine) led to GPs expressing more positive attitudes towards patients' RTW and the FN. Ong et al. (2014) argued that health professionals' views of behaviour change interventions could affect their readiness to relinquish a degree of power and adopt a patient-centred approach necessary to support self-management. Subsequently, Ong et al. (2014) suggested that clinicians may struggle to uptake new clinical guidelines which depart from the established routine, which could perhaps explain the low usage of 'may be fit' to work classification. Therefore, more training for GPs is required to educate and support them in considering RTW as an achievable treatment goal and a consultation outcome.

One such training initiative is an online learning tool that includes information and guidance on health and work-related issues (Aylward et al., 2013). The tool is available via the Healthy Working UK website (Aylward et al., 2013). Managed by the Royal College of General Practitioners, this online resource is targeted at GPs and secondary care physicians. The tool helps to promote a shift in attitudes initiated by the introduction of the FN, and to improve healthcare practitioners' knowledge about OH issues (Aylward et al., 2013). In January 2016, a new process involving gathering data on the number of computer generated FNs issued in England, their category ('unfit' vs 'may be fit' for work), duration, and recipients' gender was initiated by the UK government (DWP, 2015). The action was in response to calls for more accurate data collection strategies on the usage of the FN (Black and Frost, 2011) to inform future RTW policy. There are multiple recommendations to facilitate effective FNs and thus to allow an effective dialogue between the stakeholders in the SA process (Coole et al., 2015b). However, implementing those recommendations has proven difficult in practice, and further guidelines, supporting the costs and improving the workability of IT systems used, and training for all stakeholders seem necessary (Coole et al., 2015b). Recent report on certified SA recurrence suggested that 20% of patients had recurrent FNs in the same year (Shiels et al., 2016). Musculoskeletal disorders (including back problems), as well as the first FN not reflecting 'may be fit' category were amongst factors associated with having a repeated SA certification episode (Shiels et al., 2016).

A further aspect of RTW linked to the limited success of the FN is the tentative impact of employee affective factors, such as positive work orientation, resilience, and sick-role investment. Black and Frost (2011) argued that RTW and sickness behaviour differ amongst individuals, including those affected by similar conditions. However, empirical evidence on workers' affective factors is currently lacking, thus limiting the ability to draw evidence-based conclusions. Therefore, it is important for researchers to assess how individuals interpret and respond to their health-related symptoms, and subsequently to the current RTW practices. Furthermore, albeit not relating specifically to CP sufferers, Collins, Cartwright and Cowlishaw (2017) found that presenteeism negatively affected employee work performance and argued that presenteeism should be considered as an important issue by organisational absence management policies.

In contrast, Holland and Collins (2016) argued that workplace adjustments linked to suggestions provided on the FN might lead patients with CP to participate in voluntary sickness presenteeism, seen by the authors as a positive concept. By exploring the perspectives of UK workers with CP due to rheumatoid arthritis, Holland and Collins (2016) suggested that suitable workplace adjustments and employers' flexibility to account for the fluctuating nature of their workers' CP allow work to be therapeutic for those CP workers with motivation to work despite their condition. This echoes findings by Waddell and Burton (2006) who stated that safe and accommodating work is good for most people.

3.3.1d Interventions with vocational elements

Lee et al. (2013) argued that workplace-centred rehabilitation should form part of integrated care for employees with CP. Employees should have access to OH advice. Such advice can be provided within the company they work for, or from external consultants (Palmer and Brown, 2013). Currently however, OH services in the workplace are available from only 15% of UK employers (Bishop et al., 2014). Aylward, Cohen and Sawney (2013) argued that rehabilitation and RTW are employer's responsibility/duty of care towards their employee. If healthcare interventions are delivered in isolation they can be a barrier to RTW and promote removal of employees from the workplace (Aylward, Cohen and Sawney, 2013).

A recent UK study evaluating vocational aspects of RTW rehabilitation was the Study of Work and Pain cluster trial (SWAP; Bishop et al., 2014; Wynne-Jones et al., 2018), which was based on an intervention that aimed to reduce days lost from work in a sample of patients on sick-leave suffering from musculoskeletal pain. A vocational case management service was offered to patients with CP at a point of a GP appointment in several primary care settings, as an addition to the current best practice (Bishop et al., 2014). Participants were off work for less than 6 months (Wynne-Jones et al., 2018). Results from the SWAP study (Wynne-Jones et al., 2018) suggest that the intervention had significant positive effect on SA over 4 months ($p<0.05$) and RTW self-efficacy. At 12-month FU the differences remained, but only RTW self-efficacy remained statistically significant. Furthermore, the intervention seemed more effective for workers with CP who were on sick-leave for more than 10 days (Wynne-Jones et al., 2018).

As part of the SWAP project, in a qualitative exploration of GPs, vocational advisors (VAs), and patients' views, Sanders et al. (2019) argued that early vocational interventions may not be suitable for all patients with musculoskeletal disorders, and restraining from employing such interventions until sick-leave duration persists may be more adequate. Demou et al. (2016) conducted a systematic review to examine the effectiveness of 'very early' workplace interventions for musculoskeletal disorders. The review found that intervening during the first two weeks of part-time sick-leave together with adequate job modifications resulted in a reduction of the duration and recurrence of SA, and improved self-perception of health and QoL (Demou et al., 2016). However, Demou et al.'s (2016) conclusions were not fully supported and the operationalisation of the 'very early' timescale for interventions lacked homogeneity.

Targeting vocational interventions at CP patients with characteristics relevant to the intervention has been suggested (Sanders et al., 2019), which is in line with stratification of care approach (Lee et al., 2013) and risk-profiling to match intervention type as suggested elsewhere (e.g. Haland Haldorsen et al., 2002). Importantly, Gross, Bostick and Carroll (2016) argued that considering the ongoing study of validity of predictor measures and inconsistencies in their prediction accuracy, widespread use of such tools should not be recommended within clinical practice without caution. Similarly, Hayden et al. (2009) argued that the variability in methods employed by various studies affects conclusions regarding LBP prognosis and related biases should be investigated. Factors identified by Sanders et al. (2019) as determining the effectiveness of the vocational intervention were linked to the timing of a GP referral to the VA (i.e. too soon into patients' work absence), uncertainty regarding patients' own need for the intervention (e.g. ability to self-manage, especially amongst the self-employed CP workers), and uncertainty around the VA's role definition.

In the first national survey with occupational therapists (OTs) conducted in the UK, Coole et al. (2013) examined the work-related advice and support from the OTs working with CP RTW stakeholders (i.e. employees and their employers) in the RTW process. The rationale for the survey was supported by the lack of evidence around the current UK OT practice in terms of work-related advice for employees with musculoskeletal disorders as well as their employers (Coole et al., 2013). The findings suggest that there are pronounced variations in terms of service delivery, employed interventions, and communication between the stakeholders. A large proportion of the OTs who took part in the study provide work advice and support to the CP patients they treat. However, only about 12% of the surveyed OTs responded that work rehabilitation and/or work retention interventions were the main part of their role as an OT. Amongst respondents who did not see provision of work-related advice as their key responsibility, 89% provided such service to their CP clients and/or their employers. Furthermore, just over 40% of the OTs responded that they had never contacted their CP patient or their employer with a work-related advice, with reasons including the uncertainty around the role responsibilities, lack of time or permission, and availability of copies of reports outlining the OT's advice.

Coole et al. (2013) found that the interventions employed by the OTs varied greatly. Psychosocial interventions such as treatments based on cognitive-behavioural approach were not particularly prominent amongst the responses. This may be surprising, since the recent shift towards the biopsychosocial model of pain and the CBT-based treatments being considered as the most effective treatments for CP (e.g. Gatchel and Okifuji, 2006). However, whilst arguably providing an opportunity to access a bigger sample, the survey methods restrict the ability to treat Coole et al.'s (2013) findings as representative of individuals' perspective (Brown, 2002). In another survey employing a sample of participants with a range of different OT roles, Coole et al. (2015a) examined their views on what may be vital areas to research around the UK-based work rehabilitation. The survey respondents highlighted the need to clearly show the effect of occupational therapy approach on the RTW rates, whilst also clarifying currently employed outcome measures and their evaluation in practice.

Vooijs et al. (2015) conducted a SLR examining interventions which enhance work participation (i.e. work retention or RTW) among workers with chronic conditions and found three studies originating from the UK (Bambra et al., 2005; Clayton et al., 2011; Clayton et al., 2012), all of which were also systematic reviews. However, none of those studies offered any insight into the effectiveness of UK RTW interventions for workers with CP, as defined by the current thesis. The study populations comprised individuals with chronic illness and disability, who were on long-term sick-leave that in the UK qualified for a welfare benefit and lack of employment contract. In Scandinavian countries people with long-term sick-leave can still be classed as in employment (Clayton et al., 2011). As some of the reviewed interventions in Vooijs et al.'s (2015) study were policy-directed, their findings highlight the importance of considering various compensation systems across different countries and their effect on RTW, as suggested previously (e.g. Bartys et al., 2017).

Recently, a decision has been made to withdraw the government-funded OH service, Fit for Work, which was an intervention available to employees, employers, and GPs to support RTW (Knutt, 2017). Since September 2015, the Fit for Work service was made available to stakeholders across England and Wales (Fit for Work, 2015a) and a similar intervention was available in Scotland (Fit for Work Scotland, currently Healthy Working Lives; NHS Health Scotland, 2018). The service was designed to work with employees who have been, or are likely to be signed off work for a minimum of 4 weeks. When taking advantage of the Fit for Work intervention, employees were referred by their GP or employer and received access to an OH professional. A personalised action plan was designed to enable RTW (Fit for Work, 2015a). The Fit for Work plan was supposed to identify issues and obstacles highlighted by the employee which might be preventing them from achieving RTW, and work with the employee (and sometimes with the employers at the same time, if agreed and appropriate) to overcome these difficulties. The involvement of the Fit for Work service aimed to provide an intermediary in the RTW process and address the issue of perceived pressure in employee-employer interactions during employee SA (Fit for Work, 2015a). During the time when the service was available, the GPs Committee argued that framing the referrals to the Fit for Work advisors as referrals to 'OH professionals' is misleading and should be replaced with a 'specially trained health professionals' instead to avoid misinterpretation (BMA, 2016). However, issues with low level of referrals to the Fit for Work service led to the cessation of the one-on-one support within it, maintaining only the indirect online information and support (DWP, 2016a; NHS Health Scotland, 2018).

The lack of referrals and the subsequent decision to withdraw Fit for Work service was in contrast to the 2015 government survey of Health and Well-being at Work (Steadman, Wood and Silvester, 2015). In the survey, employees considered both the advisory service offered as part of the Fit for Work provision and the FN to be helpful (84% and 91%, respectively). Furthermore, the majority of employees expressed a willingness to share the RTW plan with their employer whilst also having confidence that the plan would be implemented. Important work adjustments comprised flexible working. Among the employees, one third suffered with a health condition in the previous year, with musculoskeletal disorders being the second most often reported health issue. Most SA was short term, with 5% lasting longer than 4 weeks. The longer-lasting sick-leave was experienced by those employees who had comorbid conditions, unsupportive employers, worked in large organisations, and those with adjustments to their workplace. The latter might indicate the relationship between the type of health condition and the length of SA. Overall, the initially encouraging data regarding Fit for Work service were not supported in practice and future research into effective RTW interventions should consider barriers and mediators of such poor outcomes; replication of in-house procedures and low exposure were amongst issues listed by some of the RTW stakeholders (Knutt, 2017).

Another UK government's 'into work' intervention, aimed at providing support for people claiming unemployment benefits due to sickness, was Pathways Advisory Service (PAS) (John, 2017). As part of the service, GPs refer incapacity benefit recipients to employment and benefit advisors already placed at the primary care practice. The intervention comprised of support from specialist advisors, work-focused interviews, and NHS-run Condition Management Programme to improve patients' management and reduce disability. The advice offered through PAS signposted individuals towards services available to them elsewhere (e.g. from Jobcentre Plus). Referrals to the service were carried out at GP's discretion. Consequently, Skivington et al. (2010) argued that due to the structure of service delivery, evaluation of the effectiveness of PAS remains problematic, although as a result of participating in PAS, some regions of the UK saw double the number of incapacity benefit claimants RTW (Aylward et al., 2013).

3.3.1e Technology-based interventions

In January 2019, the NHS released a report outlining its long-term plan for delivery of healthcare services (NHS, 2019). That is, by 2024 approximately one-third of hospital outpatient appointments would be conducted using video technology (NHS, 2019). From the sickness certification perspective, using channels other than face-to-face consultation is worth investigating. Currently, not much is known about such care delivery approach.

At primary healthcare level, Campbell et al. (2014) found that trial telephone consultations increased primary care contacts. Recently, an electronic consultation approach to primary care was evaluated in a qualitative study of six GP practices in West of England (Banks et al., 2018). The participating practices employed eConsult (https://econsult.net/), which next to askmyGP (http://askmygp.uk/) was reported as one of two main electronic consultation systems employed in the NHS at primary care level (Banks et al., 2018). Interviews with the practice staff revealed that despite the initial convenience of place-independent consultation, in most cases technology supported contact was followed by the traditional, face-to-face appointment due to insufficient information to inform clinical decision-making (Banks et al., 2018). Thus, Banks et al. (2018) argued that in their current format, technology-supported consultations do not effectiely substitute face-to face doctor-patient interaction, which is in line with Currie, Philip and Roberts (2015).

There is also some (albeit limited) evidence for such system of care delivery being viable for RTW (Burton et al., 2013). A recent report by the DWP (Burton et al., 2013) found that telephonic approaches enhance RTW when they utilise vocational aspect of rehabilitation within them. Telephonic support can be used in successful facilitation of employee’s RTW process by identifying RTW obstacles and developing appropriate RTW plans, which is often done via a co-ordinated consultation with employers (Burton et al., 2013). Furthermore, Burton et al. (2013) found that employers consider telephonic service as an appropriate work-focused RTW intervention.

Working Health Service Scotland (WHSS) is a telephone-based case management intervention, with occasional face-to-face therapeutic contact, aimed at self-employed individuals and workers in small and medium-sized organisations who are on sick-leave or are at risk of being signed off work (Demou et al., 2018). The WHSS intervention is coordinated by a case manager and comprises multidisciplinary approach with an occupational focus, including physiotherapy, occupational therapy, and psychological interventions. Demou et al. (2018) reported the results of a 4-year evaluation of the WHSS, which resemble positive effects of a vocational case management on RTW reported in the SWAP trial (Bishop et al., 2014; Wynne-Jones et al., 2018) described earlier. The authors found that the WHSS service referrals comprised 84% of workers with musculoskeletal conditions, which may be linked to a more streamlined referral process dedicated to these conditions and introduced in 2011 (Demou et al., 2018). Nevertheless, the WHSS programme seemed effective in returning workers, who were on sick-leave at baseline, back to work (18% of the study sample), with secondary measures such as QoL, depression and anxiety also showing an improvement sustained at 3 and 6-month FU (Demou et al., 2018). Age and length of SA were related to RTW outcome, with longer sick-leave and worse outcomes for older workers and those with longer sick-leave at baseline, respectively (Demou et al., 2018).

The findings reported by Demou and colleagues (2018) indicate the importance of the government and DWP funded WHSS programme in the RTW process for workers with CP, as well as potential economic benefits for the other stakeholders in the RTW process. Similarly, vocational case management was an important aspect in the SWAP trial (Bishop et al., 2014; Wynne-Jones et al., 2018) mentioned previously. However, as Demou et al.'s (2018) evaluation did not include a control group and the FU data was not available for all workers. Thus, further evaluation of the programme and examination of profiles of workers who may benefit the most from this type of intervention would be recommended.

Deployment of technology as part of a care package for CP remains at a very early stage (Currie, Philip and Roberts, 2015). An example of a technology-driven intervention for people suffering with chronic conditions is 3millionlives which offers access to telehealth and telecare (3millionlives, undated). The 3million service has been recognised by the NHS as important tool in transformation of healthcare into integrated care (3millionlives, undated). The NHS offers an online course called Pathway through Pain which is aimed at helping CP patients self-manage their condition (Pathway through Pain, 2017a). Since its launch in 2010, Pathway through Pain has, via digital channels, guided individuals suffering with chronic musculoskeletal disorders through an intensive Pain Management Programme (Pathway through Pain, 2017a). The service has been shown to reduce NHS costs related to pain management by 45% and to improve patient outcomes including impact of pain on daily life (17% reduction), depression (25% reduction), and anxiety (27% reduction;

Pathway through Pain, 2017b), but no further FU data has been available at the time of writing up the current RAR.

However, Currie, Philip and Roberts (2015) found that CP patients have mixed views about the balance between the online and other forms of self-help support in the NHS Pathway through Pain programme. Furthermore, despite offering potential savings for the state in terms of service delivery costs, eHealthcare interventions face practical restrictions such as patients' age or infrastructure constraints (Currie, Philip and Roberts, 2015). Healthcare professionals seem to agree that whilst technology-driven interventions for CP have many positive aspects, such as empowering patients to deal with their condition, the wide-spread use of such treatment strategy may not be appropriate for every CP patient (Currie, Philip and Roberts, 2015). Currie, Philip and Roberts (2015) argued that ensuring that each patient's case is considered on an individual basis would promote familiarity of such approach amongst patients, strengthen its appropriateness, and lead to a wider successful implementation of technology-driven interventions.

An online discussion forum within therapeutic approach for Complex Regional Pain Syndrome (CRPS) patients was examined by Smedley et al. (2015). Findings suggested that the social support elements obtained from taking part in the online forum may play an important role in helping CRPS sufferers self-manage their condition. This links to the 'four pillars of intervention' (Turner-Stokes and Goebel, 2011) for CRPS sufferers. Specifically, Smedley et al. (2015) reported that social support derived from the online forum might bolster educational, pain relief, rehabilitative, and psychological aspects of the intervention process. Participants in Smedley et al.'s (2015) study were supported with things such as goal-setting, coping with pain, gaining knowledge about available treatments, and the challenges associated with vocational rehabilitation, which arguably might help with managing RTW.

3.3.1f Self-management tools

Self-management can be defined as education programmes that are designed to enable people with chronic health conditions to actively partake in the management of their condition, as opposed to simply offering education or skills training (Foster et al., 2007). In 2005, UK Department of Health introduced the Expert Patients Programme (EPP)

(Donaldson, 2003), which was a peer-led, self-management training course designed as a response to increased burden imposed on society and the National Health Service by chronic health conditions (Taylor et al., 2016). In recent years, there has not been as much emphasis placed on the EPP, perhaps due to underwhelming reports regarding its effectiveness (e.g. Griffiths et al., 2007). Specifically, generic measures of self-rated health QoL and healthcare use amongst chronic conditions' sufferers (e.g. arthritis), examined prior to and post-intervention in four RCTs remained largely unchanged, despite some patients reporting benefits following the programme attendance (Griffiths et al., 2007).

ESCAPE-pain (Enabling Self-management and Coping with Arthritic Pain using Exercise; NICE approved rehabilitation program) is an educational self-management, coping strategies, and individual exercise regime, which is currently being run in 27 sites in England and shows clinical and cost effectiveness (Hurley, 2016). MoodJuice (2004) and The Pain Toolkit (Moore, 2017) are some further examples of resources which provide free self-management tools for patients with CP (Mills, Torrance and Smith, 2016).

The effectiveness of the self-management approach requires further study, especially with regard to the type and content of such interventions (Anderson and Wallace, 2018), and their effectiveness on musculoskeletal conditions (PHE, 2017), including RTW with CP. However, some evidence for its impact on pain and self-reported outcome improvement is available (e.g. Mann, LeFort, and van den Kerkhof, 2013) and self-management strategies should be generally supported as part of a multidisciplinary treatment approach (PHE, 2017).

3.3.1g Complementary therapies

There is a strong evidence base for the use of acupuncture as a complementary and alternative medicine (CAM) approach; for example, research suggests the use of acupuncture as a short-term relief of pain, specifically chronic LBP and osteoarthritis (Mills, Torrance and Smith, 2016). Franke, Franke and Fryer (2014) reviewed studies of osteopathic treatment for non-specific LBP and found that when this CAM treatment was tested in the UK against a diathermy and placebo treatments (e.g. Gibson et al., 1985), neither of the interventions was more effective than the placebo in promoting RTW. However, there is insufficient evidence relating to the application of other CAM treatments (e.g. mindfulness) to treat CP, and their effectiveness with regards to RTW outcome (Mills, Torrance and Smith, 2016).

3.3.1h Other evidence

There is currently a significant focus in the UK on promoting physical activity for people with musculoskeletal pain (e.g. Foster et al., 2018), often against their beliefs of perceived harm of exercise on their condition (Arthritis Research UK, 2017). Despite these recommendations, interventions focusing solely on physical activity seem to lack long-term clinical effectiveness (Willett et al., 2017). Similar findings regarding lack of effectiveness of RTW physical activity interventions have already been reported in *Chapter Two* (e.g. Heinrich et al., 2009). Willet et al. (2017) were conducting a SLR to investigate the effectiveness of behavioural change techniques in conjunction with the physical activity component for CP, thus more relevant evidence should emerge.

Richards (2017) reported results of an unpublished pilot trial of a power-assisted device (PAM machine) used to mobilise the spine in CP sufferers. Findings from that trial suggest that of the 64 chronic BP patients who participated, "*54 per cent of the out of work group could return to work and were still in their employment one year on (84.4 percent)*" (Richards, 2017: Online). The participants who benefited from the treatment and returned to work had a marked reduction in disability scores, despite being classed as "*failed backs*" cases (Richards, 2017: Online).

In a qualitative analysis of the role of family support in helping people with CP stay in work, McCluskey et al. (2015) found that, in the UK sample, supportive family networks encouraged CP patients to remain active and stay at work. There were also commonalities between the UK findings and a separate set of data collected from a sample of participants in the Netherlands and analysed as part of the same study. Importantly, the results highlight the importance of social support for individuals with CP.

3.3.2 Current chronic pain management guidelines and recommendations

A set of comprehensive guidelines to summarise the current evidence on effectiveness of all CP interventions for all types of CP is lacking, especially for non-specialist, primary care (Smith et al., 2014). Lee et al. (2013) summarised guidelines for managing chronic spinal pain which have recently been developed by the British Pain Society to promote best practice in the management of chronic spinal pain and to expand on the previously available guidance by the National Institute for Health and Clinical Excellence (NICE) and the Royal College of General Practitioners. Subsequently, a stepped care approach was recommended and the need to empower CP patients in their care decision-making process was highlighted. The stratification of care guideline reflects the evidence regarding its effectiveness as presented in the current review (e.g. Foster et al., 2014) and in the SLR (*Chapter Two*).

The British Pain Society also recommends the stratified care model for people at risk of developing CP (Lee et al., 2013). The STarT Back diagnostic tool (Hill et al., 2008) should be used at 2 weeks from the onset of pain to help predict the likelihood of patients developing persistent pain and thus lead to referrals for treatments of appropriate intensity (Lee et al., 2013). Subsequently, "*low-risk patients are encouraged to self-manage their pain, medium-risk patients are referred to physiotherapy and a patient-centred management plan agreed, high-risk patients are referred to physiotherapy with the skills to provide a comprehensive biopsychosocial assessment and a patient-centred management plan*" (Lee et al., 2013, p. 115). Lee et al. (2013) suggested that further research is urgently needed to build upon and provide stronger evidence for future guidelines in CP care. Importantly, the research should consider evaluating the cost-effectiveness as well as clinical effectiveness of interventions to promote their widespread application and use (Lee et al., 2013).

In addition, greater emphasis is placed on self-management approach to pain management and supporting CP sufferers to remain active, whilst surgical and pharmacological treatments are not recommended as first-line treatments (Foster et al., 2018). Guidelines for managing LBP suggest massage as a second-line or adjunctive intervention for people with CP (e.g. Foster et al., 2018). Acupuncture is included in the Scottish Intercollegiate Guidelines Network (SIGN) guidelines for CP care (Smith et al., 2014), but its link to improving RTW remains unclear.

The UK Department of Health remains committed to supporting self-management for chronic health condition sufferers (Taylor et al., 2016). It seems important to signpost pain patients to relevant self-help advice, whilst at times to provide direct support and contact at primary care level (Lee et al., 2013). SIGN also suggests supported self-management at any stage in a pain condition (Smith et al., 2014). However, as discussed earlier in the current chapter, the evidence regarding the usefulness of various self-help interventions is lacking, and the available data are somewhat underwhelming (e.g. Donaldson, 2003), which needs to be addressed.

3.3.3 Cost-effectiveness findings and recent recommendations from Public Health England

In October 2017, Public Health England (PHE) launched the latest version of a return on investment (ROI) tool, based on the findings from a PHE commissioned report in collaboration with York Health Economic Consortium (PHE, 2017) aimed at addressing and prevention of musculoskeletal conditions. The tool focuses on osteoarthritis, back pain (BP) and neck pain as the most prevalent musculoskeletal conditions. The ROI tool assessed CBT including exercise (for BP); STarT Back (for BP); PhysioDirect - early telephone assessment and advice; self-referral to physiotherapy (for all musculoskeletal conditions); ESCAPE-pain (for knee pain); group yoga for backs (for BP); vocational advice from physiotherapists in primary care (for all musculoskeletal conditions). Based on the findings from the report it was suggested that, out of the above seven assessed interventions, four (STarT Back; PhysioDirect; self-referral to physiotherapy; ESCAPE-pain) should be considered as producing a positive ROI when compared to TAU, from a healthcare financial perspective (PHE, 2017).

Interestingly, the report by the PHE (2017) also suggested that, when QoL is considered, CBT combined with exercise also showed small positive ROI, and the greatest impact on work days saved was associated with STarT Back, group yoga for backs, and vocational advice. Importantly, ROI does not equal cost-effectiveness, but even the latter (i.e. when delivery cost is higher than TAU, but there are considerable generated benefits, such as improved clinical outcomes) may present as a valuable intervention option for commissioners (PHE, 2017). There are some limitations with regards to utilising the above findings in the current review; firstly, RTW was not assessed directly as an outcome measure, but instead a ‘work days saved’ outcome was employed. Secondly, some of potentially effective UK interventions for CP could have been missed due to the review’s methodology (i.e. literature search focused on finding studies specifically describing cost-effectiveness). Finally, the preventative aim of assessed musculoskeletal interventions in the PHE's (2017) report may not align with the aim of the current project, which focuses on RTW and thus 'reactive', tertiary interventions (see adopted classification of RTW interventions in *Chapter One*).

3.4 Discussion

The RAR found only limited sources evaluating evidence related to successful UK RTW interventions for workers with CP, with sparse reporting of significance values or effect sizes. Findings and recent guidelines suggest a multidisciplinary, stratified approach to RTW. Furthermore, the importance of vocational elements of interventions was highlighted. These findings align with those reported in the SLR (*Chapter Two*).

Whilst evidence suggests that multidisciplinary RTW interventions are important, there seems to be a gap between evidence and practice in pain management (e.g. Foster et al., 2018), such as the limited availability of multidisciplinary interventions (National Pain Audit, 2013). Interestingly, in order to make the RTW process more streamlined (i.e. by allowing a wider access to healthcare professionals who are able to discuss fitness to work and thus eliminating potential waiting times for healthcare referrals) the government's strategy currently includes extending the FN certification to a wider group of healthcare professionals (e.g. physiotherapists, senior nurses, etc.; DWP, 2017a). In addition, physiotherapists are now able to train as independent prescribers, thus potentially reducing the length of time and number of appointments required for pain patients to access appropriate care (Loughran and Rae, 2015). At the same time, sharing out the responsibility for some of the aspects of OH and RTW process between the stakeholders inevitably leads to teething problems related to things such as role boundary (e.g. Welsh et al., 2014).

Contemporary UK interventions addressing health and work have been driven by policy and are aimed at individuals who have been off work for longer than six months (Bishop et al., 2014). This contradicts the research evidence suggesting that early interventions are beneficial for RTW, as discussed in *Chapter One* and echoed here by the findings from the

SWAP trial (Bishop et al., 2014; Wynne-Jones et al., 2018) and the WHSS service (Demou et al., 2018). Similarly, Waddell and Burton (2004) suggested that clinical and occupational management of people on incapacity benefit should be employed after the first month on benefit and before the seventh month in order to improve the effectiveness of an intervention.

At least 85% of individuals suffering with musculoskeletal conditions, 80% suffering with stress, and 75% of those with other mental health conditions RTW after 4 weeks or longer (Black and Frost, 2011). The importance of an early intervention is highlighted by the data suggesting that each year approximately 865,000 employee absences in England and Wales tend to last beyond four weeks (DWP, 2014). However, Sanders et al. (2019) argue that early interventions may not be beneficial to all patients with musculoskeletal disorders. As mentioned previously, time was not a key factor in RTW amongst people with chronic LBP when a multidisciplinary approach was employed (Watson et al., 2004). Similarly, one of the reviewed trials (Corey et al., 1996) in *Chapter Two* did not find that recent onset of injury resulted in 'easier' treatment. In fact, the authors referred to data that showed more success in RTW for those participants who had pain for longer. Thus, it is clear that for some workers any RTW intervention for CP is better than no intervention at all. However, it is imperative to understand the other factors (e.g. worker motivation, workplace factors, financial factors, etc.) influencing the timing of RTW for CP sufferers, which might require employing alternative methods of enquiry to those adopted by previous studies to account for the biopsychosocial aspects of RTW with CP.

Overall, the government-driven policy to return more people to work continues (DWP, 2017b), and changes to OH services driven by the government policy are called for due to currently impoverished provision (Frank, 2016). Specifically, only about 30% of the UK workers have access to specialist OH advice (Frank, 2018). Furthermore, whilst most large companies provide OH services to their employees, such support for workers in medium- and small-sized companies is lacking (Frank, 2016).

Inclusion of a case manager was an element present in the effective UK RTW interventions in the current review (i.e. Demou et al., 2018; Bishop et al., 2014; Wynne-Jones et al., 2018). It was also the feature which was present in some of the helpful interventions identified by the SLR (Cheng and Hung, 2007). Interestingly, in Norway, Farholm et al. (2017) examined changes in RTW amongst patients with musculoskeletal and mental health problems who were encouraged by their multidisciplinary team to play an active part in their rehabilitation process. The authors reported that the multidisciplinary vocational intervention, which included healthcare professionals supporting the autonomy of their patients (e.g. encouraging decision-making), creating RTW action plans, and taking part in exercise, was associated with an increase in RTW at 6 weeks and at 15-month FU (Farholm et al., 2017). Although the findings cannot easily be generalised due to a small sample size, high attrition rates, and lack of sub-group analysis for the CP sufferers, the effects of healthcare professionals empowering their patients and enabling them to feel autonomous in their rehabilitation process on patients' RTW seem important to highlight in the context of vocational intervention. The concept of support seems relevant here too.

Also considering workplace-oriented RTW intervention, Hogarth et al. (2013) evaluated an Employment Adviser (EA) service run alongside the Improving Access to Psychological Therapies (IAPT) Programme. The EA intervention was designed to strengthen the impact of the IAPT, to promote timely RTW and limit the number of people needing access to sickness-related welfare benefits. Since its introduction, the target population of the IAPT programme was people suffering with depression and anxiety, thus the study did not meet the inclusion criteria for the current review. However, as patients with CP often suffer with comorbidities (e.g. Rayner et al., 2016), it is important to discuss the IAPT intervention in context of treating CP, and RTW with CP. A transdiagnostic approach to occupational rehabilitation has also been suggested previously to account for comorbidity of chronic conditions (Hara et al., 2018). In Hogarth et al.'s (2013) study the IAPT on its own increased the percentage of workers returning to work post-therapy. Furthermore, Hogarth et al. (2013) found that 63% of sick-listed employees benefited from seeing EAs and were back at work following the programme. However, the methods used risked introducing bias as the study was not randomised or controlled in its design.

RTW may be linked to other factors such as presenteeism. The overall success rate of CP interventions could also be related to factors such as missing pain management appointments. Fitzmaurice et al. (2015) found that, between April and September 2011, 23% of all CP clinic appointments at an NHS clinic in Birmingham were cancellations and missed appointments; forgetting was reported as the most common reason for the lack of attendance. Nationwide, missed and cancelled appointments constituted over 11% of all outpatient appointments (Fitzmaurice et al., 2015). Technology could possibly reduce the rate of pain clinic non-attendance through text message or phone reminders (Fitzmaurice et al., 2015) and thus improve the overall effectiveness of pain interventions. However, technological advances applied within the healthcare delivery pose challenges which are described in the latter parts of this discussion.

Echoing recommendations for further research into the effectiveness and financial benefits of CP interventions (e.g. Lee et al., 2013), it may be useful to mention other interventions which still require assessment of their impact on RTW outcome for British workers. The SLR in *Chapter Two* found that some RTW interventions positively affected secondary, non-RTW outcomes such as QoL, general functional ability, and psychosocial factors ratings (e.g. Haland Haldorsen et al., 1998b; Heinrich et al., 2009). Notably, some of the evidence from the UK offers similar findings, without considering RTW outcomes. Sheldon, Clarke and Moghaddam (2015) evaluated an NHS funded pain service providing psychological therapy to CP patients in secondary outpatient care setting in 2013-2014 financial year. Originally a CBT-based approach, the service has shifted its focus to provide ACT (Hayes, Strosahl and Wilson, 1999). The ACT service is aimed at helping people to manage their pain and distress caused by their condition, and to encourage their engagement with valued activities which they previously avoided (Sheldon, Clarke and Moghaddam, 2015). Intervention examined by Sheldon, Clarke and Moghaddam (2015) was patient-centred and followed pain care guidelines (NICE, 2011), with CP patients working together with their healthcare professionals to set up treatment goals and choose between individual or group sessions.

Findings from Sheldon, Clarke and Moghaddam's (2015) study also suggest that ACT influences functional ability of CP patients. Sheldon, Clarke and Moghaddam (2015) reported significant changes in employment status among a sample of 29 patients for whom such data was available post-treatment. The proportion of patients on sick-leave post-treatment was smaller than patients who were taking part in unpaid employment or were in education (Sheldon, Clarke and Moghaddam, 2015). Patients discharged from the service (both completers and non-completers) expressed positive opinions of the service provided, which supported the findings related to the outcome measures (Sheldon, Clarke and Moghaddam, 2015). Further research should consider gathering data similar to Sheldon, Clarke and Moghaddam's (2015) practice-level data to compare with findings from evidence-based randomised trials. Interestingly, a Swedish trial (Lytsy et al., 2017) identified in *Chapter Two* reported a positive trend for RTW for a sub-group of CP employees receiving ACT versus those receiving multidisciplinary intervention and controls. Berglund et al. (2018) found that ACT increased employability (i.e. transfer from a sick-leave scheme to a work-ability assessment scheme that exists in Sweden) among participants with mental health problems and/or CP (multidisciplinary intervention was the most effective for RTW and employability, but sub-group analyses were unavailable).

The change in approach to pain management service examined by Sheldon, Clarke and Moghaddam (2015) resulted from the research evidence around the benefits of ACT in treating CP. Barker and McCracken (2014) noted that such changes within the healthcare organisations are required to improve pain services. In their mixed-methods study of service transformation from traditional CBT to delivering ACT-based treatments, Barker and McCracken (2014) found evidence for positive views and engagement, as well as uncertainty and discomfort amongst staff having to deliver services following the new ACT model. Feasibility of delivering ACT-based CP therapy in primary care practice has been suggested using face-to-face (McCracken et al., 2013) and online (Scott et al., 2018) mode of delivery. Neither of these two studies considered RTW as an outcome measure in their trial. Scott et al. (2018) noted that employed CP individuals completed the online treatment at a much lower rate than the unemployed participants (44% versus 80%, respectively), which highlight potential limitations such as access issues and the typology of the online user (e.g. Brandtzæg et al., 2011) if utilising online platform for RTW interventions.

Indeed, the introduction of technology to healthcare provision could affect the healthcare system's equitablility. The issue is two-fold: fair access; and equity of health status (Mays and Fitzpatrick, 2018). Mays and Fitzpatrick (2018, p. 388) define fair access as "*the extent to which different social groups have access to health services relative to their needs rather than their ability to pay or any other factor unrelated to need*". In turn, equity of health status is defined as "*the extent to which different social groups or regions enjoy similar levels of health and/or the extent to which the health outcomes of treatment are the same between different social groups*" (Mays and Fitzpatrick, 2018, p. 388). Mays and Fitzpatrick

(2018) argue that efforts should be made to ensure that equity of access in provided as, due to wide array of factors, social differences in health status cannot simply be addressed by changes to healthcare services.

In the UK, publicly-funded healthcare service uses formulae to distribute resources fairly across the different regions and based on the regions' residents' characteristics (Mays and Fitzpatrick, 2018). Interestingly, Cowie et al. (2018) evaluated eConsult service use in Scotland and found that the electronic service was utilised by a larger proportion of younger patients (18-44), thus potentially affecting outcomes for the older group of patrients. However, Cowie et al. (2018) found no relationship between eConsult use and measures of deprivation based on the Scottish Index of Multiple Deprivation (Scottish Government, 2016). Elsewhere, in the Netherlands, a study by Van der Vaart et al. (2014) reported that some patients perceived that their quality of care was improved when they had access to their electronic medical records. Importantly, Brandtzæg et al. (2011) suggested that there are several types of Internet users (e.g. sporadic, advanced, etc.). Due to the limited knowledge about the ways these individuals engage with online support communities, it is difficult to establish if and which of the types of users might benefit from interventions with online-based elements (Smedley et al., 2015). Thus, in the current digital age, further research into the benefits or otherwise of technology-driven interventions is warranted.

Interestingly, using a mixed-methods approach, Greenhalgh et al. (2018) examined introduction of Skype outpatient consultations within non-pain NHS clinical settings. The study found that video consultations appear safe, effective, and perceived as popular by both, the NHS staff and patients, but caveats exist within such statement. Specifically, Greenhalgh et al.'s (2018) finding was supported only when conditions linked to supporting judgement toward virtual mode of consultation delivery from the healthcare professionals, or to existence of pre-established mutual trust between a patient and their clinician were met. Minor technical challenges potentially hindering the delivery and effectiveness of Skype consultations were also noted. The authors concluded that patients, for whom virtual consultations might be appropriate constitute a minority among the overall clinic footfall (Greenhalgh et al., 2018). Currently, virtual reality is being trialled in the UK as a training tool for clinicians, as well as an intervention tool for patients (Best, 2019), albeit as yet not specifically as a RTW intervention tool. Furthermore, it seems key to establish the right proportion, or a specific patient group who might benefit from such systems.

Sparse evidence for the effectiveness of current UK RTW interventions makes it difficult to answer the RQs attached to this review. The types of successful UK RTW interventions (i.e. stratified, multidisciplinary, with vocational elements – RQ2) are broadly aligned with those identified by the thesis' SLR (RQ3). However, rates of successful RTW among workers with CP (RQ4) cannot be fully evaluated as the vast majority of identified interventions failed to consider RTW as an outcome measure. Although this narrative review was used to summarise a selection of sources to inform empirical research in the current thesis, a potential issue of bias due to its arguably limited scope when compared with the systematic method has to be acknowledged (e.g. Smith and Noble, 2016). That said, narrative reviews emphasize researcher's judgement and necessarily include an element of interpretation (Greenhalgh, Thorne and Malterud, 2018).

3.5 Conclusions

As being unable to work (due to CP) comes at a high cost at individual and societal levels (e.g. Cooper and Bevan, 2014) and due to the limited evidence identified by the RAR, more research evaluating UK RTW interventions and practices for CP is called for. To reconcile findings from the literature reviews with other evidence and enable cumulative understanding of RTW with CP, further investigation should include perspectives of RTW stakeholders, some of whom face extended responsibilities as an implication of the changes in CP policy and management. Chapters *Six*, *Seven*, and *Eight* describe three such studies – with employees, occupational health physicians (OHPs), occupational therapists (OTs) and OH nurses; for a justification of the choice of these populations see section 5.5.1.

The choice to conduct qualitative research as part of the current thesis resulted from the complex nature of CP phenomenon and the multi-stakeholder nature of RTW process. Findings from the thesis' literature review chapters laid the foundations for deciding the follow-up RQs (see Figure 1 in *Chapter One*). The author wanted to study stakeholders' views of contemporary RTW processes for CP sufferers, acknowledging the 'web of meaning' constructed therein. Qualitative methodology stems from ontological and epistemological foundations, which enabled to meet this aim (see *Chapter Five*). First, *Chapter Four* describes the conceptual framework constructed for the current thesis, representing relationships between actors and elements of RTW with CP.

Chapter Four: Theoretical framework

4.1 Summary

This chapter describes a conceptual framework designed with key concepts relevant to understanding RTW with CP. The framework combines the biopsychosocial model of CP, introduced in *Chapter One*, with concepts of the self and social identity, the interplay between job demands and resources, and social support. A detailed justification for considering the above concepts as key for RTW with CP is presented to contextualise the thesis' empirical work (*Chapters Six-Eight*).

4.2 Conceptual framework for RTW with CP

4.2.1 The biopsychosocial model of pain

Previous chapters discussed research evidence which suggests that people benefit from work, as long as their work is "*safe and accommodating*" (e.g. Waddell and Burton, 2006, p. ix). Having an accommodating workplace following SA is important as for some people illness, or CP conditions, may result in reduced ability to RTW. With respect to workers with CP, the biopsychosocial model of pain (Engel, 1980; 1982), discussed in detail in *Chapter One*, offers a holistic interpretation of their pain experience; specifically, the model acknowledges the interaction between biological, psychological, and social factors, and their respective contribution to an individual's health and illness experience (e.g. Maltby, 2012). By incorporating the biopsychosocial model of pain within the thesis' theoretical framework, the current project considers the multidimensional aspects of pain experience and applies it to the process of RTW. Subsequently, whilst biological factors are linked to some behaviours, the role of psychosocial factors in influencing RTW process for CP sufferers is emphasized. Gatchel (2001) proposed that in instances where pain might not always be linked to disability, such paradox is best framed by the biopsychosocial model, although the model has also been criticised for attracting isolated thinking in relation to its three domains (Wainwright and Wainwright, 2019; see also *Chapter One*).

The biopsychosocial model of pain has been widely accepted. However, the model is arguably not often used in therapeutic practice and psychosocial factors may not be perceived as having the same importance to individuals' well-being as biological ones (e.g. Edwards et al., 2016). Nevertheless, Waddell and Burton (2005) suggested that biopsychosocial problems need biopsychosocial solutions. Furthermore, Cheng and Hung (2007) suggested that "*the development of work disability could be viewed as a process in which biopsychosocial barriers exist to hinder the worker from returning to work*" (p. 488). Therefore, good RTW programs should address all aspects of RTW – functional, physical, attitudinal, psychosocial, etc. (Corey et al., 1996). Similarly, Waddell (2006) suggested that a wider use of a biopsychosocial model of rehabilitation by all stakeholders could lead to reduced SA due to musculoskeletal disorders. Previous research suggested that in the chronic health conditions psychosocial factors dominate over the biological factors that might have a bigger role during the acute stage (Turk and Monarch, 2018). It is argued here that to support RTW for workers with CP, consideration of the impact of factors such as contextual/psychosocial workplace factors and social support, is key.

4.2.2 The role of self and social identity

By affecting one's self-identity, illness can be considered as a 'biographical disruption' (Bury, 1982). Williams (2000) argued against uniform acceptance of the idea that chronic illness disrupts an individual's 'normality', suggesting that the latter concept remains relativistic due to "*differences in normality*" (Kelly and Field, 1998, p. 19). Yet, chronic illness often leads to reassessment of one's life and changes to functioning where both, positive and negative outcomes to self-concept are at play (Nettleton, 1995). Antao et al. (2013, p. 13) noted how CP sufferers might experience "*an altered sense of work identity*". Wainwright et al. (2011a) emphasized the bi-directional relationship between the self and social identity, and argued that *"[r]eturn to work requires not just reconstruction of the self and social identity, but also the development of strategies for the successful presentation of the self, particularly to potential employers*" (p. 29). Stroud et al. (2000) reported that "*negative self-statements were consistently related to less adaptive adjustment to chronic pain*" (p. 350) and were negatively associated with individuals' total activity level, albeit determining the causal relationship between maladaptive cognitions and functioning would require non-correlational design to be employed in future studies. Furthermore, Shilling (1993) argued that individuals can exert control over their bodies, which is linked to self and identity (Nettleton, 1995). Thus, people suffering with CP can lose elements of such control, and thus (parts of) their self-identity.

At the same time, WHO's (2019, Online) definition of health states that it "*is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity*". Arguably, when signed off work, RTW might offer workers an opportunity to maintain positive self-perception. Similarly, Claes (2014) argued that "*sickness presence may be preferred to sickness absence when workers derive structure in their lives from their work*", "*where their work environment provides them with needed support from others*", and "*where their job performance helps them get through*" (p. 379). These work characteristics, connected by Claes (2014) to presenteeism, link to the idea of yielding positives from work (e.g. Waddell and Burton, 2006) and emphasise situations with subjective interpretations of what constitutes 'good' work.

4.2.3 The Job Demands-Resources Model and the interplay between demands and resources

The interaction between personal and occupational factors can have a profound, negative or positive effect on health and work outcomes (including RTW) for individuals with CP (e.g. Waddell and Burton, 2006). While many conceptualisations have been put forward with regard to the relationship between job characteristics (e.g. the amount of workplace support; pressures experienced by the employees) and favourable and unfavourable outcomes (e.g. health; work performance), the *Job Demands-Resources Model* (JD-R; Schaufeli and Bakker, 2004) is one theoretical model which assumes the interplay between job demands and job resources as affecting employee health and motivation. The model proposes that high job demands result in strain and impairment to employee health (i.e. the health impairment process), whilst high resources (e.g. having high job autonomy) buffer against the impact of demands and affect the motivational process; that is by increasing employee motivation and productivity (Schaufeli and Taris, 2014; Aronsson et al., 2019).

Zapf, Semmer and Johnson (2014) noted that "*work puts demands on those who work*" (p. 145). Demands can be described as job characteristics that require effort (Aronsson et al., 2019). In turn, job resources are features of the job that enable management of work tasks (Aronsson et al., 2019). As considerable amounts of time are spend by being at work, ensuring the balance of demands and resources should be key in helping to achieve a healthy and productive workforce (e.g. Bevan et al., 2018), including providing adequate rest periods for employees to replenish resources (e.g. Aronsson et al., 2019).

Long-term exacerbation of the 'quantitative' job demands (e.g. having too much to do; longer working hours etc.) negatively affects an individual's health and well-being (Van Veldhoven, 2014). Conversely, 'qualitative' job demands refer to the qualitative aspect of demands (Zapf et al., 2014), such as emotional difficulty (e.g. role ambiguity), intellectual difficulty etc.. An example of qualitative demands relevant to the process of RTW with CP, in the context of the proposed framework, is the concept of 'physical demands'. The term 'physical demands' is defined as "*any kind of environmental demand that impacts on workers*", such as working in unusual body positions, fitting into the field of ergonomics or occupational medicine (Zapf et al., 2014, p. 153). Waddell and Burton (2006) found evidence suggesting that control of the physical demands of work can make work retention for workers with CP easier. Employees typically face a combination of physical, psychological, and cognitive demands (Aronsson et al., 2019). The latter two refer to effort linked to dealing with feelings and information processing at work. Psychological costs (negative consequences for one's psychological well-being) associated with physical demands are usually similar to those due to psychological demands (Zapf et al., 2014).

The JD-R model expands upon and refines classic models such as The Demand-Control-Support Model (DCS; Karasek and Theorell, 1990) used by Black's (2008) report or The Effort-Reward Imbalance Model (ERI; Siegrist, 1996). In the DCS model, "*a combination of high job demands and low job control will lead to job strain*" (Brauchli et al., 2015, p. 1). Similarly, the ERI model conceptualises job strain as "*the result of an imbalance between effort and reward and may lead to negative health outcomes*", including cardiovascular disease (Brauchli et al., 2015, p. 1). Both of these classic models consider a limited set of job characteristics (Bakker and Demerouti, 2007), with limited scope for application to a wide variety of jobs and employees (Brauchli et al., 2015). In contrast, the JD-R model has a much broader scope by assuming a possible relationship between any salient or relevant to worker's role job demand and resource (De Jonge, Demerouti and Dormann, 2014).

The JD-R model was conceptualised to consider outcomes of burnout and engagement, with considerable empirical evidence in support of the model's assumptions (e.g. Hakanen, Bakker and Schaufeli, 2006). However, recent studies began to consider outcomes such as perceived health, workability, absenteeism, and ill-health (Schaufeli and Taris, 2014), albeit as mediated by the original JD-R outcomes. Thus, inclusion of the JD-R model within the current conceptual framework was based on its broad scope and application to diverse employment sectors and individuals, the model's application to RTW and CP (which is in line with the biopsychosocial model of CP employed here), as well as its acknowledgement of the biopsychosocial characteristics of job demands and resources (e.g. Brauchli et al., 2015). Brauchli et al. (2015) proposed an extension to the JD-R model via inclusion of the health dimension. Specifically, the authors argued that job resources positively affect ill-health, since individuals can recover from demands easier when more resources are available to them (i.e. JD-R Health Model; Brauchli et al., 2015).

The JD-R model is versatile, as it specifies two general types of job characteristics (i.e. demands and resources); subsequently, these facets of the JD-R model are applicable to any vocation, irrespective of its specific characteristics (Bakker and Demerouti, 2007). The model can also be targeted; this is achieved by defining the salient demands and resources of various jobs through consultations with employees and/or supervisors. The model's broad scope and flexibility is appealing to both, practitioners and researchers (De Jonge, Demerouti and Dormann, 2014). All of the above features make the model appropriate for the conceptual framework within the current thesis.

Recently, Aronsson et al. (2019) examined workers' self-rated post work recovery, conceptualised using the JD-R model. This survey study found that the model helped to predict differences in aspects linked to employee self-rated recovery (e.g. varying need for job resources such as work-related feedback and social support). As such, those with qualitative job demands needed feedback from their managers to support post work recovery, in contrast to employees facing quantitative demands needing social support to recover from work (Aronsson et al., 2019). Furthermore, the JD-R model is inclusive of personal resources, which are aspects of the self (e.g. Hobfoll et al., 2003). The latter is one of the key concepts pertinent to the current framework (see section *4.2.2*). Therefore, within RTW interventions, the JD-R model could help to conceptualise the subjective nature of CP experience in relation to work.

Finally, the JD-R model assumes that job resources have motivational potential and it includes the 'buffer hypothesis' (i.e. the ability of job resources to balance out the effects of job demands, thus weakening the interaction between job demands and adverse health effects; De Jonge, Demerouti and Dormann, 2014). For example, work overload or physical demands may not lead to employee burnout, if buffered by a feeling of autonomy or social support (e.g. Bakker, Demerouti and Euwema, 2005). Arguably, in order promote RTW for employees with CP and in line with the JD-R model, workplace-based interventions should be targeted more effectively to individual workers, and various job roles should be reasonably adjusted (e.g. using ergonomic adjustments or flexible working patterns) to reduce the impact of job demands on individual worker's pain condition. Furthermore, adequate or insufficient social security compensation might mediate the relationship between resources and demands elements of the JD-R model.

However, it is important to note that the model's limitations relate to the lack of specificity when applying explanations to job demands and resources interplay, which might in turn reduce the accuracy of its predictions (De Jonge, Demerouti and Dormann, 2014). In addition, Werner and Cote (2009) noted the subjective nature of the interplay between job characteristics and employee outcomes. This further reduces specificity of any explanation of a given phenomenon (here, RTW experience) and arguably makes the scope of any model limited. Thus, consideration of workers' perceptions when evaluating RTW processes should also be addressed to understand how they respond to interventions.

4.2.4 The role of support

Semmer and Beehr (2014) proposed that the meaning of social support is socially defined. As such, people interpret it differently, depending on things such as one's professional role and identity, or culture (Semmer and Beehr, 2014). Importantly, interpretations of social meaning are inherently individual for every employee, all of whom are part of an objective social reality. That is, where formerly individual interpretations become objective 'general knowledge' due to social interactions (Semmer and Beehr, 2014). As such, there is a lot of variation in social support, which matches the individuality of CP experience. The singular focus on social support within the thesis' conceptual framework that is beyond the JD-R model, recognises that support can arise from a variety of sources and from within, as well as outside the workplace.

As previously stated, successful interventions promoting RTW amongst employees with CP tend to be multidisciplinary and include workplace-based elements, including a job coach (Cheng and Hung, 2007) or a vocational case management service (Wynne-Jones et al., 2018). Such elements within RTW interventions represent examples of social support that help individuals to be safeguarded from oncoming stressors by positively affecting mental health and, subsequently, physical health. Both perceived availability and receipt of support enable individuals to feel supported (Semmer and Beehr, 2014). Conversely, a lack of social support could therefore be classed as a stressor in itself (e.g. Forshaw, 2002), and thus negatively affect RTW process for workers with CP.

Notably, psychosocial aspects of work, social support, and a locus of control within the workplace are all crucial to an employee's well-being (Semmer and Beehr, 2014). Organisational social support requires employees to have both structural and functional aspects (Semmer and Beehr, 2014). Structural support is related to the size or frequency; functional support is linked to the 'feeling' of being supported (e.g. Broadhead et al., 1989; Semmer and Beehr, 2014). Beehr (1995) described the latter as the one that people value the most, where things with a useful function for employees are provided. Furthermore, functional measures of social support have been reported in the past as stronger predictors of general health outcomes (Broadhead et al., 1989). Previous research suggested that functional aspects such as support from a supervisor and/or work colleagues is linked to employee job satisfaction (e.g. Judge, Piccolo and Ilies, 2004) and well-being (e.g. Beehr, 1995). In support of this, Bevan et al. (2018) highlighted the need for managers to have ‘people skills’ and the importance of the role employers have on well-being and productivity of their workforce. Social support in the workplace can be ‘emotional’ or ‘instrumental’; the former addresses an employee’s need for empathy (Beehr, 1995). Instrumental support is more practical and solution-oriented (Beehr, 1995). Notably, the above types of social support in the workplace often overlap (Semmer and Beehr, 2014).

Interestingly, social support (in and outside of work) may at times lead to negative outcomes for employees by reinforcing negative behaviours (e.g. Fordyce, 1988; Turk and Monarch, 2018). For example, relief from duties leading to avoiding activity amongst workers with BP would be seen as detrimental to people with this health condition (e.g. Fordyce, 1988). Amongst other unfavourable aspects of social support are its negative impact on elements of employee self-esteem and the expectation from others regarding employees to display adequate coping behaviours (Semmer and Beehr, 2014). Nevertheless, when support at work is wanted and delivered skilfully, it is usually seen as helpful (Semmer and Beehr, 2014).

When social support at work is lacking and quantitative job demands such as work pressure increase, employees with CP might experience low job control (e.g. Karasek, 1979; Van Veldhoven, 2014) and thus they might struggle to RTW after a period of SA. Importantly, when affected by illness, people cope in different ways. Berk et al. (2012) argued that an individual’s beliefs about their illness may affect their recovery, and some people may at times become trapped in their sick role, that is when one’s identity rejects the idea that ill-health is undesirable. Yet as noted, Claes (2014) suggested that when work provides structure and support, it affects workers’ willingness to engage in work. This relationship also relates to the idea of social support being linked to job satisfaction (Judge, Piccolo and Ilies, 2004) and employee behaviours such as strategies to avoid dissatisfying work (e.g. Hanisch and Hulin, 1990). Findings such as these justify the inclusion of the concept of support as one of the key facets within the current project’s theoretical framework for RTW with CP.

Lastly, the literature review (*Chapter Two*) highlighted that workers' compensation systems may affect CP RTW process based on the differing social and occupational structures in identified trials with successful RTW interventions. Together with other previously reported findings related to the advantages of more generous and flexible social insurance systems on RTW (e.g. Anema et al., 2009), the current project's framework incorporates compensation systems as a (separate) source of support, or otherwise (see section *4.3*).

4.3 Visualising the Conceptual Framework

Figure 3. illustrates the conceptual framework. The separate elements of the biopsychosocial model of CP, represented by overlapping circles, may arguably be more or less significant at different stages of individuals' experiences of living with CP, and thus of RTW. This is due to factors such as the subjective nature of CP, variation in social support, and the variability of work environments to which employees return. Subsequently, the process of stratifying employees with CP to appropriate RTW interventions is represented by rotating arrows to illustrate a varying process, which reflects changes and the individual nature of the interplay between the biopsychosocial domains.

At the centre of the biopsychosocial CP model lies not only the pain, but the 'diminished self' or an individual's identity affected by the 'biographical disruption' (Bury, 1982) that constitutes CP. By perceiving the output of the interplay of the tripartite elements of pain model as linked to the concept of the 'self', the framework of RTW with CP proposed here follows a recent revision of the biopsychosocial model of health and illness proposed by Wainwright and Wainwright (2019). The emphasis on considering the 'self' in the proposed framework is also linked to the challenge around an individual's identity, highlighted by Eccleston (2018) as being at the centre of CP experience. Furthermore, previous research suggested that RTW is linked to the need to repair an individual's sense of self and their social identity, and argued that many RTW interventions, such as those with CBT, aim to address this (e.g. Wainwright et al., 2011a).

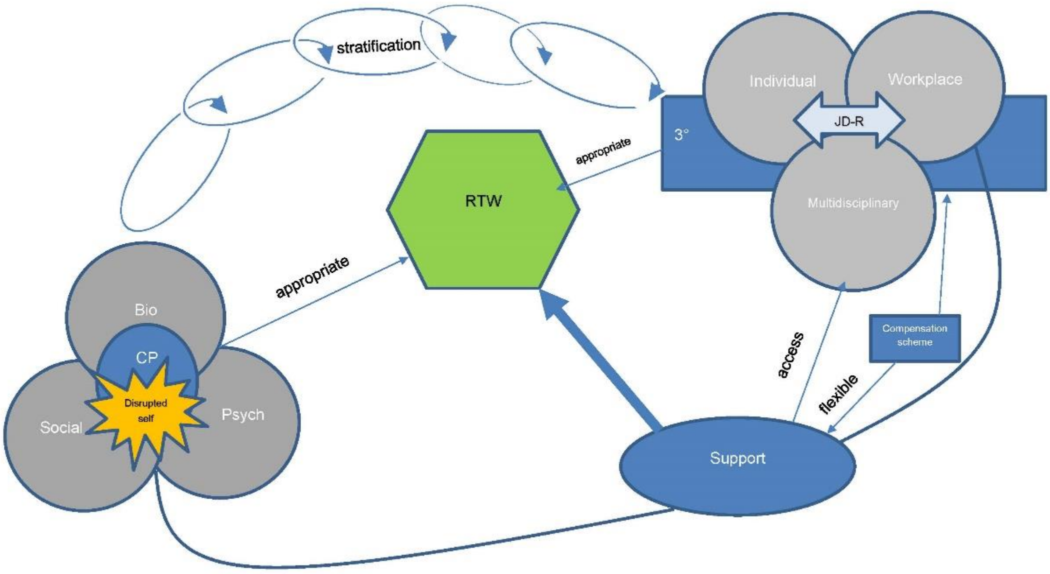


Figure 3. Theoretical framework of thesis
Note. Bio=Biological; CP=Chronic pain; JD-R=Job Demands-Resources Model; Psych=Psychological; RTW=Return to work; 3°=Tertiary interventions

Based on the findings from the project's systematic and rapid reviews, successful RTW approaches should include access to support and multidisciplinary strategies that include flexible social security; these key elements are crucial in the conceptual framework of the current thesis. Importantly, whilst successful RTW might be defined in a number of ways depending on the stakeholder involved (e.g. Young et al., 2005), the current framework proposes that the appropriateness of RTW for an individual with CP is established by their subjective reflection paired with supportive input from the professionals delivering RTW interventions.

The interventions aimed at supporting RTW among employees with CP have been depicted as a Venn diagram. These interventions mirror the biopsychosocial model of pain including the overlap of domains involved in the CP experience and RTW. Such conceptualisation of RTW interventions has been informed by the biopsychosocial dimensions of disability which need corresponding rehabilitative approaches (Waddell and Burton, 2004), as well as by the overlap between the target and level classifications of interventions (Kompier and Cooper, 1999; DeFrank and Cooper, 1987; Giga, Cooper and Faragher, 2003). Tertiary interventions have been defined as specific to RTW, as they are targeted at employees already signed off work (here, with CP). The variable relationship between job resources and demands features at the core of the interventions matrix highlighting its role in the RTW process.

Access to interventions was depicted within the current model as an important feature of support, since the lack of access to OH services for workers in the UK was highlighted as one of the issues faced by RTW stakeholders in the UK (Frank, 2016; Frank, 2018; see *Chapter Three*). Furthermore, the importance of access to RTW interventions was based on evidence to-date around benefits of employing timely RTW approaches (Black and Gunnyeon, 2013). Similarly, flexibility of a compensation system features as part of the current framework, as supported by the literature reviews' findings and discussed earlier in the current chapter (see *4.2.1 The biopsychosocial model of pain*).

4.4 Conclusions

To help conceptualise RTW with CP, the proposed framework includes the biopsychosocial elements of pain, the self and social identity, (the role of) social support, and the interplay between job resources and demands (the JD-R model). The suggested ways in which these concepts relate to each other, helping to conceptualise the process of RTW for workers with CP, are depicted in Figure 3; the intricacies of these relationships have been described above.

Previous chapters reviewed what we know about the impact of CP on multiple stakeholders and examined existing evidence on helpful RTW interventions, with 'administrative' criteria used to define RTW and judge the effectiveness of RTW interventions. However, previous studies highlighted the subjectivity of the interplay between job characteristics and employee outcomes (e.g. Werner and Cote, 2009). Thus, qualitative methods could provide CP RTW stakeholders such as policy-makers with an in-depth understanding of how users (e.g. employees with CP) experience RTW interventions. Furthermore, the current theoretical framework highlights the role of biopsychosocial factors and the ‘self’ in the RTW process for CP sufferers, as well as the socially defined meaning of key factors such as social support and work conditions, which pertain to successful RTW outcome. Thus, understanding RTW stakeholders’ perspective of the RTW process seems necessary to fully evaluate what an effective RTW process for workers with CP should represent.

Chapter Five: Methodology

5.1 Introduction

The current chapter presents a philosophical standpoint underpinning the social constructionist orientation for the project's empirical chapters. Justification of the choice of an interpretative qualitative method of thematic analysis (TA) in relation to the epistemological and ontological orientation is offered. A detailed justification for considering RTW stakeholders' views of the current UK RTW interventions for workers with CP is provided in relation to the gaps identified by the literature reviews. Next, procedure and analysis methods are described; these were applied to the project's three empirical studies. Ethical considerations applicable to these qualitative studies are summarised.

Based in the UK, the current research and its methods aimed to investigate RTW processes for UK-based employees with CP and thus inform change in processes to improve outcomes for RTW stakeholders, including employees, employers, healthcare providers, the government, and the wider society. Previous studies investigating SA and RTW successfully employed both, quantitative and qualitative methods (e.g. Myhre et al., 2014; Wainwright et al., 2015; respectively). Depending on the RQs of interest, either or both of these approaches apply (Gray, 2014; Hall, 2013). The choice of methods for the empirical studies in this project resulted from the RQs informed by the literature pertinent to the research topic, as identified by the systematic and rapid access literature reviews (*Chapters Two, Three*).

Results from both reviews suggested that, although there was no clear consensus regarding one RTW approach being clearly superior to the other, stratified care with multidisciplinary RTW interventions and workplace-based/workplace-targeted elements should be employed when supporting workers with CP. Equally, there was a gap in evidence relating to RTW stakeholders' views about the current RTW interventions, particularly evident from the RAR and its broader than the SLR's evidence inclusion criteria. Findings from the literature review offered context and provided the rationale for employing a more explorative method in the empirical phase of the current project. The identified evidence gap informed the choice of population (see section 5.5).

5.2 Ontological and epistemological standpoint, and rationale for research methods employed in Studies 1-3

Ontology considers the nature of existence and reality, whereas epistemology provides a philosophical background which helps us to decide the kinds of knowledge which are valid and acceptable (Gray, 2014). The former embodies our understanding of what exists, whilst the latter addresses the issue of how we know the world around us and what is needed for us to arrive at such understanding (Neuman, 2011). The type of methodology applied to research is grounded within ontological and epistemological assumptions (Neuman, 2011), which in turn impacts on the choice of methodology. For the purpose of this thesis and in a wider context of qualitative research, the paradigmatic stance adopted to underpin the research cannot be sidestepped by leaving it implicit. Equally, ignoring one's adopted paradigm is not sustainable since paradigm-free research does not occur (Hall, 2013). Instead, following Neuman (2011), a reflexive approach and awareness of the philosophical assumptions pertinent to the current research has been adopted here.

When one considers gaining knowledge about reality, ontology offers two main positions from which to make assumptions about the nature of reality, namely realism and relativism (Braun and Clarke, 2013). Within a continuum between the real world as independent of human interpretation (i.e. realism), and as occuring through interpretation, cultural background, and subjectivity (i.e. relativism; thus never directly experiencing the 'real world'), we can also find interpretations of the concept of reality with elements of each philosophical stance combined (critical realism). The latter position of critical realism rejects the reality as "*unproblematically existing 'out there'*" (Chia, 2002, p. 7) and it argues that our inquiry into the nature of reality can at times be distorted (e.g. by our preexisting ideas), and thus we need to acccount for such interpretation.

Subsequently, the positions we assume on the realism/relativism spectrum shape the way we learn about the world (i.e. epistemology) (Neuman, 2011), and arguably the way we experience learning about the world shapes our orientation. Sometimes unknowingly to us, our experiences and cultural factors shape the reality we perceive (Neuman, 2011). "*Research orientations are, therefore, inextricably linked to philosophical preferences which are, in turn, influenced, though not necessarily determined, by the embedded collective* *histories and cultural traditions within which our own individual identities have emerged*" (Chia, 2002, p. 3). For example, observing reality may be considered sufficient to produce knowledge if one adopts a realist stance, since it assumes that psychological phenomena can be observed and studied objectively and the world is independent of subjective interpretation (Neuman, 2011). The idea that empirical evidence we gather can verify or dispute our idea of reality, and verified ideas help to explain it, is the basis for a positivist epistemological position (Neuman, 2011). However, the effectiveness of observations in producing knowledge (and the status of the knowledge – i.e. the validity of the claims that can be made based on observations) is questioned by the relativist assumption of subjective influence and interpretation, and existence of multiple constructed, context-dependent realities (Braun and Clarke, 2013). The current research is aligned with the philosophical orientation of relativism (see Figure 4).

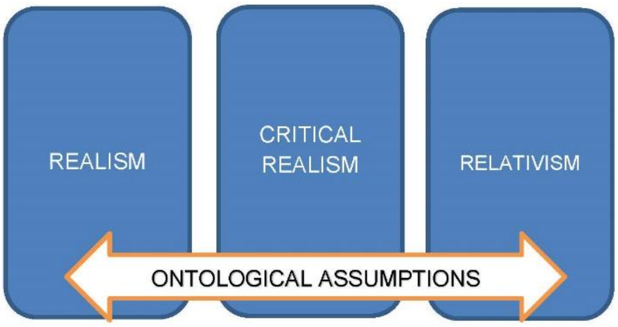


Figure 4. Ontological assumptions of research as a continuum (informed by material from Braun and Clarke, 2013)

From the relativist perspective, reality is subjective and the meaning is constructed when people interact as social beings, including the role of the discursive element (Braun and Clarke, 2013). Linked to this, an epistemological position of constructionism claims that the meaning is derived from our interactions with the world (Gray, 2014). The term 'social constructionism' highlights the importance of the interplay between the individuals as social beings and the world, which results in them constructing meaning which, even if related to the same phenomenon, can be constructed in many different ways (Gergen, 1985). How practices are represented and constructed through dominant cultural discourses is also important to the production of meaning (Burr, 1995). In the current thesis, both terms (i.e. constructionism and social constructionism) are assumed to relate to the same epistemological orientation. Although there is no single description which would sufficiently acknowledge breadth of social constructionism (Burr, 1995), there are several assumptions that should be considered. Specifically, social constructionism assumes "*a critical stance towards taken-for-granted knowledge*", accepts specificity of historical and cultural contexts, recognises that "*knowledge is sustained by social processes*", and argues that "*knowledge and social action go together*" (Burr, 1995, pp. 3-5).

By being aligned with the social constructionist epistemology (e.g. Gergen, 1985), the current project assumes meaning as arising from and being framed by the socio-cultural processes. Furthermore, by adopting the social constructionist orientation, the aim is to be able to elucidate the processes through which people "*come to describe, explain, or otherwise account for the world (including themselves) in which they live*" (Gergen, 1985, p. 266) – here, RTW process with CP – to promote change for RTW stakeholders. Thus, the aim of the empirical part of the project is not to discover 'facts' per se but, by adopting a constructionist perspective, to explore stakeholders' perceptions of the current RTW processes which could comprise a useful "*'reading' of a phenomenon*" and thus help to promote change if and where it is required within the RTW process (Burr, 1995, p. 162). Although such a goal of research could be perceived as 'political' (e.g. Burr, 1995), changes in RTW processes for CP workers might be needed based on the problematic nature of CP and its wide-ranging impact on society (see *Chapter One*).

In line with Burr (1995), the aim of the empirical part of the current project is to achieve a useful 'reading' of stakeholders' experiences of SA due to CP, and the impact of current RTW processes and strategies on RTW outcomes in terms of those experiences being the result of (or constructed by) the social interactions. At the same time, the notion of 'strong' constructionism is rejected as it may be seen as "*mute*" with regards to ontology (Nightingale and Cromby, 2002; p. 703). Schwandt (2003) argued that 'weak constructionism' accepts the idea of the role of external reality in the knowledge building process. Berger and Luckmann (1991) suggested that reality is socially defined, but it also reflects subjective experience and understanding of every day life. Subsequently, social arrangements can be both permanent and modifiable, and contradictory constructions often change the ways in which individuals think and behave. ‘Weak’ constructionism could be seen as somewhat akin to critical realism or contextualism, with its acknowledgement of context (e.g. Braun and Clarke, 2013). The current study adopted a ‘weak’ social constructionist epistemological position to investigate CP RTW processes.

It is important to mention some issues which might arise as a result of conducting a qualitative inquiry from a social constructionist position. From a relativist position and, specifically, constructionist epistemology, Coyle (2016, p. 16) noted that we should reject an assumption that “*there is some relationship between the outcome of the analysis of research data and the actualities of which the analysis speaks*”. However, Braun and Clarke (2013, p. 30) argued that when a constructionist approach is adopted, “*the process of knowledge production is still (often) empirical*” as we still seek understanding, with the process itself grounded in data. Arguably, a concept of the ‘interpretative framework’ (i.e. the researcher’s professional and personal investment in the research process; Coyle, 2016) interacts with the data during the analysis. However, no singular reality serves as the foundation for the ‘truth’ we seek, thus “*constructionism is a non-foundational view of knowledge*” (Braun and Clarke, 2013, p. 30).

Qualitative methods do not attempt to reach the precision possible when applying sophisticated statistical procedures (e.g. Antaki et al., 2003). Many earlier studies (e.g. those that emerged from the thesis’ SLR) employed quantitative methods when exploring the concept of SA and RTW (e.g. Myhre et al., 2014). This approach was suitable for those studies considering the RQs they attempted to address. In the current research, the literature review was part of the process of designing the study. The research gaps identified in the reviews, as well as the different types of evidence in relation to the thesis’ topic of RTW with CP were reflected upon. As a result, qualitative methods were employed in the empirical part of the current project. The aim was to answer RQs related to stakeholders’ experience and the social process of RTW, thus qualitative methods were deemed as appropriate for such an inquiry.

Qualitative inquiry supports evaluation of how people make sense of the world (Patton, 2015). The current thesis argues that understanding of RTW stakeholders' meaning making is essential for assessing the current UK RTW processes for workers with CP and informing change (e.g. the design of new interventions). Allowing stakeholders' perspectives on the contentious topic that is RTW with CP, could in future lead to more practical engagement in interventions. Such understanding of aims of research within social constructionist orientation was likened by Burr (1995) to 'action research', to highlight its focus on promoting change and intervention. The qualitative inquiry was adopted in the empirical part of the current project to contribute to generating new knowledge by examining social, cultural, and political perspectives, as well as the context surrounding the meaning making of individuals involved in RTW processes (e.g. Patton, 2015).

5.3 Study design

Individual interviews were chosen over other interviewing formats (e.g. focus groups) due to potential sensitivity of a topic of CP experience (Elam and Fenton, 2003; Elmir et al., 2011). Therefore, rather than employing a focus group interview where participants hear each other's responses, the current study employed individual interviews to account for a topic related to highly personal issues (CP experience, being off work, psychosocial issues related to CP, SA, and RTW) and to ensure participant confidentiality (e.g. Patton, 2015).

The methodological decision to conduct interviews was also linked to the ontological and epistemological position framing the current project, which suggested that the knowledge about an experience of CP RTW can be sought from the RTW stakeholders. A set of RQs related to stakeholders' experience of the current UK RTW processes for workers with CP were constructed (see their genealogy in Figure 1, *Chapter One*). Findings related to the literature (*Chapters Two, Three*) were considered with the interviewees, which provided an additional level of analysis. As the RQs related to the stakeholders' experience, considering the current RTW processes in participants' own context and situations, the qualitative approach seemed to be the most fitting for the type of inquiry planned (e.g. Patton, 2015).

5.4 Sampling strategy – Studies 1-3

Snowball and purposive sampling was employed to recruit participants for the three qualitative studies. In contrast to the quantitative approach which aims to identify a random sample that would mathematically represent subgroups belonging within a larger population (Berg and Lune, 2014), qualitative research focuses on purposeful sampling and its power to identify "*information-rich cases*" necessary for an in-depth inquiry (Patton, 2015, p. 264).

Snowball sampling involves making contact with small number of participants that leads to them introducing the researcher to others within their social network (Patton, 2015). This strategy was used in the current project to allow the researcher to expand the sample required to evaluate the current UK RTW processes for employees with CP. As part of the current recruitment strategy, individuals with attributes matching the inclusion criteria listed in *section 5.5* were approached, with an aim to ensure a degree of homogeneity in sampling.

5.5 Target populations – Studies 1-3

5.5.1 Justification of inclusion

Selection of specific RTW stakeholders to recruit for the project's empirical studies was informed by the literature. For example, the workplace elements within the successful interventions identified by the SLR led to reflections about the stakeholders involved. The Sherbrooke model of work disability prevention (Loisel et al., 2005) suggested that RTW outcome depends on interactions of several key stakeholders including employees and employers, as well as healthcare and compensation providers. Whilst access to OH services in the UK is limited (Frank, 2018), OH professionals were considered because the RAR identified no recent studies reporting views of OHPs, OTs, and OH nurses in relation to contemporary RTW interventions for CP, despite broad inclusion criteria that considered policy and legislation documents to establish the state of contemporary discourse. This research gap is noteworthy; gaining stakeholders' perceptions of the current RTW processes based on their experience of RTW interventions would be helpful in understanding the reasons behind the inconclusive findings reported in *Chapters Two* and *Three*. Furthermore, stakeholder engagement could promote best-practice development (Schmittdiel et al., 2015) for CP RTW interventions.

In every intervention there is a patient; there is an increase in patient-oriented research because it is important for researchers to include the voice of the person in pain (Richards et al., 2020). That is why the current project's aim was to explore the views of CP sufferers regarding contemporary RTW interventions. Empowering CP patients in their care decision-making process was included in the recent pain management guidelines (Lee et al., 2013). As CP is a subjective experience (e.g. Cohen, Quintner and van Rysewyk, 2018; see *Chapter One*) and has been conceptualised in the current thesis as an interplay of biopsychosocial elements, interlinked with the concepts of the 'self' and self-identity (see *Chapter Four*), considering RTW experiences of workers with CP was deemed as key to meeting the research aims.

OHPs' experiences of sickness certification have been examined in comparison to experiences of GPs, showing that the former had less problematic sickness certification consultations (Ljungquist et al., 2015a; 2015b). However, recent studies reporting specific views of OHPs in relation to contemporary RTW interventions for CP were not found by the literature search, therefore providing a rationale for the project's second study (*Chapter Seven*).

Little is known about RTW processes from the OTs' perspective (Coole et al., 2013), or a highly related, albeit distinct group of OH nurses; this supported the rationale for the third study. In the RAR, survey research found pronounced differences in work-related advice and support delivery among UK OTs supporting CP sufferers and their employers with RTW processes (Coole et al., 2013). However, survey methods could not have captured individuals' in-depth perceptions of RTW processes (e.g. Brown, 2002). Views of OTs regarding RTW interventions have been explored with relation to non-CP patients (e.g. Desiron et al., 2015) and Scott-Dempster et al. (2014) explored the experiences of physiotherapists in the UK who treat CP patients. However, a review of occupational therapy interventions on RTW found that whilst they support RTW, an overall indication of ‘good practice’ and its key components is lacking (Desiron et al., 2011). As such, examining views of OTs on what works best for RTW with CP could help to address this gap. Importantly, OHPs, OTs, and OH nurses may be members of multidisciplinary RTW teams, suggested to be strategies likely to support RTW for CP sufferers (*Chapters Two, Three*), which contributed further to the sample selection criteria employed in the current project.

It is worth noting some of the similarities and differences between the roles of the healthcare professionals recruited for the current project and their roles in RTW processes. For example, all three professions work with people of all ages to promote health and work ability (RCOT, 2019; RCON, 2019; BMA, 2015). In addition, OTs consider work as one of many possible ‘occupations’ for which patients might need supportive strategies. The OT role is regulated by the Health and Care Professions Council (RCOT, 2019), whilst the Nursing and Midwifery Council oversees the role of the OH nurse (RCoN, 2019). OHPs are medical doctors with a qualification in occupational medicine; OHPs can issue FNs and work often in-house (i.e. employed at an organisation for which they provide OH service), or contracted as third-party OH service providers (BMA, 2015).

GPs were not included as stakeholders in the current project because a lot of RTW research has focused on samples of GPs and their patients – for example, the RAR identified research relating to GPs and their experience of sickness certification (and the FN) for CP patients (e.g. Wainwright et al., 2015). Evidence suggests that practitioners’ beliefs and attitudes affect their treatment orientation, advice and recommendations (Daykin and Richardson, 2004; Jeffrey and Foster 2012; Pincus et al., 2007; Wainwright et al., 2011b).

Similarly, trade union representatives were not specifically sought out as a sample population for the qualitative studies. Reasons such as the voluntary, self-selection nature of employees' membership in the trade union contributed to this decision. The Department for Business, Energy and Industrial Strategy (2019) reported a downward trend in trade union membership since 1995, with 6.35 million UK employee members in 2018. Older workers, permanent contract holders, and those with professional occupations were reportedly more likely to have a trade union membership (The Department for Business, Energy and Industrial Strategy, 2019) but these employee characteristics were not set as the inclusion criteria for the first of the three studies, with CP sufferers. Fitch and Nicoll (2019) found that stakeholders' views on RTW after cancer are not influenced by the union membership as much as by the type of work or the size of an organisation, although in Britain the unionised workers tend to receive higher sick-pay (i.e. in excess of the statutory allowance; Bryson and Dale-Olsen, 2019).

Insurance companies were not approached to participate in the current project due to the majority of UK workers receiving the immediate source of compensation and healthcare provision from the state, and sickness benefits from employers (Lewis, 2012; see *Chapter Nine* for further discussion and researcher's reflections on the limitations of the adopted approach). Finally, whilst initially planned, the project did not include employers as a study population. For a discussion of reasons for excluding employers, see *Chapter Nine*.

5.5.2 Inclusion and exclusion criteria

Participants in the first empirical study (*Chapter Six*) had to be employed (on a full-time, part-time, or self-employed basis) and have some experience (currently, or in the past) of being signed off work due to CP. Participants in the second (with OHPs) and third (OTs/OH nurses) study had to have experience of helping workers (who have been signed off work with CP) to RTW. OTs had to have a recognised qualification in occupational therapy and experience in practice, whilst OH advisors (i.e. nurses) had to have the qualification 'Specialist Practitioner in OH' (registered nurse with a BSc or MSc in OH).

To meet the inclusion criteria for the three studies, potential participants had to be aged 18 or over, be able to give informed consent (i.e. understand and accept the information on the Participant Information and Consent sheets), and be able to understand English adequately without the need for an interpreter as unfortunately there was no funding available for one. The upper age limit was not set in any of the studies; in study one, such decision was based on the current workforce comprising many different age groups, including older workers (e.g. Bevan, 2016; Bevan et al., 2018). Thus, the researcher was interested in recruiting all workers, no matter what age. Similarly, the upper age limit was not deemed as relevant considering aims of studies two and three.

The length of time participating employees had to be off work was not set a priori. The length of time during which healthcare professionals in studies two and three were working with CP sufferers to address RTW was not determined as an inclusion criterion. In previous SA literature, the choice of recall periods for recording SA has not been consistent (Severens et al., 2000). However, Von Baeyer (2011) noted that individuals remember experience based on their saliency rather than based on its timing; for example, pain experience is more salient than having no pain, thus the former is more likely to be retained in memory (Von Baeyer, 2011). Haug (2008, p. 538) argued that "*memory itself should be conceived of as contested; it contains hope and giving up; above all, memory is constantly written and always runs the risk of reflecting dominant perspectives*", thus highlighting the issue of identity, subjectivity, and social production of experience (e.g. Stephenson and Kippax, 2008).

Subsequently, the following exclusion criteria were employed:

- In the study with workers, participants who had no experience of being signed off work, were unemployed, or who were volunteers instead of in employment were not sought; the latter exclusion criterion was decided based on the current conceptualisation of RTW as returning to paid employment. Thus, the current thesis differed in how work was conceptualised versus previous research (e.g. Waddell and Burton, 2006). Other forms of work, as listed in Waddell and Burton's (2006) review are conceptualised here as other forms of 'meaningful occupation' (e.g. Clark et al., 1991) rather than work per se.
- In the studies with OHPs and OTs/OH nurses, the criteria set a priori meant that participants who were not involved in working with CP patients using RTW interventions were not sought.
- In all three studies, participants who were non-English speakers were excluded due to insufficient resources towards translation; the latter exclusion criterion creates a potential for bias and ethical issue of inequality amongst the study participants, but it was necessary from a pragmatic point of view and followed other researchers who adopted such an approach (e.g. Wainwright et al., 2015).

The current project focused on UK RTW interventions, and thus UK-based workers, OHPs, OTs/OH nurses were targeted. As a result of employed sampling strategy (see section *5.4*), the researcher was approached by a participant who worked in Jersey. Based on the thesis' assumption that data would be collected from the UK, the researcher considered Jersey to be a crown dependency, thus self-governing but a crown possession. Bath Spa University (BSU) Research Support Office (RSO) was contacted for guidance to ensure the current inclusion criteria was adhered to. The RSO confirmed that Jersey does not come under the NHS regulation, and thus the Health Research Authority's (HRA) approval for recruiting participants based there would not be required (see section *5.12*). Jersey's own regulatory approvals were not considered here, since the researcher did not plan to use any Participant Identification Centres (PICs) based there.

5.6 Recruitment – Studies 1-3

Both, online and paper copies of recruitment adverts/posters (appendix 8-10) were used. Various pain charities and OH organisations were also contacted (see appendix 11 for the full list), mostly via email and social media channels (appendix 12-13), asking them to share the study's recruitment advert with their members and employees. When contacting potential participants, the researcher asked those individuals to alert anyone else who may be interested in taking part in the study, about the project. Notably, Patton (2015) suggested that snowball sampling can be efficient and effective in generating a sample using internet-mediated strategies; thus, a website dedicated to the current empirical project (www.rtwresearchblog.wordpress.com; appendix 10) was set up to provide potential participants with more ways of finding out more information about the studies. Unfortunately, the number of visits to the website is not known. Furthermore, once HRA's ethical approval for the current project was secured (see section *5.12* and appendix 14), the researcher contacted several NHS Trusts (e.g. [redacted]) to act as PICs and to display the study recruitment advert with the researcher's details for any potential participants to use.

5.7 Sample size – Studies 1-3

Originally, based on methodological literature (e.g. Guest, Bruce and Johnson, 2006) the aim was to recruit at least twelve participants per each of the three empirical studies, although Patton (2015) argued that strict sample size rules do not apply to qualitative research. Romney, Batchelder and Weller (1986) stated that samples comprising only four participants can yield complete information, providing participants possess 'cultural competence’ (i.e. expertise in the enquiry’s domain). Morse (1994, p. 230) described ‘adequacy’ suggesting that in qualitative research, it “*refers to the amount of data collected, rather than to the number of subjects as in quantitative research. Adequacy is attained when sufficient data has been collected that saturation occurs*”. According to Guest, Brunce and Johnson (2006), conducting twelve interviews should be sufficient to reach thematic saturation, providing that the sample is homogenous and interviews have at least some degree of structure; this was arguably the case in all three of the thesis’ empirical studies.

Sample size was actively reflected upon, as per Braun and Clarke (2015). At the stage of submitting the Research Plan for the current project, when considering the aim of the study and the required timescale, during reflection on the ethical principles behind the design, as well as during the actual recruitment, qualitative data collection process and the subsequent analysis, the adequate sample size was of key importance. Any decisions regarding the size of the sample were informed by considering theoretical and pragmatic arguments. Supervisory meetings were utilised to discuss researcher’s thoughts and receive feedback on proposed research strategy.

5.8 Saturation

Glaser and Strauss (1967) originally proposed ‘saturation’ as a concept assuming continuous sampling and coding of the data until no new categories can be identified, in the context of Grounded Theory. However, Malterud, Siersma and Guassora (2015) claimed that data saturation has been continuously poorly applied across studies employing theoretical frameworks other than Grounded Theory. Reviews suggest that transparency and justification by qualitative scholars of selecting given sample sizes leaves much to be desired (e.g. Carlsen and Glenton, 2011). Similarly, what is understood by the term ‘data saturation’ has not been uniform or sufficiently explained in many of the qualitative research studies (Malterud, Siersma and Guassora, 2015). Becker (2012) postulated that there is no ‘right place’, which researchers can universally adopt as a stopping point for the qualitative data collection. Most recently, Low (2019) argued for a pragmatic definition of data saturation, at the same time reflecting a logically implausible idea of an absolute end to qualitative data analysis or comprehensiveness of a theoretical framework.

Whilst saturation sampling allows to de-centralise the issue of the sample size in qualitative inquiry, it requires an assumption of conducting data collection and preliminary data analysis in parallel with each other (Patton, 2015). Thus, this strategy was employed when collecting data for the thesis' three empirical studies. The concept of achieving data saturation was continuously reviewed as part of the iterative process, whilst acknowledging the role of researchers' subjective decisions (Malterud, Siersma and Guassora, 2015). Factors such as sample specificity, theoretical background and analysis strategy, as well as the quality of dialogue (linked to researcher's listening and rapport building skills, as spontaneously commented on by the participants) were considered and were all linked to the study's information power (Malterud, Siersma and Guassora, 2015). That is, the level of relevant information the sample holds (Malterud, Siersma and Guassora, 2015).

As the current aim considered a specific experience (RTW), transferrable to a specific population group, and the study sought participants who, in accordance with Romney, Batchelder and Weller (1986) possessed expertise in the area of interest for the current study, it was argued that this provided access to the relevant level of information power. Clear communication during the interviews with the study participants was achieved, which in turn resulted in a rich set of empirical data with high information power (Malterud, Siersma and Guassora, 2015). Morse (2000) described an inverse relationship between the amount of useable data and the number of participants needed in qualitative studies, suggesting that rich data allows for a lower sample size. As the current thesis considers the essence of RTW experience when people have CP, such a goal should allow saturation with a smaller sample (e.g. Morse, 1994). Mason (2010) argued there is a risk of 'diminishing returns' from an ongoing data collection once new information adds nothing new to the overall data set.

Recently, Wainwright et al. (2017) published a qualitative study with fewer than twelve participants postulated by Guest et al. (2006). This suggests that low sample studies have a valid place within the field of health and psychology research, which is also a consideration when arriving at the final number of interviews required (Baker and Edwards, 2012). Notably, a strong theoretical background in the study by Wainwright et al. (2017) would have likely been an important contributor to its information power (Malterud, Siersma and Guassora, 2015). In contrast, Wainwright et al. (2019a) included a sample of twelve participants in a qualitative study using TA; the study did not comprise theoretical basis to the extent of that by Wainwright et al. (2017).

Finally, linked to the interpretive perspective applied to the current project, research with roots grounded within social constructivism does not subscribe to the idea of qualitative studies representing a full set of facts (Alvesson and Sköldberg, 2009). Instead, such perspective sees knowledge being "*considered partial, intermediate, and dependent of the situated view of the researcher*" (Malterud, Siersma and Guassora, 2015, p. 7) and thus "*we should see the interview as a place where social forms are staged rather than a resource to understand the nature of society beyond*" (Back, 2012, p. 13). Braun and Clarke (2015) postulated a flexible TA approach, where samples differ in size. This is linked to conceptualising themes as being developed and a result of a subjective, reflexive, and creative process of data exploration (Braun and Clarke, 2015). Thus, studies employing TA should not subscribe to an idea of 'truth to be missed'; instead, sample size (and saturation) should be actively reflected upon and continuously evaluated during the research process (Braun and Clarke, 2015), which was the approach adopted here.

5.9 Research questions and semi-structured interview schedule

The project's empirical studies aimed to answer RQs presented in Figure 1 (*Chapter One*; these RQs are stated again in each empirical chapter). All interview schedules (appendix 15-17) were informed by the findings from the literature regarding successful RTW interventions (see *Chapters Two*, *Three*), designed to help to meet the study aims (informing change by examining stakeholders' perspective of RTW processes). Patton (2015) suggested that, whilst interviewers are free to ask spontaneous questions in a semi-structured interview format, interview guide serves as a checklist to ensure key topics are addressed.

The interview schedules were piloted. Following the pilot interviews no changes needed to be made. Frankland and Bloor (1999, p. 154) argued that piloting a qualitative approach allows researchers to gain a "*clear definition of the focus of the study*". However, Holloway (1997) disagreed, since the progressive nature of qualitative data collection techniques allows the researcher to improve subsequent interviews following the insights gained from the initial interview. In terms of the quality of dialogue between the interviewer and the participants, each semi-structured interview informed the subsequent ones. Patton (2015) noted that semi-structured interviews might lead to emergence of topics which had not been included in the interview schedule, thus leading to richer data. At the initial stage of data collection, thesis supervisors were consulted to review the interviewing technique. As a result of conducting the literature review and continuous reading around the subject the researcher held a reasonable amount of background knowledge on the topic of interest and became more confident as the data collection process progressed. The researcher was able to establish rapport swiftly and effectively (as spontaneously confirmed by the participants). The researcher's interviewing/active listening skills helped to shape the data collection, such as including complex questions about potentially emotional issues towards the middle of the interview, once rapport had been established, and prompting participants if/when required.

Finally, the approach to data gathering was concurrent. This allowed data to be collected during the same phase of the project and approximately at the same time. The concurrent approach was chosen to increase the efficiency of data collection. As all data was qualitative, there was no issue of different timing or weighting of methods to answering the RQs that might be pertinent to mixed methods research (e.g. Creswell and Plano Clark, 2011).

5.10 Procedure

Participants who volunteered to partake in the current project were informed about its aims, asked to provide informed consent, and if provided, they were interviewed. Ethical considerations pertinent to the procedure have been described in detail in section *5.12*. Each semi-structured interview lasted between 30 minutes to 1 hour. Some interviews were conducted face to face and some were telephone interviews. Notably, there are strengths and limitations of both approaches to data collection; telephone interviews result in the loss of visual cues and non-verbal data, which in turn might affect the researcher-participant rapport and compromise the quality of data and their interpretation (Novick, 2008). Furthermore, McCoyd and Kerson (2006) suggested that participants can be distracted by their surroundings during telephone interviews, although the same has been claimed for the face to face approach (e.g. Sturgess and Hanrahan, 2004).

Equally, partaking in a telephone interview is often more straightforward and more cost-effective than arranging a meeting in person, and it might make participants more relaxed when discussing sensitive topics than when having to do so face to face with a researcher (Novick, 2008). Notably, as any self-report method, interviews rely on the ability and willingness of participants to provide accurate and complete answers to the presented questions (Breakwell, Hammond and Fife-Schaw, 2000), which cannot be guaranteed and thus can jeopardise the interview and subsequent analysis process. This issue could potentially be addressed by effective rapport building between a researcher and a participant, as was the case in the current project. Furthermore, successful rapport building (as confirmed by the participants, unprompted), enabled the researcher to address potential bias resulting from mixing two different mediums of data collection (i.e. face-to-face and telephone-based), whilst ensuring participants were comfortable with the interview type, and data collection proceeded safely and ethically.

The data analysis was iterative and proceeded sequentially. This, in each of the studies, allowed for the analysis of the collected data before the subsequent interviews. Thus, the initial findings helped to inform later interviews by modifying the schedule of questions as and if required. During the semi-structured interview process prompts adapted from Morgan and Kreuger (1998) were used and field notes were collected to inform future interviews, analysis, and reflection (see appendix 18 and Table 6 in the latter parts of the chapter). The notes assisted with the emergent nature of qualitative research and the prompts helped to respond to points raised by the participants during the interviews (Joffe, 2012). Furthermore, as per recent guidance (e.g. Social Perspectives Network, 2003; Tew et al., 2006), the qualitative studies considered participants' perspective holistically to enable their experience to be investigated in their social context.

The researcher conducted all interviews, which allowed prior knowledge of the data set (including recalling details of the interviewing experience) and to form initial reflections about the analysis. The interviews were audio recorded and transcribed verbatim by the researcher or by an external, ethically bound professional transcribing company. To address potential issue regarding different transcribers, the transcripts were read several times to achieve familiarity with their full content. Furthermore, the transcripts prepared by the researcher and those prepared externally were checked for accuracy against the original recordings. Notably, as described earlier, Braun and Clarke (2006) argued that immersion in the data is the primary step of TA, and thus these steps taken prior to data analysis allowed for immersion with the full data set. All data were stored on a password protected computer and transcripts were stored seperately from the original recordings. Participant confidentiality and anonymity were protected (see section *5.12.2*).

5.11 Thematic analysis as an approach to analysing interview data

Whilst positioning the current project within the relativist, social constructionist epistemological position and deciding upon using qualitative methods in the empirical studies with RTW stakeholders, TA (Braun and Clarke, 2006) was chosen to analyse the gathered data. The concept behind TA was developed to enable analytical transition from a simply observable to a more tacit content (Joffe, 2012). Although in the past there was a lack of agreement about the specifics of conducting TA, there are currently several approaches to defining the approach (e.g. Boyatzis, 1998; Braun and Clarke, 2006). According to a definition by Braun and Clarke (2006, p. 79), TA "*is a method for identifying, analysing and reporting patterns (themes) within data*". Despite some researchers arguing against recognising TA as a standalone analytic tradition (e.g. Ryan and Bernard, 2000), this qualitative approach was chosen here due to its flexibility and compatibility with constructionist paradigm (Braun and Clarke, 2006).

Serving as a constructionist analysis method, TA was used in the current project to examine the impact of a range of societal discourse on the many experiences and realities (Braun and Clarke, 2006) of RTW stakeholders. Joffe (2012) noted that a number of studies which focus on exploring subjective experiences of various therapies have been using TA. Joffe (2012, p. 212) noted that TA "*serves as a useful tool to illuminate the process of social construction*". Used in that way, TA is most appropriate for a researcher to elucidate "*the specific nature of a given group's conceptualisation of the phenomenon under study*" (Joffe, 2012; p. 214), with the interview data collection method being the most suitable.

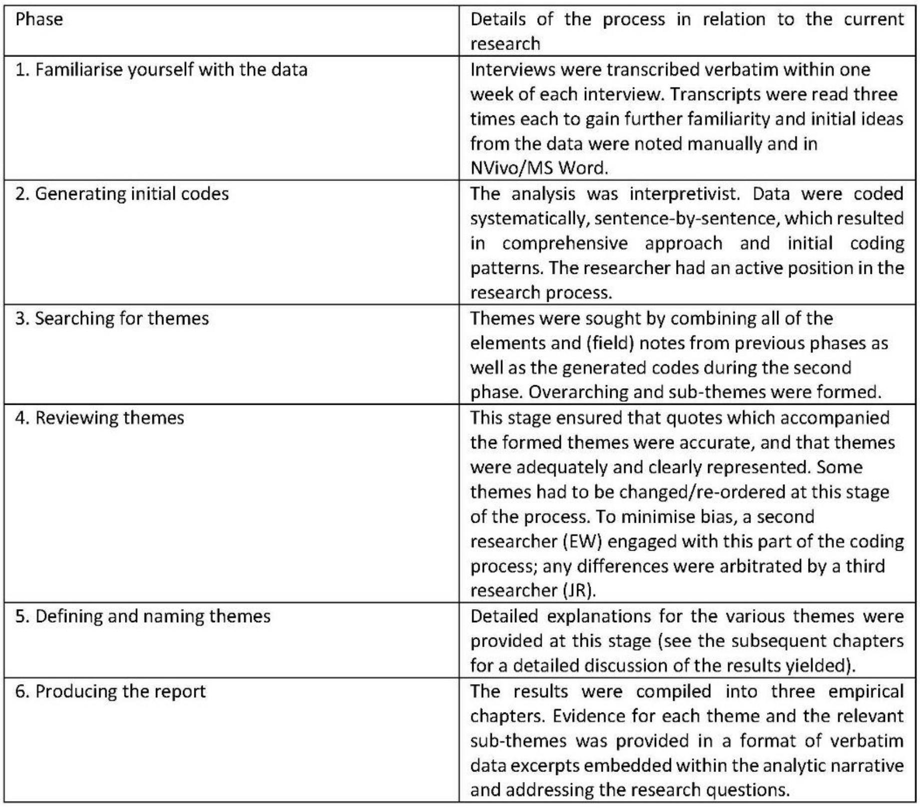
In terms of the TA method, the coding procedures can be seen as flexible and naturally evolving (Braun and Clarke, 2006), in comparison with initial coding when employing the grounded theory method (Charmaz, 2006). Taylor and Ussher (2001) proposed a view of an active role of the researcher in the analysis process, thus rejecting the notion of discovering themes passively present in the data set as advocated by some (e.g. Rubin and Rubin, 1995). Braun and Clarke (2006) agreed, suggesting that researchers are determined by their ontological and epistemological position, which has a direct impact on coding the data. However, Joffe (2012) argued that both, deductive (i.e. theory driven) and inductive (i.e. data driven) TA strategies can be applied to data analysis, and researchers should remain open to new concepts, whilst approaching the data with some theoretically informed ideas. A high-quality analysis should comprise both latent (i.e. implicit) and manifest (i.e. directly observable) theme categories (Joffe, 2012). Furthermore, Harper and Thompson (2012) noted the importance of both, epistemological and personal reflexivity throughout the qualitative research process, which the current researcher strived to adopt throughout the duration of this thesis, and importantly during the empirical methods as described in the following section of the current chapter.

5.11.1 Analytical procedure

The analytical procedure, employed separately for the three empirical studies (*Chapters Six-Eight*), followed Braun and Clarke's (2006) six-phase model of conducting TA; Table 5 illustrates the process adopted. Specifically, the initial phase comprised reading the data transcripts many times to achieve familiarity with their content. Howitt and Cramer (2011) concurred with Braun and Clarke (2006) regarding the necessity for researcher to familiarise themselves with the data set. Only once this initial process of 'active reading' and data immersion is complete, the gathering of the initial codes can commence (phase two; Braun and Clarke, 2006). Data for the current project was coded systematically, to allow for as many potential patterns within the data (themes) as possible (Braun and Clarke, 2006). Some of the coding was initially done using NVivo analytical software, with the remaining data coded manually, using MS Word document to store the codes and the relevant ideas. This approach was pragmatic and taken based on reflections form the researcher about the level of analysis achievable through each strategy.

Subsequently, phase three of TA focused the analysis of collated codes on finding the relationships between the codes (Braun and Clarke, 2006), and thus identifying the main themes as well as those contained within the primary ones (i.e. sub-themes, or strands). Following this initial recognition of the importance of some of the themes, phase four of the TA data analysis involved refining the previously identified themes to ensure that the data within them cohered together in a meaningful way, whilst ensuring distinctiveness between the separate themes (Braun and Clarke, 2006). This process was carried out at two levels; namely, the level of the coded data extracts and subsequently in relation to the complete set of data to ensure a good understanding of the themes and the relationships between them. At this stage, a second researcher reviewed the coding process to reduce bias and a third researcher arbitrated any disagreements.

Table 5. *Thematic Analysis method in the current research as based on Braun and Clarke (2006)*



Phase	Details of the process in relation to the current research
1. Familiarise yourself with the data	Interviews were transcribed verbatim within one week of each interview. Transcripts were read three times each to gain further familiarity and initial ideas from the data were noted manually and in NVivo/MS Word.
2. Generating initial codes	The analysis was interpretivist. Data were coded systematically, sentence-by-sentence, which resulted in comprehensive approach and initial coding patterns. The researcher had an active position in the research process.
3. Searching for themes	Themes were sought by combining all of the elements and (field) notes from previous phases as well as the generated codes during the second phase. Overarching and sub-themes were formed.
4. Reviewing themes	This stage ensured that quotes which accompanied the formed themes were accurate, and that themes were adequately and clearly represented. Some themes had to be changed/re-ordered at this stage of the process. To minimise bias, a second researcher (EW) engaged with this part of the coding process; any differences were arbitrated by a third researcher (JR).
5. Defining and naming themes	Detailed explanations for the various themes were provided at this stage (see the subsequent chapters for a detailed discussion of the results yielded).
6. Producing the report	The results were compiled into three empirical chapters. Evidence for each theme and the relevant sub-themes was provided in a format of verbatim data excerpts embedded within the analytic narrative and addressing the research questions.

"*Defining and naming themes*" (Braun and Clarke, 2006, p. 92) and writing-up the results of the data analysis were the fifth and sixth phases adopted in the TA method in the current thesis, respectively. The former phase included identifying the "*essence*" of the separate themes and the overall "*story*" they tell about the data in relation to the research questions (Braun and Clarke, 2006, p. 92), whilst the latter included exhibiting and explaining the results to the reader, as presented in the subsequent chapters. Importantly, throughout the analytic process, attention was given to the potential challenges which might affect the process of TA and addressing those; for example, a lot of time was spent ensuring that the analytic comment illustrates researcher's interpretation of the data and goes beyond simply paraphrasing the data (Braun and Clarke, 2006). Identified themes differed from the RQs, thus ensuring that analytic work has been carried out and resulted in a coherent and consistent narrative, where claims were supported by the data (Braun and Clarke, 2006) (see summary of data analysis methods in Table 6). The quantity of quotes and in particular, their length were motivated by a perceived need to increase the overall trustworthiness of the analysis and thus, the reader's confidence therein (e.g. Williams and Morrow, 2009).

The researcher negotiated the analysis by reflecting on the TA method and by being flexible in the adopted approach (Braun and Clarke, 2019). The analytical process comprised breaking up the narrative accounts and thus their continuous structure had been lost. To limit how the initial interpretations shaped the course of the analysis, the researcher engaged in regular reflection. Whilst the 6-step process (Braun and Clarke, 2006) was adopted, as per the more recent writings (Braun and Clarke, 2019) the linearity of it was not rigid and allowed the researcher to 'leave' the analysis for a few days and 'return' to the process, enriched by own reflections and thinking around the analytical process and its constructionist framing. In doing so, the researcher's knowledge formed part of the analytical process; this was acknowledged throughout whilst analytical decisions were made (Braun, Clarke and Weate, 2017). As the literature review was conducted before collecting data for the qualitative studies, the researcher was able to become familiar with the key concepts related to the thesis' topic. This is common and to be expected within academic research (Charmaz, 2006). However, Charmaz (2006) suggested that researchers ought to be aware of the impact of their pre-conceptions on their observations and interpretation of the data, addressed by engaging in reflexive practice (Harper and Thompson, 2012; see *Chapter Nine*). Furthermore, Glaser and Straus (2017) suggested that literature reviews could be performed after the data collection and analysis.

The themes were generated (i.e. not simply ‘waiting to be found’ but rather developed as a result of a reflexive process) and described to show how they were underpinned by a “*central meaning-based concept*” (Braun and Clarke, 2019, p. 593). In their recent paper, Braun and Clarke (2019, p. 593) point out the importance of themes being “*patterns of shared meaning*”. In the current project, generated themes reflected shared meaning (for example, the meaning of being “100% fit” to RTW and the problematic construction thereof in relation to the topic of research). The researcher constructed themes’ titles that were descriptive yet diverse from the wording of the interview questions, which helped to evidence the depth of the analysis and create “*stories about the data*” (Braun and Clarke, 2019, p. 594).

Due to the project being a doctoral dissertation, the researcher analysed the data independently. This comprised interpreting language as means of constructing reality (Burr, 1995), with participants’ phrases (e.g. ‘Emperor’s New Clothes’) making it often a complex, but equally a rewarding task; personal interest in linguistics made the interpretation process highly enjoyable. That said, brief discussions and collaborative coding during the initial stages of the analysis helped the researcher to develop a more nuanced approach to reading of the data and thus, the analysis. The researcher became increasingly confident in justifying her analytical decisions to supervisors without the need for uniform consensus; knowledge of the data gained from conducting the interviews, familiarisation with the transcripts, and reflexivity helped with this. Importantly, Braun and Clarke (2019) note that in reflexive TA, collaborative coding emphasises nuance rather than coding consensus per se.

Table 6. *Summary of data analysis methods – Study one with employees (Chapter Six)*

Data analysis methods	Examples of how methods were adopted
1. Initial coding - verbatim excerpts were assigned preliminary codes	*'I felt that I didn't feel 100% well. I didn't feel 100% sure of what was wrong. But I felt like I could do some work, and I really wanted to do some work rather than no work' (P10);* coded as "being fit"
2. Field notes - written during interviews by the interviewer, informed data analysis	"*Pp focusing on ability throughout the interview, despite challenges to manage certain tasks; not having 100% capacity does not equal inability to contribute – work is important!*" [Field note P10; 30 May 2018]
3. Inter-coder review - some themes changed/re-ordered following a discussion with a second researcher	*'I felt that I didn't feel 100% well. I didn't feel 100% sure of what was wrong. But I felt like I could do some work, and I really wanted to do some work rather than no work' (P10);* Initially coded as "being fit", second researcher (EW) commented: "*Not quite sure about this phrasing…they are not saying they are totally fit, are they, more that they are fit enough to do SOME work, and/or are pushing themselves to work as it helps them*"; the initial code was re-named as "subjective feelings of being fit enough to do some work" and was later classed as forming part of a theme "*RTW and work in general allow employees to feel 'fit'*"
4. Reviewing, defining, and naming themes - researcher tested how themes represented the data and how they are linked to each other	Initial codes turned into themes in a process exemplified by the following: Codes/Initial themes *"being fit"* code within a theme hierarchy *One hundred percent fit: Feeling pressure to RTW/Adapting to pain/Recognising the value of RTW and work in general;* Final themes *1. The subjectivity of what '100% fit' actually means is problematic:* *1a. Employees feel pressure to RTW at '100%' capacity* *1b. Feeling 'fit' requires acceptance and adapting to pain* *1c. RTW and work in general allow employees to feel 'fit'*

5.12 Ethical approval and consideration of ethical issues

Originally, ethical approval for the qualitative studies described in the current and subsequent chapters was obtained from the College of Liberal Arts (CoLA) Research Committee. However, as the project progressed, the types of participant groups of interest to the study were extended and so HRA approvals for all study documents were sought and given, see appendix 14. The qualitative research was overt and did not involve participant deception.

Although the research did not study a vulnerable population, CP sufferers participating in the first study could be seen as ‘vulnerable’ in some sense of the word. Thus, the already mentioned sensitivity of the topic of RTW with CP was considered when making methodological decisions. The study was fully funded by BSU PhD studentship. All three empirical studies included adult population and the consent form (CF) asked participants to sign to confirm that they are 18 or over.

5.12.1 Ensuring consent is informed

Prior to the qualitative data collection, Participant Information Sheet (PIS; appendix 19-22) was included in an information pack (appendix 23-26) sent out to participants (approximately 1 week prior to the interviews, allowing sufficient time to consider taking part in the study and informed consent). At any time, before or after receiving the CF, participants were encouraged to contact the research team (via phone, post, or email) if they had any questions relating to participating in the study, or the study itself. If a participant did not have any questions, the researcher still confirmed verbally or via email if they had any outstanding queries before the consent was sought and accepted. Only once all questions had been answered and participants were satisfied they met the inclusion criteria for the study and were happy to take part, they were requested to sign a CF (appendix 27) and return it to the study co-ordinator (researcher’s details were provided here). Questions asked by the participants referred to the end date of the current project and expressed interest in receiving a copy of the findings.

Once the CF was received, participants were contacted to arrange an interview. Participants were screened over the phone prior to the interview to confirm that they matched the inclusion criteria. Furthermore, continuous progress consent was being sought during qualitative data collection, and the researcher was ready to terminate any interview if a participant became distressed; this did not occur. As some participant recruitment occurred online, ethical issues relating to internet-mediated research such as valid consent and privacy online were addressed in accordance with the BPS guidelines (BPS, 2013). Participants were made aware that the current study was independent from their healthcare provider, GP, employer, and government agencies.

5.12.2 Managing confidentiality and anonymity of participants and data

Data storage, both on paper, and electronically, complied with Data Protection Act (1998) (Great Britain, 1998) and subsequently, as of June 2018 with the new EU General Data Protection Regulation (GDPR) guidelines (EU, 2016), and the University policies. Information explaining this to participants was included in the study information pack (appendix 23-26). Furthermore, participants were not asked to give out any in-depth information about their medical history (study one), or information about specific clients (studies two and three). Instead, participants were requested to reflect generally on the topic of RTW interventions for people with CP. The audio recording and all data was handled and stored following ethical, university, and legal guidelines on a password protected computer and/or in a locked cabinet. Transcripts were stored separately from the original recordings. The audio recording was used to generate data for this study, not for any commercial purposes.

Participants' answers (raw data and data analysis) were completely confidential and anything they said was kept in the strictest confidence and was not be shared with anyone outside the research team, whose members were bound by the principles of the Code of Human Research Ethics (BPS, 2014). Importantly, everything the participants said remained confidential between them and the research team, unless they said something relating to harming themselves or another person (e.g. a healthcare professional doing something to harm their patient). In that case, the researcher had a duty of care to inform a relevant third-party contact and all potential participants were informed of this in the PIS (this did not occur). All above confidentiality issues were dealt with by a strict adherence to the BPS Code of Ethics and Conduct (BPS, 2009).

Furthermore, the data was anonymous, which meant that no one knew who has taken part in the study as all identifiable details were removed to ensure that no interview transcripts contained identifiable data (e.g. participant names, family names, place names). Data was anonymised prior to the analysis; participants were given pseudonyms rather than using their name to prevent participants' identity to be disclosed. Major identifying details (e.g. place and company names, etc.) were removed from the interview data and thus no identifiable information was contained within the transcripts. All of these procedures were employed to help to ensure that participant information was protected so the organisation they work for, their clients, or the government agencies could never know whether they have taken part or not. It was noted that all personal data (for example, signed CFs) would be destroyed 12 months after the end of the study and data transcripts would be destroyed 2 years after the study has ended.

5.12.3 Right to withdraw at any time without penalty

Participants were informed that taking part in the study was entirely voluntary. Participants also had the right to withdraw from the study, or withdraw their data from the study, at any time they liked to, by contacting the researcher using the contact details in the documents included in the study information pack. This information was clearly stated on the Participant Information (appendix 19-22), Consent (appendix 27), and Debriefing Sheets (appendix 28-31).

5.12.4 Protecting participants from harm

Participants were made aware that the researcher worked independently and the work was external to participants' healthcare provider, GP, and employer. There were some potential risks of participants experiencing psychological distress, particularly for workers with CP, including low mood, financial and work-related worries due to the sensitive nature of the study. Such risks to participants also included finding some of the questions in the current research uncomfortable to answer. Therefore, the researcher made sure that participants were aware of their right to withdraw from the study at any point without giving a reason and with no adverse consequence on anything e.g. care, and to omit any questions they did not wish to answer (BPS, 2014). During the qualitative data collection, progress consent was continuously sought by asking interviewees if they were happy to continue with the interview.

To address potential situations where participants could for any reason feel distressed post-study, participants were directed via written information on the Debrief Form to dedicated, impartial support services and counselling organisations (e.g. Lift Psychology, B&NES Talking Therapies, MIND, NHS 111, B&NES Citizens Advice). There were no instances where the researcher needed to direct any distressed individual on to these organisations and the researcher was not made aware that such external support was sought by any of the participants after the study. Participants were informed of an option to access a confidential EAP, which might be offered by their employer. Contact information for the study co-ordinator (Ms Paulina Wegrzynek), project supervisors (Dr Elaine Wainwright, Dr Jermaine Ravalier), and a point of contact for ethical concerns (Dr Andrew Smart, Bath Spa University CoLA Ethics Committee Co-ordinator) was also be provided. As mentioned previously, participants were made aware that they could withdraw (their data) from the study at any point, and that refusal to participate would not jeopardise their healthcare.

5.12.5 Competence of the researcher

The study did not involve any activities beyond the capabilities of a PhD student. Regular supervisory meetings were held to address any issues that might have arisen. Furthermore, employed methods were adequately suited to the current researcher's competence, as outlined by the British Psychological Society (BPS, 2009). When recognising the limits of competence, the researcher sought consultation (e.g. with the supervisors). Furthermore, reflexive approach (by keeping a reflexive research diary) and ongoing consultations with the supervisors were used during the empirical research process to address any potential issues of pseudo-therapeutic relationship between the researcher and participants when undertaking the qualitative data collection process. The HRA application also specified relevant experience of the supervisory team in conducting research with medical populations and in area of organisational psychology, together with details of relevant training and professional organisations membership.

5.12.6 Location of research and risks to the researcher

As the study involved conducting interviews where participants answered questions over the phone, thus participants and the researcher could complete the interviews in any safe, confidential spaces which they felt were appropriate. Subsequently, most of the interviews were conducted from a secure, private room at Newton Park Campus. In situations, when telephone interviews were not possible, face to face interview took place in a private room but in an accessible, public location whenever possible (e.g. a bookable room at BSU).

When conducting fieldwork, the researcher made sure that other people knew where and when the interview was taking place, and checked in with her responsible adult before and after the interview. A log of any instances of lone working was kept, with information within it kept confidential and shared only with the study supervisors. Mobile phone was in possession at all times. During a lone working session, a dynamic risk assessment was employed, aiming at identifying any warning signs and taking steps to eliminate/reduce any risk (e.g. being aware of all entrances and exits, etc.). Safe route to meeting point and sufficient resources (e.g. fuel, time) were provided. Adequate insurance policies were put in place before fieldwork commenced. For example, if using own transport, the researcher ensured that any motor policy covered business use. In addition, BSU's public liability insurance and professional indemnity insurance covered the researcher's actions as a researcher on studentship.

5.12.7 Debriefing of participants

Participants were briefly debriefed at the end of the interview and were provided (either via email or post) with a Debrief Form (appendix 28-31). This form directed participants to dedicated, impartial support services and counselling organisations, should they feel they require such support. Participants were also reminded of their right to withdraw without a penalty.

5.12.8 Reimbursement of expenses or other payment to participants

Participants received no direct benefit from taking part, but in future a range of stakeholders (including employees, employers, the government, the healthcare providers) could benefit from us having gained a greater understanding of RTW interventions for CP sufferers. Participants contributed to evaluation and improvement of some RTW practices that are likely to contribute to well-being and safe RTW (if and when it is appropriate).

5.12.9 Dissemination

In the study information pack the researcher indicated that the data collected was to be analysed and a report would be written. Participants were also informed that the data would be used for a doctorate, and anonymised findings might be published (in an aggregated form) in a peer-reviewed journal, or presented at research conferences. If the participant showed interest in the outcome of the study, a summary of the research findings would be made available to them. They were asked to indicate so on the informed CF and would be sent a report of the findings upon the study completion. Upon reflection, in similar studies in future anonymised interview transcripts could be made available via a citeable online data repository (e.g. the UK Data Service) to further increase impact.

5.13 Conclusions

The current chapter outlined the rationale employed when making methodological choices for the empirical studies with RTW stakeholders (i.e. employees with CP, see *Chapter Six*; OHPs, see *Chapter Seven*; OTs/OH nurses, see *Chapter Eight*). The choices were informed by the literature reviews (*Chapters Two, Three*) and by aligning the project with an interpretive, relativist, constructionism paradigm. Next, *Chapter Six* outlines the first empirical study and its analytical findings.

Chapter Six: Empirical study one – with employees with CP

6.1 Introduction

Informed by the literature review, the empirical part of this project aimed to explore stakeholders' perceptions of RTW interventions to find out which are perceived as helpful and what could be suggested to improve the RTW outcomes. The current chapter discusses findings from the first empirical study, which explored employees' perceptions of the current RTW processes for workers with CP.

This first study comprised 10 semi-structured interviews with employees with ongoing pain who have had experience (currently or at any point in the past) of the RTW process. All interviews were conducted over the telephone (see *Methodology* for evaluation of this approach). Through TA method, the following RQs were addressed:

RQ5: What are employees' experience and perceptions of current RTW interventions for CP patients in the UK?

RQ6: According to employees, which aspects of current RTW interventions for people with CP contribute to RTW in workers, which of these do not, and why?

RQ7: What is 'good practice' regarding RTW intervention according to employees?

RQ8: What RTW interventions could/should be used to improve RTW outcomes for CP patients in the future?

6.2 Results

6.2.1 Study participants

Participant flowchart can be found in Figure 5 and participants' characteristics can be found in Table 7. Ten employees with CP took part in the study; out of those, 90% (n=9) were female. Mean age was 40.2 years, the average pain duration was 13.1 years, and the type of CP varied among the employees. Half of the participants worked on a part-time basis.

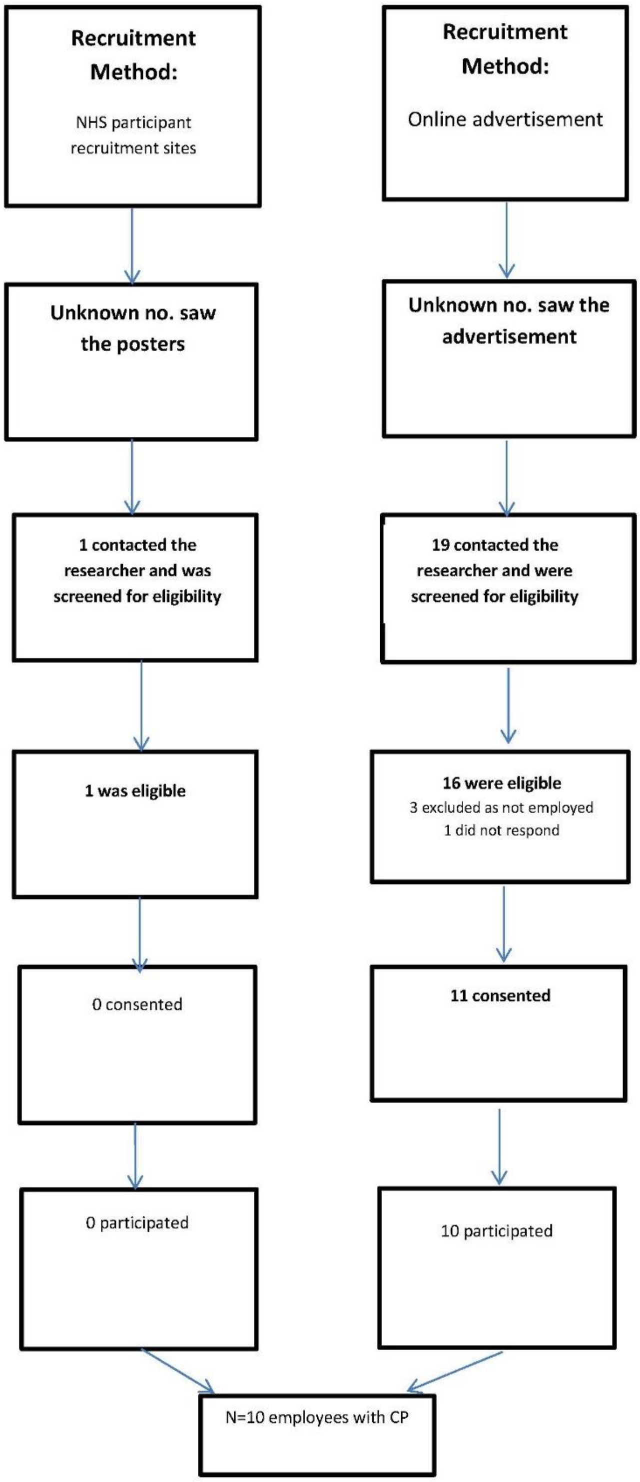


Figure 5. Study one – participant flowchart

Table 7. *Study one – participant characteristics.*

Participant	SIC	SOC	Age	Gender	Source of CP	CP duration	Employment status, working pattern, RTW (+/-)
P1	88910 Day nursery	61210 Nursery nurse	35	Female	Back, foot, hyper-mobility	6 years	Employed, p/t, +
P2	86101 General hospital (public sector)	22310 Nurse	61	Female	Joints (inflammatory, post-infection)	25 years	Employed, p/t, +
P3	86101 General hospital (public sector)	22220 Occupational therapist	52	Female	Back, arthritis, osteoporosis, frozen shoulder	Several years (2+)	Employed, p/t, +
P4	82110 Combined office administrative service activities	41510 Sales administrator	23	Female	CRPS	Since March 2016 (2 years and 5 months; recorded as 3 years)	Employed, p/t, +
P5	85421 First-degree level Higher Education	23110 Higher Education teaching professional	53	Female	Spinal stenosis, injury at birth, lupus	Since birth (53 years)	Employed, f/t, +
P6	94990 Activities of other membership organisations n.e.c.	41620 Office supervisor	34	Female	Back (collapsed disc)	Since teenage years, then since 2010 (8 years)	Employed, f/t, +
P7	88910 Child day-care activities	61450 Care worker	24	Female	Fibromyalgia	12 years	Employed, p/t, +
P8	52219 Other service activities incidental to land transportation, n.e.c. (not including operation of rail freight terminals, passenger facilities at railway stations or passenger facilities at bus and coach stations), 93110 Operation of sports facilities	34420 Sports instructor, 92420 Parking and civil enforcement occupation	44	Male	Arms	Since 2002 (16 years)	Employed, f/t (3 x p/t), +

Table 7 (cont.). *Study one – participant characteristics.*

Participant	SIC	SOC	Age	Gender	Source of CP	CP duration	Employment status, working pattern, RTW (+/-)
P9	85310 General secondary education	23140 Secondary education teaching professional	43	Female	Back (radiating)	Since December 2016 (1 year and 9 months – as recorded in August 2018; recorded as 2 years)	Employed, f/t, +
P10	85421 First-degree level Higher Education	41290 Financial administrative occupation n.e.c.	33	Female	Back and injury, leading to fibromyalgia	Since December 2014 (3 years and 9 months – as recorded in August 2018; recorded as 4 years)	Employed, f/t, +

Note: f/t=full-time; p/t=part-time; SIC=Standard Industrial Classification [source: SIC CODE (2020) United Kingdom SIC CODES for economic activities. Available from: https://www.siccode.co.uk/ (accessed 6 July 2020).]; SOC=Standard Occupational Classification [source: HESA (undated) Standard Occupational Classification: SOC2010. Available from: https://www.hesa.ac.uk/support/documentation/occupational/soc2010 (Accessed 6 July 2020).]

6.2.2 Themes revealed from the data

TA method led to identification of 3 themes and the relevant sub-themes:

1. *The subjectivity of what '100% fit' actually means is problematic:*
    - *1a. Employees feel pressure to RTW at '100%' capacity*
    - *1b. Feeling 'fit' requires acceptance and adapting to pain*
    - *1c. RTW and work in general allow employees to feel 'fit'*

2. *Employees adopt an active role in their RTW process:*
    - *2a. Expert-patients advocate for themselves and their RTW*
    - *2b. Employees become conduits of knowledge in RTW process*

3. *Factors affecting RTW:*
    - *3a. Employees' poor RTW support is linked to poor understanding of CP*
    - *3b. Social support outside work is important*
    - *3c. Difficulty accessing interventions*
    - *3d. Interventions are a part of a disjointed approach*

3e. Lives are not a 'black and white flowchart'

3f. Multidisciplinary approach – the key element that is sometimes missing

6.2.3 The analysis

In the subsequent sections, detailed analysis of the data is placed within the above themes and supported by examples of anonymised quotations. A set of definitions for each theme/sub-theme and the concepts drawing them together can be found in Appendix 32.

1. The subjectivity of what '100% fit' actually means is problematic

This theme comprises three sub-themes, which all centre around the concept of being '100% fit' and the 'true' meaning of it. The influence that the '100% fit' concept has on workers' lives, including the RTW process, is discussed. Importantly, the findings from the current study highlight the difficulty with objectively defining what being '100% fit' truly means and how it may mean different things to different stakeholders (e.g. employees with CP vs employers). Similarly, being fit enough to carry out responsibilities of one's job role does not necessary equal to regaining full fitness in terms of one's health – a notion presented in previous studies as well (e.g. Kayawa-Singer, 1993; Nettleton, 1995). Subsequently, the current theme highlights the interplay between wanting to feel/being perceived as '100% fit' and the associated pressure to RTW swiftly and at full capacity – stemming from both, external (e.g. employer) and employees' self-applied pressure.

Importantly, CP is a persistent pain, which often fluctuates but the symptoms of the condition rarely go away in their entirety (e.g. IASP, 2019). Subsequently, when employees adapt to living with CP, they also create a new meaning for what being fit to work means for them, which is moderated by social expectations. In addition, employees see returning to work and being at work as therapeutic and allowing them to feel '100% fit', or the subjective equivalent of such fitness. However, data gathered from employees in the current study suggest that various RTW stakeholders view the concept of 'true' fitness (for work) differently, which affects employees' experience of current RTW interventions as they often feel under pressure to meet expectations set by other stakeholders.

1a. Employees feel pressure to RTW at '100%' capacity

A common thread through participants' narratives was their references to feeling under pressure to RTW swiftly and to be 100% fit upon RTW, therefore needing no adjustments to their workload or work environment, etc. Employees based such conceptualisation of RTW on their own beliefs that the employers expected them to RTW quickly and to perform their job at full capacity. According to the study participants, the feeling of pressure to be '100% fit' applied throughout the period of SA and RTW process, and beyond, when employees were already back at work. Arguably, a clear-cut conceptualisation of employee health status and RTW is problematic as it rejects the idea of RTW being a process. Instead, such reasoning suggests that unambiguous categories exist and employees who are back at work should be able to work at full, pre-illness capacity levels. Importantly, whilst swift RTW is preferred and evidence suggests that timely RTW interventions are beneficial (e.g. Bishop et al., 2014; Wynne-Jones et al., 2018), sustainable RTW cannot always be achieved and would be impacted by the factors such as perceptions of RTW stakeholders.

Due to the problematic meaning of full fitness, participants in the current study often felt that there was limited room for adjustments to their work responsibilities and thus the workplace RTW processes lacked flexibility (e.g. accommodating altered ergonomic requirements) and did not account for the fluctuating nature of their CP condition. Therefore, employees often felt pressured to RTW and many talked about feeling such pressure, or suspecting their employers of having such agenda, summed up by the following quotes:

> *"So she [the manager] wasn't very understanding, she was more like pressure, when are you coming back? It was just that constant - because she needed staff…" (P1)*
>
> *"I felt that I was under a lot of pressure to work more quickly. I felt that was very unhelpful. It didn't feel like they were really making any accommodations for my condition" (P10)*
>
> *"[...] I've always just come back in [to work], I haven't even asked for that kind of stuff [adjustments] now, I just sort of get back with it…" (P5)*

> *“They're [organisation] not worried about can you manage, or do you want the permit [adjustment, not normally available] for your first couple of days back. They're not worried about that. They want you to be there to do the role, do that job.” (P6)*

The above excerpts from the data also suggest that employees with CP often faced increased/unchanged job demands upon RTW (e.g. pattern of working hours), whilst job resources (e.g. supervisor’s support, job flexibility) seemed limited. Some employees felt hesitant to be open with their management teams about the adjustments they needed in fear of their requests being dismissed. Instead, employees put up with various work stressors. When resources such as reduced hours were available, employees still faced pressure to ‘recover’ and stop needing to use them, and were made to feel somewhat responsible for the staffing shortages, as depicted further here:

> *“Then, after, I think, it was possibly a few months on that reduced hours, HR started pressuring him [manager]. He [manager], in turn, started pressuring me that that arrangement couldn't continue indefinitely” (P10)*
>
> *“…The only time I would get contacted is if nearer the time of me coming back and the manager knew she was short staffed, that is the only time she would have contacted me…” (P1)*
>
> *“My concern should be getting better and working. I thought it was a bit unfair to burden me with that [staffing shortages]. I also felt very pressured by him [manager] to be working up to the speed that I used to be working at” (P10)*

The above quotes suggest that employees felt that their employers lacked real interest in their well-being, and showed no empathy and no real understanding of the intricacies of their RTW process. Furthermore, nearly all of the employees in the study felt pressured to RTW due to the amount of responsibility and demands placed upon their roles. At times, it seemed that employees felt they were irreplaceable, but the feeling did not have positive connotations and it did not contribute to their feeling valued as workers or to how helpful their RTW process was:

> *“…One of the pressures is that I think that if I don’t do whatever it is that needs doing, who will do it? Because the answer is that nobody will” (P5)*

> *"It was chaos, they [employer] were on the phone to me all the time [when on sick-leave]. Absolute chaos in the office without me being there" (P6)*
>
> *"Because it's hard enough being off work [laughs] and trying to get back to work, because I wanted to get back to work, because I needed money, and then it's the hassle of them [employer] sort of not being very nice about it really in the end" (P1)*

A one-sided relationship emerged here from the above narratives, where employers made employees aware of their expectations but from the employees' perspectives, did not reciprocate in terms of providing support for the employees to meet those demands. Equally, some employees felt a sense of distrust towards the employers and felt they needed to cope with the pressure placed upon them to guard the security of their employment. Participants expressed a worry about job security if they chose to be honest with their employer about their CP:

> *"I still think there is the belief that employees are dispensable" (P5)*
>
> *"So if I'm feeling unwell I'm not going to, you know, make it sound worse than it is because I want to stay employed. You feel you have to protect yourself as well" (P2)*

The above is concerning, since it suggests the presence of an organisational culture which is far removed from the idea of employees being the most valuable tools within an organisation (Donovan, 2013) even when particular employees reported almost being indispensable since things were 'chaos' without them there. Furthermore, the above suggests a reality of having workplaces that are unlike those, which Waddell and Burton (2006) would class as 'safe and accommodating' in psychological and physical terms. Subsequently, the idea of psychosocial gains from re-joining work may not apply. In addition, the above quotes highlight a concern around the perception of illegitimate sick-role (Freidson, 1970), present in almost all narratives in the current study, where the CP condition is stigmatised and thus the sufferer is not granted "*the rights and privileges of the sick role*" (Nettleton, 1995, p.71).

The perceived pressure by the employees to be '100% fit' often seemed to be persistent and applied across the continuum of returning to work and being at work. Importantly, often the workplace stressors were present before participants' condition resulted in their being sick-listed, thus also stressing the importance of primary and secondary workplace interventions in preventing long-term SA due to CP. The pressures some employees faced when at work were exemplified by the following:

> *"I could have that reassurance from the employer that it wouldn't hurt me or my career [if I took time off work]. Then I might well have taken that time off but it was such a high pressurised environment. There's no way I could've, you know, done that [take time off to get manage pain problem] without consequences, I don't think." (P8)*
>
> *"I feel very pressured to be at work. [My role] It's not something that I can just say: Oh, I'm not feeling great, I'll have a day off. " (P6)*
>
> *"For example yesterday I sat at my desk from seven in the morning until ten last night… and I was trying to mark, that was a real pain - literally. And I don't think anybody would appreciate that unless they saw it happening" (P5)*

Interestingly, the above narratives suggest that the employees knew their workload was too high but did not feel that they could pace their responsibilities to make it more manageable for fear of negative consequences on their career within their organisation. Furthermore, the interviewees were aware of the consequences that such a pressurised work environment had on their health, yet they felt that they simply had to put up with it. Arguably, employees put pressure on themselves to RTW and fulfil all of their job requirements, often before they were ready to go back:

> *"Well I started going to physio more often, just to see if that could help me get a job. [...] I've done too much too soon really" (P4)*
>
> *"So I would try my damnedest to get in. I would try and get there no matter what." (P6)*
>
> *"I did push myself to go back [to work]" (P1)*

When RTW was driven by such self-applied pressure, employees recommenced work before they were truly ready to do so. Lack of social support from participants' employers reinforced self-application of such pressure and the overall feeling by the employees of a lack of alternative scenario (i.e. remaining off-sick until it feels appropriate to RTW), until they reflected upon the process as exemplified in the earlier quote by Participant 8. In circumstances such as those described, the pressure to be ‘100% fit’ to RTW and upon return to the workplace was associated with the reality of a work environment unfit to support effective RTW for the employees suffering with CP and to maintain a healthy workforce.

1b. Feeling ‘fit’ requires acceptance and adapting to pain

Overall, employees in the current study seemed to have accepted that their CP condition is unlikely to improve and they cannot return to being ‘100% fit', yet they refused to let their condition rule their lives entirely; participants described how they adapted to living and working with pain by continuing with their routines as much as they could, which often required acceptance of limitations brought on by CP:

> *“And the pain I experience is neither here nor there really, it’s just something that I live with and that’s that” (P5)*
>
> *“My pain is going to be there whether I'm sat at home or sat there [...] when you have the constant pain you kind of just learn to get on with it” (P6)*
>
> *“Cause sometimes you've just got to accept this pain is just gonna carry on, regardless, and resting or sitting at home is probably detrimental [...]” (P3)*
>
> *“I suppose I'm refusing to let it [pain] define... define the things I can't do. I hate thinking about not being asked to do things and mostly, that's not true. I can do most things sometimes with some pain...” (P9)*

The above quotes illustrate how CP has changed participants’ lives and describe how employees adapted to those changes to regain parts of their identity and the feeling of being (100%) fit. There was an overall acceptance of experiencing pain but participants persevered and carried on with the activities associated with being ‘100%’ fit even at great cost to themselves. All of the employees in the study expressed refusal to accept the limitations of the sick-role and instead learnt how to cope with their CP by putting up with its effects (Bury, 1982). Furthermore, the workers also felt aware of the biopsychological nature of their CP:

> *“…Because there’s not really any medication that you can give me. So it’s basically mentally and physically how to do it [treat pain]” (P4)*

> *“Um, and definitely when my, like, when my pain gets worse, then my mental health gets worse, you know, almost simultaneously and vice versa” (P7)*

However, adapting to the fluctuating nature of CP and maintaining the concept of fitness was not straightforward for the employees and often made their RTW process more taxing. Although RTW was important to all participants in the current study, the following quotes vividly describe their need to actively manage their condition and the complexity of achieving a sustained RTW with CP in light of its fluctuating nature and a range of psychological, socio-economic, and other related consequences that never cease to exist:

> *“But of course every winter it’s a psychological worry that you’re not going to be able to cope with work, and I’m single by the way so I can’t, I haven’t got anybody to finance me.” (P2)*
>
> *“[Physiotherapy] can get me down the scale [of severity of pain] from a nine or a ten to probably a six, which is where I can function, I can function on a six or a seven quite normally. That's probably a normal day for me. But to be able to get to that point is pretty good.” (P6)*
>
> *“So I think you're kind of like, you're planning for, you're planning for what you're expecting to happen [during RTW], but also you kind of have some kind of, like, worst case scenario backup.” (P7)*

The above excerpts highlight individual circumstances of each participant and suggest that RTW with CP is a complex process and adapting to pain, including feeling ‘fit’ to RTW, is not aligned with procedural checklists (this moves towards a later sub-theme *Lives are not a ‘black and white flowchart’*). In terms of RTW, some participants described how adapting to CP meant that people had to consider alternative job roles:

> *“I mean, if I went to an office job, I wouldn't last a week. That would last a day. Um, but it's only because of the jobs that I'm doing that it [RTW] is sustainable. I'd have to find jobs that aren't particularly, um, um, heavy” (P8)*
>
> *“I don’t mind going to this job because I do actually like it. Not as much as me doing a bar job, that’s what I wanted to do. But I still don’t get the: oh god, I’ve got to get up for work” (P4)*

Although “*it's more being forced into those sort of roles” (P8)*, despite the initial agency of having to change jobs in order to RTW being shifted away from the participants, they seemed to have accepted the demands of their CP condition. Importantly, employees in the current study described features such as job satisfaction as an important facilitator of accepting CP and allowing RTW, despite working in a different occupation to what they would have originally preferred.

1c. RTW and work in general allow employees to feel 'fit'

This strand is dedicated to participants' experience around the importance of RTW. All participants in the current study described how work is important to them and their well-being, and they were making tremendous efforts to stay in work. Furthermore, all expressed how working was seen as therapeutic and helped them to cope with and adapt to living with pain. When they were off sick, employees still felt motivated to RTW despite the pressures often placed upon them (as described earlier in this chapter) and felt work was important to them as it provided them with a sense of normality (considered here as synonymous to subjective feelings of being fit enough to do some work):

> *"I felt that I didn't feel 100% well. I didn't feel 100% sure of what was wrong. But I felt like I could do some work, and I really wanted to do some work rather than no work" (P10)*
>
> *"There are times when it [working] isn't going to help when the pain is that bad but normally I can, I can just shove it somewhere and just get on with what I'm doing" (P5)*
>
> *"So I think the need to keep normality going at all costs (laughs) ... is definitely a real driver to going to... to being in work" (P9)*

From the above quotes, it seems that the importance of regaining self-identity in face of a 'biographical disruption' that is triggered by CP seemed crucial to the participants in the current study and was suggested as one of the elements linked to RTW. CP disrupted participants' tacit knowledge, structures of everyday life and its features which they might have been taking for granted (Bury, 1982); in response, employees mobilised resources to address the situational change and enable them to RTW:

> *"Yeah all I wanted to do was go back to work, just because after having so much time off it starts affecting your mental health as well. Umm and you just… and having no money and being sat at home watching TV all day was alright for a week" (P4)*

> *"Umm the only reason why I came back I think was my sheer determination to do my job, I mean I could - I'm pretty sure I could have stayed on sick leave for another month or so… there's only so much Jeremy Kyle you can watch... but no, I just decided I was going to come back and that's always been the way it is…" (P5)*

2. Employees adopt an active role in their RTW process

The following theme describes the active roles adopted by the participants in the current study, all of whom took charge of various aspects of their RTW process. This highlights the current debate around the role that the pain patient should be assigned in their treatment process, whilst questioning the solutions offered by the RTW processes currently in place; recent guidelines by the British Pain Society (Lee, 2013) suggested that CP patients should be empowered to make decisions in relation to their care. Greater patient involvement may lead to a boost in treatment satisfaction and the approach seems right from the ethical point of view (Griffiths et al., 2007). At the same time, there is a lack of sufficient evidence to fully support self-management programmes based on the model of expert-patient, and further studies (Griffiths et al., 2007) and a more holistic approach (Greenhalgh, 2009) should be considered. Nevertheless, participants in the current study placed a great value on their expertise, knowledge and subjectivity of their own situation; this perception was encapsulated by the active, multifaceted role employees adopted in their RTW process.

2a. Expert-patients advocate for themselves and their RTW

Employees in the current study felt that they knew their pain and perceived themselves as experts in their own situation. Thus, participants wanted to feel empowered, listened to, and able to drive their treatment and RTW process. All participants stressed the importance of other stakeholders gaining insight from workers with CP about the things, which may help with their RTW, as encapsulated by the following narratives:

> *"Um, and I think generally, like, people are quite passive, like the person the situation's about, they made to be quite a passive participant in the decision-making, and it's like, actually, if you give them a bit more power, a bit more control, um, and try to work with them and be flexible that's, you know, no matter what, what their condition is or what environment they're trying to return to work… that kind of being flexible, dynamic, and understanding is going to be your best bet" (P7)*

> *"Allowing the person [with CP] to say: This is the kind of routine, this is the kind of environment that would allow me to be as well as possible and as functional as possible. And to be willing to listen to that and accommodate it. I think that certainly is key" (P10)*

> *"I think it's important that it's [RTW process] person-led but the workplace is saying: Right. What can we do to help you? What adjustments would help? Instead of stipulating to the person: Right. You need to work here at these times in this way" (P10)*

The above quotes illustrate the need for a flexible, dynamic, and individual approach to RTW interventions. All participants agreed that having support at work and an employer willing to be flexible and accommodating of their condition during RTW would be advantageous, as this would create an environment needed to achieve and sustain RTW. Employees also highlighted the need to feel empowered to make decisions at all stages of their RTW process:

> *"So he [GP] continued to issue my fit notes until the point where I went in and said: Actually, I'm seeing this doctor. It's going quite well. I'm gonna go back to work, um, or I'm gonna try and find a part-time role" (P8)*

> *"[...] so he [consultant] was saying about death and about the risks of any surgery really. But he was saying about the spinal cord, and how it's really dangerous. I said I would take that choice. If he gave me that option right now I would take it" (P6)*

Analyses suggest that without taking on an active role, employees felt their chances of succeeding at RTW would be negatively affected; by readily issuing FNs, GPs could be seen as reinforcing employees CP condition whilst the overall process denies the legitimacy of employees as legitimate arbiters of their own condition. The latter two quotes suggest that beyond the role of 'expert patient', some employees felt that they should have the ownership of making decisions about their treatments, at times dismissing medical and moral judgement regarding the appropriate treatment strategy as exemplified by Participant 6. Furthermore, there was a feeling amongst the participants of being let down at times by the current RTW processes and having no choice but to adopt the active role, including challenging the expertise of healthcare professionals and the appropriateness of their referral advice:

> *"I got referred to something called Pain in the Community. [...] It was more about your well-being rather than pain. So there was going to be no hands-on stuff. There was going to be no alleviating your pain. More about talking about it. They talked about yoga for the over 50s. I'm 34. I just felt that the environment wasn't something that was going to help me" (P6)*

> *"Um, I don't know what I expected [from the appointment at a Pain Clinic]. I expected a bit more help and understanding. I felt they [Pain Clinic] were almost dismissive of me. Um, I got the impression they [Pain Clinic] didn't really believe that my pain was that bad" (P8)*

It seems concerning that certain elements of the current RTW process could be so disjointed that they fail to even begin to address the needs of workers with CP, as evidenced in the above quotes by the lack of fit between the workers and the RTW interventions they took part in. Furthermore, the issue of stigma arose again and it seemed doubly problematic since the legitimacy challenge originated from healthcare professionals (e.g. the staff at the Pain Clinic). Interestingly, despite encountering some negative experiences during their RTW process some participants expressed an almost altruistic attitude, putting other people's needs in front of their own. Namely, whilst expressing a motivation to 'keep going', employees were keen to use any bad experience of RTW process as the means of improving future outcomes, to guide other stakeholders and make the subsequent process more effective:

> *"And I felt like if I'd backed down, uh, the [organisation] wouldn't have learned their lesson... and they would've have learned that what they were doing, and their kind of practices, were actually wrong" (P7)*

> *"No, I can't think of anything that I would change about the [RTW] process to be honest. Um, 'cause although there was a misinformation, it was still a learning curve for other people. Um, so I don't mind being someone's guinea pig like, if you like, just so that they can learn from the situation and know better for the next person" (P3)*

> *"When I started, I'd already been diagnosed. I knew what was wrong. I'd already had a going back to work experience that hadn't been very helpful. I knew a lot more about what I needed, and made sure I stated it all upfront" (P10)*

Thus, the role of past experience was highlighted here, including such experience empowering the workers as the ones 'in the know' about their condition and being used as possible means of preventing repetition of unhelpful RTW practices. Similarly, all employees in the current study felt motivated to seek out new approaches that may be helpful in their RTW process. All participants described how they sought out the most effective RTW interventions by themselves. This effort was not linked to participants' search for a diagnosis, but rather exemplified the need for an individual-led approach to CP treatment and RTW. Participants took charge in finding out what interventions may work best for them, as the following examples illustrate:

> *"I did, um, some research on the internet and found, uh, you know the online open courses that are free, run by universities… I found a positive psychology course for about eight weeks on the, um, science of happiness. Whereas that talked a… quite a bit about mindfulness, um, that has been a really helpful course for me to do, to help me manage the pain" (P3)*

> *"I think I've personally tried different approaches to find what fits with me. So not necessarily that my doctor has referred me, it's about me being proactive, seeing what I can do" (P6)*

> *"So I tried every painkiller under the sun, 200 physio sessions, um, just, you know, you name it, I tried it" (P8)*

Each participant in the study found different combinations of treatments as the most helpful, including CBT, mindfulness, physiotherapy, and others. Similarly, throughout this chapter, data suggest the importance of individual approach to RTW interventions for people with CP. However, the above excerpts highlight the difficulty in achieving this. Specifically, analyses suggest that the process of drawing up an effective individual RTW plan for an employee with CP has to involve many RTW stakeholders, including healthcare professionals, employees, and employers. Importantly, all employees described a multidisciplinary approach and the importance of having a supportive workplace environment as key in promoting their RTW (see the theme *Factors enabling RTW*). Equally, some employees felt that whilst adopting the active role they should not have been required to take charge in ensuring their RTW is effective, but felt that it was the only way forward to achieve a successful outcome. Participant 10 described:

> *"They [different interventions] should have been presented to me. I think I should have been made aware of them rather than having to seek them out".*

The above sentiment was echoed by Participant 4:

> *"I mean I don't feel like I should have to do that [take charge]. Because at the end of the day they're the specialists, they're the ones that should have to be taking care of me. And they're the ones that know what's right for me, and who I'm under and everything like that, but at the end of the day I want to get as better as I can so I need to do it".*

The above points highlight the complexity of how stakeholders' expertise is perceived in the RTW process; namely, an issue of being an expert regarding RTW interventions and care provision, and an issue of being an expert on the CP condition. Feeling the need to adopt an active role, advocating for their own RTW, often stemmed from participants' negative feelings about the current RTW processes and their perception of not being listened to and subsequent fear of potentially missing out on adequate treatments. Furthermore, employees regarded being able to describe their needs as individuals who are experts in knowing their condition and how it feels to live with CP, as an implicit need and a positive aspect of an ideal RTW approach, as discussed in the latter part of the current chapter.

2b. Employees become conduits of knowledge in RTW process

As part of having the role of 'active patients', participants in the current study felt that they were a communicative link between the various stakeholders in their RTW process. Despite originally the FN being designed to be used as a communicative tool in the RTW process, employees did not find it overly helpful in that respect. Instead, the FN was mentioned as a validation tool for participants' pain condition, for example:

> *"Umm the fit notes were the main thing that helped I think. If I didn't have the fit notes, work would - didn't make it very easy for me" (P1)*
>
> *"I knew if I didn't get my fit note, my insurance or my work might say: Well, you've got to come back, and I couldn't do that 'cause I wasn't physically up to it" (P8)*
>
> *"I: During your time when you were off sick, have you had any fit notes from your GP or any other health professional?*
> *P10: Yeah. I had a sick note from the GP that I sent to work that was signed off for usually a month at a time.*

> *I: Were there any kind of suggestions of what can be done to help you return to work on those notes? They've got a little box that...*
> *P10: Yeah. No, not really"*

> *"Because I'd learnt from my foot [condition] that I wanted more detail on [the fit note] so that my work could understand, but I literally had to pester the doctor to do that which is stressful [laughs]" (P1)*

The latter quote offers a possible insight into the one of the potential reasons behind the FN failing as a communicative RTW tool, namely the reluctance of GPs to include detailed notes about employees' needs. Interestingly, GPs' hesitance to add detailed notes on FNs may be linked to their lack of confidence to issue advice related to OH, as evidenced by previous studies (e.g. Coole et al., 2015b). Furthermore, as the RTW process requires communication between various professionals and departments, with the lack of uniform communicative tool or a streamlined process, employees felt that they had the responsibility to convey important information about their condition and needs:

> *"[...] that's the hardest part - because I was the communication between everybody and I think to some extent I still am the communication between everybody" (P4)*

> *"I have instigated meetings with personnel and my line manager just to sort of let them know what it's like to go through a day [with CP]" (P5)*

> *"Yeah, there's a massive amount of kind of, like, advocating for myself that was involved, which made it very difficult because you're trying to prove to someone who's already kind of made their mind up about you, um, whether you are able to do a job or not" (P7)*

The perceived responsibility of being a source of knowledge and a link between all stakeholders was paired with the challenges around being believed. These challenges were often linked to employers' lack of knowledge around the needs of workers with CP, as well as the issues of stigma and the need for employees to validate their condition, referred to throughout the current chapter. Employees often felt that they had to prove themselves during their RTW process as they faced the stigma surrounding CP.

3. Factors affecting RTW

The current theme has several strands, which centre around the elements that participants in the current study felt supported their RTW and the elements that participants felt were detrimental to their RTW. The factors discussed can be classed as biopsychosocial and they all interlink, creating a complex pattern of issues that need addressing in order to support workers with CP back to work.

3a. Employees' poor RTW support is linked to poor understanding of CP

In the previous sections of the current chapter, analyses highlighted employers' attitude towards employees with CP (as perceived by the interviewed employees) and how this added to the pressure often resulting in an untimely RTW amongst many of the current participants. This attitude displayed by the leadership in various organisations might have originated from their lack of knowledge about CP:

> *"He [my manager] also still didn't seem to really think of me as somebody now with a permanent condition. He just seemed to think of me as somebody that had had back pain, which might now have got a bit better. He didn't seem to really understand that I now had a long-term disability" (P10)*
>
> *"There is very much the belief that you deal with it [CP] in your own time, leave it at home, sort of lock the door on it then come in to work" (P5)*
>
> *"So it would be great if the [organisation] kind of understood what chronic pain was, rather than just thinking it's almost like a luxury, it's like an indulgence, you're indulging yourself with it…" (P5)*
>
> *"I think, to be honest, the view is: As long as you're alright and you're teaching your classes and there's no overall disruption, I don't need to know" (P9)*

Nearly all participants described how their experience of RTW was negatively affected by employers' (and other stakeholders linked to the employing organisation, such as insurance companies) lack of understanding about CP, its dynamic and fluctuating nature, and its impact on an individual (e.g. Von Korff and Dunn, 2008). Furthermore, employees did not believe their employers were interested in finding out more about their CP. Arguably, as perceived by the participants in the current study, employers may be hesitant to rectify their lack of awareness regarding CP and may be turning a blind eye to the CP issue as long as employees' job demands have been fulfilled. In addition, participants felt that CP may at times be seen by the employers as a form of malingering rather than a chronic health condition and some participants felt under pressure to exhibit organisational 'citizenship behaviour' in order to sustain the availability of support at work. The varying levels of support shown by the various RTW stakeholders, as exemplified by all participants' narratives, add to the perception of a disjointed approach in the current RTW process (see sub-theme *Interventions are a part of a disjointed approach*). Interestingly, the pressures felt by the study participants, including heavy workload and low level of support, did not lead to them engaging in employee withdrawal behaviour. However, some workers described their worries during their RTW process, which were centred around the need to have to legitimise their condition and directly linked to the availability, or otherwise, of social support at work:

> *"And you feel like you've got something to prove when you return. And when you do return, you perhaps feel like you can't raise issues, you know, normal issues that anyone would have because they might turn around and say to you: Oh, well we knew this would happen, or, We thought you weren't okay" (P7)*

Strong feelings of experiencing stigma related to having CP, in all environments inclusive of the work environment, were present amongst all of the participants' narratives in the current study. Furthermore, the stigma and the need to legitimise their condition made the RTW process more complex and stressful for employees, who were often faced with societal expectations regarding their behaviour and workplace 'conduct' linked to the lack of understanding of CP condition:

> *"…And the woman that used to work on the reception [in the organisation I work for], I once asked her to reserve me a [disabled parking] space and she railed at me saying she'd seen me walking around, she didn't think that there was anything wrong with me, and yeah that was particularly fun" (P5)*
>
> *"…People just don't understand so they shrug it, you know, it's everybody's ill, everybody gets flu, why are you, you know… So I think [hearing that] from other people that can be a massive issue, a real concern. On top of already not feeling well" (P2)*

> *“[...] I was worried that people would see me walking a little bit even though I was in a lot of pain, because then they’d be saying oh why aren’t you at work?” (P1)*

The lack of understanding of CP was mentioned with regards to the immediate supervisors and the organisations as a whole. Participants also often felt frustrated with how their RTW was being (mis-)handled and arrangements which they deemed as reasonable had not been implemented. Some participants felt that at times procedural shortfalls/misinformation added unnecessary pressure and affected employees’ decisions to RTW at what may not be the appropriate time:

> *“So they [HR staff member] Googled that [narcolepsy diagnosis, in addition to CP]. They also went home and watched a Channel 4 documentary about the condition, and then without ever meeting me, getting any information about me, or contacting any of my doctors, made a decision that I shouldn't be [in the organisation]” (P7)*

> *“My supervisor basically flat out refused to consider working from home [...]. I also lived about five minute walk from work, so somebody could have rang me if there was something urgent and I could have come into work. There could have been lots of different arrangements that could have made working from home viable” (P10)*

> *“If I'd have had any more time off from October, I thought I was in danger of getting ill health dismissal. But then my manager had gone away and found out from HR that rather than do that [RTW] I could have taken a career break” (P3)*

Encouragingly, some participants (albeit, a minority) had a positive experience and received support throughout their RTW process. Interestingly, one participant (Participant 10) had two entirely opposite experiences with two separate employers. The supportive organisations also seemed aware of the available sources of support when managing employee sick-leave and RTW:

> *“And they [employer] were very good to me, they said right let's find you a job in the [department] as [an alternative job role] instead.” (P2)*

> *“My work encouraged me to apply for the Access to Work support from the Government. I applied for that and had somebody come in and do an assessment. Then, they recommended that I got a specific desk. They [employer] put in for that.*

> *I asked for a specific chair that I'd had in my last workplace, so they got both of those things for me when I started" (P10)*

Comparing the two vividly different RTW experiences later on during their interview, Participant 10 described their sense of injustice at their previous employer's lack of empathy for their condition:

> *"I think if you've got a health condition, you're not going to be at 100% capacity 100% of the time. That doesn't mean you don't have a valuable contribution to make to that workplace, and a significant contribution if you have the right accommodations and the right adjustments. It did feel like discrimination in that if I wasn't 100% healthy, I got the sense I wasn't really wanted which I don't think that that is going to help anybody in my position" (P10)*

From participants' narratives, it seemed clear that employees felt like their contribution would be scrutinised and questioned unless their performance was judged as being at 100%. Furthermore, social support at work seemed largely dependent on the availability of an 'appropriate' diagnosis and CP did not always fulfil that socially constructed criterion. Linked to this, the diagnosis itself seemed to be a double-edge sword issue. Namely, employees agreed that the diagnosis of CP provided a form of validation for the employees and a form of tangibility for the employers. However, it sometimes added pressure to the RTW process instead of alleviating workers' concerns due to the ambiguous nature of CP conditions. Subsequently, a CP diagnosis seemed to affect the amount of support available to the employees both, in positive and negative ways:

> *"Yes, [diagnosis helps] because then I can explain it [my condition]" (P2)*
>
> *"I mean I know everyone's individual with a diagnosis and everything, but it was, um, it's almost like you got cancer and you're right at the top of the list [P3 had both CP and cancer diagnosis]. Whereas there are other difficult illnesses to manage, that can be just as disruptive, and possibly more so' (P3)*
>
> *"[...] at first she [employer] just kept saying that unless I had a diagnosis they wouldn't take me seriously - and I'm like but my diagnosis is [CP condition] and she said it's not the kind of thing that we need…" (P5)*

> *"Yeah I mean - I know people have heart attacks and cancer treatments and they get staged return to work, and that would have helped, but when I asked about*

> *that I was told that it would only be available if I could find somebody to do the other half of my job" (P5)*

The above quotes suggest that participants thought that having CP was of lesser importance in workplace context when compared to diagnoses of other employees struggling with ill-health. Subsequently, participants felt unsupported during RTW, which they thought was due to having a CP diagnosis. Such findings are concerning, particularly whilst reports suggest that CP is the second biggest reason for being off work (ONS, 2017). Thus, action should be taken to change such culture and develop strategies to support employers to deal comprehensively with the RTW needs of workers with CP, which would arguably bring societal and economic benefits to the RTW stakeholders. The conditional nature of social support at work was further discussed by participants who talked about feeling the pressure to be believed in order to personalise the RTW process; in addition, participants talked about the stigma associated with having CP and not feeling well enough to RTW. Furthermore, according to the participants in the current study, current workplace RTW interventions do not seem to be tailored to the needs of employees with CP and their format is not supportive. Different definitions of fitness to work seem to apply in employer-employee RTW interactions (see sub-theme *Employees feel pressure to RTW at '100%' capacity*), with the former stakeholders adopting a rather simplistic, risk-averse view and hesitance to know 'too much'. Subsequently, this resulted in some employees lacking the social support element of RTW. Organisations wanted to maintain a good reputation and save costs, and subsequently workers did not feel valued. The same scenario extended to the other RTW stakeholders affiliated with the employing organisations, such as insurance companies:

> *"Like, you might have all the boxes ticked, but you don't actually feel supported because you don't feel like anyone fully understands the picture of your health" (P7)*

> "*My employer was, you know, on paper supportive..." (P8)*

> *"Of course, being an insurance company, they [insurance company] just wanted you to go back to work. So they tried just to say, 'Well, it's a rehabilitation program,' which is basically just go back to work, so they were rubbish" (P8)*

> *"I just got the sense that they would prefer it if I just drifted away" (P5)*

Analyses suggest that employees perceived their employers' support to be available purely in theory rather than in reality; in practical terms, employees felt that their needs were not met by the RTW approach exercised by the employing organisations. Often a quick solution (i.e. the employee returning to work) was sought by the organisations, without truly understanding the conditions required for employees to achieve being back at work with CP. When a swift RTW was not possible – which was the case with all CP sufferers in the current study – participants' perception was that they were obstacles rather than valued workers. Notably, findings from the literature suggest that supporters have a tendency to withdraw their support in absence of expected coping behaviours (e.g. Semmer and Beehr, 2014), which could have been linked to the feelings expressed by the participants in the current study. In contrary, expressed by a minority of participants and in line with the literature (e.g. Beehr, 1995), having emotional and practical support at work was seen by employees as beneficial, helping with and upon RTW:

> "*But it was good to know that, um, if halfway through the shift I didn't feel well or had to sit down or something, they [work colleagues] would be able to, um, they would be understanding and kind of ready to step in" (P7)*
>
> *"Yeah I think it was the support of the actual people I was working with. Not my - I wouldn't say management but the people that were in the room with me and they could see when I was struggling and they would help me - say like sit down, this that and the other" (P1)*

The above quotes suggest that some employees felt peers were appreciative of their situation, which signalled support and helped employees to deal with some of the demands of their job (e.g. managing the workload, adjusting the physical demands). Since appreciating is a contributory element of good leadership (Judge, Piccolo and Ilies, 2004), it is somewhat concerning that participants' perceptions of receiving support and appreciation did not involve it coming from their mangers/employers. However, this finding might be linked to a trend regarding hesitance of businesses to invest in employee health and well-being despite prospective financial and productivity gains (Cooper and Bevan, 2014). Keeping in touch with employees on sick-leave was seen as important by the study participants, linked to their need for empathy and support. Notably, finding a suitable mode of contact and its frequency was important:

> *"I think communication is a huge factor, and I think when you're not in the office it's easy to lack that. I think emails can be quite cold if you're emailing someone, it can be misinterpreted quite easily" (P6)*
>
> *"So for me, I wanted contact every couple of months... It was quite nice because when she [manager] was also contacting me, there was no obligation, I didn't have to respond. I didn't have to justify the time I was having off, I didn't feel like she was checking up on me or putting any pressure on me to come back sooner" (P4)*
>
> *"So I was constantly ringing them, but there was no kind of contact like seeing how I was doing, it was more me just updating them really. There was no back and forth. They weren't very good with that really" (P1)*

Although it was encouraging that some participants' experience with their managers was positive, in some cases it became apparent that according to employees, employers did not adequately utilise communication opportunities whilst managing sick-leave for their employees. A poignant summary of the current RTW process for people with CP came from Participant 5:

> *"Well, what the government think is happening, what my doctor thinks is happening, is something entirely different to what actually is happening, and the number of times I've come back to work on a sick note, purely because of you know, the demands of the job - is just phenomenal".*

It was striking to hear about such an asynchronous approach to RTW and miscommunication transpiring from the study narratives, particularly considering seminal reviews showing the value of work and getting people back to work being one of the key points on the UK government's agenda for a while. Furthermore, the intensity of job demands placed upon employees with CP during the RTW process, consistently present throughout the current data, is concerning. In addition, a common thread through participants' narratives was a feeling of one's problems being dismissed, and availability of help and understanding of one's needs being sparse. Subsequently, it seems plausible that as a result of the shortfalls in the current RTW processes, employees with CP face an increased likelihood of sickness presence at work.

3b. Social support outside work is important

In addition to having a supportive work environment, participants referred to the importance of social support available from other sources, namely family, friends, online support communities, and healthcare professionals. The support was helpful in terms of logistics (e.g. commuting) as well as coping with the emotional demands of being off work and returning to work with CP. Instrumental support was often quoted as having emotional meaning to the participants, which is in line with the literature (e.g. Semmer et al., 2008). The value of such support was exemplified by the following quotes:

> *"Because if I didn't have friends and family I would - yeah I don't know what I would have done to be honest, to help. If I lived on my own or didn't have many people around me that would have made a big difference" (P1)*
>
> *"Yeah, it's just - it [Facebook support group] gives you that belief that you're not on your own. There is other people going through exactly what you're going through and although you've got your family around you… they don't know to what extent you're in that pain and what you're actually going through." (P4)*
>
> *"Um, but yeah, I mean, I don't know how, if I had no support from anybody else, I don't think I would have got through it [being off work for a long time and associated symptoms of depression]. It was only because I had my family, I had the support of my GP still, um, that I managed to not do myself in" (P8)*

Participants often felt that their well-being was largely dependent on external support whilst they dealt with numerous life-changing consequences as a consequence of having CP. Furthermore, in many cases the GP was seen as a person legitimising employees' pain condition.

> *"When I went back to work I had back to work forms. Which I had to fill in, like reduced duties, reduced hours but they [employer] did that [including this additional information on the form] because the doctor gave me a sick note with that [recommendation] on for reduced hours and reduced duties" (P1)*
>
> *"I knew if I didn't get my fit note my insurance or my work might say: Well, you've got to come back. And I couldn't do that 'cause I wasn't physically up to it. Um, so it was very stressful to be reliant on somebody else to make sure I had some sort of thing… income still, so I could keep on paying my mortgage. Um, but I was very lucky, I think, in the fact that my GP was very supportive... unlike the benefit people, they all say I'm ... sort of, I was lying basically and making it up" (P8)*

The above excerpts highlighted the differences in amounts of support offered by various stakeholders in the RTW process. Namely, GPs were often seen as having a largely positive role in the RTW process, as opposed to the employers, albeit not entirely so:

> *"But actually I kept putting myself back a bit because I was pushing myself a lot, because I felt like I had to, but that wasn't from doctors that was from work" (P1)*
>
> *"I think that I mentioned it [an intervention] to my GP. They did a referral to the [hospital], and I saw an occupational therapist a couple of times" (P10)*
>
> *"Um, my GP, when I was talking about wanting to go back to work and there was no reason why I shouldn't go back to work, um, was very good at sitting down with me asking what I wanted" (P3)*

The above finding may be linked to the nature of doctor-patient interactions versus the dynamics of workplace relationships and was supported across all interviews in the current study. Notably, as some employees found the support offered by the GPs to be somewhat 'passive', thus leading them to adopt active roles in their RTW process (see theme *Employees adopt an active role in their RTW process*).

Social support was key to those participants who received it and seemed to have been desired by those employees for whom such support was lacking. It is plausible to suggest that without the support being available, the RTW process for the participants in the current study would have been made increasingly difficult. The online forums provided participants with validation, which might have been lacking elsewhere. From the practical point of view, having a supportive network allowed participants to meet their everyday commitments. In an ideal scenario, all stakeholders would work together and support each other in ensuring the RTW process is joined-up and effective. However, logistical issues around accessing appointments to discuss the FN put pressure on employees and made them reliant on support from others. Whilst social support was invaluable from the current participants' point of view, it also carried feelings of guilt associated with needing a higher level of assistance to be able to meet the demands of daily life, including RTW:

> *"And obviously there's help to get to appointments or around the house and things like that. But then it does put a strain on you because I feel guilty because my mum and dad help me quite a lot and I don't want them to have to do that." (P4)*

> *"I don't feel that my pain depresses me in general. I do have days where I don't want to go out, where my pain is quite bad. I often feel guilty for cancelling on friends" (P6)*

> *"So I needed to get to the doctors constantly when I don't drive, I'm on crutches, I couldn't - it was hassle to rely on other people to get me to the doctors" (P1)*

> *"So it [living with CP] does put a little bit of a strain on but obviously I've got a lot of support, and they [my parents] do take me to appointments and medicals and things like that" (P4)*

Biopsychosocial consequences of living with CP are far-reaching. Therefore, although there is some tension apparent via participants' feelings of guilt, the availability of good social support is crucial to the success of any RTW intervention.

3c. Difficulty accessing interventions

As part of the current study, participants were not asked about any specific RTW interventions, but instead were able to discuss any intervention that they took part in as part of their RTW. Subsequently, all participants described obstacles in accessing RTW interventions, including long waiting times for appointments and uncertainty around accessing interventions via the NHS route. Such uncertainty was re-iterated in participants' interactions with primary care providers:

> *"Everything took such a long time. It took many months to diagnose, many months of waiting for referrals" (P10)*

> *"So she's [GP] re-referred me [to the pain clinic], but she said she doesn't know if they've got any more staff yet. There's supposed to be four or five consultants, they were working with one. So she said lots of change in the NHS at the moment, she doesn't know what's gonna happen. She said, I'll try, assume I've referred you, I'll contact you if not. So we'll just have to wait and see" (P6)*

Thus, some of the narratives suggested that the participants were faced with various – arguably avoidable - stressors as part of their RTW, in what should have been a guided, reassuring, and confidence-building process. Importantly, delays in accessing interventions have previously been linked to the risk for a non-RTW, associated with long-term sick-leave prior to rehabilitation (e.g. Ahlgren et al., 2007; Øyeflaten et al., 2014). Previous research (Burton et al., 2013) has suggested enabling more telephone appointments as part of RTW interventions and utilising vocational aspects of rehabilitation within them, but none of the participants in the current study described being able to take part in interventions via the telephone. As a result of difficulties in accessing RTW interventions and restrictions placed on their duration, many participants opted for a private route when accessing services such as physiotherapy, and adopted the active role as described earlier in the chapter (see *Employees adopt an active role in their RTW process* theme). In addition, participants seemed frustrated by the flaws in the referral process, which made some of the services that were potentially available to them seem redundant:

> *"[An intervention] was quite helpful, I felt that by the time it was starting to be helpful, you've done your however many weeks and you are discharged. From that, as things have got worse and worse I felt that I've needed to go and do my own thing" (P6)*
>
> *"But, although she'd [manager] put forward to occupational health to, um, sort that out for me, oc-, it took several months for occupational health before they turned round and said, well actually it's a self-referral" (P3)*

The lack of or limited access to RTW interventions was a common issue experienced by the employees in the current study and it was relevant to the workplace interventions as well. The latter was linked to the issues around employer support, discussed previously (see sub-theme *Employees' poor RTW support is linked to poor understanding of CP*).

3d. Interventions are a part of a disjointed approach

The current sub-theme highlights the challenges within the current RTW processes for employees with CP, specifically focusing on the lack of joined-up thinking behind delivering various elements of RTW interventions. Participants in this study described issues around stakeholder communication and lack of goal alignment, which in their view hindered their RTW process. Data revealed the importance of continuity of care, patient-led approach, and the fact that pain is not one speciality problem and various professions should offer support to people with CP trying to RTW, whilst maintaining dialogue throughout the process:

> *"I think you have a team of people looking at you, and looking at every aspect of what pain is, will be really beneficial. I think when you're only attacking it from a medical side, or you've got the doctor if he's trying to prescribe me pills. But no one seems to really talk with each other. I've got my private physio, who has no relation to any of these things. I've got my spinal consultant, who's only looking at giving me surgery because that's what he does" (P6)*
>
> *"Um, yeah, there was miscommunication there [during the referral process]" (P3)*
>
> *"Yeah, nobody knew what to do" (P8)*

The above quotes, and other narratives in the current study, suggested communication problems affecting the outcome of RTW interventions. Apart from the lack of communication, participants in the current study referred to the lack of goal alignment in RTW interventions delivery. Employees often faced conflicting advice from various health professionals and thus, due to the lack of joined-up thinking, participants at times struggled to have confidence in and trust the advice they were receiving:

> *"I'd go and I'd see a different physician than what I'd seen previously and they'd give me often quite conflicting advice? And then I'd go the next time and it would be someone different again and they would give me different advice" (P9)*
>
> *"Even with the first employment, I saw two different GPs. The first one gave me a couple of notes and then sort of implied that it would be good to go back to work. [...] The second time I was off sick, they [GPs] would just sign the notes and gave it to me and gave me my prescription for my painkillers and that was it. They didn't really suggest anything else at all" (P10)*
>
> *"My spinal consultant actually said to me to go swimming. He said: Swimming might be a good idea for you. I mentioned to my physio about swimming, and he was like: No, do not go swimming" (P6)*

Subsequently, employees found themselves trusting the advice of those healthcare professionals who listened to them, and who showed them the most empathy and understanding for their condition. The level of familiarity in terms of having appointments with the same person delivering a certain type of intervention played the key part in building employees' trust towards them. Interestingly, several participants described physiotherapists as the most trusted healthcare professionals involved in their RTW process. Those participants had more meaningful interactions with physiotherapists, and consultations did not seem as transactional in their delivery format as, for example, those with GPs or the Pain Clinics:

> *"I think for me I've got a lot of trust in my physio. He knows me well. He's been working with me for several years now. I trust what he says and what he does. So I'm probably more likely to go with him, because he's helped me the most. It's difficult when you're getting conflicting information" (P6)*

> *"Yeah, but, you know, without him [physiotherapist], I don't think... you know, if I had spotted him two years earlier, if I'd have found him, I'd be back [to work] two years earlier but if I'd have just doing the traditional routes of pain medication, normal physio, pain clinic, whatever it was, operations, painkillers... I'd be in exactly the same position now" (P8)*

> *"Yeah well when I went to the physio after my operation… Yeah, she listened to what was going on, what I could do, what I couldn't do. And she was really helpful, yeah. She was the best physio I've seen to be honest, when I was there after the operation. Because I think, as well, being - so I've seen physios in more outside places - whereas this is based in the hospital, they had… they seemed to have more detail of my operation and more detail of what I had done" (P1)*

The above quotes suggest that RTW for people with CP should have a person who leads the process to improve the inter-disciplinary communication, and who the employee trusts. Participants in the current study highlighted this as being part of an ideal, flexible and dynamic, and a more joined-up approach. Furthermore, a person leading RTW could act as someone who could validate employee's CP diagnosis:

> *"And one person sort of taking a lead on it [RTW process], rather than having, you know, like, you send this form to occupational health and then you have to go through this department and this one, and then it's just becoming really blurry... Like, you might have all the boxes ticked, but you don't actually feel supported because you don't feel like anyone fully understands the picture of your health and what you need is them having one key contact" (P7)*

> *So I do think that like if my physio did communicate with like my leader on the pain management programme when I get there - my physio sees me on a weekly basis so she's seen everything and the ups and the downs that we've gone through - and if she could then communicate that to the pain management and they could look at me in a different light to what they would as an outsider" (P4)*

Another issue around the disjointed approach to current RTW interventions for employees with CP is linked to the worrying practice of (over-)prescribing pain medication and pressure on resources limiting the already lacking support:

> *"I mean, I went to the pain clinic in the hospital and they were absolutely terrible. They just said morphine, um, and then lidocaine patches, 'cause I didn't wanna be on morphine every day. And then they cut the lidocaine patches 'cause they were too expensive. 'Cause they're like 400 pounds a box and I was going through a box a month and they didn't, um ... wouldn't pay for them anymore [...]" (P8)*
>
> *"Just because they're really strong painkillers, I had to get my body to be used to them, to be able to function well enough to hold down a job. And one of them I have had to stop taking, due to starting a job, because it causes like memory loss and confusion, well I can't start a new job and experience that" (P4)*
>
> *"Umm I took them, I took morphine for a couple of years until I realised it was doing more harm than good, so I've stopped that. And in fact I'm like other members of staff who have got chronic pain, you just, you take painkillers when you need to and you don't any other time... horrible things - they genuinely are. I'm amazed that there's not more research about the psychological problems that come with the medication, it's worse than the pain" (P5)*
>
> *"They're not kind medication" (P5)*

The practice of prescribing pain medication for CP is a contentious topic; a recent drive to increase withdrawal of opioid pain medication from CP sufferers revealed tensions in the process (e.g. Knight et al., 2017), including negative psychosocial effects of such practice, with patients reporting opioid tapering as a dynamic social and emotional process (Henry et al., 2019). Interestingly, as the above quotes illustrate, participants were aware of the negative side effects of certain pain medication and drove the change in intervention strategy adopted by the other RTW stakeholders. Data also highlighted the pressure of managing CP at work for the employees, who often face the 'double-edged sword' dilemma of choosing between reducing debilitating pain and debilitating side effects of prescription drugs. At the same time, it is clear that at certain points in their lives employees may need pain medication to function, thus making the issue a contentious one and fuelling the debate on the most effective use of medicines and treatments. Notably, in situations where employers and other RTW stakeholders should work together to support RTW for an employee with CP, participants described their frustration at experiencing a of lack of joined-up thinking:

> *"Okay, we don't do that [joined up thinking about RTW interventions] (laughs). Don't be so silly… NHS and [employer], no, no no" (P5)*

The above quote encapsulates frustration and somewhat lack of hope that the current state of affairs could improve. Yet, the fact that most individuals spend a high proportion of their adult lives at work (Cooper and Bevan, 2014) should be a reason compelling enough for all stakeholders to drive the change to improve the RTW process for CP sufferers.

3e. Lives are not a 'black and white flowchart'

This sub-theme encapsulates participants' views about what should be an important consideration in an appropriate approach to RTW process. Namely, all of the participants expressed the need to have an individual approach to RTW interventions, aimed at meeting the needs of each individual rather than being rigidly informed by policies and guidelines:

> *"[...] organisations and policies like to cover their backs and have, like, a black and white flowchart of what you can and can't do, but lives aren't like that" (P7)*

> *"Like some things work for some patients and some things don't work for others" (P4)*

Participants felt that employers' approach was one-sided and the RTW process they adopted omitted the practical considerations and the support needs of workers with CP. Employees suggested that employers' agenda was mainly centred around following rigid RTW procedures:

> *"If I do have a return to work interview it's kind of like: are you fit to continue? Yes? OK. And that's it" (P5)*

> *"I felt like they wanted me to just be a full-time well person, and couldn't really even consider the fact that wasn't the case, if that makes sense" (P10)*

> *"Rather than, like, being solution-focused, it was almost, like, just making a judgment, like, like an almost, like, for legal reasons - yes or no, can she be here…" (P7)*

The idea of ‘ticking boxes’, without considering socially constructed meaning of CP and RTW process, is aligned with the notion of evidence based medicine defined by Sackett et al. (1996, p. 71) as “*the conscientious, explicit and judicious use of current best evidence in making decisions about the care of individual patients. The practice of evidence-based medicine means integrating individual clinical expertise with the best available external evidence from systematic research*”. However, issues with such simplistic approach to RTW process were present in comments from all employees, with participants stating:

> *“Um, I think although there are things as a whole that employers can do or NHS services can do to support somebody, the situation needs to be, like, the person needs to be treated like an individual’ (P7)*
>
> *“Because different people think differently about different things” (P4)*

The ‘one size fits all’ approach to managing RTW for people with CP may be linked to the shift in the UK government’s policy regarding CP and work (e.g. Black and Frost, 2011). Until recently, the approach to managing RTW for people with CP omitted to fully consider the value of employee’s ‘expertise’ related to their condition (NHS, 2016), although Greenhalgh (2009) noted limitations of the Patient-expert, self-management approach and postulated a more holistic approach instead. From the current participants’ narratives it was clear that none of them felt like an ‘average’ member of a defined group.

Data analysis suggested that employees felt that being fit to do the job can be somewhat ‘black and white’ from the employers’ point of view. Thus, it seems that improving the fit between the employee with CP and the workplace may be one of the challenges to address within the future RTW processes. Namely, the fluctuating nature of CP often remains at odds with the current organisational polices. Importantly, Greenhalgh (2018) argues for scepticism regarding the value of guidelines and seeking a more patient-based approach in medicine, which based on the current study’s findings seems fitting when considering RTW for workers with CP.

3f. Multidisciplinary approach – the key element that is sometimes missing

There was a clear alignment between the qualitative data and the results from the literature reviews informing the current empirical study as to the usefulness of the multidisciplinary approach in delivering RTW interventions. Interestingly, a multidisciplinary team provided some participants with reassurance regarding the comprehensive nature of their care:

> *"So, you kind of get the, um, like, that kind of group, that team placebo effect, don't you, like, a lot of people are looking after you, so I must be being looked after well. But I think also having that many people was important, because each of them looked at a slightly different perspective of me as a whole" (P7)*
>
> *"To have a collaborative approach I think would be really beneficial" (P6)*
>
> *"I would agree [about the multidisciplinary approach]. I would agree 100% 'cause that's ... My pain physio, he's physio, if you'd have just done the physio, I'd be in that same position." (P8).*

Thus, in terms of successful interventions, no single intervention was highlighted as the most effective in promoting RTW, but it was clear that participants benefited the most from a varied approach, which met their specific needs. It was often a trial and error approach before employees found an intervention that matched their needs and helped them RTW with CP:

> *"So I tried every painkiller under the sun, 200 physio sessions, um, just, you know, you name it, I tried it" (P8)*
>
> *"I've tried everything from osteopaths, chiropractors, physiotherapists, sports massage, everything. You name it, I've tried it. I've gone to the gym and had personal trainers to try and strengthen the core, I've gone to specialist yoga, Pilates teachers, and tried to do things like that" (P6)*

The types of helpful RTW interventions described by the employees in the current study included physiotherapy and exercise, mindfulness, counselling, education about CP, positive psychology and coping skills courses, visualisation techniques, and occupational therapy:

> *"I'd also accessed mindfulness course last year, which was really, really, really helpful" (P3)*
>
> *"[I] got referred over to [hospital] and saw occupational therapists and physiotherapists, did the Fibro Coping Skills program and just had a lot more specific*

> *treatment and intervention and suggestions of things to help, which was very useful to learn more about the condition, about what helps" (P10)*

One participant (P10) described receiving advice from an OHP (namely, rest breaks). Two participants (P6 and P10) received medical interventions, such as spinal injections, and found that those interventions helped to lessen the severity of their CP and subsequently helped with being able to RTW:

> *"So he did the facet joint injections and the nerve block, which was really good. I always think maybe it [each subsequent injection] hasn't helped as much as it did before, but I was able to stand and wash my hair in the shower for the first time in as long as I can remember" (P6)*

The majority of the participants expressed the importance of workplace interventions, which included a mixture of target/level interventions such as phased return, flexible/reduced working hours, having an option to work from home, having a point of contact and support from their supervisor, progress review meetings with their employer during RTW, employers maintaining communication with an employee who is off work, and ergonomic adjustments:

> *"I wanted to return to work and, um, I think, think the fact that I felt comfortable with the phased return that was discussed. You know, 'cause it, to begin with it was like, two or three hours every other day, um for a few weeks. Just to break me in" (P3)*
>
> *"We discussed about me coming back to work in that meeting. I said one of the things that would help would be flexible hours and working from home" (P10)*

Interestingly, none of the study participants rated positively the input from OHPs into their RTW process, albeit for some access to OH advice had simply not been offered. Some employees took part in occupational therapy interventions – often initiated by employees' own research and active input into the RTW process strategy - which they found useful:

> *"I think that I mentioned it [a hospital where a treatment was available] to my GP. They did a referral to the [hospital], and I saw an occupational therapist a couple of times." (P10)*
>
> *"I had to go and see occupational health and that's been going on for six months now and they still haven't had the feedback meeting with me. So they're not particularly good at it" (P5)*

Arguably, participants in the current study might have had such experience due to issues around limited access to OHPs. This might have been affected further by the limited understanding of the various services at the organisational level. Notably, according to participating employees, multidisciplinary efforts in delivering RTW interventions for workers with CP were better suited to addressing their complex needs.

6.3 Discussion

In summary, all CP employees in the current study felt motivated to achieve RTW and the data suggest that during the RTW process, psychosocial factors such as availability of social support played a pivotal role in steering employees back into work (RQ5-7). Specifically, besides motivation, psychosocial factors included having a supportive manager and flexible workplace (intervention), which were referred to by the participants as being amongst the factors allowing RTW (RQ5-8) and allowing workers to maintain a sense of normality (the 'self', albeit often disrupted and reconstructed; Bury, 1982), despite the burden of the biological aspects of their pain experience. Helpful RTW interventions discussed by the employees included a mixture of target/level interventions such as phased return and ergonomic adjustments, flexible/reduced working hours, having an option to work from home, having a point of contact and support from their supervisor (including progress review meetings and maintained communication during the period of SA and RTW) (RQ5-8).

Equally, participants described a mixed experience of the current RTW processes (RQ5). Specifically, participants felt under pressure to RTW and to perform at their former levels ('100% fit'). Such pressure was applied externally, mostly by the employers, but also by the employees themselves. There was some recognition of the latter ("*But really I needed to wait until my consultant was ready for me to go back to work*", P4), but overall the current participants felt that they were the experts of their pain experience and felt entitled to the ownership of their care decision-making process. Such perceptions are in line with the assumptions of the EPP (Donaldson, 2003) and support the idea of CP self-management.

Employees often faced feelings of stigma related to the invisibility of their CP. Furthermore, participants found that their employers often struggled to show empathy and understanding of their needs, which they linked to the lack of knowledge about their condition (RQ5; RQ6). In these instances, GPs were perceived by employees with CP as having a largely positive, albeit passively supportive role in the RTW by the means of legitimising the workers' pain condition. Furthermore, such a role could also be linked to GPs passively issuing FNs and thus, arguably, not attempting to address motivational factors key to RTW. Thus, the true supporters of the employees were often workers themselves, adopting an active role in their RTW process. Equally, this role implies a requirement for CP sufferers to be articulate to ensure better outcomes in the RTW process, thus linking to and adding another dimension to the feeling of pressure for employees trying to RTW.

Linked to the above, all participants felt that a multidisciplinary approach to delivering RTW interventions was key (RQ6; RQ8); however, participants highlighted that there were significant issues around accessing multidisciplinary RTW interventions in a timely manner, and felt that the interventions were not flexible, nor dynamic, and were rarely targeted at their individual needs (RQ5; RQ6). Such perception goes against the idea of Personalised Medicine approach defined by the NHS (2017) as "*a move away from a 'one size fits all' approach to the treatment and care of patients with a particular condition, to one which uses new approaches to better manage patients' health and target therapies to achieve the best outcomes in the management of a patient's disease or predisposition to disease*" (p. 6). As a result, employees in the current study aspired to have the role of expert-patients and often adopted the active, communication-leading role in their RTW process to address an otherwise 'box-ticking' approach.

Participants' responses suggested that multidisciplinary efforts, availability of social support, job satisfaction, and employers' willingness or otherwise to provide workplace adaptations were key in how employees perceived the ease with which they could RTW (RQ5-8). However, the overall analysis shows that job demands significantly overweighed the availability of job resources, thus leading to employees feeling more pressure to RTW and to potential issues of presenteeism (in its negative form; e.g. Claes, 2014). The current findings are concerning since the disjointed efforts to manage RTW for employees with CP do not reflect our overarching understanding of psychosocial benefits of re-joining work (e.g. Waddell and Burton, 2006).

6.4. Conclusions

Whilst all participants returned to work, this was often not a positive experience or a streamlined process. Employees with CP described feeling pressured to RTW swiftly and at full capacity, as well as the need to adopt an active role in their RTW process. The importance of multidisciplinary interventions, communication, and related social support, both in the workplace and outside of work environment was evident from the analysis, and were described by the participants as the elements affecting RTW, alongside factors such as the lack of joined-up approach in the RTW process. Interestingly, none of the interviewed employees rated the input from OHPs positively; most did not have access to OH referral, despite the important role that OHPs play in most areas of disability and equality law (Howard and Williams, 2013). In light of the above findings, and to help to inform future RTW efforts for all stakeholders, the second empirical study in the current thesis explored how potential members of a multidisciplinary team – OHPs, perceived the current UK RTW processes for employees with CP. This study is described next in *Chapter Seven*.

Chapter Seven: Empirical study two – with OHPs

7.1 Introduction

Previous chapter discussed caveats and shared meanings within the RTW process from the perspective of employees. Here, the second empirical study comprised 11 semi-structured interviews with OHPs who have had experience (currently or in the past) of helping employees with CP to RTW. All interviews in this study were conducted over the telephone (see *Chapter Five* for an evaluation this approach). The aim of the current study was to gain an insight into OHPs' experiences of the current RTW processes for workers with CP, by seeking to answer the following RQs:

RQ9: What are OHPs' experiences and perceptions of current RTW interventions for CP patients in the UK?

RQ10: According to OHPs, which aspects of the current RTW interventions for people with CP contribute to RTW in workers, which of these do not, and why?

RQ11: What is 'good practice' regarding RTW intervention according to OHPs?

RQ12: What RTW interventions could/should be used to improve RTW outcomes for CP patients in the future?

When describing the current participants, OHPs and OH doctors were conceptualised as the same healthcare professionals and both terms were used interchangeably throughout the current thesis.

7.2 Results

7.2.1 Study participants

Figure 6 shows the participant flowchart. Summary participant characteristics of the final study sample are listed in Table 8. Eleven OHPs who had experience of working with CP sufferers on RTW took part in the current study; out of those, the majority (n=9) were male. Participants' mean age was 51.56 years. The average length of time the participants practiced as OHPs was 26.67 years and they had been working with employees with CP for an average of 23.22 years.

7.2.2 Themes revealed from the data

TA approach revealed the following two themes and relevant sub-themes:

1. *RTW processes for workers with CP are tainted by conflict:*
   1a. Overworked GPs are seen as 'bad apples' corrupting RTW process for people with CP
   1b. Tensions at primary care level feed into the over-prescribing problem for employees with CP
   1c. A lack of agreement on what constitutes a medical issue and what does not, affects RTW processes for workers with CP
   1d. OH consultations are "The Emperor's New Clothes"
   1e. Employees, employers, and RTW intervention providers' goals are not aligned
   1f. RTW stakeholders (healthcare professionals, employers, and the state) encounter complex but also 'questionable' CP patients, which is problematic for assessment and RTW intervention delivery

2. *The way forward for CP RTW processes:*
   2a. Workers with CP need a 'bespoke' RTW plan and improved access to interventions
   2b. OHPs act as mentors for CP sufferers in RTW process
   2c. Employees' inaccurate beliefs about their CP need to be challenged
   2d. Employers' inaccurate beliefs around CP need to be challenged
   2e. A multidisciplinary approach is key but needs to be dynamic

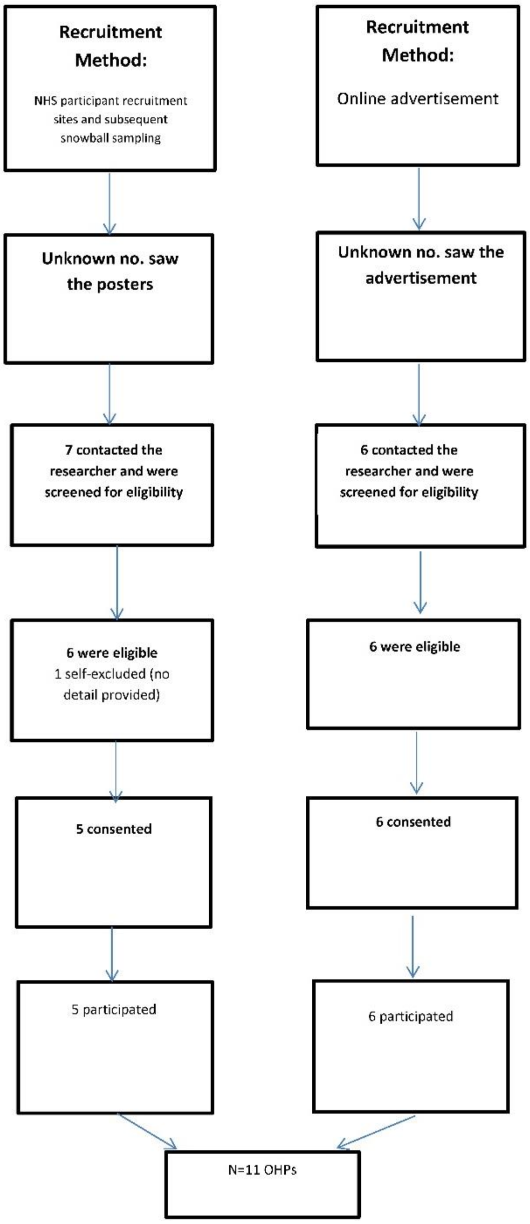


Figure 6. Study two – participant flowchart

Table 8. *Study two – participant characteristics.*

Participant	Type of organisation	Length of time worked with employees with CP	Age	Gender
OHP 1.	OH consultancy	Unclear (“*some years now*”)	Not given	Male
OHP 2.	OH consultancy (private and public sector) and GP	At least 10 years	41	Male
OHP 3.	OH consultancy	Since 2000	Not given	Female
OHP 4.	OH consultancy	About 35 years	62	Male
OHP 5.	OH consultancy (independent)	Since 1999	78	Male
OHP 6.	OH consultancy (own business)	Since 2004	42	Female
OHP 7.	OH consultancy and GP	For about 20 years	54	Male
OHP 8.	OH consultancy	Since 1983	69	Male
OHP 9.	OH consultancy	More than 20 years	59	Male
OHP 10.	OH consultancy (independent, private and public sector) and GP	Since 1984	59	Male
OHP 11.	Company employee	Unclear (“*Many years*”)	Not given	Male

7.2.3 The analysis

Below, themes are described and a detailed analysis of the data within the themes is supported by examples of anonymised quotations which best illustrate the findings. A set of definitions for each theme/sub-theme and how these have been drawn together can be found in Appendix 33.

1. RTW processes for workers with CP are tainted by conflict

This theme comprises four sub-themes, which all centre around a conflict which, in OHPs' view, is embedded within the current RTW processes for workers with CP. The conflict reflects a pronounced degree of inconsistency in relation to actions of some of the RTW stakeholders (e.g. GPs, employers) versus what should arguably be seen as the mutual goal of an intervention, i.e. (in most cases) CP sufferer achieving RTW. Subsequently, the current theme refers to perceived tensions in the RTW processes due to the lack of joined-up thinking across teams of stakeholders (healthcare professionals, employers). Frustratingly for the OHPs in the current sample, stakeholders' approach to RTW, which seems to be focusing on outcomes that are not uniform, contributes to disjoining of the overall RTW efforts. Furthermore, some OHPs questioned the meaning of an OH consultation, considering the current procedures for referrals/access to OH and the common-sense approach needed to swiftly assist employees with CP with their RTW.

1a. Overworked GPs are seen as 'bad apples' corrupting RTW process for people with CP

OHPs in the current study described their discontent at how GPs approach the issue of work and RTW with their CP patients. The conflict referred to within the current sub-theme is one of OHPs' 'failed expectations' towards GPs to act as RTW team members whose priorities are aligned with those of OHPs. The conflict transpired from OHPs' interpretation of what an ideal RTW process should mean in terms of GPs' contribution therein versus the reality that these OH doctors perceive (i.e. GPs' contribution to the RTW process). Thus, the current sub-theme encapsulates a feeling of frustration expressed by the participants in the current study in relation to the actions of their peers in primary care involved in CP RTW processes. For example, the current data suggest a bleak reality of continuous sickness certification for workers with CP, without a detailed review of cases:

> *"And I review quite a lot of full [sic] GP [fit] notes so I can see where it's happening - telephone consultations - signed off. And you know when people have been off on a long term condition, a [sic] sick notes quite understandably in some ways get longer and longer, and you know three months, six months certificates" (OHP3)*

Arguably, the above excerpt suggests that a meaningful evaluation of a CP worker's fitness to work should be carried out face-to-face, which is at odds with the current policy to promote remote healthcare consultations (see sub-theme *2a* for a further discussion of such consultations in context of RTW and CP). It is also noteworthy that critique of GPs remains ambivalent at times, as there is also a feeling of shared responsibility for failing to adequately monitor sick-listed CP sufferers, as exemplified further by the same participant:

> *"And nobody's reviewing these people [workers with CP] between us at all. [They're] Just left…" (OHP3)*

Importantly, the above data reflects shared (multidisciplinary) responsibility for aspects of RTW for workers with CP (see also sub-theme *2e*); despite of this, GPs' contribution to legitimising employees' sick-role remains an issue woven through the current data. OH doctors described shortfalls in how GPs address RTW with employees with CP, for example by issuing continuous sickness certificates with no meaningful follow-up (thus the FN 'morphing into the sick note', see strand *1e* for relevant data) or not utilising opportunities for referral to OH. Such perceived shortfalls might be linked to GPs' lack of confidence around discussing employment issues (e.g. Aylward, Cohen and Sawney, 2013). Subsequently, in OHPs' view, RTW process for workers with CP suffers greatly due to mismanagement on behalf of the primary healthcare providers:

> *"I mean to be honest my view of GPs managing chronic pain is they don't" (OHP3)*
>
> *"GPs don't like to get involved [in the RTW process]" (OHP6)*
>
> *"But it's very rare for GPs to contact us [OHPs] and when we [OHPs] contact GPs I think a lot of GPs see us [OHPs] as a bit of a nuisance and think: oh he's [OHP] probably wanting a report, when in fact I will often contact GPs and say look if I can help I'll be happy to be part of the team here" (OHP1)*
>
> *"[GPs] are often ape ignorant of the importance of getting people back to work as an outcome" (OHP8)*

It is noteworthy to acknowledge the criticism of one professional group (GPs) by another (OHPs), with its meaning – a wide-ranging criticism implying a general lack of awareness of key health issues related to todays' society (i.e. fitness for work). Worryingly, all participants in the current study also expressed a view that GPs do not fully understand what an OH doctor's role entails, as the quote from *OHP1*, above, exemplifies. Equally, whilst noting the negative impact of GPs' practice in terms of hindering RTW of people with CP, the OHPs empathised with said GPs and expressed some understanding of, and a modicum of sympathy with, some of the challenges they face. Specifically, all OHPs acknowledged the shortage of resources and limitations of the GP role in respect to dealing with vocational issues:

> *"GPs simply have their noses too close to the grindstone all the time" (OHP8)*
>
> *"I think it's hugely difficult for GPs to cover all of these things in 10 minutes" (OHP10)*
>
> *"They're [GPs] too busy" (OHP6)*

The above data suggest that the conflict characterising RTW processes, linked to OHPs' criticism of their fellow healthcare professionals in general practice, is almost being justified by the lack of resources that is a bigger and a more pressing issue hindering the overall RTW approach. Thus, analyses (and field notes; appendix 15) suggest that the current participants feel frustrated with the current CP RTW processes. This frustration might be translated into OH doctors' arguably ambivalent critique of GPs as stakeholders in RTW process. Thus, OHPs' frustration is fuelling the criticism of GPs but at the same time, GPs' hard work is being acknowledged. However, OHPs discussed improving GPs' knowledge of work issues and awareness of alternative referral routes for CP sufferers, suggesting these might be the key issues that need to be addressed if RTW process for workers with CP was to improve. Instead, participants described how due to the issues around the lack of adequate resources as well as GPs' lack of confidence in what might be the appropriate course of action, the current RTW processes for employees with CP at primary healthcare level continue to focus on limitations rather than on fitness to work:

> *"I think for most GPs… for most GPs we [OHPs] don't come in to their tool kit, we're [OHPs] not part of the referral mechanism" (OHP1)*

> *"The challenge from an occupational health point of view is that the occupational health physician often has time, resource to actually help patients but we [OHPs] are often up against the challenge of a GP who will consistently sign people off" (OHP3)*

Arguably, it might seem surprising that, from OHPs' perspective, GPs would not utilise an option for another health service to assist with managing RTW process for workers with CP, as it would free up their time. Equally, the lack of time in the first place (e.g. to write reports for OH practitioners, or to spend more time in a consultation with their patient) might be a contributory factor to GPs' hesitance to work closely with OHPs. As the quote from *OHP3* illustrates, participants also highlighted their availability to spend more time than primary care practitioners in consultations with their patients, which is in stark contrast to the arrangements available to employees with CP in primary care. Another excerpt suggesting the value of spending time with a CP patient came from *OHP5*, below:

> "*So all this [a consultation] can take quite a bit of time especially if it's a complex case. And [having] an hour [to carry out a consultation] is a luxury*" *(OHP5)*

Interestingly, a minority of the OHPs in the current study had shared responsibilities and worked as GPs alongside consulting in OH. Those participants reflected upon their experience of working in general practice with CP patients and, as suggested previously, indicated frustration with the current processes and acknowledgement of the failures within them, particularly when all available options have been exhausted:

> *"General practitioners - clearly short of time - may just look at that [one CP] symptom in isolation and treat it and then the patient goes away, then they may come back with another symptom, it gets treated, they go away… and no one sits down and puts it all together" (OHP1)*
>
> *"And I [in my role as a GP] don't see him [CP patient] anymore; he's just waiting for secondary care to see him. And we're kind of stuck until that happens. And so it's kind of this cycle, and it's demonising for me, it must be very demonising for him just to keep on that cycle as it were" (OHP7)*

When OHPs had shared role-responsibilities (i.e. OH doctor's role as well as being a GP – see Table 8), it was clear that certain aspects of the GP's role made those healthcare professionals feel trapped by the current system's failures, including difficult to manage workload and lengthy waiting times for secondary healthcare referrals for their CP patients. The negative feelings seemed in acknowledgement of the moral and ethical obligation to help their patients related to the role of a medical practitioner (e.g. Hussey et al., 2004).

Although the issues faced by the GPs were acknowledged by the participating OHPs, overall, analyses suggested significant levels of frustration amongst OHPs in the current study at how the current RTW efforts for workers with CP may often be thwarted at the very start of the process, in primary care. Specifically, although individuals access GP appointments, they do not have an improved chance of RTW because of GPs' questionable intervention. Arguably, failings of the system as a whole, with its lack of sufficient resources and its ongoing pressures on the sickness certification 'gatekeepers' (namely, GPs; e.g. Wainwright et al., 2015), fuel the shortfalls in the RTW processes and are arguably a driving force behind GPs unwittingly 'sabotaging' RTW process for CP sufferers.

1b. Tensions at primary care level feed into the over-prescribing problem for employees with CP

Participants in the current study described the reality of the current UK RTW interventions for workers with CP in a pessimistic tone, highlighting the issue of over-prescribing pain medication, including opioid prescribing. Over-prescribing of pain medication was linked by the OHPs to the wider problems encompassing the NHS at present (linked to funding and a lack of joined-up thinking) and to the role of GPs as the unwitting saboteurs of the RTW process, as described in the previous sub-theme:

> *"So public interventions are very much down the lower end, you know we [OHPs] are reliant on GPs and pain clinics to put the appropriate medication in place and it amazes me still how many people I see on morphine for chronic pain rather than anything else" (OHP3)*
>
> *"So people go to pain clinics and are put on drugs" (OHP5)*

> *"So, they [GPs] just try and get them [CP patients] out of the consultation as quickly as they can, and that's normally achieved with a prescription [for pain medication]" (OHP10)*

The above quotes illustrate a further issue which was expressed by all participants in the current study; namely, that prescribing pain medication for people with CP is used as a way to quickly deal with a complex situation which otherwise requires a more thorough investigation and a thought-out treatment approach. Some healthcare professionals (based from the current data – GPs and pain clinics' staff) might inadvertently be failing CP sufferers by initiating the use of strong pain medication, including opioids. As potent drugs, which often carry a significant number of side effects for their users, opioids require regular dose review; in reality, without any follow-up, CP patients' opiate load remains unchanged and hinders RTW:

> *"You find that, rather like 'the Grand Old Duke of York', people [with CP] have sort of marched up, up, half way up the hill but, unlike 'the Grand Old Duke of York' they've not marched down again" (OHP8)*
>
> *"I wish GPs knew that [that opiate medication does not help with CP], because most patients I see are taking opiate medication, which is totally disastrous in chronic pain" (OHP10)*

Importantly, opioids were also directly linked to hindering RTW for workers with CP by affecting individuals' ability to meet job demands, as exemplified by the following:

> *"Because sometimes you know A, pain stops them [CP sufferers] driving but B, it's the medication [that] stops them [CP sufferers] driving" (OHP3)*

The above excerpt suggests that strong analgesia often affects employees' ability to cope with job demands, thus negatively affecting workers' RTW prospects. However, whilst OHPs' sentiment regarding reducing opiate use for CP is supported by the findings in the literature (e.g. Højsted and Sjøgren, 2007; tapering opioids, unless CP increases/function decreases substantially, Busse et al., 2017), some also argue that restricting opiates for CP patients might often be done too quickly and without providing adequate alternatives

(Knight et al., 2017). As such, efforts to protect community health might result in individual suffering for CP patients (Knight et al., 2017) and in reduced trust in healthcare providers due to their opioid pharmacovigilance (Langlitz, 2009; Knight et al., 2017).

1c. A lack of agreement on what constitutes a medical issue and what does not, affects RTW processes for workers with CP

OHPs in the current study suggested that RTW stakeholders (including healthcare professionals, employees, and employers) unnecessarily medicalise non-medical issues, which is a significant problem negatively affecting RTW processes for CP sufferers. The medicalised issues highlighted by the OHPs included understanding of the nature of persistent pain (thus focusing on the often unavoidable physical pathology and ignoring CP's biopsychosocial complexity – see *Chapter One*). In addition, over-medicalisation applies to other aspects of RTW process such as seeking OH consultation without stratification of CP sufferers, and thus regardless of the severity of employee's situation:

> *"Does this person need flexible working? The answer is they do – it's not a medical problem" (OHP11)*
>
> *"Rather classically he [CP patient] had seen his GP, GP was making a referral preparing an MRI scan [...] They [people with pathology identified on a scan] will think in their head that there's something majorly wrong. This chap [a CP patient I saw] was like that and I took some time trying to explain that if you do MRI scans on anyone over the age of forty you're going to get some kind of findings" (OHP1)*
>
> *"People have long waits for the NHS, all they seem to do is MRI scans and X-rays which is a waste of time in most cases" (OHP5)*

Analyses suggest that individuals construct their perception of 'normality' (here, concerning their/their employee's health or otherwise), which at times might deviate from what the standard (or the average) presentation of a phenomenon might be. Specifically, perceptions of what being healthy/fit to work actually means at different stages of someone's life might differ, but societal expectations and other factors such as family experiences might skew an individual's interpretation. OHPs in the current study highlighted an issue around a careful interpretation of CP sufferers' MRI investigation results. Specifically, OHPs emphasised the need to lessen the negative effects of over-medicalisation on RTW process linked to costs, as well as to a conflict of post-intervention expectations. This could be done by highlighting a message to RTW stakeholders (here, employees with CP as well as those healthcare professionals making the referrals) that a state of 'total' health is improbable.

1d. OH consultations are "The Emperor's New Clothes"

This sub-theme represents an aspect of the conflict underlying RTW processes for employees with CP, linked to recognising the value of OH medicine in the process. Beyond the primary healthcare practitioners not utilising the input from OH when assisting people with CP with RTW (see sub-theme *1a*), OHPs expressed a view that the other RTW stakeholders (e.g. employers) struggle to define the true value provided by occupational medicine. For example, one participant described:

> *"I have a problem with people who want an ergonomic assessment to people's motor cars because of their chronic pain. You know, motor manufacturers spend vast amounts of money getting their ergonomic cars right and you don't want to rebuild a car, right?" (OHP9)*

The above excerpt suggests that already available information might not always be scrutinised effectively by RTW stakeholders, and thus delays in access to appropriate RTW interventions are likely due to over-investigation. Interestingly, the current process of having an OH consultation prior to RTW was described by some of the OHPs as equal to meaningless in terms of its timing, focused on preventing issues around employers' liability, and detrimental to employees with CP particularly considering the timescales involved. Thus, when incorporated within RTW process without a definite need for it, OH consultation provides stakeholders such as employers with an illusion of 'good practice' but without representing such practice per se:

> *"[Employers] often say: Well, you know, the doctor [GP] might think this [about employee needing work adjustments] but I'll just get an occupational health review to confirm; which then can create problems with access [for employees with CP] and so forth, and conflicting advice and so forth" (OHP2)*

> *"Why do you have to [in certain circumstances] go through a process of having a consultation [with an OHP], I've no idea. And why, in fact, a person might have to wait for that consultation before they go back to work astounds me. I just don't understand how we got into this situation where we think it's great to have an occupational health consultation before return to work happens" (OHP11)*

> *"I think occupational health physicians should perhaps be the very last barrier to return to work. I think occupational health doctors [OHPs] probably don't need to get involved that much" (OHP2)*

> *"It makes me think that at the end of the day the best thing for employers to do is to manage health problems using common-sense and by dialogue with their employees, and not let occupational health get in the way" (OHP11)*

> *"I think chronic pain is poorly managed by the medical profession. People do want to get on with their lives get on with their lives despite the doctors and [other] people getting in the way" (OHP9)*

Data analyses suggested that OHPs perceive a dissonance between what elements employers feel are necessary during employee's RTW versus what might be a sufficient approach. In summary, the above excerpts highlight OHPs' perception of employers, and at times healthcare professionals (including OH doctors) themselves as unnecessarily medicalising the issue of work adjustments required for employees. This might be occurring as a result of a somewhat "*parasitic relationship*" *(OHP11)* between employers and OHPs. As such, by utilising OH advice, employers satisfy their internal procedures in a largely uniform approach, instead of assessing their employees' needs case-by-case. Thus, instead of over-complicating RTW processes for workers with CP, stakeholders (here, employers but also healthcare teams involved in CP sufferers' care) should utilise the true value of occupational medicine and stratify CP patients to use OHPs as facilitators of RTW for the more complex cases instead.

1e. Employees, employers, and RTW intervention providers' goals are not aligned

OHPs in the current study expressed their views regarding a disjointed approach when considering RTW interventions for workers with CP. For example, the FN was described as a failed RTW intervention with not much credibility regarding facilitating inter-stakeholder communication. Issues around the lack of information on FNs have previously been reported in the literature (e.g. Coole et al., 2015b). Furthermore, in OHPs' views, the FN achieves an end goal of signing people off work instead of certifying fitness to work:

> *"The thing is intentions were, you know, admirable but I don't think it's [the FN] achieved what it hoped to achieve" (OHP2)*
>
> *"I've got one [FN] here that says – this gentleman has back pain and is to have light duties only, indefinitely. And that's not much help for an employer. Light duties is not a term we [OHPs] like to see, and we prefer restricted duties and for a defined period of time" (OHP5)*

The current participants suggest here that the meaning is often lost between the various RTW stakeholders (e.g. GPs and employers) due to the differences in how those groups communicate and the professional language they use. Notably, OHPs themselves suggested preference for a choice of different terminology pertinent to RTW interventions, thus highlighting how the lack of goal alignment refers to many aspects of the RTW 'approach', including the language used. Furthermore, the design features of some of the interventions (i.e. the 'simplicity' of the FN) may be contributing to disjoining across teams/RTW stakeholders:

> *"So this ticking of the box 'phased return' [on the FN] is too non-specific" (OHP4)*

Whilst based on healthcare professionals' judgement, the advisory nature of the FN makes it difficult to ensure that the employers are flexible when implementing the advice, and that employees perceive it as an indication of their fitness rather than inability to work (see also sub-themes *2c* and *2d*), thus creating another layer of misunderstanding and conflict in the RTW process:

> *"The fit note is only advisory and yet individuals think it's absolute gold dust and has to be applied" (OHP6)*
>
> *"But of course it [the FN] is advisory, it's not… I think that's where the slight confusion comes in, I think a lot of patients think that if I or any other doctor has written something on the note, then it's gospel and actually of course it's not" (OHP7)*
>
> *"The perception with employers is, if you've got a fit note, it means you're not fit for work" (OHP2)*
>
> *"The fit note just morphed into the sick note you know" (OHP3)*

The latter excerpt points out again how the process of fitness to work certification is suffering due to varying social constructions of the meaning of fitness to work and the message carried by the FN. Furthermore, arguably, GPs do not align themselves with the agenda of RTW as a health outcome (albeit this issue arising from the current analyses is contentious, see sub-theme *1a*). Such an inappropriate application of a positive therapeutic intervention (as the FN was planned to be, see Black, 2008; Biron, Cooper and Gibbs, 2011; Gabbay, 2010; Gabbay, Shiels and Hillage, 2016) may lead some CP sufferers into long-term incapacity (e.g. Aylward, Cohen and Sawney, 2013). Arguably, GPs' lack of understanding of the practical side of dealing with employment issues may be hindering the sickness certification process and the negotiation (of RTW) within it (e.g. Wainwright et al., 2015). In addition, OHPs in the current study expressed their frustration regarding the current approach to managing CP patients, where the one-fits-all approach to interventions prevails and CP patients, including their RTW needs, are forgotten:

> *"I've got a lot of people that are recently ill-health retired who have been through the NHS pain management and are probably six, twelve months down the referral and nobody's followed them up, they've had no change of medication, they've had no reviews for twelve, six months you know, they've just sort of fallen out the end of the sausage machine and are no better off than they were before they went in" (OHP3)*

> *"I think it's [the issue of CP and RTW] more complex than most people realise and they [RTW stakeholders] just try to throw generic interventions at them [people with CP]" (OHP4)*

Furthermore, the current sample expressed a view that work is still predominantly not seen as a health outcome by stakeholders trapped in a medical, impersonal and 'transactional' type model of practising medicine that can be observed in the UK. Such an approach does not emphasise the importance of a healthcare professional-patient rapport and trust, and is contrary to the economic, social, as well as moral arguments suggesting that work (within certain pre-conditions) effectively improves individuals' well-being (Waddell and Burton, 2006; Aylward, Cohen and Sawney, 2013). A lack of communication between RTW stakeholders and a lack of clear leadership – importantly, from a person with a biopsychosocial outlook at managing CP patients and their RTW - within teams delivering RTW interventions have been raised by the OHPs as significant downfalls of the public healthcare processes currently in place:

> *"The NHS works in such a siloed and restricted manner" (OHP9)*
>
> *"If you have a GP practice where you'd see a different GP every time, that's going to be very difficult [to manage CP]" (OHP10)*
>
> *"[CP patients] These are people who really have medically unexplained pain which needs to be very much treated, addressed by a biopsychosocial model. But they're not. They're being offered injections into their back or whatever" (OHP9)*
>
> *"And my view of anaesthetists running chronic pain clinics is that they're not the ideal person usually. You need someone with a more psychological background quite often" (OHP3)*
>
> *"So, actually, I think the biggest problem we've got in the UK is that, at the moment, chronic pain is managed by anaesthetists and they're probably the worst people to manage it (laughs)" (OHP10)*

The above excerpts reveal OHPs' concern that the psychosocial elements of CP might not be addressed, or empathised with, by healthcare professionals whose training and expertise is in the biological approach (i.e. anaesthetists), since the often-unexplained nature of CP symptoms largely defies the reductionist approach of the medical model (e.g. Wainwright et al., 2015). Moreover, OHPs linked the disjointed approach to RTW interventions for workers with CP to the pressures on the public healthcare service in the UK and the subsequent shortfalls in the way the public healthcare system operates (e.g. shortage of resources, excessive waiting times to access interventions, a lack of availability of services committed to OH provision). All of the interviewed OHPs had a pessimistic outlook on the future of RTW intervention provision and related outcomes for CP sufferers, as exemplified by the following:

> *"The NHS is creaking at the minute you know" (OHP6)*

All participants in this study expressed their view that the current access to RTW interventions and to healthcare professionals with relevant skills to treat workers with CP is not satisfactory, making the possibility of goal alignment within the RTW process even more challenging. Excessive waiting times for treatments and the lack of goal alignment between stakeholders in the RTW process are problematic and render the overall efforts onerous:

> *"If someone presents to their primary care practitioner and gets sent towards secondary care or physio, that can take months nowadays unfortunately" (OHP2)*
>
> *"Well we're [OHPs] reliant on the NHS, we're reliant on pain clinics and to be honest it's appalling. The level of service is terrible. We can use physiotherapy to an extent but there are very few specialist physiotherapists. We've got - I've got contact with one OT [occupational therapist], and you know he is working in general occupational health, he doesn't particularly specialise in any particular area" (OHP3)*

These interview excerpts illustrate functionality problems that affect RTW intervention delivery within the NHS, making the process isolated and thus, disjointed and arguably, less effective. In addition, in OHPs' experience employees suffering with CP are rarely given an opportunity to be actively involved in the decision-making process when trying to RTW. Employers have been mentioned by the interviewed OHPs as stakeholders whose primary goal should be employees' RTW, but in reality the benefits of such an approach do not seem universally accepted:

> *"It's a mixed bag [with regards to employers], it can vary, you can get those really empathic, very sympathetic line managers who will contact the patient, who will say is there anything we can do to help? Let's get you back to work. Do you need some physio? And on the other hand there are ones who are very distant - you know hardly contact employees" (OHP2)*
>
> *"I think employers, they're often far too rigid in the way they deal with employees [wanting to RTW]" (OHP11)*
>
> *"I used to sometimes find particularly with larger organisations [...] you get someone [in charge] who would come in to a department and they'd come into it sort of as a new broom… and they'd take a look around and say: Right, we've got a lot of skives this year, I'm gonna sort it out" (OHP8)*

Although some could perceive it as a pro-RTW approach, the latter excerpt describes an overly zealous approach to managing sick-listed employees and assuming a malingering role for some individuals (see also sub-theme *1f*). The above findings raise an issue of the importance of support at work to employees with CP trying to RTW (see also *Chapter Six*). However, OHPs described how at times the lack of goal alignment and signs of a power-struggle amongst RTW stakeholders – specifically, between employers and employees, become apparent in the RTW process:

> *"Sometimes I think that the real person in these [OH] consultations is the employer, not the employee" (OHP11)*
>
> *"Sometimes employers can be quite fussy and can be quite obstructive really because they might have other agendas, i.e. trying to get rid of the employee from the workplace altogether" (OHP2)*
>
> *"In most cases people with chronic pain will meet the criteria under the disability component of the Equality Act, and as an occupational health physician I can sometimes encourage employers to seek and implement suitable adjustments" (OHP1)*
>
> *"Well, the Equality Act 2010… sometimes I remind employers about this, that they can't just get rid of people willy-nilly" (OHP5)*

The above narratives also highlight the roles of mediators and educators adopted by the OHPs during the RTW process for workers with CP, to address the lack of joined-up thinking. Arguably, a change of culture in the employing organisations is needed in order to open up practical support avenues for workers with CP, which might also result in a better goal alignment amongst RTW stakeholders:

> *"If you're off for a period of time - let's say six months to nine months, you lose your job with the employer, how are you going to get back to work? Because any employer will say: Well, why have you been off for X, Y and Z amount of time? You'll say, oh I was off for chronic pain. Are they likely to get employed? Unlikely" (OHP2)*
>
> *"I think [RTW process for employees with CP could be improved by] companies buying into occupational health, where you've got trained, qualified clinicians. [This] would be much better and free up GPs to see sick people and not just write sick notes" (OHP6)*

Analyses revealed many issues with the current RTW processes for employees with CP, many of which were linked by the OHPs to the lack of joined-up approach to managing CP and RTW. There was a feeling of missing opportunities to adequately address the issues faced by the workers with CP and to help them to return to their normal lives, including to employment:

> *"It's a bit of a random one chronic pain and chronic fatigue at the moment because I just get so frustrated about the amount of people I see on the scrap heap who don't need to be" (OHP3)*
>
> *"The NHS is so dysfunctional, it's just unbelievable" (OHP11)*
>
> *"People who can't get on with their lives are able, through the NHS and the way the NHS works, to make chronic pain something that in the end defeats everybody" (OHP9)*

The latter statements are troubling and all of the participants in the current study echoed a similar sentiment. Arguably, the wide-ranging issues encapsulated within the latter quote include the healthcare system's failings around the education of stakeholders about the problematic nature of CP (see *Chapter One*), thus affecting (RTW) advice issued and received, having a negative impact on CP sufferers' motivation.

Lastly, some OHPs in the current study described how the overall attitude of stakeholders (including employees, employers, wider society) regarding CP needs to change to encourage a better understanding about the CP condition and support efforts of people with persistent pain in returning to work (see also sub-themes *2c* and *2d*). The value of such a support seems clear considering that CP is the second biggest reason for being off work (ONS, 2017), yet adequate support does not seem readily available to people with persistent pain:

> *"Chronic pain is a huge public health issue and it's not just about working [with CP]" (OHP11)*
>
> *"[CP] It's not sexy, and funding goes to surgery and basic emergency, and doesn't focus on that" (OHP11)*
>
> *"We need a proper rehabilitation type service [for people with CP]" (OHP9)*
>
> *"Obviously, costs are going to have an impact [on availability of RTW interventions for CP] as the NHS is cutting back on many things. Chronic pain is probably an area it's going to have a negative impact. [CP] It's not likely to generate as much input [as other initiatives]" (OHP1)*

Overall, the current strand exemplified how having a common goal is lacking, yet importantly how it is critical for all RTW stakeholders when supporting CP sufferers in managing their pain and RTW.

1f. RTW stakeholders (healthcare professionals, employers, and the state) encounter complex but also 'questionable' CP patients, which is problematic for assessment and RTW intervention delivery

Analyses revealed the perceived complexity of dealing with employees with CP and addressing RTW due to the types of patients with whom the healthcare professionals interact. Psychosocial factors linked to CP (both at work and at home, such as job satisfaction, disliking one's line manager, relationship problems, etc.) were identified by the OHPs as enablers as well as factors that might delay/prevent RTW for workers with persistent pain conditions. Notably, the success of RTW interventions for workers with CP may not necessarily be dependent on the type of treatment employed, but rather on whether the patient is receptive to it and whether their CP is the main barrier preventing them from returning to work:

> *"It [effectiveness of an intervention] depends on the cause of the pain" (OHP4)*
>
> *"If you dig enough there is always something [else, or in addition to pain] going on" (OHP3)*

Thus, the question relating to the level of honesty surrounding workers' accounts of CP is, according to the OHPs, related to the issue of somatising psychological issues employees may have. Some OHPs suggested that patients' hesitance regarding RTW might be linked to overly generous compensation systems, although the evidence from the literature regarding this claim is weak (e.g. Bartys et al., 2017):

> *"I think it's a cultural issue. I mean, it would be quite interesting to look at whether there is a common pain in society where they don't have benefits for having chronic pain" (OHP9)*
>
> *"I think sick-pay should be shortened and I think they [workers with CP] should only get paid for the hours they work, and I think that the genuine cases would become more apparent" (OHP6)*

In addition, OHPs suggested that some workers with CP might feel that their only option is to insist on being signed off work, if their employers remain inflexible and employees cannot meet employers' expectations related to the practical aspects of their RTW. Thus, pressures linked to excessive job demands due to a lack of fit between a particular job and employee's capabilities (as affected by their CP) were linked to workers' lack of motivation to RTW:

> *“[...] if they [workers] perceive their work to be worsening their chronic pain, whether it’s from an anxiety and stress point of view, whether it’s from a physical point of view I think they’re less likely to want to return to work” (OHP2)*

> *“If you get an individual [employee with CP] who is not in love with their organisation, then they tend to resist anything that they see is trying to draw them back in to that organisation” (OHP8)*

> *“Often work is an obstacle [for RTW]” (OHP11)*

Analyses suggest that employees with CP might encounter job demands/environments, which make RTW difficult; this happens without placing the blame on the patients, despite them sometimes being perceived as ‘questionable’ in terms of CP somatisation. Furthermore, the above is concerning as it further suggests a presence of a conflict on an employee-employer dimension, which has already been described as part of the previous strand focussing on the lack of goal alignment between RTW stakeholders (see sub-theme *1e*). However, the question of how genuine a CP patient is, could according to the OHPs be linked to a lack of correct diagnosis:

> *“[T]here’s chronic pain patients and there’s <u>chronic pain</u> patients, and there are those that we’ll recognise to be you know absolute classic chronic pain, you’ll see them they’re sitting there and when they say they feel ten out of ten in pain they are obviously, sweating they’re pale, they’re obviously in pain. And then you’ve got a whole lot of people who are labelled chronic pain, who basically have not very much pain [laughs] compared to some other people, but have quite a lot of significant, mild psychological issues and are somatising quite a lot” (OHP3)*

> *“They’re [‘questionable’ CP patients] generally quite apparent, because they’re the ones that are perhaps over egging it or have loads of side effects, or seeing – trying to look out of the corner of their eye to see if you’ve noted things” (OHP6)*

> *“[T]here is an element of swing the lead or there is an element of exaggerating symptoms [by the patients]” (OHP7)*

In the earlier study with CP sufferers (*Chapter Six*), diagnosis was described by the study participants as helpful in legitimising their condition to other RTW stakeholders. This aspect of diagnosis was also present in the current study’s narratives. However, diagnosis alone provides limited clues about one’s ability to work (Aylward and Locasio, 1995). Aylward, Cohen and Sawney (2013) argued that symptoms do not equate to illness or incapacity for work. Notably, some OHPs in the current study concentrated on secondary gains related to employees’ CP diagnosis, including avoiding work stressors (e.g. a stressful confrontation at work) or having an overly supportive partner (thus inadvertently reinforcing patients’ sick-role behaviours):

> *“But very often actually the work set up, the whole sort of relationship they [workers with CP] have with that [their] employer is part of the problem” (OHP10)*
>
> *“If you have someone that is, you know, generally happy to be at work and they’re regarded, you know, by their managers and fellow employees as a, you know, ‘good egg’ then they seem to be generally happier to get back to work in some capacity compared to people who feel that they’re perpetually misunderstood and at best misunderstood, at worst being bullied or intimidated by their employers” (OHP8)*
>
> *“And I say that’s [having someone supportive] very good in the early stages [for someone with CP], but they [person offering support] need to change their role, and they need to change their role from carer to coach” (OHP10)*
>
> *“To get them [CP patients] not to be doted on every two minutes and not to be run around after is quite difficult… difficult move sometimes” (OHP3)*

The above links to findings within the literature about the negative aspects of social support (e.g. Fordyce, 1998; Semmer and Beehr, 2014). Although social support both at work and outside the workplace is much needed when employees with CP aim to RTW (see also *Chapter Six*), it is important to strike the right balance when providing such support, so that desirable health behaviours amongst CP sufferers could be bolstered and what the current participants reported to be the malingering elements in some consultations, such as exaggerating symptoms could be reduced. In addition, if all domains of CP experience (i.e. biopsychosocial) are not addressed, RTW process can also be jeopardised by the diagnosis and its confirmatory role in relation to an individual’s sick-role:

> *“[Workers] they’ve got the diagnosis [of CP] so therefore they can give up trying if you like” (OHP3)*

Furthermore, OHPs in the current study described how an incorrect diagnosis of CP would be vastly problematic in terms of matching patients to correct RTW interventions and promoting their RTW. There was a feeling expressed by the OHPs of needing to be ready to challenge the CP diagnosis to improve patient outcomes, including RTW:

> *"And also the ability to say something else [when assessing treatment outcomes for patients with CP]: well, I'm not sure this person is even in the right programme, we [healthcare professionals] may not have got the diagnosis right in the first place" (OHP4)*
>
> *"So what I think - there's a real problem with diagnosis that we've got a lot of people labelled as chronic pain who don't meet the full criteria of chronic pain or regional chronic pain syndrome as I would know it [...]" (OHP3)*

The above excerpts suggest that CP diagnosis is problematic and might sometimes have negative connotations as a 'label'. Meeting diagnostic criteria for a specific diagnosis is not straightforward for individuals with CP, who often have a complex combination of symptoms, and consultations depend on workers articulating their problems and concerns effectively. Furthermore, analyses suggest that a quest for a 'correct' diagnosis is doomed from the very beginning due to the problematic nature of CP, despite the CP diagnosis itself providing some positive impact on individuals with the condition, as described previously (e.g. linked to removing stigma and affecting the 'self'; see also *Chapters Four* and *Six*). Thus, the diagnosis itself is a source of conflict in the RTW process for workers with CP, due to its subjective interpretation by RTW stakeholders (e.g. employers, employees). In summary, perceived conflict related to the legitimacy of CP patients' identity has to be addressed at an early stage of RTW process and during the initial healthcare consultations to help to enable RTW for employees with CP. However, as described earlier in the current chapter, logistical challenges make this task difficult for stakeholders at the initial stages of the process, e.g. GPs (see sub-theme *1a*).

2. The way forward for CP RTW processes

This theme is concerned with OHPs' views regarding an ideal approach to promoting RTW amongst workers with CP. In their interviews, all participants addressed the issue of limited resources, inaccurate beliefs amongst the stakeholders (including healthcare professionals, employers, and employees), and the lack of availability of individualised interventions for employees with CP. Furthermore, all OHPs agreed with the findings quoted from the literature review from the current thesis; specifically, the OH doctors felt that multidisciplinary approach, including interventions described in sub-theme *2e*, was the only suitable way forward in order to improve chances of achieving RTW outcomes for CP sufferers. Participants also concurred regarding the importance of workplace interventions in helping to facilitate RTW. Furthermore, participants discussed some of the intricacies they felt should be addressed when delivering a multi-faceted intervention for workers with CP, as described in the latter parts of the current chapter.

2a. Workers with CP need a 'bespoke' RTW plan and improved access to interventions

All OHPs in the current study stressed the importance of avoiding a "*blunderbuss approach*" (OHP4) to RTW interventions for workers with CP. Participants clearly expressed that CP sufferers need an individualised RTW plan, which considers the cause of their CP as well as their response to it. One participant compared people having CP to a rollercoaster ride, which would be experienced differently by different people, based on their socially constructed knowledge and experience:

> *"[...] whenever a person gets off the ride at the end, some people will be absolutely terrified, shaking, other people will be there saying: Oh, it's fantastic. I'm gonna do it again. The odd thing is they've all been through exactly the same experience…" (OHP11)*

Thus, when addressing the needs of workers with CP during their RTW process, an individual, bespoke approach is required to account for employee's subjective experience of pain, as well as to address the influence of societal factors. A combination of different interventions, supported by professionals who would help workers reframe certain problems that might be hindering their RTW, would according to the current analyses be advantageous in RTW process for workers with CP:

> *"I think there is never one specific intervention that works particularly well for people. Most of the I've learnt to be the most effective intervention is almost like a coaching process, if you like" (OHP3)*

Interestingly, and partially linked to the need for SA review described earlier in the current chapter (sub-theme *1a*), current participants suggested that no formal review is available for RTW interventions and their effectiveness, which might seem like an oversight in terms of the broad policy agenda of promoting RTW:

> *"And often I will see people who have difficulty getting back to work because the intervention hasn't worked. But I don't see people returning to work in their totality. So I get a biased view" (OHP 4)*

Thus, even if CP sufferers receive an individualised (or 'bespoke') intervention, sustainability of their RTW and success of the approach cannot be evaluated. RTW stakeholders (e.g. healthcare providers, employers, the government) also have to be realistic in terms of acknowledging that for some people returning to work is not an appropriate route to take. To achieve this understanding, stakeholders need to be empathetic towards the needs of CP sufferers and ensure their point of view is heard. Furthermore, understanding of the non-medical issues might at times be more pressing:

> *"I think the key thing is to make sure that the employee with the [CP] problem is involved and feels that they're being listened to" (OHP11)*
>
> *"Where we get people who are dissatisfied with work, you can do any intervention you like and they're never going to go back. It's not a medical issue at that point" (OHP3)*

The above data highlight again the issue of over-medicalisation of otherwise non-medical problems, which seems woven into the RTW processes for workers with CP (as discussed earlier - see sub-theme *1c*). Furthermore, participants expressed mixed views regarding telephonic approach to RTW interventions; OHPs felt that such approach might work for primary (i.e. preventative) interventions, whereas at tertiary level employees with CP often take part in diagnostic processes that need a face-to-face interaction. Cost-savings and reduction in time needed to complete telephone consultations versus face-to-face meetings are often outweighed, in OHPs' opinion, by the limitations of such an approach (see also sub-theme *1a*):

> *"You know, you can't examine the patient over the phone, but then a lot of healthcare preventions does not involve examinations" (OHP4)*

> *"I mean, you can't sort of suss out people's body language over the telephone" (OHP8)*

> *"Well, I think there's a lot to be said for meeting the person and examining them" (OHP5)*

The above findings suggest that RTW stakeholders (e.g. policy-makers) should consider gains which might result from the initial investment in the RTW process, although at the start such investments might seem considerable to some. The government's policies often focus on saving costs, which has previously found to be an ill strategy by research into the costs versus economic gains of delivering multidisciplinary interventions for CP (e.g. Skouen et al., 2002). However, a recent UK trial (Wynne-Jones et al., 2018) reported both, effectiveness regarding the RTW outcome and cost-effectiveness of a RTW intervention with vocational elements targeted at workers with CP. Thus, there seems to be evidence to suggest that obstacles perceived, for example by the government, as related to costs potentially associated with some (particularly multidisciplinary) RTW interventions can be eliminated. In summary, the bespoke needs of CP patients regarding RTW need to be carefully considered and addressed with timely interventions, characteristics of which will be discussed in the latter strand of the current theme.

2b. OHPs act as mentors for CP sufferers in RTW process

Interestingly, when OHPs in the current study were describing the needs of employees with CP during the RTW process, the terms 'coach', 'facilitator', and 'mentor' appeared frequently and interchangeably within their narratives. Such a support could be seen as medical doctors knowingly choosing a more passive approach, whilst also actively encouraging CP sufferers to take initiative of their RTW process. Participants in the current study saw their role as facilitators and mentors for employees with CP - coaching, educating workers and their employers about working with pain, and empowering CP sufferers in their RTW process:

> *"With chronic pain my role, as I see it, is really three things; I will talk to them [employees with CP] about what they are already doing, what advice they've been given already. I will reinforce the good advice they've been given. I will try to pick out the bad advice they've been given by various health professionals – and there is*

> *a lot of that given. And I would try to encourage them to return to work if they can do it" (OHP9)*
>
> *"I see it [occupational health's input] as a consultation, or the nurse consultation and having a physician to go to for advice" (OHP6)*
>
> *"[CP sufferers] They're rather anxious, think that their employer is trying to get rid of them, and I say our [OHPs'] purpose is to keep them well and working" (OHP5)*

Participants in the current study described the vocation of an OHP as having a very reassuring and holistic approach to managing RTW for people with CP, in line with the biopsychosocial model (Engel, 1980). Employees with CP face a challenge of stigma related to their condition, which can make their RTW difficult. In those instances, the facilitator role adopted by an OHP can support RTW process for a CP sufferer.

2c. Employees' inaccurate beliefs about their CP need to be challenged

From OHPs' perspective, there is a need to challenge stakeholders' beliefs (including those of employees with CP, their employers, GPs, as well as other healthcare professionals who are involved in delivering RTW interventions) around CP and the reality of returning to work with CP, to improve future outcomes in the RTW process. A need to effectively inform RTW stakeholders about issues related to CP and work, and to challenge unhelpful behaviours that might be negatively affecting RTW for people with CP were mentioned by all OHPs in the current study. Employees' beliefs about their CP were repeatedly discussed by the OHPs as factors influencing RTW; specifically, a need for employees with CP to set realistic goals with regards to their intervention outcomes was discussed:

> *"The goals [of interventions] are about getting their [CP patients'] lives back, being able to do things they enjoy. Participating in family life. Participating in employment. And that may involve doing things differently" (OHP10)*
>
> *"It's important that people [running the interventions] highlight the idea of returning to work and it's important for people [with CP] to appreciate that they may not fully recover" (OHP8)*
>
> *"And, actually, I don't think of chronic pain patients as people having a disease or a pathology. I see them as having a major psychological barrier to actually engaging with the ability to move forward" (OHP10)*

The latter quote suggests clear links to a diagnostic category issue related to CP. Specifically, the importance of considering CP as a set of biopsychosocial problems interacting together and somatising as CP. Importantly, without the right type of knowledge being transferred onto CP sufferers from their healthcare professionals and without focusing on what they are able to do, workers with CP might struggle to progress and achieve RTW:

> *"So often patients are saying: Well, I have been referred to a specialist and until I see that specialist I'm not going back to work" (OHP2)*
>
> *"I think this [challenging sickness beliefs] is perhaps an issue for general practice and public health, to say just because patients or employees have pain, doesn't mean they can't work. But for employees it's often a case of: I'm in pain, I can't work" (OHP2)*
>
> *"You know, well, if you're pain free, you're actually happy and smiling and... There's no evidence that we've ever been like that. Why we suddenly think in this day and age we can suddenly be like that…" (OHP9)*

The above suggests that health itself is a social construct; the analyses support the concept of salutogenesis (Antonovsky, 1996), where flaws within the human organism exist, and thus no person is 'naturally' healthy. Furthermore, participants expressed the following:

> *"Education and communication right at the beginning to make people more aware of the [CP] condition [is needed]" (OHP3)*
>
> *"Chronic pain is very much about belief" (OHP10)*

Thus, challenging ill-beliefs of employees suffering with CP around their (dis-)ability were mentioned by the current participants as pertinent to successful RTW. Furthermore, it might mean that, for some workers with CP, recommencing work at a different organisation or partaking in an occupational activity as volunteers is the appropriate first step:

> *"I'm a great fan of voluntary work, so I look at it as sort of a stepping stone. Because, very often, the job that they're [employees with CP] in is actually quite a major barrier. They just can't possibly see themselves returning to that" (OHP10)*

> *"And quite often with those individuals [who suffer with CP] it's about convincing them that they are not going to do themselves any harm" (OHP9)*
>
> *"I think that the message still hasn't got through to employees sometimes that work can be generally very useful and therapeutic to you" (OHP2)*

Although the current thesis conceptualises 'work' in a way which excludes volunteering (i.e. by considering only paid employment), the analyses suggest the importance of a meaningful occupation and thus regaining elements of one's self-identity, whilst maintaining a milieu in terms of job demands and resources.

2d. Employers' inaccurate beliefs around CP need to be challenged

According to the current data, employers who focus on obstacles to RTW and who rigidly follow procedures might miss an opportunity to help their employees to accommodate their CP within their role in the workplace swiftly, if at all. Thus, in OHPs' view, employers are another group of stakeholders who would benefit from education around CP and RTW. Shortfalls in employers' knowledge about CP can arguably put unnecessary delay to some of their employees' RTW:

> *"[Employers] They'll say [to their employee with CP]: Oh, you've been referred to a specialist, there must be something wrong with you, so therefore I'm not going to risk you coming back to work" (OHP2)*
>
> *"If employers actually had a conversation with the occupational health before they made a referral [for employee with CP] I think a lot of the referrals would then become unnecessary" (OHP11)*

Participants in the current study felt that employers misunderstand the likely outcome of CP experience on workers' self- (and work) identity; specifically, pressure to return to 100% fitness, which seems often inadvertently applied on to employees by their employers (*Chapter Six*), should not be seen as an outcome or a goal of an intervention (e.g. Mills, Torrance and Smith, 2016).

> *"It's not unusual for people to say: I don't want you back until you are 100%" (OHP8)*

> *"[I know employers saying to their employee with CP:] Don't worry, stay out until you're better, we don't want you back until you're completely well" (OHP11)*

Thus, a better understanding of CP sufferers' experience by their employers could improve RTW outcomes, allowing employees to re-join work earlier and on flexible terms. This is in line with the idea of fitness to work despite long-term health conditions, as promoted by the current government policy:

> *"[...] if prevalence of chronic pain is increasing in the population, the population is getting older, there may be an element of having to accept perhaps that we are at some point in our lives going to have pain for a particularly long period of time [...]" (OHP2)*

Furthermore, the unanimous view amongst the participating OHPs was that adopting a RTW strategy that includes employers providing support and enabling an active input from the employees would bring more benefits and facilitate a quicker RTW, as exemplified by the following quotes:

> *"There was one [organisation] in which managers that did keep a sort of gentle friendly eye on employees who were off sick, and when those people [employees] were referred to me, what we would find, would be that they [employees] would come in with big smiles on their face, a return to work plan was already agreed, and adjustments and adaptations had been tentatively, were already worked out and the employee had been involved with this" (OHP8)*

> *"But the good thing is his [an employee's] employer has been excellent at supporting him. They've kept in touch, communicated and are doing their best to get him back to work" (OHP5)*

Data analyses thus far suggested that a good rapport between employees and their organisations, and employer support during RTW are key for employees signed off work with CP (see also *Chapter Six*).

2e. Multidisciplinary approach is key but needs to be dynamic

OHPs emphasised the importance of having a multi-faceted approach to RTW interventions and a dynamic approach within a multidisciplinary team. Based on the current data, multidisciplinary teams are dynamic when team members are open to a change of a strategy based on a holistic outlook on a patient, informed by an interplay of individuals' skills-sets within the team and effective communication therein. As discussed previously in the current chapter, relying wholly on the medical model when working with CP sufferers on their RTW was agreed by the OHPs as an inappropriate strategy. Instead, multidisciplinary teams should work on being aware of the best ways to provide a holistic approach for their clients:

> *"Early recognition, early referral, and MDT [multidisciplinary] approach [are needed]" (OHP2)*
>
> *"Well, that [multidisciplinary approach should be adopted] completely ties in with what I was saying about looking at the person as a unique person, looking at what their perceptions are and having a team approach with investigations, but not over-investigating and having priority on return to work" (OHP1)*

Some interventions listed by the participating OHPs as useful in forming the holistic multidisciplinary approach included intensive FR, psychological (e.g. CBT) and physiotherapy interventions, augmented by education about pain and paired with workplace interventions. Several participants had background in providing OH services to military service personnel and reflected upon past interventions for CP available via those routes (including FR), indicating they were helpful. Interestingly, these suggestions from all OHPs concurred with the findings from the literature review for the current thesis (see *Chapters Two* and *Three*).

OHPs referred to physiotherapists as highly desirable members of multidisciplinary team. Alongside them were other specialists who together would provide a holistic approach, addressing the tripartite, biopsychosocial model needed for RTW interventions for workers with CP. Although, arguably, some of the suggestions mentioned by the OHPs in the current study seem implicitly obvious, the participants themselves acknowledged that the current shortage of resources, lack of appropriate stratification, and issues with stakeholder communication lead to the disjointed approach we observe today:

> *"A lot of knowledge is there, but it's just not implemented in any sort of meaningful way" (OHP11)*
>
> *"Yep, for some conditions the waiting time for interventions is a problem. But with so many interventions you get swamped with people who want the intervention and people delivering the intervention have a finite capacity" (OHP4)*
>
> *"And I was saying we have actually reasonable pain clinics out here but they're just absolutely overwhelmed with people that have other issues other than chronic pain [laughs]" (OHP3)*
>
> *"The problem is there's a lot of very good interventions out there – there's just often not a lot of funding or facilities to actually facilitate them" (OHP3)*
>
> *"So it may depend on how the multidisciplinary care is delivered, and whether the people in that team are working together or whether they're just delivering what they're trained to do in a sort of a standardised way" (OHP4)*

For a multidisciplinary team to be effective, OHPs in the current sample suggested that their members should have an array of different skills complementing the whole team's arrangement. Furthermore, participants stressed the need for members of a multidisciplinary team to be aware of their skills-set, to communicate with each other, and to be responsive to the complex needs of CP sufferers. Equally, participants acknowledged that not all multidisciplinary teams work in such a manner, thus restricting how supportive they are for employees with CP:

> *"So yep, I mean the best multidisciplinary teams are where the people in the team meet and discuss cases together. And this often doesn't happen and what you find is the physician does their bit, the physio does their bit, and the OT [occupational therapist] does their bit, and the counsellor does their bit" (OHP4)*
>
> *"We [multidisciplinary professionals within the local referral network] work together as a team and help each other. That's the ideal situation - it doesn't always happen" (OHP5)*
>
> *"We do need the OH nurse, the OT [occupational therapist] or psychologists – the person that does the support and, you know, making sure that they [employees with CP] don't feel forgotten, which I think a lot of people do" (OHP3)*

According to the OHPs, workers with CP taking part in RTW interventions should have a mentor (see sub-theme *2b*) and a multidisciplinary team should have a person leading it, both of whom could potentially be the same individual. Importantly, workers with CP should be regularly followed-up, their progress reviewed and updated, and interventions they receive adjusted. Access to OH should be provided as basic, either as an advisory service for the employers, or as consultations in more complex CP cases. Finally, OHPs suggested that employers should be involved in a two-way communication at the start of the RTW intervention, whilst employees with CP should be given an active role within the RTW process:

> *"The relationship between the individual and the employer, speed and ready access to therapies [all are important]. So I think it's multi-faceted" (OHP6)*
>
> *"I think if you've got a rehabilitation unit that is proactive and engaged, and you are able to communicate with employers, you've got employers listening, who can activate the amount of occupational health service… Yes, those two [elements of RTW approach] work very well, that is [needed] to get people back [to work]" (OHP9)*
>
> *"I think if you can integrate [the approach to RTW] with the employer, either directly or via occupational health in the early stages of managing chronic pain problems, you'd have a much better chance of getting people back to work" (OHP11)*

Notably, there is significant amount of evidence to suggest that vocational rehabilitation (i.e. an approach aimed at helping individuals with health complaints stay or RTW), which includes early intervention and input from an employer, should be considered as the way forward, since it provides benefits for many stakeholders including individuals, businesses, and the state (Aylward, Cohen and Sawney, 2013). Furthermore, healthcare interventions in isolation have limited impact on work outcomes (Waddell, Burton and Kendall, 2009), thus a dynamic multidisciplinary team inclusive of employers might help to facilitate timely RTW for employees with CP.

7.3 Discussion

Analyses of the interviews with OHPs strongly suggest that there are several issues with the current RTW processes for employees with CP (RQ9, RQ10). Firstly, it is concerning that GPs were continuously singled out by the OHPs in the current study as the (unwitting) saboteurs of the RTW process for workers with CP. This does link to study one's findings related to GPs' 'passive support' and arguably 'unchallenged' FN provision. The current participants also highlighted issues around the language used on FNs, which has features that hinder understanding of often nuanced requirements for RTW stakeholders not in the healthcare sector (e.g. employers). However, there might be alternative interpretations than those from claims made by OHPs that GP practices are attributable to ignorance. For example, a conflict between GPs' dual obligations - towards their patients versus towards the state, results in the CP sick-listing process being problematic for those healthcare professionals (Wainwright et al., 2015). GPs might struggle to adequately assess CP due to its overriding subjectivity and thus when negotiating sick-listing with a patient, they might prioritise their role as the patient advocate over that of the benefit gate-keeper (Wainwright et al., 2015). Furthermore, a lack of resources (e.g. short appointment time) might lead GPs to sick-list as first-order problem solving, which quickly fixes a patient's immediate care need but does not address the problem's contributing factors (e.g. Henriksen and Dayton, 2006). The latter would arguably be linked to wider, systemic issues. Finally, since the OHPs' view expressed here is necessarily partial, it is also plausible that GPs are in fact coping well in their role as stakeholders in the RTW process.

Linked to the above, OHPs in the current study were entirely critical about the NHS and its lack of interest and/or lack of resources to manage CP. This links to the misalignment between the UK guidelines regarding multidisciplinary intervention delivery for CP sufferers versus the current provision; specifically, RAR (*Chapter Three*) found that only 40% of Pain Clinics in England are multidisciplinary in their structure (McGhie and Grady, 2016), thus comprise teams with an input from a psychologist, physiotherapist, and physician (National Pain Audit, 2013). The lack of access to RTW interventions featured in the OHPs' narratives as well. Finally, mixed views regarding technology-mediated consultations were expressed, with participants edging towards critique of such an approach. Similar mixed views have recently been reported elsewhere (e.g. Greenhalgh et al., 2018).

All OHPs in the current study stressed the importance of challenging false beliefs related to CP early to ensure that those workers for whom it is appropriate to RTW, receive the best chance at succeeding at this outcome (RQ12). Awareness of the complex nature of CP, usefulness of input form the OH, false beliefs related to having persistent pain, intricacies of CP sickness management, and negatives of opiate prescribing were all discussed as affecting RTW. Furthermore, overly generous compensation system was partially blamed by the OHPs for employees' lack of motivation to RTW. Importantly, compensation system differences impact on RTW as suggested elsewhere (e.g. Anema et al., 2009; Bartys et al., 2017). Whilst wage-equal payments were noted as reducing the incentive linked to RTW, inflexibility of such systems seems more hindering than a receipt of compensation itself.

Current participants raised an issue of opioid over-prescribing, which they perceived to be an issue at primary care level and linked to their frustration with their professional peers, GPs. Opioid usage prevalence data (Zin, Chen and Knaggs, 2014; van Amsterdam et al., 2015) suggest that many CP patients are likely to be taking prescription opioids, thus providing context for the concern related to opioid over-prescribing expressed by the OHPs in the current study. More recently, Ashaye et al. (2018) reported secondary RCT's analyses, where 59% of UK participants with chronic musculoskeletal pain received opioid prescriptions from their GPs. The authors noted that long-term opioid (over-)prescribing is common in UK primary care, thus supporting the current data. However, the issue of opioid prescribing, or more specifically opioid pharmacovigilance is a contentious one and fuelling the debate on the most effective use of medicines and treatments. Withdrawing opioid analgesics without sufficient alternative treatment and psychosocial support (e.g. for issues such as painkiller addiction) is a siloed approach and can result in reduced trust in healthcare providers due to their opioid pharmacovigilance (Langlitz, 2009; Knight et al., 2017).

According to the OHPs in the current study, RTW process for workers with CP requires a dynamic, multidisciplinary approach, with effective inter-disciplinary communication and recognition of each other's skills. Furthermore, a degree of flexibility from all stakeholders and a recognition of when an ineffective approach should be abandoned, are needed too (RQ11, RQ12). There is also a need for a more targeted approach to RTW interventions for CP sufferers, which should be precluded by a meaningful analysis and understanding of an individual's needs. This is also essential in order to recognise "*a non-genuine case*" *(OHP5)* among CP patients. Successful RTW interventions discussed by the current participants included intensive FR, CBT and physiotherapy interventions, augmented by education about pain and paired with workplace interventions (RQ9-RQ12). The discussed findings are in line with the literature identified in *Chapters Two* and *Three*.

Importantly, according to the participating OH doctors, input from employing organisations to support efforts of the multidisciplinary team in the RTW process for workers with CP is key. Specifically, such input should comprise communication with both, HR professionals and line managers. In terms of employer support and employee outcomes, the current findings are in line with previous research suggesting that both, perceived availability and receipt of support at work enable individuals to feel supported (Semmer and Beehr, 2014). As such, lack of social support at work could be classed as a stressor in itself (e.g. Forshaw, 2002), and thus negatively affect RTW process for workers with CP, as discussed by the participating OHPs.

Linked to the above, participants in the current study suggested that OH consultations should - in the less complex CP cases - be exchanged for a ‘common-sense approach’; according to the participants in the current study, employers should be willing to accommodate adjustments to employees’ roles, arising due to their CP, without a need for a second opinion from an OHP. Thus, the current sample discussed the importance of avoiding medicalisation of non-medical issues and highlighted the need for accurate patient stratification, which would help with an appropriate allocation of (limited) resources. At the same time, participants suggested that employees with CP need input from professionals who would employ a mentoring role, supporting active roles of patients in their RTW process (see also *Chapter Six*). According to the participants, OHPs often adopt such mentoring roles in the current RTW process for workers with CP (RQ9-RQ11), but mentors are lacking when access to OH is restricted. In line with the multidisciplinary approach to RTW interventions, professionals’ responsibilities should be shared; thus, issues around mentoring might be linked to the social factor of diffusion of responsibility (e.g. Henriksen and Dayton, 2006). That is, with role boundaries being blurry and an individual’s contribution to the multidisciplinary team potentially lesser (i.e. not adopting a mentoring role) than if defined clearly. Equally, another underlying factor shaping OHPs’ assessment (and possibly overestimation of) their mentoring input within RTW interventions might be self-serving bias (Miller and Ross, 1975) – see *Chapter Eight*, section 8.3 for a more detailed discussion thereof with respect to healthcare professionals’ roles. Finally, as the OHPs’ accounts form just one piece of evidence, this offers only partial understanding of the above issue, with a need for extensions/replications.

7.4 Conclusions

The importance of the multidisciplinary approach when delivering RTW interventions for workers with CP, effective communication, and availability of support during RTW process highlighted by OHPs have been discussed previously by employees interviewed as part of the first empirical study (*Chapter Six*). Participants in the current study highlighted the value of OH in promoting RTW in more complex CP cases, including the input from OTs and OH advisors (nurses) within the multidisciplinary team. Similarly, employees in study one often referred to the positive input from OTs. Thus, in light of these findings, and to help to inform future RTW efforts for all stakeholders, the final empirical study for the current thesis explored how the OTs and OH nurses perceive the current UK RTW processes for employees with CP. Next, *Chapter Eight* provides a detailed description of that study's design and results.

Chapter Eight: Empirical study three – with OTs and OH nurses

8.1 Introduction

To expand upon previous findings and identify solutions to potentially improve future RTW efforts for all stakeholders, the thesis' third empirical study explored views of a joint group of OH professionals, namely OTs and OH nurses. The rationale for including both professions within one participant group was based upon the close link between these professionals regarding their role responsibilities (e.g. advisory roles and liaison with employers and employees; Fit for Work, 2015b; RCOT, 2019; RCON, 2019), although an OT does not hold a nursing qualification and vice versa. Amongst other healthcare professionals, OTs and OH nurses provide OH services, which can be broadly described as focusing on workers' physical and mental well-being (in the workplace) (Fit for Work, 2015b). A link between the two professions and their roles in OH was first highlighted when the interview schedule was piloted. Subsequently, potential participants who responded to online recruitment adverts for the current study expressed comments of a similar sentiment. As earlier semi-structured interviews informed future data collection, the researcher noted that the issue of OH nurses' input into the RTW processes for workers with CP had been consistently raised, and thus warranted further investigation. Furthermore, whilst the OH nurses (referred to interchangeably here as OH advisors) are a distinct professional group, they are RTW stakeholders whose responsibilities are closely linked to those of OTs.

The third empirical study within the current project comprised 14 semi-structured interviews with OTs and OH nurses who possessed experience (currently or in the past) of helping employees with CP in RTW. The majority of the semi-structured interviews with OTs/OH advisors were conducted over the telephone (see *Chapter Five* for an evaluation of this approach), with one interview taking place face-to-face. The aim was to answer the following RQs:

RQ13: What are OTs' and OH nurses' experience and perceptions of current RTW interventions for CP patients in the UK?

RQ14: According to OTs and OH nurses, which aspects of current RTW interventions for people with CP contribute to RTW in workers, which do not, and why?

RQ15: What is 'good practice' regarding RTW intervention according to OTs and OH nurses?

RQ16: What RTW interventions could/should be used to improve RTW outcomes for CP patients in the future?

8.2 Results

8.2.1 Study participants

Figure 7 shows the participant flowchart. Summary participant characteristics of the final study sample can be found in Table 9. Fourteen participants (9 OTs and 5 OH advisors) took part in the study; all were female. Mean age was 44.54 years, the average length of time the participants practiced as OTs/OH advisors was not recorded, however, field notes suggested a large variation in length of participants' work experience. Participants had been working with employees with CP for an average of 9.71 years.

8.2.2 Themes revealed from the data

TA approach revealed the following two themes and relevant sub-themes:

1. *"We all spoke from a 'hymn sheet'" (P13) - the aligned multidisciplinary approach is key*
    - *1a. OTs/OH nurses are crucial to multidisciplinary intervention success, but access is an issue*
    - *1b. Mode of intervention delivery can affect the level of care*
2. *Good work is good for most individuals*
    - *2a. Manual job roles make RTW with CP more problematic*
    - *2b. When trying to RTW, workers need a supportive work environment but do not always get it*
    - *2c. RTW is affected by two types of 'cultural problem'– work not being a motivator and over-medicalisation of CP*
    - *2d. CP should be given "the gravitas it deserves" (P5) and a targeted educational intervention might help to address this*

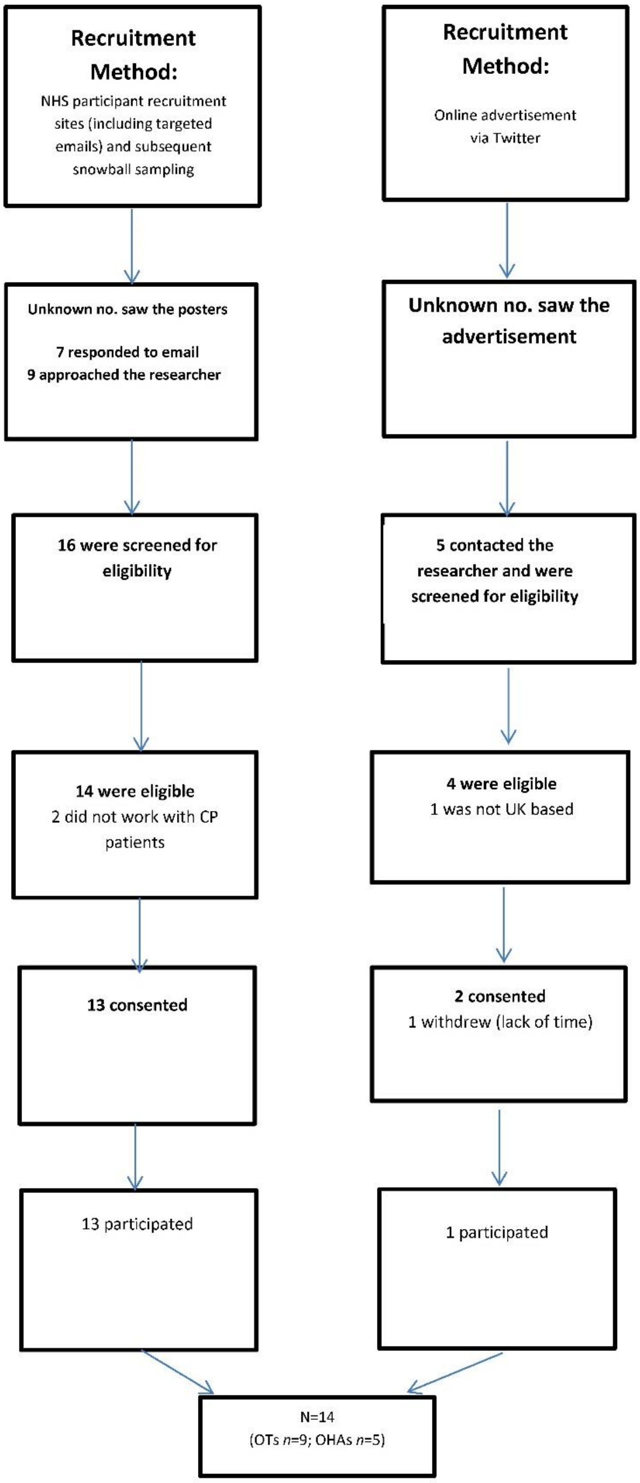


Figure 7. Study three – participant flowchart

Table 9. *Study three – participant characteristics*

Participant	Age	Gender	Role	Type of organisation	Worked with employees with CP
P1.	39	Female	OT (remote case manager)	Independent OH provider	4 years
P2.	49	Female	OT	Pain centre	5 years
P3.	26	Female	OT (senior role)	Rehab centre	2 years
P4.	39	Female	OT (clinical specialist)	Rehab centre	1 year 4 months
P5.	50	Female	OH nurse (chief nursing officer)	Independent OH provider	25 years
P6.	49	Female	OT (consultant)	Fatigue clinic	Over 15 years
P7.	33	Female	OH nurse (remote case manager)	Independent OH provider	1 year
P8.	26	Female	OT	Outpatient department	5 years
P9.	51	Female	OH nurse (remote case manager)	Independent OH provider	15 years
P10.	Not given (“*in my 50s*”)	Female	OT (consultant)	Fatigue clinic	13 years
P11.	51	Female	OT	Pain management and rheumatology teams at a rehab centre	10 years (on and off)
P12.	57	Female	OH nurse (advisory role)	Own business	10 years
P13.	57	Female	OT	Pain clinic	8 years
P14.	52	Female	OH nurse (manager, including clinical remote case management)	Independent OH provider	21/22 years, current job 2 years

8.2.3. The analysis

In the subsequent sections, the above themes are described and a detailed analysis of the data within them is supported by examples of anonymised quotations which best illustrate findings. A set of definitions for each theme/sub-theme and how these have been drawn together can be found in Appendix 34.

1. "We all spoke from a 'hymn sheet' " (P13) - the aligned multidisciplinary approach is key

This theme describes the importance of delivering RTW interventions for workers with CP in a multidisciplinary fashion which should be underpinned by effective inter-disciplinary communication and goal-alignment. Delivering RTW interventions in such a way is important as according to the current participants multidisciplinary care ensures provision of a holistic support for CP sufferers and addresses the complex, multifaceted nature of their CP condition (*"it's like an intensive care"; P4*):

> *"At the end of the day, I don't think one profession can do everything for the sort of patients we're talking about [patients with CP]" (P10)*
>
> *"I think that there's a huge value in a multidisciplinary approach [to RTW interventions]; fresh ideas, fresh pair of eyes" (P5)*
>
> *"We have a team meeting every Tuesday morning, and we discuss cases. We help each other out" (P9)*

From the above data, it is clear that participants perceived peer-support within the multidisciplinary team as beneficial for the team members and for CP sufferers receiving the intervention. Importantly, a multidisciplinary team can only function effectively when the individual team members communicate well with each other, and therefore, respect each other's area of expertise. This was expressed by all participants, including in the examples below:

> *"If we're [healthcare professionals] all seen as having equal contributions [within the multidisciplinary team], then we can bounce around between those ideas and get to the bottom of it and listen to each other and then come up with a plan" (P11)*
>
> *"I think clear definitions of escalation points and expertise [are needed within multidisciplinary team approach], really" (P5)*

> *"There needs to be a good inter-professional understanding. There needs to be a not one profession thinking they are more important than another" (P10)*

The above excerpts also indicate that there might be instances when conflict within a multidisciplinary team might arise. Various occupational groups offer different definitions of a situation, or strive towards their authority to gain recognition. However, all of the current participants perceived their multidisciplinary teams to be unaffected by a sense of conflict. Within the aspects of the multidisciplinary team approach which make RTW interventions for CP sufferers effective, participants in the current study described their perceptions of their role in the RTW process, which form a sub-strand of the current theme and are described below.

1a. OTs/OH nurses are crucial to multidisciplinary intervention success, but access is an issue

According to the majority of respondents in the current study, the presence of OTs/OH nurses within the rehabilitation team can successfully promote RTW for workers with CP. Specifically, the majority of participants expressed a view that (locally) within their specific rehabilitation settings, the interventions offered for workers suffering from CP bring positive results in terms of supporting RTW. Successful RTW efforts described by the current participants included phased RTW, ACT, goal setting, and workplace adjustments. In a broad sense, the latter had to ensure access to work promoted accessibility within the work environment and thus going beyond a simple interpretation of access to work as a purely physical issue. However, some participants reflected more broadly upon the whole 'system' and the difficulties associated with access to RTW interventions. In their view, this hinders the RTW outcome for CP sufferers, whilst also failing to secure timely input from OTs/OH advisors:

> *"I think that certainly reducing waiting times… so having more access to earlier [RTW] interventions would be helpful" (P1)*
>
> *"I just think that we have got them [the right types of RTW interventions for workers with CP] but they cannot be accessed within a speedy time, within a decent timeframe" (P12)*

Interestingly, employees with CP who participated in the first study, as well as the OHPs in study two, shared these perceptions about limitations linked to accessing RTW interventions. Overall, the analyses suggested that the current RTW interventions benefit significantly when OT input is available:

> *"You might be all [in the multidisciplinary team] looking at the goal, the overall goal of return[ing] to work, but the person that does the actual, 'right, let's get you back to work', is the OT" (P4)*
>
> *"I think for most of the work-related needs, even though we [in the rehab centre] have quite a complex clientele here, the occupational therapist would certainly be extremely well placed to deal with the person's work, or vocational rehabilitation needs" (P10)*
>
> *"I see [the role of OT within a RTW MD team] as something that OT[s] should be taking the lead on really" (P11)*

All participants felt as though they were best placed as healthcare professionals for addressing employees' occupational needs. As such, several suggested that OTs could lead multidisciplinary teams through delivering RTW vocational interventions. 'Occupation' was understood very broadly (e.g. comprising both of work and leisure activities), and depicted as 'meaningful' and bringing positive social health outcomes (Antao et al., 2013). According to the participants, an OT acts as an employee's 'wingman', providing support and building their confidence during all stages of RTW process. Similarly, analyses suggest that an OHN acts as *"Jack of all trades" (P5)*, being able to support an employee through an array of presenting problems during the RTW process. In both roles, dealing with health and psychosocial issues, as well as the more practical aspects of RTW such as providing relevant policy information, was described as key:

> *"We're pretty much in the middle. We're trying to bridge that gap to make sense of the medical things in easy terms for HR to understand so that they can help the employee, and for the employee to understand that they can ask more questions" (P12)*
>
> *"I think we [OTs] can cover both, from the functional aspect right through to the vocational side of things" (P13)*

> *"Whilst it sits with them [workers with CP] to keep ownership, there are times when you just need somebody else alongside you" (P2)*

The above excerpts highlight the holistic approach for interventions which are delivered by OTs/OH advisors. Within the process of supporting RTW for sick-listed employees, OTs/OH nurses described how the key part of the process is to enable CP sufferers to feel listened to and empowered. This subsequently help to build workers' confidence and develop skills to self-manage their CP condition in relation to work:

> *"Sometimes they [workers with CP] don't think their voice is heard" (P6)*
>
> *"They're [workers with CP] the expert of their condition, their workplace, and they stay in that expert role" (P2)*

OTs/OH nurses saw enabling CP sufferers to regain a sense of control over their lives which became an important element of RTW efforts. This resonates with the concept of 'biographical disruption' (Bury, 1982). Furthermore, participants described that within their practice, they stratify their CP clients based on the needs identified during an initial assessment. As such, related goals for their clients are developed. Subsequently, many interventions described by the current participants focused on *"breaking things down into manageable chunks" (P5)* and addressing separate areas of difficulty highlighted by CP sufferers as the most important.

1b. Mode of intervention delivery can affect the level of care

The mode of delivery of CP RTW interventions by the current participants varied and included both face-to-face and telephone consultations. Participants' views of the remote assessments/interventions were mixed, with many citing issues around building rapport with clients as well as gaining appropriate access to healthcare (Mays and Fitzpatrick, 2018). Furthermore, the level of training and familiarity with the technological approach to consultations played an important role in shaping participants' perceptions regarding its usefulness:

> *"I feel as a clinician if I'm going to get any rapport, proper rapport, it has to be face-to-face. I often felt [during consultations conducted remotely] people won't really tell you tell you the real stuff, the real deal, unless you're face-to-face and they can see your empathy" (P4)*

> *"It's [conducting telephone consultations] very challenging, it's complex. But I think as long as you're very particular in your questioning and your skills of questioning, I think it could be done" (P7)*

> *"I suppose I'm very used to telephone assessments now. I'm quite comfortable with them. I do still like to see somebody face-to-face, if I can" (P5)*

This somewhat ambiguous judgement of technology-driven interventions is in line with a recent study by Greenhalgh et al. (2018). Safety, effectiveness, and popularity of remote consultations were identified as dependent on factors such as clinician's judgement and previously established doctor-patient rapport.

2. Good work is good for most individuals

Whilst work has been shown to have a beneficial effect on most individuals' well-being (Waddell and Burton, 2006), there are also a number of caveats within this claim (e.g. how ready an employee is to consider RTW; how accommodating the workplace is). These specific conditions are pertinent to a successful RTW transpired from the interviews with the OTs/OH nurses, and have also been identified within the following sub-strands of the current theme.

2a. Manual job roles make RTW with CP more problematic

As discussed above, RTW is nuanced and participants suggested that the success of it largely depends on the type of job to which an employee with CP is returning. More specifically, participants described manual occupations as being most problematic due to the associated difficulties of implementing the workplace-based elements of RTW interventions, such as reasonable adjustments:

> *"If people work in an office environment, they're usually protected far more and supported far more than if they are on the shop floor" (P12)*

> *"Firstly, I would need to determine are they [employee with CP] fit to be at work? A lot of it would be determined by the job role, so what is the job role of the person?" (P9)*

> *"We really, really struggle to get people [employees with CP] the support they need to actually find jobs that are suitable for them" (P8)*

Overall, manual jobs for CP sufferers were considered a bad employee-job fit due to the job demands outweighing the availability of job resources. Yet, the above did not mean that an employee with CP is unfit to work in a different capacity. Equally, opportunities for re-employment to different roles for workers with CP seemed sparse. To deal with these obstacles affecting RTW, participants spoke highly of volunteering opportunities and the perceived benefits of such an activity for employees with CP. Here, RTW interventions which comprised volunteering opportunities could be perceived as having elements of *"social prescribing" (P10*), defined by Bickerdike et al. (2017) as "*a way of linking patients in primary care with sources of support within the community*" (p.1):

> *"The volunteering placement may be an opportunity for them [people with CP] to maintain their social contact, maintain a person's routine, maintain their mood levels" (P13)*
>
> *"Allowing somebody [with CP] to be at work, having some kind of structure, routine, a reason to get out of bed every day… [is important]" (P9)*
>
> *"But I think that even when people can't return to their usual role, they nine times out of ten are capable of returning to some, some type of work" (P1)*

Participants suggested that volunteering might serve as a 'gateway' to re-employment and provide an opportunity for employees with CP to gain skills relevant to other, perhaps, more appropriate job roles. Volunteering also helps CP sufferers focus RTW efforts on their ability (as opposed to disability) and thus maintain their self-identity which may be linked to their work. Similarly, adjusted work demands can help make work more achievable and therefore provide a realistic prospect for CP sufferers to promote their 'work self'.

2b. When trying to RTW, workers need a supportive work environment but do not always get it

All participants mentioned support from employing organisations as an important element for workers with CP, which was linked to successful RTW outcomes. Specifically, participants in the current study highlighted the need for employees to have a supportive work environment (conceptualised as supportive attitudes from employers and work colleagues, as well as practical support such as adequate workstation/equipment configuration) when attempting to RTW. OTs/OH nurses also described the importance of employer empathy regarding what returning to work with CP might entail to be a crucial factor in supporting RTW:

> *"Certainly for us [at the rehab centre] the empathy from the [employee's] direct line manager is really key, I think, to a successful return to work" (P6)*
>
> *"They're [employers] are absolutely key [in RTW process]" (P5)*
>
> *"I think that's a huge one, I think if they've [employees with CP] got a really supportive business, supportive manager, I think that makes a huge difference in their return to work" (P7)*

From the analyses, it seems that employers are being perceived by OTs/OH advisors to be powerful RTW stakeholders, whose input within RTW process often shapes the outcomes for employees with CP. However, participants described mixed experiences in terms of how accommodating employers involved in the current RTW processes were of their clients' condition:

> *"Some employers are, what we would call, very gold standard. They refer to us for advice, but actually they've already got it nailed" (P5)*
>
> *"I've come across several workplaces that could help and then I've got some [employers] that say 'definitely no. If they [employees with CP] can't do the full job, then they can't come back to work' " (P12)*
>
> *"But in terms of paid employment, we [at the rehab centre] hear a lot about quite a lot of lip service paid to disability or pain, or whatever… [employers would say] 'Oh yes, we'll make arrangements' and then nothing happens" (P4)*

As perceived by the current participants, there was hesitance for employers to implement a RTW plan for workers with CP. This noteworthy as existing literature emphasises the importance of support at work to promote a heathy workforce (Semmer and Beehr, 2014). In OTs/OH advisors' view, the lack of understanding of CP by some employers might be a contributory factor that organisational support is lacking, or the 'wrong' kind of support is inadvertently being offered. For example, employer insisting on employee with CP to remain off sick because of their pain, thus encouraging their sick-role and limiting the psychosocial benefits of working:

> *"People with chronic pain learn to manage with pain on a daily basis, don't they? And it's sometimes [their] managers can be a little too overprotective. If someone says 'Oh, you know, I'm in pain', [the managers reply] 'Stop then. Go home.'" (P8)*
>
> *"Often people [with CP] are unfortunately having difficulties in terms of employers not understanding their [CP] condition or treating them unfairly because of their [CP] condition" (P3)*

According to some participants, CP is often conceptualised by employers as a 'socially deviant state' (i.e. a disease; Parsons, 1951), from which a recovery is needed. This is in contrast to seeing CP as a severe reduction in resources that an employee can adapt towards (Nettleton, 1995). Furthermore, in the latter excerpt Participant 3 described an example of psychosocial workplace stressors such as lack of support and discrimination, which some workers with CP might be experiencing. Other participants in the current study also mentioned similar stressors, which arguably could be present before a worker has been signed off work due to CP, during the RTW process (including re-employment), and beyond:

> *"[CP sufferer during a job interview] He mentioned 'Oh by the way, just so you know, I've got this thing [CP] but it won't affect anything'. Then they [employer] said 'no'. That's it, he lost it [a job he was previously offered]" (P4)*
>
> *"I think [during the RTW process for an employee with CP I was helping] there was some element of bullying within the role [the employee was in] and not a great level of understanding with regard to [the employee's] health" (P13)*
>
> *"I never forget the quote [from my patient], 'It's not the illness that disables me. It's my employer'" (P10)*

Arguably, in the above examples, perceived lack of employer support during the RTW process could be a direct obstacle which prevents an employee with CP returning to work. Furthermore, this may also have a detrimental effect on employee's psychological health and well-being. The legality of actions described by Participant 4 is questionable (e.g. Howard and Williams, 2013), and implies social factors influencing fitness to work; specifically, social barriers stemming from employer's attitude perpetuated said CP patient's inability to find, or return to, their employment. Furthermore, these data are linked to the need for an employee with CP to develop a successful presentation of the 'self' to potential employers in order to achieve successful RTW (Wainwright et al., 2011a).

2c. RTW is affected by two types of 'cultural problem' – work not being a motivator and over-medicalisation of CP

Participants discussed a two-fold 'cultural problem' related to the issue of RTW for employees with CP; namely, when work is not a motivator for individuals, and the way that CP is being framed in terms of individuals' inability to continue working. Analyses suggest that OTs/OH advisors deal with a spectrum of CP sufferers, with two polarised types being the most prominent: those whose self-identity is linked to work and who feel motivated to RTW, and those for whom *"work isn't in their culture" (P4)*:

> *"I see both sides. I see people that are not motivated to be at work at all, and I see other folks that wish to work and want to be at work regardless, folk that are even struggling" (P9)*
>
> *"There's the 'truck on through, gotta get through it, this is not going to stop me, I'm not going to let this top me' type of approach [from CP sufferers]. So they probably would be the ones that would do it and go back [to work], but to the detriment to the rest of their life. Or there are other people that I've noticed that tend to not have the internal volition to return to work" (P4)*
>
> *"You're fighting a double-edged sword. You're trying to get them back to work, but their motivation to get back to work has gone" (P12)*

It also seems that the formal financial compensation system has an impact on RTW and contributes to the cultural issue described by the participants here around employee's lack of motivation to recommence employment. Bartys et al. (2017) found that the amount of compensation can reduce the incentive to and slow-down RTW, but the literature is contentious. Perceived rigidness of the benefits system is not aligned with the fluctuating nature of CP:

> *"I think there is definitely [an issue] here, I think, with chronic pain patients, where potentially they're slightly reluctant to show their full potential because they would lose the PIP [Personal Independence Payment] payments, which I can understand because they feel ... and maybe rightly ... they they're not able to access full time work so they're getting the equivalent money." (P4)*

> *“Having that face to face contact and those links to social security [i.e. to civil servants within the system, which is a set-up available in Jersey] can be a real asset, but the actual [benefits] system can be a little bit of a barrier [for RTW]” (P13)*

The latter excerpt refers to a short-term incapacity allowance (STIA; gov.je, 2019), which in Jersey is a benefit designed for people who are off sick with payments that can last up to a year. Whilst on STIA, individuals are not allowed to engage in work activities. This is problematic in terms of engaging in vocational rehabilitation and promoting early RTW, despite evidence suggesting that not targeting long-term sick-leave increases the risk of non-RTW (Waddell, Burton and Main, 2003; Øyeflaten et al., 2014). The above supports non-UK findings which suggest flexibility in social security benefits RTW for employees with CP (e.g. Anema et al., 2009). However, whilst a critical review (Bartys et al., 2017) found only limited evidence to support claims such as those by OTs/OH advisors here, that sickness benefit arrangements can prolong an individual’s sickness absence, the benefits system can also force CP sufferers to engage in presenteeism:

> *“I think finance, obviously is the huge one [factor in RTW process]. If they're [workers with CP] the only person in their house that earns, that's an incentive. However, I do know of people with chronic pain and chronic fatigue, who just can't do it anymore. They just can't carry on. It's just too much” (P10)*

Claes (2014) suggested that the issue of positive versus negative nature of presenteeism is largely subjective and linked to perceived support and one’s ‘work self’. However, the above excerpt highlights the negative side of working whilst struggling to cope and live with one’s pain. Arguably, for some CP sufferers, work may not be equal to ‘meaningful occupation’. As such, returning to work will not be a motivating factor for these individuals. Subsequently, stratifying individuals with CP to the right type of intervention whilst considering occupation carrying the most meaning for those individuals seems paramount:

> *“It [RTW] really depends on the person, I don’t think it always depends on the intervention” (P7)*
>
> *“And empowering the patient really to take control of some of the conversations [around work and RTW] rather than feeling that they have to do this because this is what they’ve been pushed into doing” (P6)*

Deciding upon whether an employee should RTW and when this could happen links to the idea of empowering CP workers in the RTW process, expressed by OTs/OH advisors and discussed earlier in the current chapter. Empowering CP sufferers is based around fostering their ‘ability’ to carry out their job and associated responsibilities, but also allowing them to be ‘in charge’. Furthermore, along the spectrum of their CP clients, OTs/OH advisors also described employees with CP whose ill-founded beliefs regarding their condition require challenging in order to present RTW as a viable outcome of rehabilitation. Such inaccurate beliefs, and socially constructed (mis-)understanding of CP and associated sick-role might be linked to the prevalence of the medical model. As such, according to the study participants, we readily medicalise health problems, which seems imbedded within the Western culture:

> *“Then [CP patients] they’ll come in and tell me, yes, they’ve got chronic pain because they’ve got a degenerative spine and it takes so much for me to tell them that if I had an MRI scan it might show that I had a degenerative spine as well” (P12)*
>
> *“Sometimes it’s not just about them not wanting to work, but it becomes actually [about them] visualising themselves having that ability to return to work” (P13)*

Here, empowering workers with CP is all about them regaining control over their lives. This may require detaching themselves from unhelpful sick-role beliefs, and regaining confidence to ‘re-discover’ their ability to re-join work. Employees are key in achieving such a transformation; they should be ‘active’ actors in this process. Yet, medical and social influences on individuals’ perceptions are significant:

> *“I believe it’s [mind-set around RTW] stuff that we’ve grown up with, and that’s how it’s always been” (P9)*
>
> *“I think it’s just the way that our culture is… Especially, we like the medicalised things” (P14)*
>
> *“I think in our culture you don’t have ‘pain equals living with it’. You just have ‘pain equals assessment, treatment, or death’ ” (P4)*

Arguably, when healthcare professionals indicate a need for continuing assessment, for example by employing MRI scanning, this often results from mismanagement of patients’ expectations/CP beliefs. Employees’ expectations of RTW and time needed to achieve this have previously been identified as important factors predicting RTW (e.g. Sampere et al., 2012). Over-investigating may inadvertently perpetuate the social construction of CP as a disease requiring medical approach and a cure, and delay RTW (e.g. Burton et al., 2006).

2d. CP should be given "the gravitas it deserves" (P5) and a targeted educational intervention might help to address this

As expressed by the OTs/OH advisors, employers' and employees' lack of knowledge about CP and its associated prognosis is concerning. The finding echoes a similar sentiment expressed by employees with CP (*Chapter Six*) and OHPs (*Chapter Seven*). Together, the findings suggest that there is a need for improved inter-stakeholder communication, designing an educational intervention, or a public awareness campaign specifically aimed at CP RTW stakeholders, including employers, employees, as well as the society as a whole:

> *"…if you think, employers are just normal people at the end of the day. That's the sad thing: normal people out there don't know anything about pain, chronic pain at all. It's not known about like cancer or other conditions" (P4)*
>
> *"There was a lack of awareness really, a lack of awareness of how pain and fatigue can impact on somebody, and the expectations [from employer towards an employee] were too high [during RTW process]" (P6)*
>
> *"People not understanding [CP and what it entails], as we said originally. Their [workers'] own family not understanding" (P10)*

Thus, the data suggest a prevailing lack of understanding and validation available to workers with CP. Nettleton (1995, p. 87) argued that "*attempts to 'carry on as normal' might be regarded by significant others as inappropriate in the light of a deterioration of symptoms*" of a disease. Furthermore, as CP is often perceived to be an idiopathic condition for which a cause is unknown, experiencing CP might restrict employees' access to legitimate sick-role. This limits the availability of social support, negatively affecting RTW. If the sick-role is given legitimacy by a doctor's FN, the stigma attached to CP remains (Glenton, 2003). If sick-listing is ongoing, this removes employee's agency in the process and the legitimacy of their 'expertise'. Linked to the above issues, Participant 5 added that CP should be given *"the gravitas that it deserves"*. This highlights a dissonance between a socially accepted 'classification' of CP as being of lesser importance when compared to other conditions and the magnitude of challenges that the CP condition brings for the individuals, both in the realm of work (and RTW) and beyond, as exemplified by below:

> *"Because lots of people we see [at our rehab centre] as well have sort of mental health difficulties, anxiety, depression and things like that and that can add an extra element of challenge for returning to work, with their pain" (P3)*

The above excerpt suggests that the problematic nature of CP, along with its fluctuating nature (Von Korff and Miglioretti, 2005) and sensory burden makes RTW only one of the challenges that defines CP experience. When paired with comorbid conditions and lack of public awareness regarding the complexity of CP, the experience might be overwhelming for CP sufferers who might struggle to achieve and maintain focus on returning to work:

> *"In many cases people with chronic pain have maybe gone off work and back to work, and back off work and… so there's a lot of stuff to deal with, really" (P8)*

Thus, the current participants highlighted the importance of educational elements for RTW stakeholders within RTW interventions. This includes promoting self-management education to improve RTW outcome amongst the CP employee population. Thus, an underlying message within the data is to develop an understanding and convey the importance of CP being real. Yet, it can also be lived and worked with:

> *"We've [team at the rehab centre] helped her [employee with CP] and worked with her with some self-management techniques and we're also still encouraging her to show that work is possible and there are other people [with CP] that are still working" (P11)*
>
> *"I speak to lots of people that just think 'That's it. I've got back pain, so I need to be off'. I say 'Well, why do you need to be off?' they say 'Well, I'm waiting for an MRI scan'. I say 'Well, an MRI scan's actually not going to change anything, so we could be at work while we're waiting for that'" (P9)*

The above examples illustrate positive language used by OTs/OH nurses with an aim to re-frame workers' misconceptions about functioning with persistent pain. Notably, participants in the current study described some other examples of educational elements with the current RTW interventions delivered by OTs/OH advisors. For example, letters to their patients' employers outlining workers' CP prognosis and recommendations for workplace adjustments. Whilst providing such guidance letters could be deemed as 'good practice' in the current approach to RTW for workers with CP, some OTs/OH nurses also described challenges present during this process. It was therefore clear that RTW stakeholders' goals should be aligned:

> *“Managers don’t like to manage [ill] people at work. Often, we [as society/employers] don’t know what to do if somebody returns back to work, so they [employers] like us to provide the report giving them some guidance” (P9)*
>
> *“I think this is one of the challenges [of the current RTW interventions], is that some companies use their own occupational health and are sort of resistant to any recommendations we [OTs in the pain rehab centre] make, rather than working with us really” (P8)*
>
> *“Sometimes, and I saw a patient yesterday actually, where there was conflicting advice from GP and occupational health, which was causing some problems with who the employer listened to, and the consequence of what that impact was on her [worker with CP] work” (P6)*

The above excerpts summarise how the current participants perceive mixed attitudes towards OH advice from employers engaged in RTW process. Challenges are apparent if the advice is not aligned with their agenda and/or pre-conceived expectations regarding such advice. Furthermore, a lack of agreement amongst healthcare professionals surrounding RTW strategies might be contributing to such difficulties. This reinforces findings from the two empirical studies described earlier (*Chapters Six, Seven*) which highlight the need for joined up thinking regarding the RTW process:

> *“I think, if anything, I think the [RTW] interventions and support will do what we need them to do if the employer’s willing to accommodate them” (P5)*

The above sentiment prevailed throughout all interviews in the current study. Based on these findings, future studies should consider examining employers’ perceptions of RTW processes for workers with CP in order to better understand their views of current practices, and ultimately, inform future RTW approaches.

8.3 Discussion

In summary, OT professionals and OH nurses felt that as healthcare professionals, they possess the right set of skills to support RTW for clients with CP. This was particularly apparent when considering vocational elements of intervention strategy (RQ13-15). However, participants indicated that the overall RTW efforts should be multidisciplinary (RQ16), with effective communication to mediate holistic care and subsequently avoid inter-disciplinary conflict. Participants mentioned phased RTW, goal setting, ACT, and workplace adjustments as examples of current RTW interventions. These were identified to have positive effects on RTW outcome amongst employees with CP (RQ13-16). Findings from the current study suggest that addressing the complex nature of workers' CP condition requires RTW interventions to provide emotional and psychosocial support. Moreover, consideration is also required in terms of education about practical, work-oriented, and self-management skills (RQ16). According to OTs/OH nurses, educational interventions about (working with) CP should be provided to several groups of RTW stakeholders, including employers and employees. This would ensure workers' negative beliefs can be challenged, and that adequate support for workers is available when required (RQ16).

A number of theoretical concepts described in *Chapter Four* align with the current data. Participants' emphasis on adopting multidisciplinary interventions resonates with the biopsychosocial nature of CP experience. As such, RTW interventions are required to address the functional, physical, attitudinal, and psychosocial elements (e.g. Corey et al., 1996; Waddell and Burton, 2005). The importance of the findings surrounding multidisciplinary interventions identified within the thesis' literature reviews (*Chapters Two, Three*) is similarly apparent from the qualitative findings presented in the current chapter. Furthermore, the role of OTs/OH advisors as "*Jack of all trades*" *(P5)* seems implicitly informed and justified by the biopsychosocial model of CP, highlighting the broad array of needs that CP sufferers have.

However, accounts of participating OTs that they are crucial to multidisciplinary intervention success could be seen as an example of self-serving bias (Miller and Ross, 1975), where individuals tend to overstate their own contribution to a joint task (Babcock and Loewenstein, 1997) – here, particularly when employees achieve RTW. As healthcare professionals tend to significantly engage in and oversee the outcomes of an activity, self-serving bias is likely (Henriksen and Dayton, 2006). Murdock, Edwards and Murdock (2010) found that therapists show self-serving bias to explain behaviour of their clients. However, past research identified that interventions coordinated by OTs and physiotherapists had more positive RTW outcomes than those referred to a psychologist (Russo and Innes, 2002). Stakeholders in the two previous studies in the current project also described the positive role of physiotherapists in the RTW process. However, Russo and Innes (2002) highlighted bias related to the type of clients/health conditions allocated to each professional that might have influenced RTW rate.

Interestingly, and in slight contrast to the findings from the study with OHPs (*Chapter Seven*), OTs and OH nurses referred to their CP clients as individuals who face many challenges in their daily lives, yet who are not perceived as ‘difficult patients’. The malingering CP patient concept present in study two, was largely absent here. CP sufferers were perceived as patients being in a ‘difficult situation’ (“*there are times when you just need somebody else alongside you*”; P2), needing to incorporate persistent pain within the ‘self’ (Charmaz, 1995), and often facing diminished societal support and job resources. This was often resultant of there being a lack of knowledge about CP and related issues surrounding stigma and legitimisation. Support, both at workplace and conceptualised by the JD-R, and societal support outside individuals’ workplace is one of the key elements of the theoretical framework derived for the current thesis (*Chapter Four*).

OTs and OH advisors discussed various forms of support needed by workers with CP to support their RTW. Specifically highlighted was employer support (or often the lack thereof; “*a lot of lip service paid to disability or pain*”, P4) and demotivating effects of the compensation system on RTW. Arguably, the latter removes control from a CP employee who might face a double-edged sword dilemma between choosing to RTW, with its benefits around social inclusion and reconstruction of the ‘self’, and barriers to accessing financial help from the state if RTW is unsuccessful. Importantly, although examining employers’ perspectives of the current RTW processes for workers with CP was initially planned as one of the elements of the current project and all necessary ethical approvals were secured, pragmatically running a study with employers became beyond the scope of the thesis (see *Chapter Nine*). CP sufferers need workplace support and there is a clear lack of awareness offered by employers that workers with CP do not need to be ‘100% fit’ to contribute to the workforce effectively (see also *Chapters Six* and *Seven*). As such, this warrants gaining employers’ perspective on the RTW topic. The researcher returns to this issue in the general discussion in *Chapter Nine*.

Furthermore, the analyses explicitly suggest that medicalisation of CP hinders employees’ RTW. Instead, this instils a belief among stakeholders (e.g. employees, employers) that their pain equals a disease, and thus, an inability to work. OTs and OH nurses seem to adopt an almost protective role over their CP clients at times which is an extension from the mentoring role suggested by and for the OHPs in the previous study (*Chapter Seven*). As part of a mentoring and supportive role, the participants deemed the provision of guidance letters to employers as 'good practice'. This is aligned with the data from the thesis' earlier study with CP employees (*Chapter Six*), whereby participants had experienced OT services useful, as opposed to the access to and advice from OHPs. Notably, wider issues of access to interventions might have contributed to such employee perceptions and all interviewed RTW stakeholders in all three empirical studies mentioned such issues.

Participants in the current study referred to CP patients sometimes having additional goals around 'meaningful occupation' which extended beyond that of simply returning to work. This is important, since the government's key message of fitness to work cannot overshadow the reality that for some people RTW might not be appropriate. The analyses suggest that social identity is often derived from work which shapes individuals' behaviours (e.g. Walsh and Gordon, 2008), and provides individuals with a sense of purpose through opportunities for social group membership (Wainwright et al., 2011a). Yet, analyses from the current study also highlight that this might not be the case for all (Waddell and Burton, 2006). Efforts to effectively stratify CP patients to interventions are linked to the idea of 'good work'. In addition, Wainwright et al. (2011a) postulated the importance of productive activity versus paid employment. Similarly, Vooijs et al. (2018) reported that undertaking work which was perceived as being useless, demotivates employees with chronic health problems (albeit operationalised as a diagnosis of a chronic 'disease'). Identifying the right candidates for specific RTW treatments (and outcomes) would not only support patient-centred care delivery, but also support OH professionals and employers to encourage motivating elements of work during RTW. Interestingly, Peters et al. (2018) found that RTW stakeholders comprising healthcare professionals, employers, insurers, and lawyers, found it easier to identify barriers to RTW than RTW strategies. Furthermore, the latter differed despite the overall similarity of identified RTW obstacles such as work and personal relationship stressors (Peters et al., 2018).

In the current study, benefits linked to work have been highlighted for those CP sufferers who volunteer; this agrees with Waddell and Burton's (2006) broad and inclusive classification of ‘work’. However, the current thesis focused upon paid employments as meaning ‘work’ (see *Chapter One*). Importantly, adopting the concept of meaningful occupation may reduce such semantic differences (Clark et al., 1991; Neville-Jan, 2003). In addition, according to OTs and OH nurses, practitioners need to listen to CP sufferers and their interpretation of what activities are meaningful to them. This seems to be a common denominator of RTW intervention success and links to the issue of patient stratification, subjectivity of CP experience, and patients as ‘active’ and experts in their RTW process. All of these issues have been woven through the thesis’ empirical findings.

8.4 Conclusions

The final study revealed that the primary outcome of a RTW intervention should not simply be return to paid employment, but rather should be driven by workers’ meaningful activity. The analyses from study three explicitly suggest that medicalisation of CP hinders RTW. The latter group of participants perceived themselves as key members of multidisciplinary RTW team. Next, Chapter Nine offers the thesis’ general discussion.

Chapter Nine: Discussion

9.1 Introduction

The aim of the current thesis was to find out which interventions are effective and should be used with employees with CP to promote their RTW. The rationale for the current project was informed by the findings of Waddell and Burton's (2006) seminal report, and by later work such as Black (2008), which suggested that work can have a positive effect on most individuals' well-being (albeit with caveats, see *Chapter One*). The project focused on the UK RTW stakeholders, reflecting the government's recent initiatives around reducing the impact of disability and returning more people back to work.

The current chapter synthesises the project's empirical findings together with the literature identified in *Chapters One-Three*, and the theoretical concepts presented in *Chapter Four*. The findings are discussed, and implications and future studies suggested. Together, evaluation of the current UK RTW processes for workers with CP is presented.

9.2 Synthesis of the project's empirical findings

9.2.1 Active, but not '100% fit' employees

Empirical findings from study one (with employees with CP; *Chapter Six*) suggested that employees often felt motivated to RTW and adopted an 'active' role in their RTW process. They often had to adopt an 'active' role to ensure their needs during RTW process were met (this was in addition to their perceived 'expertise' regarding CP); in contrast, OHPs and OTs/OH advisors perceived their role as one of mentoring and providing supportive empowerment. Arguably, these concepts may also be complementary. Availability of a mentor to guide a worker through their RTW process was one of the recommendation from the Black's (2008) report. In addition, OTs and OH nurses seem to adopt an almost protective role over their CP clients at times, which is an extension from the mentoring role suggested by and for the OHPs (study two).

It is plausible that employees' active roles might have been less pronounced if they had a mentor to guide them through their RTW process. This is because some of the stressors during RTW process would have been reduced. Employees could be seen as being resilient in their RTW process. However, employees' resilience (conceptualised here as a dynamic, process-oriented capacity to adapt to a 'threat'; e.g. Masten, 2014) could arguably be bolstered by a supportive environment (including availability of healthcare services/mentor, workplace support, and wider societal support). In agreement, Ungar and Hadfield (2019) postulated the importance of the environment as opposed to the individual in supporting resilient response. Yet, Wainwright et al.'s (2019b) systematic review found that resilience interventions' effectiveness on RTW for people with CP lacks certainty.

The differences between the analyses from study one versus studies two and three may also be linked to employees' limited access to OHPs and OTs/OH advisors within their RTW process, thus evidencing a different 'type' of intervention experience and a testimony of accessibility issues around (OH) RTW treatments. Such findings also suggest tensions in the current RTW processes, some of which were clear from study two's analysis (e.g. goal disalignment). Importantly, limited access to OH professionals challenges discourse from OTs who perceived their input as key to successful vocational rehabilitation. Perhaps the 'key' role should not be seen as an OT being a common denominator of RTW success, but rather as a way to provide a more all-round and supported RTW intervention experience. In study one, psychosocial factors such as availability of social support, played a pivotal role in steering employees back into work. However, employees often felt pressured (by employers) to RTW early and at 'full capacity' ('100% fit'), which they did not feel was achievable or reasonable to expect when living with CP. The ideological underpinning of the FN to increase understanding one can RTW when not 100% fit does not appear to have reduced perceived pressure from employers on employees in this study.

The sample frame is important to reflect on here, as having the OHPs, whose role is related to but distinct from OTs, enables further critical reflection on the partiality of the OTs' comments. This is not to say that OTs views of themselves are unimportant, but that it is vital to situate their views within a wider context of others' views on who contributes to RTW. The fact that OTs saw themselves as key whereas others saw them simply as part of the RTW process, may be due to OTs having actually a very pleasing investment in their role. Relatedly, since the COVID-19 pandemic has hit, many write that OTs are unutilised (Bartys et al., 2019) and it may be that we need further exploration of how we can match

OTs' own views that they are key to RTW with the roles they could actually play in supporting people back to work.

Overall, participating stakeholders agreed in their perception of employers being inconsistent in terms of their contribution to RTW interventions. Yet, as indicated by the employees in the current project and elsewhere (e.g. Williams-Whitt et al., 2016), support from employers is one of the main facilitators of (sustained) RTW (Blinder et al., 2017). Furthermore, employers' commitment to employees' health helps to strengthen the 'psychological contract' between those two stakeholders (Boorman and Banks, 2013). From previous literature, it is known that employers often feel that RTW is initiated before being realistically a sustainable prospect (Wainwright et al., 2013). Whilst employers do not have much power over when the decision to RTW is made by an employee, they can arguably affect the RTW process, e.g. by the level of support they offer. The latter often depends on how good an employee's track-record is (Wainwright et al., 2013). It is plausible that employees in the current project strived to RTW to 'save face' (due to stigmatisation of CP) and to restore their self- and social-identity (how they were being perceived by their employers) to try and influence levels of support, as many expressed views that made a presence of strong psychological contract seem unlikely. In the non-CP literature, employers highlighted the issue of costs due to employees' diminished work capacity, but they claimed willingness to support them and understanding of the issues their workers face upon returning to work (Fitch and Nicoll, 2019). However, contrary evidence has also been reported (e.g. Banning, 2011). A recent SLR found that employers' knowledge about cancer and RTW policies is mixed, which is among factors affecting their willingness to offer support (Greidanus et al., 2018). The current participants also described the lack of knowledge of CP as an issue in the amount of support employees receive. Lindsay, McDougall and Sanford (2014) found that employers perceive introducing accommodations for employees with disabilities as costly.

Analyses of all three studies agreed about the need to accept that work is feasible, even when a person is not '100% fit'. This non-binary idea is aligned with the aims of the FN (Gabbay, Shiels and Hillage, 2016) and the part-time sick-leave option available in some countries outside of the UK (Markussen, Mykletun and Røed, 2012), yet participating stakeholders did not emphasise the FN's role as overly helpful in their RTW. Dorrington et al.'s (2018) evaluation of the FN indicated issues around its implementation and a considerable variation in its quality. Here, employees, OHPs, and OTs/OH nurses felt that stakeholder communication is key to multidisciplinary teamwork, with the former participants often acting as 'messengers' in their treatment process (as one of the features of their 'active' patient roles). Taken together, obstacles to effective stakeholder communication need addressing.

9.2.2 Divergent interpretations of the role of the GPs in RTW process

Chapter Seven's findings revealed OHPs' frustration with the current RTW processes for workers with CP. In their view, RTW processes are suffering due to a gap between the stakeholders' knowledge about CP and work issues, and implementation of the agenda of work as a health outcome. This is led by overworked GPs who were perceived by the current participants as the (unwitting) saboteurs of RTW process for workers with CP (e.g. by continuous sick-listing and over-prescribing). Study three's analyses (with OTs/OH nurses) suggested that continuous sick-listing challenges patient-centred focus by removing patients' agency and legitimacy of their expertise. Critically reflecting on the sampling strategy, it is interesting that completely separate groups of employees interviewed for this project (who had no direct link to the OTs/OH nurses sampled) also expressed this point. The fact that these two separate groups both highlight this problem of removal of patient agency, suggests it is a really key problem to which we should pay serious attention to if sick-listing processes are to be improved.

It is important to note that GP's voices were not elicited here and the above are *opinions* of participants from one professional group about another. Yet, these are concerning, not least if we consider another finding, the importance of multidisciplinary care and the potentially key role of GPs in work retention via the FN (Black, 2008). Some OHPs accused GPs of ignorance when dealing with RTW for workers with CP, but issuing sick-notes to avoid doctor-patient conflict has previously been reported (e.g. Englund and Svärdsudd, 2000). Employees in study one described GPs as a positive, although somewhat passive presence within their RTW, which could be interpreted as conflict avoidance.

Past research explored the role and views of GPs on RTW/sick-listing process for CP (e.g. Wainwright et al., 2015) and other conditions such as cancer (e.g. Bains et al., 2012;

Morrison et al., 2015). Those studies found that GPs consider skills of other healthcare professionals (e.g. OHPs, specialist nurses) as more suited to dealing with work-related issues, but they rarely refer their patients (Morrison et al., 2015) or communicate with other professional groups regarding their provision of RTW advice (Bains et al., 2012). Issues around implementing pain assessment tools and recording results by the GPs in the UK have been described in the RAR (Johnson, Collett and Castro-Lopes, 2013). Bőttcher et al. (2012) found that among cancer patients, more individuals direct their RTW questions at their GPs than at other healthcare professionals, yet Amir et al. (2008) found that patients perceived the usefulness of GP RTW advice as limited. Likewise, the passive input of GPs as reported by the employees here made a limited contribution to when the individuals returned to work.

Toye, Seers and Barker (2017, p. 15) argued that healthcare professionals face "*the challenge of dual advocacy*" (i.e. representing 'the system', whilst also making decisions in an individual's best interest). Wainwright et al. (2015) suggested that the primary care doctors act as 'gatekeepers' of the sick-listing process, which leads to tensions both on the doctor-patient, as well as professional responsibility levels. To explain the current findings, tensions might be linked to GPs inadvertently contributing to the perceived conflict within the current RTW processes for CP patients by trying to maintain effective patient-doctor relationships.

During a recent CP Policy Coalition meeting, Arthritis and Musculoskeletal Alliance (ARMA, 2019) noted findings regarding GPs who do not feel they have adequate support to manage CP patients. An earlier review (De Jonge et al., 2018) suggested that GPs are often inconsistent in their RTW advice. Money et al. (2010) found that some GPs sign people off work 'on demand', whilst OH training made others more hesitant to do so. Ljungquist et al. (2015b) reported that primary health physicians found sick-listing tasks problematic far more often than did physicians in other settings (e.g. psychiatry, pain management). Another survey found the opposite for OHPs (Ljungquist et al., 2015a). Whilst considering potential shortfalls in the survey method as discussed previously in the current thesis, the findings highlight the importance of supporting professional competence needed for RTW assessments. Furthermore, the above findings seem aligned with the current participants' views about the CP RTW processes and GPs' role therein. Equally, some of the literature mentioned here comes from the non-CP arena and whilst cancer survivors often suffer with pain (Wynn and D'Sa, 2013), individual features of these two conditions mean exercising caution is necessary when applying results across populations.

9.2.3 'Problematic' CP patient vs dual obligation of an OHP

Among the issues around access to interventions, isolated NHS departments, and the lack of employers' support highlighted by OHPs as obstacles to RTW, those professionals described 'questionable' patients (i.e. perceived as seemingly exaggerating pain symptoms). There might be a culture-bound scepticism among healthcare professionals in relation to treating CP, leading to suspicions about patients knowingly overstating their symptoms and exaggerating a situation to seek attention (Toye, Seers and Barker, 2017). Such an approach questions the inherently subjective nature of CP experience and assumes objectification of CP (e.g. by assuming feasibility of its measurement; see section *9.7.4* for further discussion).

It is also important to note an issue of 'dual loyalty' for OHPs, who often face having joint obligations towards patients-employees and a third party, e.g. an employer, if they are based in-house (London, 2005). Tamin (2013) argued that the overarching need for an OH doctor's impartiality often affects the inter-stakeholder interactions, creating tensions such as those between employers and their employees. Whilst an OHP's obligation towards an employee is largely an ethical one, the obligation to a business often has a legal, contractual background (London, 2005). Furthermore, Rodham (1998) suggested that some OHPs experience an implicit obligation to an employer, which might be particularly salient when a doctor's social identity aligns with the values of the employer (Berlinguer et al., 1996). In the current project, all but one of the participating OHPs were based at external consultancy firms and thus, the implicit orientation of the OHPs rather than a specific employer obligation might have explained some of the reported accounts of 'questionable' CP patients.

9.2.4 Return to a meaningful occupation and/or volunteering

The final study with OTs/OH nurses revealed that the primary outcome of a RTW intervention should not simply be return to paid employment, but rather should be driven by workers' meaningful activity. This study agrees with the earlier literature about the therapeutic and almost pain-relieving effect of occupation (Waddell and Burton, 2006; Neville-Jan, 2003). The way that work was initially operationalised in this thesis might in light of these findings seem too restrictive and this has been reflected upon (see the revised theoretical framework in section 9.3). Furthermore, the same study explicitly suggests that medicalisation of CP hinders RTW, which concurs with study two's analyses.

Interviewed healthcare professionals in studies two and three indicated the importance of volunteering as a RTW stepping-stone, a way of regaining work 'self-identity', and a form of meaningful activity. Study one's participants did not reflect on volunteering as a RTW strategy. Elsewhere, there is evidence that volunteering helps with new skill development and increases employment prospects among unemployed individuals (Low et al., 2007; Hirst, 2001), and arguably supports RTW process (Bevan, 2019b). Whilst the link between volunteering and employment is a complex one, it is important to highlight the psychosocial benefits of volunteering beyond employability (e.g. reducing social exclusion, Burchardt et al., 2002; providing self-identity beyond that of 'being unemployed', Baines and Hardill, 2008). These psychosocial implications of volunteering align with the more holistic concept of return to a meaningful occupation theorised here.

9.2.5 Helpful RTW interventions

There was a lot of agreement in the studies regarding enablers and barriers to the current RTW processes for workers with CP. Specifically, the three empirical studies had common strands linked to the need for multidisciplinary RTW intervention delivery, flexible approach, bolstered by effective inter-stakeholder communication. All participants expressed a need for easily accessible, multidisciplinary, individualised RTW interventions, and availability of support (e.g. from employers, as well as from healthcare professionals) to empower CP employees and enable RTW. Based on the analyses, these factors do not feature consistently in the current processes. According to the OHPs, the systemic issues within the NHS and a lack of interest and/or lack of resources to manage CP hinder RTW processes. Employees highlighted the stigma surrounding CP, demands significantly outweighing the availability of job resources, and issues around accessing personalised, multidisciplinary interventions in a timely manner. These could be the triggers of negative forms of presenteeism (e.g. Claes, 2014). The project's RAR alerted to the access issues, as only approximately 40% of Pain Clinics in England are multidisciplinary in their structure (McGhie and Grady, 2016). Yet, according to the thesis' literature reviews, multidisciplinary efforts seem the most appropriate RTW strategy for employees with CP. Limited access to RTW interventions and thus shortfalls in delivering a stepped-care approach is contrary to the current clinical practice guidelines (e.g. Lee et al., 2013; Foster et al., 2018) and is a significant challenge in the RTW process for workers with CP.

Whilst all participating stakeholder groups reflected upon the need for individualised RTW interventions, some found medicalisation of CP as a barrier to RTW. OHPs suggested that OH consultations should - in the less complex CP cases - be exchanged for a 'common-sense approach', with HR and managers taking charge of addressing RTW issues in consultation with employees. This links to the idea of effective stratification, as suggested within the thesis' literature reviews (e.g. Haland Haldorsen et al., 2002). In the UK, there is no national OH service and whilst some do, employers are not obligated to fund such provision (Tamin, 2013) – although there are arguments for their moral responsibility to provide healthy workplaces (Bevan et al., 2018), which is discussed further later in the current chapter (see the '*Implications*' section). The suggestion of a 'common-sense'-type approach to OH provision emphasizes the roles of employees and employers and argues for a supportive, non-medical, bottom-up approach to arranging workplace accommodations. Grey literature linking such an approach to reduced work absence outcomes has been reported (Scott-Parker, 2014). Elsewhere, Paillereau (2006, p. 57) referred to a move "*from occupational medicine to occupational health*". Importantly, the idea of engaging multiple stakeholders in an intervention process beyond initiating an OH referral highlights the crucial role of employers/managers and their moral responsibility for the well-being of their employees (Bevan et al., 2018). It also aligns with the paradigm shift from reactive to preventative approach to workplace health and well-being as postulated by Black (2008), and supports the change in the way that work disability should be perceived (i.e. as an issue of re-integration to work; Main and Shaw, 2019).

All participants mentioned workplace-targeted interventions as an important element of the RTW process, which is also linked to the need for support discussed earlier (e.g. workplace accommodating needs of a worker with CP). In agreement, workplace-based or workplace-targeted elements were found to be important elements of RTW efforts by the thesis' literature reviews (e.g. Cheng and Hung, 2007; Wynne-Jones et al., 2018), which is aligned with the conclusions from seminal reports (e.g. Black, 2008) regarding the importance of investing in a healthy workforce.

The healthcare professionals in studies two and three reflected upon the usefulness of CBT-based approaches (e.g. often no longer available FR; ACT). Notably, the UK evidence (*Chapter Three*) for a CBT-based ACT approach, successful for other outcomes such as functional ability of CP patients (Sheldon, Clarke and Moghaddam, 2015), did not include RTW as an outcome. Yet, such studies in other countries show effects on RTW (e.g. Lytsy et al. 2017 as identified by the SLR in *Chapter Two*) and employability (e.g. Berglund et al., 2018).

Participating stakeholders mostly preferred face-to-face modes of RTW intervention delivery, but only participants in study three had extensive experience of regularly conducting remote consultations. As such, familiarity with an intervention seems key here (perhaps similarly to how confident GPs feel discussing sick-listing). The value of face-to-face assessments was highlighted, even when the remote assessments offered more flexibility (e.g. in terms of removing physical barriers linked to distance), which reflects nuanced findings about the usefulness of technology-mediated interventions (e.g. Greenhalgh et al., 2018).

Analyses in studies two and three suggested demotivating effects of compensation systems on RTW, as briefly discussed in *Chapter Eight* (e.g. Anema et al., 2009; Bartys et al., 2017). In short, the findings around workers' compensation and RTW are complex. Whilst there is some evidence to support OHPs and OTs' claims that the amount of compensation the workers receive might put people off from returning to work (Bartys et al., 2017), the issue is multi-factorial. Young, Besen and Willetts (2017) found that the duration of disability payments was significantly correlated with expected time to RTW, although accuracy of prediction decreased with longer sick-leave duration. Importantly, stopped compensation payments cannot be seen as the equivalent of RTW (e.g. Michell and Carmen, 1994). Overall, findings regarding compensatory payments tend to be contentious, but the receipt of benefit payments seems less detrimental to RTW than inflexible compensation arrangements (e.g. in terms of accessibility of benefit payments; Bartys et al., 2017). The SLR discussed varying results concerning CP RTW interventions originating from countries with different compensations systems, which indicates that these national differences are an important area to investigate in relation to RTW. Furthermore, RTW comprises interactions between multiple stakeholders; the readiness of healthcare professionals to approach work issues with their patients and effective communication among RTW stakeholders were found by Bartys et al.'s (2017) review as predictors of non-RTW.

Participants in studies two and three noted that educational interventions about working with CP should be provided to several groups (employers, employees, and the wider society) to ensure that adequate support for workers is available and stakeholders' negative beliefs can be challenged. Interestingly, employees with CP and OTs/OH nurses agreed that people with CP are experts of their condition. Employees felt entitled to the ownership of their care decision-making process. Such findings are in line with the assumptions of the EPP (Donaldson, 2003) and support the idea of CP self-management. Those perceptions of patients' expertise were not clearly captured within the analyses with OHPs, which could be linked to a Foucauldian conceptualisation of power in medical encounters (Lupton, 1997). That is, clinicians' inclination to interpret things without considering patients' views. Yet, individuals at times have a need to resist (Lupton, 1997) and following doctor's advice might represent one's active preservation of the 'self', as is presenting one's self as a 'good' or 'bad' patient (Lupton, 1997).

9.3 Revision of the thesis' conceptual framework reflecting empirical findings

9.3.1 RTW interventions need a strong multidisciplinary component

CP is inherently multidisciplinary. The biopsychosocial model of pain (Engel, 1980) indicates an interplay between the biological, psychological, and social domains of pain experience. In agreement, the project's analyses indicate a need for mobilisation of strong multidisciplinary teams to co-ordinate RTW efforts for employees with CP. In these two respects, the original theoretical model proposed in *Chapter Four* remains unchanged, albeit a number of other intricacies arise (Figure 8).

9.3.2 Worker's role of the 'self' remains important and embedded within the biopsychosocial model of CP

Whilst employees in the current project adopted to their new roles (living with CP), the analyses showed elements centred around loss of work identity. Bullington (2009) suggested that as individuals suffering with ill-health conditions experience detachment from previously meaningful activities through challenges to one's identity, rehabilitation strategies should address this loss. The thesis' conceptual framework for RTW with CP reflects this sentiment.

As workers with CP experience a disruption to their sense of 'self' and social identity (Wainwright et al., 2011a), also indicated by employees in study one (*Chapter Six*), they remain the subjects of an embodied pain experience, where pain is "*something of the body*" (Eccleston, 2018, p. S21). This, in turn, makes the pain experience subjective and suggests that a personalised approach to addressing needs of CP sufferers within RTW process is required. Furthermore, embodiment of CP has implications for RTW rehabilitation practice, including addressing the patient's chosen role adopted in a healthcare consultation (e.g. Lupton, 1997; see also section *9.5.5*).

For example, in situations where healthcare professionals encounter 'questionable' CP patients, as reported by some of the current participants, this indicates a significant role of psychosocial factors in predicting success, or otherwise, of RTW efforts. Thus, the current thesis argues that psychological elements, including the idea of the 'self', followed by the social aspects of pain experience and RTW with CP may at times be more salient than the biological domain (with their potential to expand represented by the dashes in the outline of the Venn diagram, Figure 8). The emphasis within the current RTW framework is on the biopsychosocial model as a process, where at different points the amount of influence that any of the factors has on an individual's pain experience may vary.

The pain experience is embedded (Wainwright and Wainwright, 2019), it has its 'place' in the web of meaning underpinning the social construction of RTW with CP. The behavioural and attitudinal factors linked to the biopsychosocial domains (at times with saliency suggesting psychosociobiological hierarchy) should arguably be considered within the concept of patient stratification, depicted here as a set of rotating arrows to account for its variability (Figure 8).

9.3.3 Input from 'active' patients should be considered within multidisciplinary approach

Analyses suggest that healthcare professionals' competencies within RTW process should be seen as complementary to the 'expertise' of CP sufferers pertaining to their lived experience of CP. Thus, whilst dispensing medical gaze should not be the chosen strategy, the data analysed here support wider application of the EPP model (Donaldson, 2003) during RTW process for workers with CP. The EPP champions the idea of patients' expertise and usefulness of self-help in chronic health condition management (see *Chapter Three*), as recommended by guidelines (e.g. Lee et al., 2013).

Armstrong (1994, p. 25) wrote that "*a body analysed for humours contains humours; a body analysed for organs and tissues is constituted by organs and tissues; a body analysed for psychosocial functioning is a psychosocial object*", indicating that credibility of an explanation originates from one's underlying ontological assumptions. Whilst some would argue that the human body's authenticity can be validated through social construction within the medical practice, where healthcare professionals enable identification of illness and disease (Lupton, 1997), the current thesis emphasises the role of patients in the process.

Furthermore, the current analyses suggest that employees are likely to adopt an 'active' role, seeking out solutions or strategies to improve their chances of RTW. Acknowledging the active role of a sick-listed employee within the tertiary CP RTW strategies and adopting bespoke interventions matched to their needs is key to intervention success. Thus, an 'active patient' element has been added within the current framework as an important consideration and part of a RTW intervention (Figure 8).

9.3.4 Support is a key feature of an effective RTW process and active patients need it too

CP sufferers' need for support during the RTW process featured heavily in the analyses of all three empirical studies in the current project. The type of support, which current participants highlighted as key to RTW success was linked to, amongst other types, support from employers and the workplace as a whole (including peer support, as well as practical adjustments at a workplace). Perceived need for support within RTW process provides a further rationale for including this concept within the thesis' theoretical framework, beyond the justification presented in *Chapter Four*. The elements of an 'active' patient's input, the tripartite elements of the CP model, and the interplay between job demands and resources (including the amount of control workers have over their RTW process, e.g. feeling pressured to RTW) contribute to the multidimensionality of support and how much of it is required.

'Active' patients in study one took on their role due to the lack of access to individual-targeted interventions and the lack of effective multidisciplinary co-ordination of RTW, thus facing limited sources of support. The current participants perceived employers as often the ones applying pressure on employees to RTW swiftly and at full capacity. Analyses suggest that perceived employer support has a buffering effect and motivates employees with CP to RTW, whilst lack of such support may lead to presenteeism due to pressure to RTW too soon (study one). In agreement, Wainwright et al. (2013) found that positive stakeholder relationships facilitate RTW for workers with CP irrespective of the size of the workplace. Subsequently, and capturing employees' need for support, it seems justified to highlight the role of employers by including the *JD-R* model (Schaufeli and Bakker, 2004) within the thesis' framework. Themes in the current data pertaining to levels of support and work pressure correspond to the elements of the *JD-R* model (and the earlier ERI model; Siegrist, 1996). The model explains the (need for) balance between work tasks and the availability of resources that in turn enables maintained participation in work. For example, the current project found that job satisfaction is an important facilitator of CP acceptance and allows RTW, even if to a different job role (*Chapter Six*). Therefore and in line with the findings related to other chronic conditions (e.g. Boot et al., 2016), aspects beyond CP itself influence RTW and its sustainability.

Conceptualisation of support stretches beyond workplace support and is a form of mentoring (here, by OHPs), a FU (e.g. by employers, or healthcare professionals) to check employees' progress, or just letting individuals know that they have someone 'by their side' if their confidence is lacking (here, specifically OTs; study three). Support should be delivered as an enabler of change. Employees are key to promoting such change as they share an identity as 'citizens' of healthcare services (i.e. potential or in many cases already the key users, with ideas of what healthcare services they expect on individual as well as the societal level) (Calnan, 1997; Fotaki, 2011; Wainwright and Wainwright, 2019). Thus, employees should drive re-framing of how the CP problem is addressed, in line with the EPP assumptions mentioned earlier. Cutrona and Suhr (1994) proposed that controllable problems require different type of support than those beyond individuals' control; arguably, a mixture of structural and functional support (Semmer and Beehr, 2014; as discussed in *Chapter Four*) is often needed to overcome stressors during RTW with CP. Finally, vocational rehabilitation, which is key to RTW could be conceptualised as a form of support in itself. Waddell, Burton and Kendall (2009) postulated that vocational rehabilitation comprises anything that helps employees to return to and remain at work, which based on the current analyses is the role of workplace and social support.

9.3.5 Barriers and enablers of RTW

Analyses from the thesis' empirical studies suggest that successful RTW processes require departure from a culture of medicalisation of CP, such as over-investigating potential biological causes (*Chapters Seven*, *Eight*). Furthermore, employees in study one expressed how they felt they could contribute to their workplace, even if they were not as 'fit' as when they had no pain. These are aligned with the salutogenic orientation used in health promotion (Antonovsky, 1996) which rejects a dichotomy of health and disease. Equally, the analyses highlight the lack of positive salutogenic message within the current RTW approaches. Thus, the thesis' conceptual framework points to a need to encourage perception of CP (among employees, employers, and society) as an illness (Waddell and Aylward, 2010) without an identifiable biomedical pathology, rather than a disease. Arguably, this would also improve stakeholders' understanding of CP and its impact on work, helping to address the stigma surrounding the condition.

Another enabler of RTW suggested by all current stakeholder groups was the importance of communication. There are several facets within this concept. Firstly, inter-stakeholder communication (including inter-disciplinary, as well as communication with employers) has been highlighted as key within a dynamic, multidisciplinary approach to RTW processes, to support changing needs of individuals with CP. Enabling such communication within multidisciplinary teams could help address the feeling of conflict perceived by OHPs in the second study.

Secondly, as expert-patients actively participate in RTW processes, their ability to express themselves would either promote or stifle inter-stakeholder efforts. Employees' communicative skills could help with 'refocusing' the Foucauldian "*clinical gaze*" (i.e. medical assessment; Lupton, 1997, p. 99). Thus, just as clinicians might be inclined to (look for and) find what they are looking for, the therapeutic 'gaze' can be re-focused and medical 'power' can be utilised as a resource and facilitator of patient's power/perspective (Lupton, 1997). Such a conceptualisation of 'power', synonymous to acknowledging patients' expertise, was raised in stakeholders' interviews as an important feature of an effective RTW process (e.g. study three). Finally, as some RTW interventions rely on their communicative features (e.g. the FN), the level of communication (and, arguably, the language used) within such interventions affect their outcome success. Importantly, all the above enablers are relevant only when interventions are available in the first place.

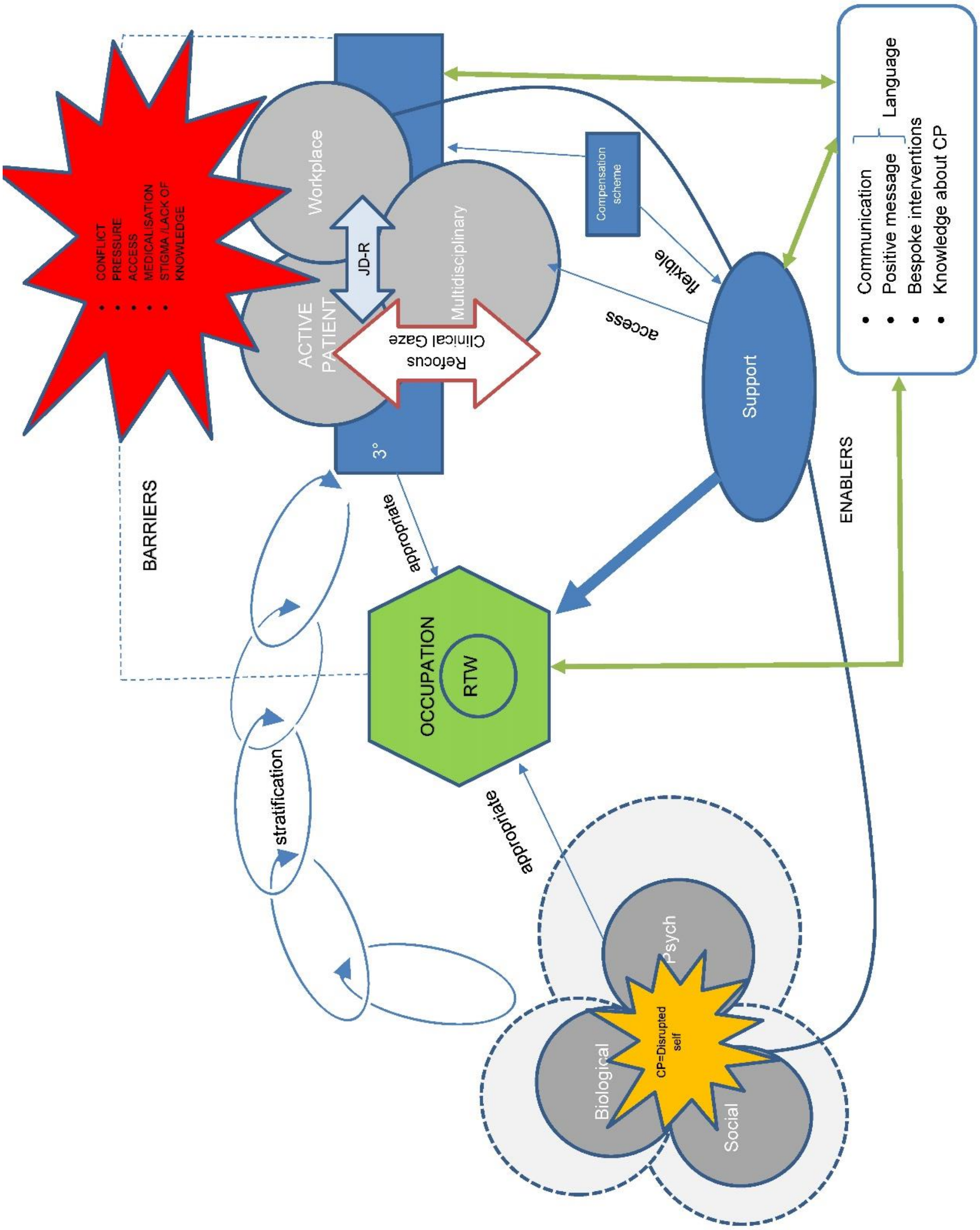


Figure 8. Theoretical framework of thesis: revised

Note. CP=chronic pain; JD-R=Job Demands-Resources Model; Psych=Psychological; RTW=Return to work; 3°=Tertiary

9.3.6 Return to a meaningful occupation is a valid outcome of a RTW intervention

Perhaps the most significant refinement within the current theoretical framework for RTW with CP is the revised conceptualisation of RTW (Figure 8). Specifically, echoing the current empirical findings, successful outcome of a RTW intervention could be perceived as non-paid, meaningful activity such as volunteering, not just paid work. This is in line with the definition of ‘work’ proposed by Waddell and Burton (2006) and it reflects focus on subjective interpretation of the meaning of RTW and meaningful occupation (e.g. Clark et al., 1991; Neville-Jan, 2003). With its benefits for individuals’ motivation and self-concept, meaningful occupation removes focus from potential fiscal benefits of the government’s health and well-being policy (DWP, 2017b), and places more emphasis on psychosocial benefits from a perspective of an individual instead. In addition, Young et al. (2005) found that workers saw their well-being (including financial and emotional) as the most important outcome in the RTW process, whilst the other stakeholders had a common focus on financial viability. The proposed revised conceptual framework for RTW with CP could be referred to as a ‘framework for return to occupation’ with CP.

Accepting meaningful activity as a valid outcome of a RTW intervention for an individual with CP is in line with an assertion that RTW (i.e. return to paid employment) might not be the right outcome for all. Certain job roles might restrict workers’ ability to RTW, for example, when CP treatment comprises workers taking strong pain medication, as its side effects might interfere with “*safety critical task[s]*” such as driving (Carter et al., 2013, p. 564). Employees in study one raised an issue of pain medication’s side effects negatively influencing their work ability and general functioning. Some of them had to re-train to cease excessive job demands. When re-training, the ‘active’ sample of employees in study one returned to employment. Yet, it was expressed by OHPs and OTs/OH nurses here that workers might still derive meaning, and (work-related) self- and social identity through participation in volunteering-related activity or education. Equally, whilst focusing on the ‘self’ aspect of CP experience, a conceptualisation of RTW as return to both, paid employment and other forms of meaningful occupation, could render operationalisation of RTW outcome by future studies somewhat problematic.

9.4 Originality and new knowledge

Table 10 provides a summary of the thesis' originality and contribution to knowledge. Firstly, as no previous SLRs examined the effectiveness of tertiary RTW interventions on workers with CP, the current project's SLR (*Chapter Three*) offers originality. At the time of submitting the corrections, the SLR's results were published as an article in a peer-reviewed journal (see page 11 and appendix 35). The thesis' SLR also informed a review by the Joint Work and Health Unit into the current OH provision in the UK (Appendix 1). Therefore, the SLR summarised the significance of previous work and, arguably, should be seen as valuable in informing the future RTW policy and practice. For example, the SLR highlighted the potential effects of workers' compensation systems on RTW, comprising an example of the project contributing to new knowledge. Based on its impact, the SLR offers a starting point for other researchers interested in the topic of RTW and CP. A recent guidelines consultation by NICE (2019) noted that there is a lack of UK evidence regarding effective strategies to support RTW among people with long-term SA (lasting longer than 4 weeks), thus the SLR and the thesis as a whole make a contribution here.

Secondly, the current project is the first to examine the views of OHPs and OTs/OH nurses of the current UK RTW interventions for employees with CP. This is an important original contribution, since addressing key RTW stakeholders' (e.g. employees with CP, employers, healthcare professionals) priorities could add value to future RTW interventions for workers with CP and improve health and well-being outcomes (including RTW) at individual, societal, and economic levels. Specifically, improved RTW outcomes could help workers suffering from reduced socio-economic status due to SA and, based on the thesis' theoretical framework, would be beneficial to workers' sense of 'self'. Furthermore, RTW reduces costs for employers paying sickness benefits and for the state paying health-related benefits.

Table 10. *Summary of project's originality and contribution to knowledge*

What is already known?	Chapter/Thesis	What does the project add?
- The social and economic implications of CP are incredibly broad (e.g. Black, 2008; Wainwright et al., 2015) - Work is generally good for most people, as long as it is accommodating and safe (Waddell and Burton, 2006) - Effectiveness of tertiary RTW interventions for CP is unclear, although multidisciplinary interventions for CP are recommended (e.g. Berglund et al., 2018) - The evidence pertaining to the FN's effect on reducing SA remains inconclusive (e.g. Dorrington et al., 2017) - The process of RTW for people on long-term SL due to CP requires further study (e.g. Berglund et al., 2018)	*Chapter Two*: SLR	***Originality***: No previous SLRs on tertiary RTW interventions for CP ***New knowledge***: 1. There is no conclusive evidence to fully support any specific type of RTW intervention for workers with CP but multidisciplinary efforts (including psychological therapy, physical training, and workplace-based/workplace-oriented elements) seem most effective for this group 2. Effects of workers' compensation systems on RTW seem an important area for RTW policymakers to consider (in line with previous findings, e.g. Anema et al., 2009) 3. Optimising participant waiting times before the start of interventions, matching interventions to employees, and incorporating better collaboration strategies between the various RTW stakeholders could help to avoid interventions hindering RTW (particularly when used on their own). 4. Findings informed a review by the Joint Work and Health Unit into the current OH provision in the UK (Appendix 1)
	Chapter Six: Study with employees	***New knowledge***: Workers with CP are 'active' actors in their RTW process; all participants in this study shared this characteristic
	Chapter Seven: Study with OHPs	***Originality***: No research conducted previously with OHPs as stakeholders of RTW process for workers with CP, regarding their views of RTW processes ***New knowledge***: 1. Lack of goal-alignment linked by OHPs to primary care intervention delivery (by GPs) and restrictions to NHS resources create a feeling of conflict in RTW processes for workers with CP 2. FNs have not been implemented as intended by the policy-makers; thus, in the current practice, FNs do not promote RTW for workers with CP, according to OHPs 3. OH might hinder RTW if the RTW process is (unnecessarily) medicalised
	Chapter Eight: Study with OTs/OHAs	***Originality***: No research conducted previously with OTs/OHAs as stakeholders of RTW process for workers with CP, regarding their views of RTW processes

Table 10 (cont.). *Summary of project's originality and contribution to knowledge*

What is already known?	Chapter/Thesis	What does the project add?
	Chapter Eight: Study with OTs/OHAs	**New knowledge**: OTs feel they are key to vocational rehabilitation of workers with CP because they provide a holistic, biopsychosocial emphasis within the RTW process
	Thesis	**Originality**: Views of employees with CP, OHPs, and OTs/OHAs have not been evaluated previously with respect to RTW interventions for people with CP **New knowledge**: 1. Currently, results from the SLR (and RAR; *Chapters Two* and *Three*), which showed the importance of multidisciplinary RTW interventions for workers with CP are not being translated into practice/implemented in society; this is manifested by issues around intervention delivery (including perceived goal-misalignment) and lack of access to ('bespoke') RTW interventions, as well as medicalisation of CP, as identified in the thesis' empirical studies (*Chapters Six-Eight*) 2. Workers with CP are 'active' actors in the RTW process, with OHPs/OTs acting as supportive 'mentors'/'wingmen'; however, the current analyses also suggest that embracing 'active' patients more effectively and a better coordination of multidisciplinary RTW efforts are amongst the key issues in the current RTW processes for workers with CP 3. Linked to the need for improved coordination and communication between the various services/RTW stakeholders (including healthcare professionals and employers) is the need for 'positivity' from the outset in RTW intervention delivery for workers with CP (as already acknowledged and adopted in health promotion by the salutogenic orientation; see Antonovsky, 1996); thus, cascading a message (to CP employees, employers, wider society) that not being '100% fit' when returning to work with CP is acceptable and to be expected, is crucial **Originality**: Based on the current findings, thesis' revised theoretical framework (*Section 9.3* and *Figure 7*) posits RTW conceptualised as 'return to a meaningful occupation' to reflect that for some CP patients return to paid employment might not be appropriate

Note. CP=Chronic pain; FN=Fit note; NHS=The National Health Service; OHA=Occupational Health Advisor; OHP=Occupational Health Physician; OT=Occupational Therapist; RAR=Rapid access review; RTW=Return to work; SL=Sick-leave; SLR=Systematic literature review.

The analyses of studies with the above stakeholder groups revealed examples of new knowledge. Specifically, whilst the SLR and RAR indicated that multidisciplinary RTW interventions are most suitable for workers with CP, the current participants revealed a lack of goal alignment and communication within the multidisciplinary approaches, and systemic restrictions to their availability. Furthermore, perceived inter-disciplinary conflict and issues around OH provision (both linked to over-medicalisation of CP and the lack of resources) were identified here and have not been discussed as linked by the RTW and CP literature before.

As described, until the present thesis there was little research done with the OTs. Thus, an important element of the new knowledge that could support changes in the current practice (see section *9.5.3*) is the finding that OTs feel they are key to vocational rehabilitation of workers with CP. This perception may be because OTs provide a holistic, biopsychosocial emphasis within the RTW process which, according to the current framework, is key when addressing CP employees' needs (see Figure 8).

Furthermore, the current project has revealed that workers with CP are 'active' actors in their RTW process, with all participants in *Chapter Six* sharing this characteristic. This was largely in response to the lack of access to RTW interventions. Those interventions that were offered, were not tailored to the particular worker's needs. The 'active' patient finding is an example of new knowledge. Embracing 'active' patients more effectively and a better coordination of multidisciplinary RTW efforts are amongst the key issues in the current RTW processes for workers with CP, and important elements for achieving successful RTW strategy.

Linked to the need for improved coordination and communication between the RTW stakeholders (including healthcare professionals and employers) is the need for 'positivity' (including language used) from the outset in RTW process. Similar approach has already been acknowledged and adopted in health promotion by the salutogenic orientation (Antonovsky, 1996), but the need for embedding it within the CP RTW processes is another 'new knowledge' element transpiring from the current thesis. Implications for practice related to this finding are outlined in section *9.5.4*).

Finally, the current thesis proposed an original theoretical framework of RTW with CP. Within it, the barriers and enablers of RTW (Figure 8) offer a way to evaluate the future RTW processes. In addition, the framework conceptualises RTW as a 'return to a meaningful occupation' to reflect that for some CP patients return to paid employment might not be appropriate. These elements, based on the analyses of stakeholders' views of the current CP RTW processes, may inspire future research and help to achieve systemic changes to reflect a more appropriate RTW response and health and employment policy. Below, the thesis' original input and other related findings have been discussed in relation to practice and future research implications.

9.5 Recommendations and implications for policy and practice

The magnitude of the CP problem in relation to employee health and well-being, and the associated costs for a multitude of stakeholders (including employees, businesses, the healthcare system, the government, and wider society) were discussed in detail in *Chapter One*. Based on the findings from the literature (*Chapters Two, Three)* and from the three empirical studies (*Chapters Six-Eight*), the current RTW process for workers with CP requires some adjustments. To account for the analyses and the revised theoretical concepts, critical evaluation and reflection on policy, and suggestions for practice to promote RTW among employees with CP are offered below. Notably, these implications are offered at both theoretical and pragmatic, health services research levels that at times, but not always, intersect.

9.5.1 Joining up policy and practice, whilst 'upstreaming' intervention delivery

Some findings applicable to joining up policy and practice may be applicable to RTW with a wide group of health conditions whereas others are specific to chronic pain. The first key point which is specific to chronic pain, is that data analyses from the thesis suggest that policy and practice in RTW for pain is often siloed and disjointed. However policy and practice could and should be joined up. Bevan (2019b) agrees with this. The NHS departments involved in CP interventions delivery were described by the healthcare professionals participating in the current study as often restricted by the lack of resources and shortfalls in stakeholder communication, which in turn has negative effects on accessibility of RTW interventions. The thesis' data also suggest that key RTW stakeholders do not think that everyone, particularly GPs, are on board with the concept of good work as a clinical health outcome for people in pain (equally, it may be normal for one group to blame another who are not in the room, which would explain the tensions revealed here).

This argument that good work is good for our health and wellbeing is made for everyone, not just pain patients (Waddell and Burton 2006); but just as their review also showed good work does help people in pain specifically, so here, analyses suggests that people living in pain greatly valued work as a way to mediate some of the damage to their identity. It is impossible to say that this not just as important for other conditions, such as depression, but the thesis findings' certainly show it is directly relevant to people living with pain.

Analyses suggest that to improve RTW outcomes for workers with CP and to join-up RTW efforts, there is a need to relieve some of the pressures faced by RTW stakeholders (e.g. GPs) and 'upstream' the delivery of interventions for CP patients. This could be based around scaling up patient-centred healthcare delivery to improve the overall service for users, which is part of the current NHS Long Term Plan (Rosen, 2018; NHS, undated). In terms of RTW, upstream approaches could mean addressing employees' RTW needs early on and enabling access to interventions (before secondary care referrals become necessary).

There is some evidence from the SLR that early RTW intervention for workers with CP helps and the thesis' empirical data agree. Yet, if the importance of an early intervention with healthcare professionals who were all trained to see work as a health outcome was embedded in health, employment, and welfare policy systems, there would likely be less pain-related disability at work (Bevan, 2019b). The thesis' data concur with this as employees do not want endless sick-listing, nor do OHPs and OTs. All participants in the current project seem on board with the idea of good work as a clinical health outcome that, as a relatively new government's focus, led for example to the formation of the Work and Health Unit (previously known as the Joint Work and Health Unit). However, analyses here suggest that those 'not in the room' (e.g. GPs, employers) are perceived by thesis interviewees as not on board with this overarching policy agenda. Whilst this finding may be due to the partiality of the sampling frame, as GPs and employers were not directly interviewed, it is really important that this perception they are not on board is further investigated. Furthermore, it may be that the government needs to increase its emphasis on the joined up thinking about good health and its links to good work.

Supported self-management is part of current policy (Gordon et al., 2017), where people with CP should be encouraged to develop strategies that help them cope with their pain and daily challenges. The data presented in the thesis agree with the importance of self-management, providing a positive reflection of policy. A possible downside of the self-management approach is patients feeling abandoned, but the thesis' data did not support that. All the evidence here seems to indicate that supported self-management is beneficial. Grady and Gough (2014) highlighted the key role of nurses as those stakeholders able to contribute to and implement in practice the evidence related to self-management of chronic conditions. Analyses from the thesis' study with OH nurses show that, together with OTs, these professionals were able to support and empower employees with CP, helping with and facilitating possible strategies for RTW. The thesis' three empirical studies illustrate some of the possible barriers to RTW linked to self-management, including medicalisation of CP and lack of access to appropriate support, which need addressing to better facilitate self-management and RTW, when appropriate. Current policy, which accords high importance to self-management of CP is borne out by this thesis. However, the thesis' findings suggest a caveat that self-management cannot exist in a vacuum and must itself be supported by reasonable resources and access to these resources. It is important that proper resourcing is not lost in the policy debate about self-management.

There might also be tension between providing an early intervention and promoting self-management. Policy documents and guidance need to be carefully framed so that early intervention can go alongside continuous self-management by the employees themselves. The thesis analyses bridge both issues and show how both are possible, for example by adopting a mentoring approach (i.e. an early, 'enabling' intervention) to empower and support an individual with CP to manage their pain and RTW. OH professionals interviewed here assigned the mentoring role as part of their responsibilities towards workers with CP, but they are not currently the ones interacting with employees. Only about 30% of people have access to traditional OH advice through organisations (Frank, 2018), which varies greatly by the size of organisations (DWP/DHSC, 2019a). This is concerning, since a 2017 Chronic Pain Policy Coalition patient survey revealed that over half of the respondents did not have confidence in their GPs to treat their CP (Policy Connect, 2017). Furthermore, since the criticism of GPs in relation to their role in RTW for people with CP had been mentioned in the results from the thesis' empirical work, a DWP report, which was partially informed by the thesis' SLR (Appendix 1), suggested there is a wider perception that GPs set OH issues aside (DWP, 2020). Implications from the above issues suggest a strong need for a better access to OH (see *section 9.5.3*). Policy needs to make steps to allow that to happen, including addressing the issue of lower investment in OH by SMEs (DWP/DHSC, 2019a). This could be by providing financial support to organisations in addition to the already deductible from taxable profits cost of employee healthcare or reasonable adjustments, as well as improving OH professionals' recruitment (DWP/DHSC, 2019b).

9.5.2 Improving consultations and FN practice

Transaction-style (thus less personal), multi-GP care delivery in primary care disrupts CP sufferers' RTW prospects (*Chapter Six*). Stokes-Lampard (2019) suggested that longer GP appointments could support holistic, patient-centred care, which would potentially allow more time resources to discuss work issues. Baird et al. (2018) noted that longer appointments and interactions with the same physicians/multidisciplinary teams enable patients to build trust in those professionals, which in turn helps to support health-promoting behaviours. Importantly, a need for support that empowers employees with CP was one of the key empirical findings of the current thesis and is an important feature of the thesis' conceptual framework.

Longer appointments are already common practice in several nations elsewhere (e.g. approx. 18.3 minutes in Norway; 22.5 minutes in Sweden; versus 9.22 minutes in the UK in 2014; Irwing et al., 2017). Data in *Chapter Seven* highlighted the benefits of longer consultations with CP patients available to OHPs versus primary care physicians. However, capacity issues at GP practices may be problematic in achieving a shift to longer consultations, although 10-minute long GP appointments are only a contractual obligation in the UK rather than based on preference (Gov.uk, undated[b]). That is, an appointment should last a *minimum* of 10 minutes. Irving et al. (2017) argued that short GP consultations are likely to have adverse effects on patient healthcare as well as healthcare professionals' stress and workload. Paddison et al. (2015) found that doctor communication was the strongest influencer of patient satisfaction. This supports the rationale for introducing a common approach to deliver longer GP appointments, particularly for complex healthcare needs often synonymous with being a CP patient.

Findings from the current project show that ten years after the FN was introduced, it is still not functioning as a RTW intervention in the way it was intended, as employees were being repeatedly signed off work when that is not what they wanted. Employees interviewed in this thesis were able to articulate their RTW desires, but this is not the case for all workers (Wainwright, 2019). We need to better support how healthcare professionals elicit such information. The FN was set up assuming healthcare professionals can assess workability but findings here suggest that healthcare professionals writing FNs need further training to support safe and appropriate work being seen as a clinical health outcome, particularly if patients are unsure about this.

Crucially, analyses from this thesis suggest that no participants found GPs' FN comments sufficiently detailed to meaningfully support RTW. As set out in the Introduction (*Chapter One*), policy in the UK legislates reasonable workplace adjustments for chronic conditions (Howard and Williams, 2013; DWP, 2019) but the thesis suggests that CP patients, OHPs, and OTs/OH nurses do not find the level of detail and, fundamentally, the right language being used by GPs to describe such intervention. Arguably, this is a complex issue of converting medical language and patients' needs into language and guidance for other settings. Being medics, OHPs are able to apply professional 'bilingualism' (Hadden, Coleman and Scott, 2018) to understand medical jargon on FNs but other stakeholders involved in RTW may not be able to decode complex terms or limited instructions into plain language and RTW strategy. There needs to be better translation of what GPs need to write about their patients' RTW into the settings that the FN recommendations will ultimately be used within (by HR, workplace, patients). Implications of this for policy and practice include a need for better training for professionals involved in sick-listing and improved, truly interdisciplinary understanding between RTW stakeholders.

However, it is not only that GPs should be supported with better training and longer consultation time to write more detailed comments, but the FN itself could be re-designed to support greater specificity. For example, analyses here suggest GPs' comments about workplace accommodations were too vague and both employees and OH professionals felt that they were not practically helpful, which arguably contradicts the key point of the FN's utility of promoting partial RTW. Therefore, a combination of having more time and FN re-design to promote specificity could be trialled in general practice. Analyses from this thesis recommend the FN system prompts GPs with better prognostic questions they could ask to assess workability. The changes suggested above, paired with a truly multidisciplinary approach (highlighted as key to RTW through the thesis' analyses), would contribute to promoting work as an outcome (as envisaged by the ideological underpinnings behind the FN; Black, 2008) and RTW even when one is not '100% fit' – a characteristic that employees in study one felt they exemplified, yet which they felt was poorly understood by other stakeholders (e.g. employers).

Furthermore, varied modes of healthcare consultation delivery such as video could be a strategy to upstream RTW interventions for some workers with CP (see section *9.5.5* for a discussion of patient stratification). Remote consultations need further study (e.g. Greenhalgh et al., 2018) and were the second choice, after face-to-face consultations, for participants in studies two and three. That said, since the original thesis submission, due to the COVID-19 pandemic and adoption of targeted public health measures such as social distancing and lockdowns, many face-to-face healthcare services including those for pain management have had to switch to remote delivery (Tauben et al., 2020). Whilst virtual healthcare can improve things such as access for some patients and reduce costs associated with delivery (Vimalananda et al., 2015), there are also specific issues relevant to pain patients e.g. the need to assess the physical symptoms, or assess functionality, which are things that may be tricky to do remotely. Furthermore, whilst individuals with CP need to maintain a sense of control over their condition and self-management may help with that, Weiling, Kai and Gunasekeran (2020) argue that limited access to targeted support services due to the pandemic is detrimental to that patient group. Arguably, this would also be the case in context of individuals' RTW (in addition to the broader employment issues linked to the pandemic, such as those linked to sustainability of the businesses due to national restrictions, which are beyond the scope of this thesis). That said, previous studies (e.g. Beasley et al., 2015) and others discussed in *Chapter Three* show that introducing remote delivery of interventions for patients with CP can be done successfully, and these strategies could be adopted to include RTW outcomes. To enable multidisciplinary support for RTW for employees with CP in the COVID-19 era, the necessary policy shifts should be introduced hand-in-hand with appropriate training for healthcare professionals, sufficient funding to enable frequent and effective stakeholder communication, improve equity of care, and improve digital literacy to foster engagement, paired with regulatory laws and licences/quality assessment for the technology-supported interventions (Weiling, Kai and Gunasekeran, 2020; Tauben et al., 2020).

9.5.3 Extending who does sick-listing, whilst improving access to OH and vocational rehabilitation

Practical suggestions for extending the sick-listing role beyond the medical profession apply to the need to address pressures faced by GPs, fully utilise the FN's potential (and related need for knowledge of vocational issues) and for improving system inefficiencies related to the lack of access to RTW interventions (*Chapters Three, Six-Eight)*. Interestingly, a recent RCT on training GPs to recognise and manage patients' work-related issues found that the educational intervention did not improve physicians' recording of work-related problems or their patients' work self-efficacy, albeit the trial was underpowered (de Kock et al., 2018). The lack of access to and the lack of suitable, work-focused healthcare has been found to be an obstacle to work participation (Bartys et al., 2017). Thus, training for GPs to improve recognition of work-related problems among patients with CP should be paired with exploration of alternative approaches to improve the overall care delivery for that patient population.

For example, as work conversations should be central to the FN process, OH professionals (beyond OHPs) should be considered as potential holders of such discussions. In support, Verma, Paterson and Medves (2006) identified a set of common, 'harmonised' competencies (i.e. knowledge, skills, values, and attitudes perceived as essential) which apply to medical doctors, nurses, OTs, and physiotherapists. Such mutually identified competencies support the call for inter-disciplinary and 'upstream' healthcare delivery. Delclos et al. (2005) reported substantial differences in competencies for OHPs and OH nurses, but these differences have since dissipated amongst UK practitioners (Lalloo et al., 2017). This is important, as it justifies broadening healthcare professionals' (e.g. OH nurses, OTs) responsibilities within RTW processes for workers with CP and within the OH domain (including issuing FNs), whilst relieving burden on others (e.g. GPs). Mutual competencies are also important for an effective delivery of RTW interventions (e.g. the FN, with its communicative features) and the salutogenic messages about care, linking back to the concept of communication and language used in RTW stakeholder interactions as an enabler of RTW (see section *9.5.4*).

There is a need for exploring strategies as those described above, as evident from the project's empirical findings and due to the restricted OH access for the majority of the UK workers (e.g. Frank, 2018; *Chapter Three*). Recruitment of OHPs has been in decline since 2003 (NICE, 2019). That said, the current thesis considers OH access as equating to access to an OHP as well as an OT/OHN, due to aspects of an 'occupation' and 'health' being part of all of these healthcare professionals' role responsibilities (see *Chapter Five* for discussion of their role characteristics). Notably, only one of the employees with CP who participated in study one had any experience of OHP input during RTW, but some had access to and benefited from access to an OT (*Chapter Six*).

Baird et al. (2018) proposed that removing boundaries pertaining to traditional roles of primary care staff and expanding their skills set could enable duties to be delegated more efficiently, thus streamlining holistic patient care more effectively. Relinquishing/sharing the role of certification authority might be problematic for GPs due to challenges such as maintaining control over patient care (Welsh et al., 2014). Yet, extending sickness certification to OH professionals (beyond OHPs, yet to those with similar set of competencies) would help to address the issue of GPs' lack of confidence to discuss work (e.g. Money et al., 2010). Evidence gathered in *Chapter Three* suggests that vocational advice from a non-medical case manager aids RTW (e.g. Wynne-Jones et al., 2018), which further supports the rationale for extending responsibilities of the non-medical healthcare professionals (e.g. OTs/OH nurses) within CP RTW processes and addresses the need to de-medicalise RTW (studies two and three). Yet, strategies aimed at promoting engagement in initiatives such as vocational advice from non-medical staff also needs examining, since the failure of Fit for Work service was linked to issues around stakeholder engagement (DWP, 2016a).

Farholm et al. (2017) found that when healthcare professionals delivering vocational rehabilitation provided support for patients' autonomy and competence, patients' RTW outcomes were positively affected. Importantly, CP employees in the current project were 'active' and engaged with their treatment (or seeking one), yet expressed a need for support (again, as the current theoretical framework would suggest). Therefore, providing a mentor with vocational rehabilitation knowledge and skills (e.g. OT/OHN) might be beneficial for achieving RTW among workers with CP.

Coole et al. (2013) identified pain patients as one of the patient groups for whom work rehabilitation should be considered a priority, which contradicts the unavailability of vocational rehabilitation within the NHS (e.g. Sinclair et al., 2014; thesis' findings). Specifically, for many patients, work issues and rehabilitation are not usually combined during the NHS rehabilitation, as due to multiple competing priorities and funding constraints, vocational rehabilitation is not being perceived as 'essential' for the public healthcare system (Sinclair et al., 2014). All current participant groups pointed to issues around systemic pressures and the lack of resources as limiting vocational rehabilitation opportunities for employees with CP. Vandenbroeck et al. (2016) noted that occupational outcomes (e.g. RTW; referrals to OH) are not usually considered at primary care level, as reflected in the current findings (e.g. *Chapter Seven*). This is against the concept of work as 'good' and a health outcome (e.g. Waddell and Burton, 2006; Black, 2008). As such, an approach to translating such a message needs to be more efficient, potentially by expanding who does sick-listing.

9.5.4 De-medicalising CP and the importance of positive communication

A crucial implication from the current project for effective RTW with CP is to highlight the salutogenic message (Antonovsky, 1996) more effectively, which posits that people are 'naturally flawed' organisms, yet such flaws can (and should) be managed. Whilst such an idea arguably informed the government's Fitness to Work agenda and its focus on people's 'ability' (Wainwright et al., 2015), from the current analyses, it seems that more could be done to cascade the message allowing it to reach all relevant RTW stakeholders (particularly, employers but also employees and the wider society).

Analyses in studies two and three revealed that medicalisation of CP (including over-investigation with MRI; medicalisation of non-medical issues such as ergonomic adjustments, by initiating unnecessary OH referrals) contributes to the challenges within RTW processes for workers with CP and a perception expressed by the OHPs of doctors 'getting in the way' (*Chapter Seven*). The issue here might be two-fold, related to the (cultural) lack of understanding of CP but also to the lack of access to such knowledge via restricted access to (multidisciplinary) interventions (*Chapters Three, Six-Eight*). Thus, a public health campaign about CP and work, particularly about acceptability of RTW when one is not '100% fit' as indicated by the analyses in *Chapter Six*, could be a way to reach out to stakeholders; similar campaigns about work and musculoskeletal conditions are already happening (e.g. Versus Arthritis' partnership with PHE; Versus Arthritis, 2018).

Linked to salutogenesis, an influential definition of health as "*a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity*" (WHO, 2019, Online) highlights the interplay of subjective and social factors in one's interpretation of the state of their health. An individual's level of optimal functioning is likely to be judged by its fit, or otherwise, to society's standards and expectations thereof (Patrick, Bush and Chen, 1982). Employees in study one described stigma due to being judged due to the invisibility of their CP; equally, they judged their fitness as being 'enough' to partake in work, even if not '100% fit'. Individuals' beliefs shaped by social interactions and perceived acceptability (or otherwise) of pain and illness behaviour may be important contributors to their interactions with other stakeholders (e.g. healthcare professionals during consultations, employers during RTW, etc.) and to the biomedical inclination to over-investigate the condition. Furthermore, by reducing pain to a medical paradigm or due to miscommunication, unexplained pain may at times seem dismissed by others (Eccleston et al., 2021). Whist other conditions such as mental health issues may also be dismissed, there have been huge cultural moves not to do this in the last few years (Stuart, 2016) whereas pain may lag behind and is still not accorded the visibility and support it needs. So 'making pain visible' is a key pain specific goal to achieve to support better RTW (Eccleston et al., 2021).

How people communicate their CP and RTW experience, how articulate they are, and how others interpret these social interactions and individual messages might influence the overall outcome of an intervention. This is an important consideration in light of the emphasis placed by the current participants on empowering employees as experts during their RTW process. As language is an important aspect of socially constructed experiences (Braun and Clarke, 2013), providing a positive emphasis on CP (i.e. ‘experience’ versus ‘suffering’) can arguably have a positive psychosocial impact on employees trying to RTW. Thus, to provide a way to manage the lack of knowledge of CP (as transpired from the data analysis in *Chapters Six-Eight*) and its prognosis versus people’s need to live with pain (and to RTW, when and if appropriate), one strategy should be to consider the importance of vocabulary used at various stages of the RTW process.

Wemyss-Gorman (2018) noted a powerful potential of communication and words used by healthcare professionals to instil patients’ fear or catastrophisation, or in contrast to support their rehabilitation progress. Terms such as ‘lived experience’ highlight the embodied and embedded nature of CP (e.g. Eccleston, 2018), including acknowledgement of challenges to self-identity stemming from ‘biographical disruption’ (Bury, 1982). Dialogue among RTW stakeholders (employers, employees, members of the multidisciplinary teams) seems key to ensuring effective RTW processes. The project’s analyses and conceptual framework suggest that inter-disciplinary communication is necessary and promotes interventions that reflect the changing needs of CP sufferers. Eccleston et al. (2021) argue that stakeholders should adopt consistent terms when communicating about pain to allow it to be understood uniformly across different contexts. This is a key pain-specific point. Sickness certification framed as a social negotiation process (Wainwright et al., 2015) is another example of the importance of considering how we communicate when delivering RTW interventions for workers with CP. Lastly, adopting positive phrases when dealing with people who have CP supports the idea of self-management, as recommended by the current UK guidelines (Lee et al., 2013; Foster et al., 2018), and remains in line with the salutogenic framework mentioned earlier; see section *9.6* for a discussion of researcher reflections pertaining to the language used in the current thesis.

9.5.5 Providing 'bespoke' CP RTW interventions and patient stratification, whilst acknowledging patients' 'expertise'

Qualitative analyses here clearly show that RTW intervention process for workers with CP requires a multifocal clinical gaze (i.e. multidisciplinary, flexible perspective; e.g. Toye, Seers and Barker, 2017). This is important for the holistic approach to care. Furthermore, analyses of the current studies indicate that homogenous RTW interventions for workers with CP fall short of addressing the subjectivity of the CP experience. Therefore, a call for 'bespoke' RTW interventions for employees with CP is justified. Whilst tailored, multidisciplinary interventions could have a higher delivery cost, future productivity gains and compensation cost savings may justify their implementation.

That said, it is also important to recognise that not all workplaces are 'conventional', and thus RTW interventions should arguably be segmented and matched to the type of employer to recognise the strengths and limitations related to the type of organisation, type of work, type of sector, mode of intervention delivery, etc.. As such, the issue of 'one size won't fit all' arguably applies to multiple RTW stakeholders beyond individuals with CP. For example, approx. 50% of the workforce in Britain works form small businesses (Bevan et al., 2018). In 2015, these businesses comprised 99% of the whole of the UK's private sector (McEnhill and Steadman, 2015). As these small or medium enterprises (SMEs) vary considerably (*inter alia* in terms of their size, organisational structure) and often have limited OH provision (Bevan et al., 2018), considering the micro-structures within this type of work environment should be key to RTW approach. As such, there are likely to be trade-offs that need to be found in a RTW intervention that allow it to be both individualised and 'business-friendly'. Applying a tailored RTW intervention is an ideal scenario but with a multitude of stakeholders in the RTW process, it may be necessary to initially subdivide interventions depending on factors such as the size and resource capacity of the employer, or the type of role than an employee is in. Subsequently, any further adjustments and/or addressing nuanced needs can be facilitated through effective stakeholder communication, which has been highlighted by the thesis' findings and subsequently in the revised theoretical framework. Whilst the common goal of RTW should apply, the route to achieving this goal might have to comprise a *tailored combination* of elements pertinent to RTW depicted by the thesis' revised RTW framework.

Efforts to effectively stratify CP patients to RTW interventions should, in line with the current empirical findings and the thesis' revised conceptual framework, be linked to the idea of employees with CP as 'active' patients and experts of their condition. Furthermore, OHPs suggested that OH consultation might not be necessary for all employees and OTs/OH nurses reflected upon matching interventions based on employees' goals and their meaningful activity target. Therefore, stratification should be patient-specific rather than condition-specific (e.g. Reeve et al., 2013).

Personalised RTW interventions require all stakeholders to understand the employee's goals and motivations, as has been proposed for healthcare delivery for patients with long-term conditions (e.g. Coulter, Roberts and Dixon, 2013). Furthermore, assessing what activities patients consider as meaningful could support behaviours such as intervention adherence (Richardson, Ong and Sim, 2006). Haland Haldorsen et al.'s (2002) trial identified as part of the SLR in *Chapter Two* reported results of RTW intervention for CP workers based on their poor, medium, and good RTW prognosis and found that intensive multidisciplinary treatments are appropriate for patients with poor RTW prospects, but do not affect RTW for individuals with good prognosis. Workers' RTW prognosis was decided based upon a questionnaire about psychological and motivational factors, as well as physiotherapist's assessment. Interestingly, Richardson, Ong and Sim (2006) reported patients' views of living with CP, which the authors classified as optimistic, pessimistic, and overwhelmed with uncertainty. Patients with the latter orientation found it very difficult to plan their own future (Richardson, Ong and Sim, 2006). The authors distinguished between categorising patients' views rather than patients themselves.

From the empirical studies and the conceptual framework, the thesis argues that a form of psycho-graphic stratification (i.e. accounting for the saliency of the psychological domain of the CP model) could be used to group workers with CP and match them to various treatment intensity and mode of delivery. Based on the analyses in *Chapter Six*, employees often acquired roles of 'active', knowledge-conducting advocates of their CP condition and RTW needs, who addressed shortfalls within their healthcare, and were motivated to seek out alternatives to help them achieve RTW. Thus, the psycho-graphic stratification of workers to CP RTW treatments could be based on their behaviours and attitudes towards healthcare (e.g. Hibbard and Gilburt, 2014). Bevan (2019a) noted that Swedish psycho-graphic stratification recognises four patient types; namely, independent and engaged, worried and engaged, traditional and concerned, and vulnerable and concerned. Each of these patient groups can be characterised by different attitudes towards healthcare and would require a tailored intervention. Arguably, psycho-graphic stratification could empower employees in their healthcare, whilst understanding their desire and capacity to manage their health, and could employ technology-based interventions, if and when appropriate (Baird et al., 2018).

9.5.6 Providing a flexible compensation system for workers with CP

The project's SLR (*Chapter Two*) indicated a need for policy-makers to examine the effects of workers' compensation system on RTW. Indeed, analyses within the first study revealed employees' worries about job security and discussing their CP condition with their employers for fear of repercussions. Elsewhere, Carter and Whitworth (2017) and Litchfield (2013) noted the need to consider employee anxieties linked to the often sudden nature of changes to one's financial situation and lifestyle when out of work, including the need to navigate the benefits system. Davies et al. (2017) argued that recent reductions to job security impact on employee decisions to be signed off work, which may give others a false perception of one's health. Finally, the nature of the compensatory system matters for absenteeism (Bartys et al., 2017; Bryson and Dale-Olsen, 2019).

Linked to the above, study one's participants reflected upon feeling stigmatised due to their condition (including external perception of their over-using 'the system'), whilst healthcare professionals in studies two and three raised issues of benefits systems as de-motivating obstacles to RTW. To account for the problematic and fluctuating nature of CP (Von Korff and Miglioretti, 2005) and to address the inadequacy of the UK welfare system versus workers' needs as argued by Spasova et al. (2016), the current thesis proposes that a more flexible sick-pay provision for employees with CP should be considered. For example, extending statutory sick-pay provision beyond the current 28 weeks, and thus allowing workers with persistent CP to return to their old job even if they had been sick-listed for a greater amount of time could be beneficial in reducing pressure to RTW too soon and removing socio-economic pressures (reflected upon by employees in study one). Such strategy would also account for a greater prevalence of an ageing workforce in today's society, who are at risk of secondary complications and whose illness recovery time is often lengthened (Goodall and Evans, 2013).

Whilst longer sick-pay provision is recommended, this should be part of a flexible RTW rehabilitation plan. This should include regular contact with the employer, since long sick-leave prior to rehabilitation has been linked to non-RTW (Waddell, Burton and Main, 2003; Øyeflaten et al., 2014) and the negative psychosocial effects of long sick-leave without progress were highlighted by the participants in study one (*Chapter Six*) as well. However, continuous public sick-pay provision is important for this recommendation, since on a practical level employers' provision of extended sick-pay benefits would likely be conditional. For example, extending the term of sick-pay would likely have to mean a reduction in cost, i.e. by reducing the amount of the payable benefit, particularly to workers who could be replaced (e.g. Bryson and Dale-Olsen, 2019). From an organisational point of view, prolonged sick-leave would also be costly and put pressure on personnel resourcing to cover lost productivity. Sick-leave due to CP can also have an intermittent pattern that is difficult to accommodate within an organisational policy (Main and Shaw, 2019). There is no easy solution to this but policymakers should engage in a dialogue with the employers and employees to promote a mutually acceptable solution that holistically supports the 'getting people back into work' agenda. Whilst earlier in the thesis it was discussed how good work (and thus, RTW) is good for most of us, arguably more is needed to encourage employer investment in the field of workplace health (Bevan et al., 2018). At the same time, as suggested by Bevan (2019b), availability of incentives for employers who recognise the importance of workplace well-being should be balanced by emphasising employers' obligation to adopt such an approach (as enforced by the means of targeted regulation, utilising responsible procurement, etc.). Legal guidance could encourage organisations to promote earlier intervention during an employee's sick-leave, paired with statutory sick-pay rebate for those employers who are supportive in RTW process – these were some of the recent recommendations to be consulted by the government (Webber and Patton, 2019) and they seem relevant in the context of RTW with CP. Furthermore, many RTW policy initiatives exclude self-employed people (Bevan, 2019b), which is problematic for the healthy workforce agenda and needs urgent attention.

When return to one's regular job is not feasible due to the impact of CP on health and safety at work (e.g. Carter et al., 2013), redeployment could be enabled with a flexible benefit provision allowing an employee to trial a new vacancy whilst covered by the statutory sickness benefit. Such arrangement would enable a personalised employability process similar to the previously withdrawn Flexible New Deal (FND) (DWP, 2011), which according to the government delivered little at a very high cost to the Treasury (albeit the programme was still being developed at the time of cancellation; Vegeris et al., 2011).

Another relevant initiative comprises work trials packages (Gov.uk, undated) available as part of the Jobseekers Allowance scheme. Currently, Jobcentre Plus offers a recruitment service, which enables employers to find suitable candidates by setting up work trials (Gov.uk, undated). Claimants volunteer to take part in a work trial, which aims to verify if a given work opportunity is a good fit for an individual seeking employment. During the work trial, Jobseekers Allowance is paid, and at the end of the trial employers decide whether to employ the candidate based on their suitability for the job. Arguably, the idea behind work trials could be adopted when RTW, in particular redeployment for CP sufferers is considered, and whilst sick-pay (possibly re-framed as a work ability benefit) remains in place. Thus, a longer sick-pay giving employees with CP time to achieve readiness to RTW and/or a work trial supplemented by a benefit payment could be adopted.

Arthritis Research UK (now Versus Arthritis) funded a project on Return to Work with Individualised Supported Employment (RISE), at Warwick University (Waldron, 2018). As part of the project, flexible six-week-long placements are offered to CP sufferers to examine factors which can help people with long-term pain conditions to RTW. The RISE project has been targeted at unemployed CP sufferers. As factors related to one's risk of work disability are influenced by employment status (Waddell, Burton and Main, 2003), the concept of offering an individual-targeted, placement-based RTW intervention seems a feasible option to promote redeployment among workers on sick-leave due to CP, and it warrants further examination. Potential challenges around obtaining training providers to equip CP workers with the new sets of skills required for the new roles, and the associated costs versus benefits would need to be assessed. Furthermore, due to the problematic nature of CP, the concept of benefit sanctioning due to non-compliance (e.g. not attending a placement) applicable to FND claimants (DWP, 2011) would need to be lessened. Finally, beyond incentives for employers, implementing the proposed initiative would need to be combined with addressing the cultural problem that stigma surrounds CP.

9.5.7 Ensuring work is 'good'

Bevan et al. (2018) argued that the quality of work that people do directly affects individuals' health and well-being; specifically, non-medical factors such as a balance between job demands and resources, perceptions of fair management, positive social interaction and support at workplace are amongst factors which can lead to low levels of SA (Bevan et al., 2018). Employees in study one reflected upon these job demands and resources, and how the interplay between them impacted (the sustainability of) their RTW. Specifically, pressure to RTW, upon which excessive job demands were perpetuated by the lack of supervisory support were often reported and presented as examples of negative RTW experience (*Chapter Six*). The current thesis' empirical data suggest that employees with CP are unlikely to return to 'good' work (*Chapters Six-Eight*). Furthermore, those employees with CP who are in lower-status jobs are less likely to successfully RTW as more stressors impact on the overall quality of such jobs, in line with the *JD-R* model affecting the balance needed for Waddell and Burton's (2006) safe and accommodating work. Healthcare professionals interviewed as part of studies two and three (*Chapters Seven* and *Eight*) reflected upon the relative ease with which reasonable adjustments can be implemented upon RTW for employees in higher-status jobs (e.g. office-based) versus a more difficult outlook for those in manual roles such as factory workers.

All employees with CP in *Chapter Six* were in non-manual roles. One participant redeployed after a long sick-leave and worked in three separate p/t positions; some of those could subsequently be classed as manual jobs. In their example, flexibility of the roles and balance of demands versus resources (including job satisfaction and enjoyment) allowed RTW. Therefore, job quality should be considered within the government's RTW agenda and by the employing organisations, since without such consideration employees are unlikely to benefit from 'good' work and thus will not achieve a sustainable RTW (e.g. Bevan et al., 2018). More flexibility within some (types of) organisations regarding physical and organisational aspects of the job would be recommended and could affect CP workers' engagement, as the *JD-R* model posits (e.g. Bakker and Demerouti, 2007). Although ensuring availability of safe and accommodating work is a problematic issue to address in its totality, one way to practically address this could be to engage with employers and offer tax incentives in order to promote investment in healthy workplaces. In support, previous research found that poor psychosocial job quality has a similar and sometimes worse effect on an individual compared to unemployment (e.g. Butterworth et al., 2013).

Interestingly, the thesis' analyses show that employees with CP see work as part of the solution (for what works for RTW with CP), as do the other groups (e.g. OHPs seeing volunteering as a stepping-stone to RTW). Whether or not work is part of the solution is complex, however, since the work itself has to be 'physically and psychologically safe and appropriate' (Waddell and Burton, 2006). The analyses here found that even for employees who want to get back to work, their work is not always up to this standard. Despite the current legislation pertaining to reasonable adjustments at work, the thesis' analyses suggest that whilst employees with CP need flexible working or ergonomic changes to equipment, these are not always possible in the real world and some participants perceived employers as being unsupportive with this regard. In the area of retirement, Weyman and Roy (2017) pointed out how employers may perceive retaining employees as valuable. Organisations require the right type of workers to meet their strategic goals (Taylor et al., 2017). Aligning strategic goals with a need for businesses to be competitive may be a factor in decisions about their workforce (Weyman, Klassen, and Schröder, 2017). Arguably, employer motivations to return CP employees to work or otherwise may be linked to similar factors as those suggested for older workers and to a perpetually limited perception of work as a health outcome. Thus, a big but important policy implication here is that legislation does continue to work towards the best job design we can have, in all work settings (e.g. Taylor et al., 2017). Whilst some of the employees with CP participating in the current project mentioned they were not well supported with their RTW, Bevan (2019b) argues that we should have more legislation which would enable employers to be fully aware of and able to access training in how to support employees. Another implication of the good work for health policy agenda is the importance of the FN as something which can bridge both, with the proviso of adopting the recommendations outlined in section *9.5.2*.

It is known that, across all conditions, good work is good for health (Waddell and Burton, 2006). But specifically for CP, which as a condition is disruptive across the spectrum of emotions, identity, and function (e.g. Eccleston, 2019), the idea that the work should be good is critical. Analyses here support that engaging in work helps to restore identity for individuals in pain. However, at times pain can be occupational in nature (Verbeek, 2019), exacerbated by the work conditions as evidenced by the accounts of employees in study one. This has implications for interventions and sustainability of RTW, but also for policy as societies have to decide whether or not the diagnosis of the nature of pain matters for compensation (Verbeek, 2019; see also *section 9.5.6*). Arguably, these issues are specific to CP and would not be widely applicable to other ill-health conditions. Whilst in the UK the notion of good work advocated by seminal reports (e.g. Black, 2008) has led to focus on RTW for employees with CP, analyses here agree that the condition's subjectivity and issues around measurement, diagnosis, and pain contestation make it very challenging for stakeholders to find effective RTW interventions. That said, benefits of engaging in (good) work should drive efforts to find such strategies for all persons with CP. This is not least as improving lives of people in pain in the context of work could be a really important ergonomic issue that in combination with other kinds of support, or even alone might help, but it also links to a wider need of giving pain the gravitas it deserves as often described by the participants in the current project. In the thesis, employees and OH professionals alike linked poor support during RTW to poor understanding of CP within society. More recently, Eccleston et al. (2021) discussed the need to make pain matter, make it visible, and make it understood – issues which the sufferers of other conditions, which tend to be more visible and need more open workplace adjustment such as diabetes, trying to RTW would not perhaps need to face in the same way.

The thesis' theoretical framework suggests that the positive, salutogenic message is important during CP RTW process to emphasise workers' ability rather than the sick-role. Linked to this, Bevan et al. (2018) suggested that a multi-dimensional concept of 'work ability', related to an interaction of employee resources (including their health status) and their job demands (e.g. Wilke et al., 2015) and adopted in Scandinavia, should be considered elsewhere. Specifically, workers' strengths and capabilities (thus their ability to cope with job tasks at any given point) should inform RTW interventions. Such an approach should aid job retention, as well as productivity and employee engagement (Bevan et al., 2018; Oakman et al., 2018).

Oakman et al. (2018) noted that good health and employee engagement are key in maintaining employment. Here, the studies suggest that CP sufferers (*Chapter Six*) and healthcare professionals (*Chapters Seven*, *Eight*) feel that employers might still struggle with the approach to organise and design jobs that would embody the idea of 'good work', which could affect whether employees with CP RTW/remain at work. The current participants felt that employers should be perceptive to the individual worker's needs to recognise what constitutes 'good work' with CP. Notably, there is a need to understand employers' perspective of the current RTW processes for workers with CP (see section *9.7.1*).

9.6 Strengths and limitations of the thesis

A strength of the current thesis is linked to the fact that the RTW processes for employees with CP were examined from a multi-stakeholder perspective. Such an approach allowed for an examination of the current UK RTW processes for CP sufferers from different perspectives, including varying stakeholders' roles within the process (i.e. CP sufferers, OHPs, and OTs/OH nurses). This allowed the researcher to recognise several similarities in RTW stakeholders' perceptions of the available interventions, thus providing an opportunity to highlight mutually recognised priorities for change. Furthermore, semi-structured interview methods adopted with all RTW stakeholder groups allowed for a comparison of perspectives among the groups and various ways in which the reality of RTW experience is constructed (e.g. Foulcauldian 'power struggle' referred to earlier; Lupton, 1997). The empirical studies addressed a gap in the literature regarding stakeholders' views of RTW processes for employees with CP and assessed outcomes judged as important from the key stakeholders' perspective (as suggested by Deyo et al., 2015). Coole et al. (2015a) reported research into management and/or service delivery of interventions, and planning and/or commissioning of work rehabilitation as that of high or medium priorities, thus the project's findings related to evaluation of the current UK RTW interventions and their delivery for employees with CP address this. At the same time, further evaluation of interventions that offer a sustainable RTW among workers with CP is called for (see section *9.7*).

Literature reviews for the project were conducted in two ways, as a SLR (*Chapter Two*) and RAR (*Chapter Three*). Bhurke et al. (2015) noted a requirement from the NIHR to provide a justification for new primary studies by utilising findings from SLRs, which is the approach adopted here. The SLR and RAR were conceptualised here as tools to interrogate the literature and help formulate RQs. Although Dempster (2011) recognised SLRs as valuable tools to inform policy and practice of healthcare professionals, Prior and Hammond (2014) noted that often too narrow focus of systematic reviews renders evidence gathered via such searches unhelpful in drawing firm conclusions. Pragmatic reasons linked to the lack of funding meant that a risk of language of publication bias could not be avoided, although mixed findings have previously been reported regarding the impact of such a bias on SLRs' findings (Ganann, Ciliska and Thomas, 2010). Furthermore, Coole et al. (2015a) argued that differences in structural, social, and cultural domains may make it difficult to transfer findings from other nations to the UK (albeit some may still be transferrable), which supports the current thesis' rationale to FU the initial, systematic review with a subsequent strategy focused on identifying literature pertaining to the UK.

However, a risk of bias also relates to the current RAR method (*Chapter Three*). Whilst the search timeframe applied reflected the 'current' element of RQs 2-4, and thus was justified, this could have introduced a risk of publication bias. Furthermore, the RAR might have missed relevant evidence due to less systematic and accelerated search and data extraction strategies.

Limitations to the thesis' empirical studies pertain to their samples and recruitment methods. Arguably, recruitment methods adopted in the three empirical studies led to participants self-selecting as volunteers, thus potentially leading to an issue of systematic bias (e.g. Wainwright et al., 2013). Farmer and Lawrenson (2004) noted that volunteers tend to have similar characteristics, which in the case of the current project would include shared interest in the issues of work and CP. Soule and colleagues (2016) suggested intellectual as well as altruistic motivations that might explain why individuals participate in studies. Here, participants' motivation to share their meaningful experience (both positive and negative) and to advocate for change might have led them to volunteering to take part. A possible sampling bias could explain why all employees displayed the characteristics of 'active' patients. As the topic of research was RTW, the behaviour of returning to work seems to have been the dynamic characteristic of the study's volunteers. Different barriers to RTW may exist among patients who are less engaged in CP self-management. In addition, the majority of participants who responded to the study advert were female. Bevan (2019b) noted that one of the stressors experienced by employees with chronic musculoskeletal conditions is the need to maintain their income and it is known that job stress can cause sick-leave (Steenstra et al., 2005). It is plausible that female employees had more experience of RTW interventions because, within the general population, more women than men seek out support when psychologically distressed (Oliver et al., 2005). To address these issues a priori by recruiting non-volunteers or people with no interest in the topic of study would not be (ethically) possible in practice. Importantly, as participant groups for all three studies (i.e. CP sufferers, OHPs, and OTs/OH nurses) were recruited with no restrictions applied to their location, and descriptions of participant characteristics and their contexts have been summarised in each of the empirical chapters, this allows the thesis' findings to be assessed against readers' populations of interest (Patton, 2015). That said, the findings cannot be seen as generalised to the whole of the UK.

Originally, the project had ethical approval for recruitment of employers as the fourth stakeholder group. Although contact was made with several employers across the South West region, either via meetings in person (e.g. at NHS organisations), or through recommendations and collaborative links through researcher's University (see appendix 12 for an example of a recruitment email), despite some organisations allowing access to participants in principle, no managers or supervisors volunteered to participate in the current project. Following an assessment of the project's timeline and resources, a pragmatic decision was made to cease recruitment efforts linked to a potential study with employers as the fourth group of RTW stakeholders. However, as employers are some of the key RTW stakeholders, future studies should consider examining their views of RTW processes for workers with CP (see section *9.7.1*).

Whilst justified in the Method chapter, the omission of GPs from the current projects poses some limitations. Individuals with persistent pain comprise a substantial part of GPs' patient base and all participating stakeholders described their views of GPs in the RTW process. Therefore, that professional group's own perspective would have provided a chance for an in-depth discussion of any divergent claims that arose from the analyses.

The omission of trade unions and insurers as participants was also justified in *Chapter Five*. However, there are limitations related to this strategy. Firstly, generous protection (from employers) is rarely provided for those in manual jobs (Lewis, 2012). Furthermore, Lewis (2006) argued that the insurers often trump other stakeholders in deciding the course of a claim. The Citizens Advice Bureau estimated in the past that approximately 95% workers supported by trade union solicitors receive some form of compensation (2004, as seen in Lewis, 2012). As such, it would be beneficial to expand the pool of participants to investigate RTW processes and to include stakeholders from trade unions and the insurance system.

The first empirical study of the current project did not recruit employees with any specific CP condition – instead, CP patients were considered in the current thesis as a single, coherent target group (in line with a new ICD-11 classification of CP; IASP, 2019), which can be researched as such due to many common features of pain experience (see *Chapter One* for justification of this approach). Upon completion of the data collection and analysis, the researcher felt confident about the decision to structure participant inclusion criteria based on conceptualisation of CP as a single category, as all recruited employees identified their CP as a singular concept, beyond any specific diagnostic category such as fibromyalgia or CRPS. All current participants with CP had a subjective experience linked to their pain condition, but their language semantically referring to what it feels to have CP represented their socially constructed knowledge of CP as a concept. Thus, in the current thesis, the subjectivity of CP relates to by the project's alignment with the relativist, social constructionist orientation and its impact on the data analysis.

The sample frame for the project was employed to address the evidence gaps identified by the literature reviews. The strategy for the thesis' three empirical studies was not aimed at purposively sampling for any specific CP condition, age, or gender (for patients) nor did healthcare professionals have to have treated a patient with any specific CP condition, of any particular age or gender. This was to allow elicitation of the voices of a range of stakeholders who have actually engaged with RTW processes when people have chronic pain. Recently, Holmes et al. (2020) adopted a similar approach to sampling in a study in a highly related topic about people with pain getting back to work.

The current sampling frame was chosen due to gaps in the evidence, and did enable the RQs to be answered, in that each set of RQs related to a specific group of people (employees, OHPs and OTs/OH nurses) whose views were elicited and analysed. Critical reflection of how the sample frame affected the findings, has foregrounded how an acknowledgment of the partiality of views is really important, although also getting rich data from a predefined group was still appropriate and helpful.

Another way of approaching the problem of RTW with CP would be to adopt a multifactorial lens approach and consider it through the eyes of other key groups of stakeholders. This could also fit with the ever-changing nature of work (Calnan and Douglass, 2019). For example, perhaps it would have been useful to expand the sampling frame to include patients needing to be attached to specific types or sizes of organisations. This would have helped mediate the interpretations of the findings according to what SMEs versus large organisations may be able to accomplish in role adjustment for example. In the thesis, employees described considerable differences in the availability of adjustments, reasons for which warrant further examination. Also, other groups of stakeholders could have been considered to provide further contrast and comparison to each other's views about what would improve RTW for CP. However, the sampling frame as it is has been critically reflected upon, and partiality of the views attained, and their analysis, has been discussed

The project design also helped to answer the research questions. Interview questions used in the empirical part of the project were deliberately open since the approach was not that of a positivist orientation. The focus of the interviews was piloted and the choice to use semi-structured interviews allowed flexibility, and within the qualitative paradigm it was found to be appropriate (see *Chapter Five*). Occasionally, unexpected issues came up during the interviews, which were then incorporated into the iterative analytical processes.

A subsequent reflection relates to the interchangeable usage of terms ‘worker with CP’, ‘employee with CP’, and ‘CP sufferer’ within the current thesis. Whilst the aim was to use a term to describe a single, coherent target group of employed CP patients with experience of sick-leave and RTW, the empirical findings in *Chapter Six* introduced caveats within such approach by revealing a theme of ‘active’ patients, continuing their lives ‘despite’ CP. Individuals in pain can be seen as agents of change, pursuing health and well-being despite obstacles (Wainwright and Wainwright, 2019). An earlier study by Fisher et al. (2007) reported how CP patients use innovative strategies in response to their pain and in order to manage their occupation. Thus, upon reflection, the term ‘CP sufferer’ could be perceived as disempowering and reductionist in light of our understanding that CP is much more than a biomedical issue (e.g. Engel, 1980), albeit the term might also be seen as a reflection of ‘loss’, or the suffering ‘self’. To reflect this and to account for the subjectivity of CP experience, and in line with the current findings that empowering employers with CP during their RTW process is key (*Chapters Seven*, *Eight*), adopting phrases that empower individuals (e.g. ‘workers with a lived experience of CP’, or ‘employees living with pain’) rather than focusing on their health condition (i.e. suffering with CP) should be considered. Such an approach fits in well within the concept of salutogenesis (Antonovsky, 1996) and management of health, as described earlier in the current chapter. Thus, in future discourse accounting for such nuances is important (see also section *9.5.4*).

Data analyses processes followed the six stages of TA by Braun and Clarke (2006; 2013), which also included input from the thesis’ supervisors at the code/theme reviewing stage (see *Chapter Five*). However, as the studies were part of a doctorate, such input was limited in comparison to what could be expected during a collaborative grant-funded study. Thus, whilst efforts were made to mitigate researcher bias during the analysis process, arguably some elements of such bias might, unwittingly to the researcher, remain. Remaining reflective during the research process was a strategy employed by the researcher to reduce the impact of the interpretative framework during the analysis (Coyle, 2016).

9.6.1 Researcher reflexivity

Whilst working on the current project, the researcher considered her ethical responsibility for transparency and reducing the impact of interpretative framework during the analyses.

As such, reflections upon the researcher's life experiences versus the aim of the current research were considered. Connections between the researcher's professional interests and motivations to pursue a PhD in Occupational and Health Psychology were examined. By actively reflecting upon the above concepts, the researcher's aim was to enable participants' views to resonate clearly throughout the research process and to provide a truthful representation of their experience of CP (or helping people with this condition) and RTW paradigm, without imposing the researcher's own opinions on the topic.

The researcher had no experience of CP prior to commencing postgraduate studies. Her interest in researching health(-care) related topic stemmed back from her midwifery studies and experience of working in a hospital setting, as well as from her MSc in the Principles of Applied Neuropsychology. While undertaking the MSc, gaining research experience as a postgraduate research assistant and working on projects linked to employee well-being formed the basis for her interest in organisational psychology. Becoming aware of the scale of the CP issue began through the exploration of the literature when preparing a PhD research proposal. As the project was developing, the researcher reflected upon her epistemological perspective; the majority of her previous research projects were predominantly quantitative but the researcher acknowledged that the topic of CP required going beyond the 'numbers'. The findings from the project's SLR highlighted this too.

In the interviews, attempts were made to bracket any insights from the literature and theory, ask neutral, non-judgemental questions, and to actively listen to the participants. At times, participants' experiences were very emotive and made the challenges of living with/assessing CP very vivid. The researcher often felt she was a witness to examples of significant resilience and it increased her compassion for people who live with persistent pain and the scale of challenges they face. At the same time, the researcher empathised with the frustration of the participating healthcare professionals, which was likely increased by an implicit, socially constructed acknowledgement of their (clinical) 'expertise' (see Lupton, 1997). Adopting a 'narrator-listener' (Mathieson, 1999) style to the interview process allowed the researcher to negotiate these positions and to place emphasis on the expertise of *all* participants.

Throughout the process, the researcher positioned herself as a ‘professional’, with her professional identity conceptualised and communicated to the RTW stakeholders as being a PhD researcher rather than a student. Yet, this professional use of the ‘self’ was more salient during interactions with CP patients and the ‘student’ identity was more emphasized during interactions with the healthcare professionals. This seems in line with Trowler and Cooper (2002, p.8), who suggested that “*we engage and suspend aspects of our identity, and take on new aspects, in different contexts [...]*”.

Several discussions with the supervisors pertaining suitability of aligning the project with the social constructionist epistemology took place, with the researcher’s decision being more of a compromise than arriving at a unanimous conclusion. In addition, the researcher remained open to the possibility of changing methodology (e.g. Underwood, Satterthwait and Bartlett, 2010), which took place at several stages of the research process (e.g. following the literature searches and designing FU RQs; pragmatically-driven during data collection, e.g. postponing employer recruitment until post-doctoral research stage). Recruitment materials altered slightly on several occasions, to reflect participant feedback and researcher’s reflection based around the target audience (e.g. materials for employees with CP were designed with a lay-person in mind, whilst communication with the healthcare professionals was targeted more at an expert audience).

During the analysis, verbatim transcripts, interview recordings and field notes (appendix 15) were tools for supporting reflexivity during this (arguably subjective) process (e.g. Patton, 2015). Thus, reflexivity allowed the researcher to provide a reading of the phenomenon of RTW with CP. Notably, challenges to reflexive practice included being a novice PhD researcher, as well as practical timing constraints related to the length of the studentship; this was addressed by reflecting upon and planning opportunities for future research and learning (e.g. by planning post-doctoral activities).

9.7 Future research

9.7.1 Research with employers as stakeholders in CP RTW process

The rationale for a future study with employers as CP RTW stakeholders is supported by the findings from the thesis’ three studies. Namely, mixed views were expressed by employees with CP, OHPs, and OTs/OH nurses regarding employers’ input and support within their employees’ RTW process, yet according to the participants there is a pronounced need for such support. As investing in employee well-being at work positively affects their productivity (Bevan et al., 2018), possible enablers and barriers to the process, including with employers’ input in RTW process need to be examined. A recent report by John Lewis Partnership (2019) suggested that some employers recognise the value of OH but would welcome financial incentives (e.g. tax relief) to fund the provision of OH services. However, Werner et al. (2012) found that employers insist on workers’ full recovery before RTW; this is in line with perceptions of employers by the current participants. Yet, ‘full recovery’ expectation (or its social construction) is an obstacle to RTW that cannot be overcome for CP sufferers, but as highlighted by the current participants, it should not have to be.

Some of the OHPs in the current project reflected upon OH consultations (here, consultations with OHPs) being over-used by some of the employers; in turn, employees with CP spend time aimlessly waiting for an intervention. Instead, OHPs suggested that employers should actively manage RTW for the less complex cases, and all employees with CP should be given an option to begin RTW whilst awaiting OH consultation. Bevan et al. (2018) suggested that some line managers might not be willing to take on additional HR responsibilities. Recently, Joosen et al. (2017) reported that some managers perceive OHPs as sources of advice, if and when required, regarding RTW for workers with common mental health disorders. Managers supporting RTW for workers with CP should, according to the OHPs in study two adopt a similar approach. Shantz et al. (2013) postulated that supervisors and HR have a critical role in shaping employees’ job perceptions. However, Levack, McPherson and McNaughton (2004) argued that accommodating an employee whose productivity has been reduced by permanent modification of their work duties may seem problematic for employers; yet, this is often required to enable workers with CP to RTW. The European Agency for Safety and Health at Work’s report noted that workplace interventions are challenging to research due to heterogeneity of dynamic workplace settings (Vandenbroeck et al., 2016). A recently released draft of NICE (2019) guideline consultation pertaining to workplace health, SA, and fitness to work suggested that views of employees and employers about SA policies and RTW should be examined, which the findings from the current thesis support. Thus, previous and current findings support the rationale for future research with employers as CP RTW stakeholders. The first FU RQ arising from the current findings would be '*What are employers' perceptions of the current RTW processes for employees with CP?*'. As an enabler of employer recruitment in the research process, 'insiders' (i.e. individuals higher-up in the organisational hierarchy, who approve of the staff's engagement in the research process; e.g. Kidd, 2009) could be specifically targeted.

9.7.2 Exploring perceptions of conflict in RTW processes - research with GPs as stakeholders of RTW process for workers with CP

The current project did not include GPs as participants as previous research (e.g. on CP sick-listing) often engaged with GP population (e.g. Wainwright et al., 2015). However, tensions in the current RTW processes as revealed by the analyses provide a rationale for investigating RQs employed in the current project with the primary healthcare doctors as well (FU RQ2), to address the challenges preventing effective inter-disciplinary collaboration. To address the issue of potentially partisan participants' accounts (e.g. about GP ignorance) arising particularly from the second study in the current project, future research could usefully examine GPs' perceptions of conflict, or otherwise, within RTW processes. Researchers could (tactfully) evaluate OHPs' opinions yielded here with a sample of GPs. A project involving both professional groups simultaneously could allow a more globalised view of inter-professional concerns and their potential solutions. Furthermore, more research regarding the role of GPs in the RTW process for CP is necessary; this should consider a desired role for and by the GPs, to inform the development of helpful interventions in future. More qualitative studies with RTW stakeholders could help develop strategies to improve inter-stakeholder communication, highlighted as key by the thesis' RTW framework.

Reeve, Irving and Freeman (2013, p. 34) proposed that GPs in the UK deliver care, which can be described in at least three heterogeneous ways; "*the all-rounder GP*", "*the GP with special interest*", and "*the expert generalist*". Beyond "*the specialist-defined care across the broad range of need*", and combining consultation skills with special interests and some specialist knowledge of the former two types of GP roles, respectively, the expert generalists adopt interpretive practice and address individual-centred needs (Reeve, Irving and Freeman, 2013, p. 34). Reeve et al. (2013) argued for the expert generalist care as the preferred model of GP care, due to its dynamic, explorative and interpretive approach to medicine and individual experience, as well as recognition of "heal*th as a resource for living and not an end in itself*" (p. 2). Such an approach is aligned with the salutogenic orientation described earlier, but as based on empirical findings here (particularly, from OHPs) it seems lacking from the current RTW processes; potential mechanisms behind such circumstances should be explored (FU RQ3).

9.7.3 Exploring barriers and enablers of OTs' input within RTW process and ethnographic tracking approach

Results reported here suggest that input from OTs is desirable/needed (study three) and useful (study one and three), but hardly utilised within the current RTW processes for workers with CP. Furthermore, workplace-oriented rehabilitation was found as an important part of CP RTW rehabilitation (literature review and empirical studies) and an important part of an OT's role; to improve RTW process, future studies should explore possible reasons behind the perceived lack of presence of the OT professionals within the current CP RTW approach (FU RQ4).

In future, it would also be useful to conduct ethnographic tracking involving OH doctor-employee, OT/OH advisor-employee, and employer-employee dyads to gain further understanding of the intricacies of the RTW process and to triangulate yielded findings. Pragmatically, due to the pre-set time and funding constrains pertinent to the current project ethnographic tracking research design was not possible; however, the researcher is considering such a study as a post-doctoral research project. Importantly, previous studies (e.g. in OH - Johnson et al., 2008) reported difficulties pertaining to recruitment of employers as study participants; this suggests that future studies should consider why this important group of stakeholders might be reluctant to participate in research (FU RQ5) and to address any issues which might arise as a result of such investigation.

9.7.4 Assessing RTW interventions

Overall, there was limited evidence pertaining to RTW and CP, as identified as part of the literature search for the current thesis; studies did not meet the inclusion criteria for the SLR (*Chapter Two*), or were lacking in the UK context (*Chapter Three).* NICE (2019) highlighted the lack of UK evidence regarding effective strategies to support RTW among people with long-term SA (lasting longer than 4 weeks) after the thesis' literature reviews have been conducted and updated. Those findings support the results yielded from the SLR and RAR. Sullivan and Hyman (2014) argued that it is plausible that RTW does not appear as an outcome measure due to a limited number of participants returning to work. Interestingly, OHPs and OTs/OH nurses who participated in the thesis' empirical studies reported that no FU of their clients (i.e. workers with CP) takes place, thus a true evaluation of intervention success and assessment of which workers with CP achieve sustainable RTW is largely absent. This is problematic from the point of view of assessing what works for RTW when people have CP.

Earlier, the current chapter discussed that there is a need to adopt stepped-care and bespoke interventions to promote RTW among employees with CP. However, from analyses reported here it remains unclear how long should be deemed sufficient for each segment of CP patients, although co-ordinated multidisciplinary efforts could trigger upstreaming of healthcare and between-step progression. Notably, future research should investigate timeframes required for effective RTW interventions for workers with CP and/or feasibility of such a concept (FU RQ6).

Project's analyses indicate that homogenous RTW interventions for workers with CP fall short of addressing the subjectivity of the CP experience. Therefore, a call for 'bespoke' RTW interventions for employees with CP is justified. The Faculty of Pain Medicine (FAPM; 2019) issued guidance regarding commonly used outcome measures for pain patients in the UK; within the document, a number of questionnaires and scales have been recommended for use as informative rather than diagnostic tools. Together with some benefits of employing the proposed inventories (e.g. validity of constructs measured; the ease of use), there are many challenges. For example, it has been noted that numerical and VAS scales tend to be unidimensional in the constructs they refer to, thus full evaluation of multidimensional pain experience using such scales is not possible (FAPM, 2019). The current analyses were linked to themes around people's lives that defy clear categorisation (*Chapter Six*) and require bespoke approaches to interventions (*Chapter Seven*). The project's SLR revealed heterogeneity (e.g. length of SA; occupation type) among CP patients, which makes implementation of uniform RTW interventions problematic and their outcomes of limited success. Arguably, standardising how we measure CP in trials measuring intervention effectiveness could reduce the variability of such results. However, CP experience conceptualised here as wrought with individualised nuance, renders this idea problematic.

Generalising outcomes is, arguably, a mis-judged strategy. Yet, incorporating (social) context and experience factors within scale-based assessment is (at the very least) challenging. In addition, questionnaire-based assessment relies on individuals' recall ability and capacity to differentiate various types of pain experience (Corbett et al., 2019). Thus, the thesis argues that the above examples of inventories may be helpful and effective as tools to evaluate progress of an intervention in terms of a degree of change in patient's pain, but individualised, patient-led goal-setting and goal achievement is a better 'measurement' of treatment effect (here, return to a meaningful activity post-intervention). The revised conceptual framework accounts for this by highlighting the need for multidisciplinary team members to 'listen' to expert-patients and respond in a dynamic way (e.g. see the interaction of the 'active patient' and 'multidisciplinary' diagram elements in Figure 8).

Furthermore, the thesis suggests that communication and co-ordinated rehabilitation efforts are some of the factors affecting RTW efforts, thus strategies to promote integrated intervention delivery should perhaps be of more focus to researchers (e.g. Vandenbroeck et al., 2016; FU RQ7), rather than targeting specific CP conditions. In addition, to test theoretical plausibility of 'return to an occupation' (Figure 8), a study of volunteering as an occupational outcome of RTW intervention for workers with CP would be recommended (FU RQ8), in line with the meaningful occupation perspective (e.g. Clark et al., 1991).

9.7.5 Moving the research forward

For progress to take place, when conducting future research we should emphasise the benefit that the research brings to the policymakers (e.g. Wainwright and Eccleston, 2019). If more controlled studies are to be considered, access to and participant waiting times before the start of interventions have to be optimised, and interventions designed with manuals that allow replication. Incorporating better collaboration strategies between the various stakeholders in the RTW process is key. At the same time, an agreement on what constitutes best evidence cannot be limited to large, controlled studies as CP RTW interventions have to address an individual employee’s circumstances and priorities, and most pertinently – their preferred, meaningful occupation. As such, a flexible approach from RTW stakeholders in terms of research and policy is required. The value of qualitative work such as the empirical studies in the current thesis should be emphasised more clearly and utilised in the RTW policy-making process.

We should also consider a better definition of RTW and ‘the workplace’ to help improve our understanding of the relationship between CP and work. The nature of a ‘traditional’ workplace is changing, highlighted most recently by the unprecedented events linked to the Covid-19 pandemic and a shift to working from home (Bevan, 2020). Arguably, there is potential to utilise some of those forced changes into an overall positive development, adopting the flexible and more autonomous working pattern embraced during the pandemic crisis to RTW processes for employees with persistent pain. At the same time, the impact of economic challenges on workplaces, the subsequent changes within those, and the socially constructed narrative around flexible and home working will need to be explored.

9.8 Conclusions

The thesis explored RTW processes for workers with CP, with an aim to elucidate what is an effective approach promoting RTW among UK employees. From the literature and empirical studies, it transpired that the current RTW interventions should be multidisciplinary, individual-focused, and comprise vocational elements, with provision of support (e.g. supervisory; flexible RTW; FU) that acknowledges CP patients’ heterogeneity and promotes their expertise. However, the overall approach to delivering RTW interventions seems fragmented, crippled by the shortage of resources, and thus elements of interventions identified as crucial for RTW with CP (e.g. multidisciplinary care; vocational rehabilitation) are not being implemented effectively, if at all.

In order to promote better RTW outcomes, stakeholders' current approach to RTW (e.g. giving low priority to vocational rehabilitation; applying pressure on employees to RTW too soon) and the relevant programmes may need to be reformed, expanded or otherwise improved. The thesis' theoretical framework suggests that a successful RTW strategy for workers with CP should consider active roles of patients, their need for support, and flexible approach to tertiary interventions and compensation arrangements. Barriers and enablers linked to the concepts of inter-stakeholder communication and perceived conflict within the multidisciplinary teams are the other, key facets of the proposed CP RTW theory. Importantly, accepting return to a meaningful occupation, beyond paid employment should be recognised as a valid outcome of RTW interventions for employees with CP, since RTW might not be appropriate for everyone. Importantly, the nature of CP means that there are caveats to what people in pain need and how they are being perceived versus the sufferers of other conditions. Suggestions for improving practice and future research whilst considering issues specific to CP, including the need for pain to be given the gravitas it deserves, have been offered. Suggestions for improving practice and future research have been offered. These include extending who does sick-listing for employees with CP and studying extended RTW stakeholder groups (e.g. employers, GPs) to examine the FU RQs arising from the current work.

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Appendix 1. Letter from the Joint Health and Work Unit

IFF Research

The Work and Health Unit, a joint unit between the Department for Work and Pensions and the Department for Health and Social Care, commissioned IFF Research, a private social research company, to investigate the current state of occupational health provision in the UK. The first stage of the project consisted of a literature review and a small number of 'expert interviews' with academics and professionals with an understanding of the field. Elaine Wainwright and her PhD student Paula Wegrzynek participated in one of the initial expert interviews, as well as providing several articles which fed into the literature review, and together made a significant contribution to informing the development of the later stages of the project.

IFF Research

Public | Page 1 of 1

Appendix 2. Systematic literature review – search strategy

pain AND (chronic OR musculoskeletal OR musculoskeletal chest OR general musculoskeletal OR back OR LBP OR neck OR sciatica OR upper limb OR shoulder OR hand OR extremit* OR lower limb OR hip OR ankle OR foot OR knee OR elbow OR arthritis OR osteoarthritis OR inflammatory arthritis OR rheumatism OR fibromyalgia OR ankylosing spondylitis) AND (intervention* OR individual intervention* OR therap* OR (psycholog* intervention* OR psychotherap* OR cognitive OR CBT OR behavior* OR behaviour* OR psycholog*) OR rehabilitation) AND (employee* OR worker*) AND (sick* OR absence OR sickness absence OR sick* leave OR sick-listed OR incapacity OR work OR workplace OR job OR occupational OR return* to work OR RTW) AND (randomised OR randomized OR controlled trial* OR clinical trial* OR RCT)

Appendix 3. Updates to PROSPERO protocol (CRD42016048822)

13/10/2016

- Focus on evaluating evidence from RCTs only at this stage to ensure achievable scope

7/11/2016

- Clarification: Google ‘citations’ checked = first 10 pages checked

30/08/2017

- Inter-rater reliability statistic changed from Fleiss Kappa to Cohen’s Kappa
- Cost-effectiveness data omitted
- sick-leave re-occurrence secondary outcome omitted

Appendix 4. Systematic literature review – list of rejected papers and reasons for rejection

Article	PW	EW	JR
REFERENCES FROM THE ORIGINAL SEARCH OF THE DATABASES			
1) 143. Aas and Skarpass (2012)	**Reject** – not RCT, commentary	Agreed	
2) 149. Aghilinejad et al. (2014)	**Reject** – not on RTW as per my inclusion criteria; workers on sick-leave excluded; prevention of pain	Agreed	
3) 150. Aghilinejad et al. (2015)	**Reject** – not on RTW as per my inclusion criteria; 'active workers' not on sick-leave so not /rtw; decreasing prevalence of pain	Agreed	
4) 153. Almeida et al. (2016)	**Reject** – ergonomic intervention aimed at pain reduction but no indication that it's CP; not on RTW as per my inclusion criteria;	Agreed	
5) 160. Andersen et al. (2012)	**Reject** – pps with **AND** without pain (total 449, **256 with pain**), those with could be classed as **CP** as ≥3 on pain scale often indicating myofascial syndrome (67%, see authors' incl. criteria); pps not on sick-leave, does not include RTW as OM, reports DASH rating	Agreed	
6) 162. Andersen et al. (2012)	**Reject** – although CP according to data at baseline, it is not RTW	Agreed	
7) 163. Andersen et al. (2008)	**Reject** –chronic **OR** frequent pain; not RTW	Agreed	
8) 165. Andersen et al. (2010)	**Reject** –not RTW	Agreed	
9) 167. Andersen et al. (2012)	**Reject** –pps with **and without pain, episodic pain**; not RTW (assessed pain disability/DASH)	Agreed	

10) 172. Andersen et al. (2015)	**Reject** –not RTW but sickness absence prevention, sickness absence AFTER the intervention; at baseline max sick-leave 1x >30days	Agreed	
11) 174. Andersen et al. (2014)	**Reject** –not RTW; OM change in pain, muscle strength, and adherence etc.	Agreed	
12) 175. Andersen et al. (2013)	**Reject** –not RTW	Agreed	
13) 182. Anema et al. (2007) rejected - confirmed 14/12/2016	**Reject** – subacute LBP, sick-leave duration 2-6 weeks and >8weeks for the second intervention, however 84 out of 196 workers recovered before 8 weeks, thus not CP	Agreed IF if specifically says subacute LBP in the text. **Otherwise, it is hard to tell if CP or not – as someone can have fluctuating CP and still "recover" enough to go back to work but still be a CP patient. This caveat applies to a lot of the articles so they will need to be read really carefully to see if CP or Non CP population. You could say you are being pragmatic and taking time of SL as indication of CP ie taking 3 mo or more of SL as indicative of CP → PW 'subacute' in abstract and discussion**	
14) 183. Anema et al. (2003)	**Reject** – **not RCT (quali and quant)** not the	But have you got the main	

rejected 13/03.17 not RCT	right Oms, **evaluation of RCT** PE program/from a perspective of process implementation and satisfaction rating	RCT paper to which this paper refers? THat needs to be assessed for I/e → **PW this is a pilot study as a part of a RCT; based on Loisel et al.**	
15) 187. Atlas et al. (2010)	**Reject** – surgery vs non-operative TAU; not all pps randomised, included pps with symptoms at least 6 weeks but at baseline approx. half with current episode's duration ,3mths; OM=work and disability status	Agreed	
16) 193. Bakhtiar et al. (2002)	**Reject** – cohort study, not RCT (as seen in Williams et al., 2009)	Agreed	
17) 196. Barene et al. (2014)	**Reject** – not RTW	Agreed	
18) 209. Bergbom et al. (2014) rejected - - confirmed 14/12/2016	**Reject** – pps 'at risk' of disability, recruited from their workplace so not currently on sick-leave=not RTW	But your PICU says ppts need experience of being signed off for 4 weeks…can you say for sure that these ppts have not got this experience? EW -after our 141216 meeting, we agreed to exclude - **this form does not reflect the changes we made in that meeting**	
19) 211. Bernaards et al. (2007)	**Reject** – CP and recent pain, but not RTW (OM disability at work and healthcare usage, but not on sick-leave prior to the intervention)	Agreed (also this is good in that in my other review we did have to include this, so it shows	

		an aspect of how our reviews are different)	
20) 212. Bernaards et al. (2008)	**Reject** – not RTW; pps currently working at least 50% of their contracted hours; OM included posture and work stress	Agreed	
21) 215. Bertozzi et al. (2015)	**Reject** – pain at least 3 months but pps not on sick-leave thus not RTW, OMs included self-reported disability questionnaires	Agreed	
22) 219. Bisset et al. (2007)	**Reject** – data from two RCTs being analysed, not RTW; wait-and-see vs corticosteroids vs physio; RTW not as OM	Agreed	
23) 222. Blomberg et al. (1992) **EMAIL AUTHORS** **[3 week reply deadline]→22/12/16** **non-reply** **REJECTED 29/01/17**	**Reject** – subacute pain ≤3mths (so mild CP included), but low rates of sick-leave in the last 2 yrs at baseline no email reply	Can you work out who the CP of 3 months are? If so then we should include. If not, then reject OR save to create special table of studies for whom certain criteria (here duration) could not be teased out	
24) 230. Borges et al. (2014)	**Reject** – not RTW; CP (mean 4.4 years) but average 'removal days' was 2.4	Agreed	
25) 231. Borges et al. (2012)	**Reject** – CP (6mths-25years) but not RTW	Agreed	
26) 253. Bültmann et al. (2009) **EMAIL AUTHORS** **[3 week reply deadline]→22/12/16** **no reply** **REJECTED 29/01/17**	**Discuss** – MSD (duration of pain?), sick-leave 4-12 weeks	If it does not say pain duration, then we might have to include even if in separate table of studies for whom duration was unclear	**Reject** – doesn't say how long they might have had pain. Back pain – could have picked something up wrong?!?

27) 272. Christensen et al. (2011)	**Reject** – not RTW; OM mention pain but mostly related to weight loss	Agreed	
28) 278. Cole (1998)	**Reject** – not RCT (although effectiveness of intervention found) – full text via inter-library loan but access denied since, could request again	If not RCT, then safe to reject	
29) 282. Coole et al. (2013) rejected during a meeting with EW to discuss ROB (reading week) EMAILED THE AUTHORS **→22/12/16→reply received 3/01/17: "Thank you for your email and your interest in the study. Unfortunately I am unable to provide the detail of data you require. I have attached below the occupational outcomes at six months for the groups, although this data was not obtainable for two participants in the control group as the information was collected by telephone and it was not possible to contact them."**	**Discuss/Reject** – Pps had LBP >6weeks but some did not take up intervention until 5 moths post randomisation, and NOT ALL on sick-leave at baseline	Agreed to reject IF (as per our supervision meeting on 14th Dec 2016, you cannot distinguish between those on and not on SL at baseline AND results (and also that you email authors and they do not have such results ready to give you) **→PW reject as not enough detail in author's response??**	
30) 283. Cooper et al. (1998)	**Reject** – not RTW, excluded if longer than 5 weeks off – full text via inter-library loan but access denied since, could request again	Agreed to reject	
31) 297. Dahl et al. (2004)	**Reject** – long-term symptoms BUT excluded pps on long-term sick-leave (>20days)	Agreed	

32) 317. del Pozo Cruz et al. (2013) **rejected 13/03/17 sub-acute pain**	**Reject** – excluded chronic back pain → **this is on subacute pain**	But if ppts have other types of CP then include if fits other PICO (as protocol is about all CP not just back pain)	
33) 318. del Pozo Cruz et al. (2013)	**Reject** – subacute pain, not RTW outcome	Agreed	
34) 319. del Pozo Cruz et al. (2012)	**Reject** – prevention of chronicity, CP excluded	Agreed	
35) 321. del Pozo Cruz et al. (2012)	**Reject** – excluded CP	Agreed	
36) 323. Dellve et al. (2011)	**Reject** – not RTW but rather 'work ability index'	Agreed	
37) 324. Denis et al. (2012)	**Reject** – acute pain <3mths, LBP chronification prevention	Agreed	
38) 325. Derebery et al. (2009)	**Reject** – time from injury in days 16.6-27.8, not RTW, RTW not an OM, CP?	Agreed	
39) 333. Doda et al. (2015) – paper copy held	**Reject** – preventative	Agreed if you meant ppts not on SL by preventative	
40) 335. Donaldson et al. (1993)	**Reject** – prevention program	Agreed	
41) 336. Donchin et al. (1990)	**Reject** – not RTW	Agreed	
42) 339. Driessen et al. (2011)	**Reject** – preventative, reduction of symptoms but excluded sick-leave >4weeks in the last 3 months	Agreed if you meant ppts not on SL by preventative	
43) 345. Dropkin et al. (2015)	**Reject** – length of pain at baseline is chronic for some of the pps but RTW not OM, short sick-leave, secondary prevention	Agreed	
44) 346. Du Bois and Donceel (2012) **EMAIL AUTHORS** **[3 week reply deadline]** **→22/12/16** **no reply→ rejected 29/01/17**	**Discuss** – subacute LBP, included sickness claims reported during a 3-month period	**Include** as 16 wks – CP Might need to change age limit to 16 as there are a few here starting at 16	**Reject** – how long have they had pain for?
45) 352. Eijsden et al. (2009)	**Reject** – RTW not OM	Agreed	

46) 353. Eijsden et al. (2008)	**Reject** – symptoms <3mths, RTW not OM	Agreed	
47) 364. Feuerstein et al. (2004)	**Reject** – experience of pain but no diagnosis, RTW not OM	Agreed	
48) 382. Gatty (2004)	**Reject** – prevention of work injury, not RTW	Agreed	
49) 394. Gram et al. (2012)	**Reject** – short sick-leave at baseline, used WAI as OM – do not think I can operationalise this as RTW	Agreed	
50) 395. Gram et al. (2014)	**Reject** – not RTW	Agreed	
51) 402. Gross et al. (2014)	**Discuss/ Reject** – in abstract referred to as subacute pain (median 67 days), baseline data suggest longer period since 'accident'; FCE assessment intervention as a component of a rehabilitation program – not a standalone intervention, RTW proxy OM supplied (a prediction of)	Agreed	
52) 415. Hagberg et al. (2000) **EMAIL AUTHORS** **[3 week reply deadline]** **→22/12/16** **no reply→ rejected** **29/01/17**	**Reject** – pain ≥3mths BUT sickness absence not more than 90 days *in the last 6 mths* and ¼ pps on a 3-week sick-leave prior to the intervention, so not RTW	**Possibly include** as only ¼ on SL Can you work out who the ¾ are? If so then we should include. If not, we could reject although I am a bit worried looking at your PICU that we said ppts who have experience of 4 wk or more SL...we did not say if they should be on SL or not right when the study is being done? OR save to create special	

		table of studies for whom certain criteria (here sl) could not be teased out	
53) 417. Hagen et al. (2000) **EMAIL AUTHORS** **[3 week reply deadline]** **→22/12/16** **no reply→ rejected 29/01/17**	**Reject/ Discuss [could email the authors to ask for a breakdown of data]** – subacute pain, pps on sick-leave 8-12weeks [follow up reports RTW]	**Yes to emailing authors**	
54) 420. Hamberg-van Reenen et al. (2009)	**Reject** – excluded workers with frequent pain in last 12 months, not RTW	Agreed	
55) 432. Hazard et al. (2000) rejected 28/01/17	**Reject** – not CP; pps were those with back pain 11 days post-injury	Rejected 18/01	
56) 433. Hazard et al. (1997)	**Reject** – acute pain, preventative	Agreed	
57) 434. He et al. (2005)	**Reject** – not RTW	Agreed	
58) 439. Helmhout et al. (2004)	**Reject** – not RTW	Agreed	
59) 440. Helmhout et al. (2008)	**Reject** – not RTW	Agreed	
60) 445. Hess et al. (2004)	**Reject** – not RCT	Agreed	
61) 446. Heuvel et al. (2003) EMAILED THE AUTHORS **→22/12/16** **no reply→ rejected 29/01/17**	**Reject** – pps mostly working, so not RTW	Agreed to reject IF (as per our supervision meeting on 14th Dec 2016, you cannot distinguish between those working and those not in baseline AND results (and also that you email authors and they do not have such results ready to give you)	

62) 448. Heymans et al. (2006)	**Discuss** /**Reject** – subacute pain, sick-listed 3-6 weeks	Agreed	
63) 451. Hlobil et al. (2005) EMAILED THE AUTHORS →22/12/16 **no reply→ rejected 29/01/17**	**Discuss** – nonspecific LBP pain for at least 4 weeks thus CP not officially excluded; pps with full or partial sick-leave **→ it says 'sub-acute' pain in Conclusions; also SL at least 1 day thus too short**	I think include as pts are on some kind of SL and we did not say in protocol it had to be full SL as opposed to partial • at least, include if you can work out results (or authors send you) for CP folk	
64) 452. Hlobil et al. (2007) **rejected as follow-up from the 451 (sub-acute pain)**	**Reject** – from the economic evaluation angle; subsequent analysis of another article; nonspecific LBP ≥4weeks no email reply - see above	Need to see original RCT (Hlobil et al 2005?) and decide if to I or E that one	
65) 458. van den Hout et al. (2003) EMAIL AUTHORS **[3 week reply deadline] →22/12/16** **no reply→ rejected 29/01/17**	**Include**/**Discuss** – inclusion LBP>6weeks and pps had the current pain or 5 years (median; 0.5-25yrs), CP episode (>12weeks) in 67% cases	Can you work out who the people with different durations are re baseline, results etc If so then we should include. If not, then reject OR save to create special table of studies for whom certain criteria (here duration) could not be teased out	**Include**, if you can weed out the results for those with greater than 3 months.

66) 461. Hurwitz et al. (2002)	**Reject** – 45% pps in pain <3mths, no RTW outcomes	Agreed	
67) 463. Hutting et al. (2015)	**Reject** – does not mention if pps had experience of sick-leave, thus secondary (?) intervention	Agreed	
68) 465. Hutting et al. (2015)	**Reject** – supplement/abstract only/not RCT	Agreed but need to assess original RCT -I guess the article above?	
69) 469. IJzelenberg et al. (2007)	**Reject** – prevention thus secondary intervention	Agreed	
70) 470. Indahl et al. (1998)	**Reject** – follow-up; subchronic pain (4-12 weeks)	Agreed	
71) 473. Jakobsen et al. (2015)	**Reject** – nothing about RTW, some CP patients in a subgroup	Agreed	
72) 476. Jaromi et al. (2012)	**Reject** – nothing about RTW or being sick-listed	Agreed	
73) 478. Jay et al. (2014)	**Reject** – nothing on CP or RTW	Agreed	
74) 479. Jellema et al. (2008)	**Reject** – not on RTW; on the benefits/wearableness of lumbar support	Agreed	
75) 480. Jensen et al. (2011) rejected - confirmed 14/12/2016	**Reject** – pps sick-listed 4-12weeks (3-16weeks), so subacute; age ***16***-60	Not sure what you mean 4-12 AND 3-16 weeks?? Ah - I see that the baseline divides ppts up by 1-3, 4-6 and over 6 mo. In that case, can you distinguish in the results between those who were 3 or more mo on SL?	**Reject** – age 16. Although it doesn't say if any actually were 16, cant include just in case.
76) 481. Jensen et al. (2013)	**Reject** – cost-effectiveness perspective	Agreed	
77) 484. Jensen et al. (2012)	**Reject** – FOLLOW UP OF Jensen et al. (2011);	Not sure what you mean 4-12	**Reject** – 16.

rejected - confirmed 14/12/2016	pps sick-listed 4-12weeks (3-16weeks), so subacute; age ***16***-60	AND 3-16 weeks?? Ah - I see that the baseline divides ppts up by 1-3, 4-6 and over 6 mo. In that case, can you distinguish in the results between those who were 3 or more mo on SL?	
78) 486. Jensen et al. (1997) **EMAIL AUTHORS** **[3 week reply deadline] →22/12/16 & 23/12/16 no reply→ rejected 29/01/17**	**Include/Discuss** – Pps with CP, sick-listed 1-12mths; can the outcome measure of sick-leave apply?	I think OM is OK so **include**	**Reject** – table 1 says that mean days (SD) is 73 (49) – some would be as little as 24 days therefore. As such unsure whether participants will have had pain for at least 3 months.
79) 487. Jensen et al. (2006)	**Reject** – prevention and not RTW	Agreed	
80) 495. Kaplansky et al. (2006)	**Reject** – not RCT	Agreed	
81) 498. Karjalainen et al. (2004)	**Reject** – not CP (less than 3 months)		**agreed.**
82) 505. Ketola et al. (2002)	**Reject** – not RTW &CP		**agreed**
83) 509. King et al. (2013)	**Reject** – preventative, not RTW &CP		**agreed**
84) 528. Lau et al. (2002)	**Reject** – not workers, all pps unemployed		**agreed**
85) 533. Lengsfeld et al. (2007)	**Reject** –not RTW		**agreed**
86) 535. Levanon et al. (2012)	**Reject** – not RTW&CP		**agreed**
87) 536. Levoska et al. (1993)	**Reject** – pps not on SL (p.426) thus not RTW intervention		**wait and see** **full-text received on 6/01/2017 agreed with JR to reject**

88) 538. Li et al. (2006) **See if reporting results in two tables etc., then include…** **rejected** - confirmed 14/12/2016 and 6/01/2017	**Reject** – pps on long-term sick-leave due to musculoskeletal injuries, however RTW not an outcome measure, psychosocial factors measured/readiness to work but not the actual RTW	But your prospero talks about including psychoscocial factors?	wait and see - 6/01/17 **reject** as articles have to include primary outcome and secondary of poss
89) 539. Lidegaard et al. (2013)	**Reject** – not RTW		agreed
90) 540. Lie et al. (2008) Analysis of 417, so check that too **→22/12/16 emailed the authors of 417.** **no reply→ rejected 29/01/17**	**Discuss** – statistical analysis of RCT's data (417. Hagen et al., 2000 – rejected as subacute pain, sick-listed 8-12 weeks) on the effect of intervention on the state of sick-listing and RTW	**Include plus orig RCT too**	**Reject?** Not necessarily chronic – doesn't say so. **waiting for response**
91) 545. Lindstrom et al. (1992)	**Reject** – subacute pain ≤6weeks		**agreed.**
92) 548. Linton et al. (2016)	**Reject** – 'elevated risk of developing CP' but not yet CP		**agreed**
93) 549. Linton et al. (2005) rejected - confirmed 14/12/2016	**Reject** – acute pain, preventing chronicity	**Agreed**	agreed
94) 550. Linton and Ryberg (2001)	**Reject** – pps with sick-leave of >30days were excluded		agreed
95) 552. Loisel et al. (1997) rejected during meeting with EW to discuss ROB (reading week) **EMAILED P. LOISEL via Researchgate ON 29/01/2017 → 1 week reply deadline**	**Reject** – subacute pain, pps with sick-leave of >4weeks but less than 3 months, so pain could be just that long		**IS IT WORTH CHECKING THIS WITH THE AUTHORS??**
96) 554. Loisel et al. (1994) rejected - confirmed 14/12/2016	**Reject** – reports on results of a pilot study for the Sherbrooke model; RTW of long-term pain, sick-listed >4 weeks; BUT Loisel et	Exclude if also subacute pain	**Reject** – seems to suggest <3 months pain

	al. (1997) specifies subacute pain <3mths		
97) 563. Ludewig and Borstad (2003)	**Reject** – not RTW		**AGREED**
98) 566. Lundblad et al. (1999)	**Reject** – pain complaints on average 4.4-4.6years but pps not on long-term sick-leave (11.5-15.3days)		**agreed**
99) 572. Malmivaara et al. (1995)	**Reject** –acute pain lasting no more than 3 weeks		**agreed**
100) 574. Marchand et al. (2015) ->Myhre et al. (2014) taken from here	**Reject** – the only indication of CP is in the discussion where the authors say as it was multi-sited it's common in CP; fear avoidance influence rather than RTW OM		**agreed**
101) 579. Martin et al. (2003)	**Reject** – not RTW		**agreed**
102) 584. Mattila et al. (2004)	**Reject** – hypertension pps, not RTW		**agreed**
103) 585. Maul et al. (2005)	**Reject** –CP described here as >30days, [included gender differences in sick-leave]; not RTW		**agreed**
104) 596. Meira (2013)	**Reject** – not RTW [the suthor mentions such intension in conclusion]		**agreed**
105) 603. Mitchell and Carmen (1990)	**Reject** – acute soft tissue&back injury		agreed
106) 609. Mongini et al. (2008)	**Reject** – not RCT		agreed
107) 610. Mongini et al. (2012)	**Reject** – not RTW		agreed
108) 611. Mongini et al. (2009)	**Reject** – not RTW		agreed
109) 612. Mongini et al. (2010)	**Reject** – not RTW		agreed
110) 615. Moreira-Silva et al. (2014)	**Reject** – not RTW		agreed
111) 621. Murtezani et al. (2011)	**Reject** – not RTW, aerobics improves symptoms		agreed
112) 625. Nelson et al. (1995)	**Reject** – age ***14***-65		agreed

113) 630. Nystuen and Hagen (2006) rejected - confirmed 06/01/2017 EMAIL AUTHORS [3 week reply deadline] →22/12/16 →reply received 22/12/2016, but no data available/file destroyed. →CP included but not specified numbers at baseline (could include L02, L03 back; L84, L88 arthritis); excluded infections/osteopathies (L70), sprains/strains (L77-79), dislocations (L80-82), fractures (L72-76), malignant neoplasm (L71)	**Discuss** – unsure if it's CP (even with the ICPC criteria provided) **→YES, it includes CP; see notes**; sick-leave >7weeks	This is one issue (you need to find the precise ICPC definition, which they only reference but do not state). The bigger issue is that they study both MSD and Psych disorders – they do differentiate these at baseline but do they in the results? If so, keep and if not, may need to reject or put in special table for studies for whom it was not possible to disentangle CP patients	**Reject** (unsure of length of pain) 6/01/17 **reject**
114) 631. Nystuen and Hagen (2003) rejected 6/01/17 EMAIL AUTHORS [3 week reply deadline] →22/12/16 →reply received 22/12/2016, but no data available/file destroyed. Check ICPC →as above 630.	**Discuss** – unsure if it's CP (even with the ICPC criteria provided) **→YES, it includes CP - see notes**; sick-leave >7weeks	Exactly as above 630.	**Reject** (unsure of length of pain) 6/01/17 **reject**
115) 634. Odeen et al. (2013)	**Reject** – prevention of LBP, acute pain, sick-leave due to 'any diagnosis', not RTW&CP		**agreed**
116) 638. Ohlund et al. (1996)	**Reject** – subacute pain		**agreed**
117) 640. Oland and Tveiten (1990)	**Include** – CP, sick-leave ≤3 months; a thought: Is this trial randomised? unclear	**Agreed**	agreed

included - confirmed 14/12/2016 should reject as non-RCT			
118) 643. Oleske et al. (2007)	**Reject** – 'episode of LBP'- pps within 8 weeks from injury diagnosis thus not CP, also workers not on sick-leave so not RTW		agreed
119) 648. Paatelma et al. (2008)	**Reject** – on CP but not RTW		agreed
120) 651. Paquette (2008)	**Reject** – not RCT		agreed
121) 673. Poppel et al. (1998)	**Reject** – not CP, not on sick-leave long enough, not RTW OM		agreed
122) 678. Rantonen et al. (2014)	**Reject** – sick-leave <4weeks, 'mild pain'≥2weeks		agreed
123) 680. Rantonen et al. (2012)	**Reject** – inclusion criteria less stringent => pain>2weeks & sickness absence 2xin the last 12 months but no min. no. of days; preventing CP		agreed
124) 683. Rasmussen et al. (2015)	**Reject** –excluded long-term sickness absence [>2weeks]		agreed
125) 684. Rasmussen et al. (2016)	**Reject** – not on RTW		agreed
126) 687. Rasotto et al. (2015)	**Reject** – not RTW		agreed
127) 690. Ree et al. (2016)	**Reject** – not RTW, shorter sick-leave		agreed
128) 701. Roer et al. (2008)	**Reject** – sick-leave but not RTW		agreed
129) 702. Ronzi et al. (2013)	**Reject** – not RCT		agreed
130) 708. Rossignol et al. (2000) rejected - confirmed 14/12/2016	**Reject** – subacute pain, sick-leave 4-8 weeks	**Agreed**	agreed
131) 709. Rota et al. (2011)	**Reject** – non-randomised so not RCT, not RTW		agreed
132) 711. Rothmore et al. (2016)	**Reject** – not RTW		agreed

133) 724. Sandsjo et al. (2010)	**Reject** – not RTW		agreed
134) 727. Savolainen et al. (2004) 140	**Reject** – not RTW		agreed
135) 733. Scheel et al. (2002) Reject **→YES, it includes CP with L02, L03 - both of which have been used to describe CP patients (e.g. Brendbekken et al., 2016), L84, L86**	**Include** – [FOLLOW-UP OF 734.] evaluating the effects of two strategies to promote active sick-leave; municipalities rather than individuals; unsure if it's CP (will check the ICPC criteria provided) **→YES, it includes CP - see notes**; sick-leave >16 days so criterion less than 4 weeks but median 50+ days/mean higher; days off work OM - RTW reported (Table 3), 6/01 check the mean → 9/03/17 can't see now which SD was larger than the mean???	**Reject - confirmed via Skype 12/05/2017 as intervention aimed more at GPs to then promote ASL**	to disuss (email follow up)
136) 734. Scheel et al. (2002) possibly include? **EMAILED THE AUTHORS →22/12/16 no reply→ however, the authors detail some info re pps on SL >4weeks** **Check ICPC →YES, it includes CP with L02, L03 - both of which have been used to describe CP patients (e.g. Brendbekken et al., 2016), L84, L86**	**Include** – although ASL is assessed here and not complete RTW; evaluating the effectiveness of two strategies to promote active sick-leave; municipalities rather than individuals; unsure if it's CP (will check the ICPC criteria provided) **→YES, it includes CP**; sick-leave in subgroups of >16days, >4weeks, and >12weeks, so only partially meeting sick-leave inclusion criteria, but some separate results for those subgroups of pps on SL >4 weeks have been provided.		to discuss (email follow up)

	6/01 check the mean9/03/17 can't see now which SD was larger than the mean???		
137) 739. Schultz et al. (2008) rejected - confirmed 14/12/2016	**Reject** – subacute pain, sick-leave 4-10 weeks post injury	**Agreed**	agreed
138) 740. Schultz et al. (2013) rejected - confirmed 14/12/2016	**Reject** – subacute pain, sick-leave 4-10 weeks post injury	**Agreed**	agreed
139) 745. Shabat et al. (2005)	**Reject** – not RTW&CP		agreed
140) 748. Shaw et al. (2014)	**Reject** – protocol only so not RCT		agreed
141) 754. Shiri et al. (2013) rejected - confirmed 14/12/2016	**Reject** – p/t sick-leave intervention, inclusion criteria re sick-leave <2 weeks during the previous month and not >30days during the previous 3 mths	But PICO says ppts must only have experience of being ON sl of more than 4 weeks	discuss
142) 785. Staal et al. (2004) **EMAIL AUTHORS [3 week reply deadline] →22/12/16 no reply→ rejected 29/01/17**	**Include/Discuss** – Pps with non-specific LBP, median 8-8.5 weeks (6-14 weeks), thus not all CP; sick-leave min. 4 weeks	Are there stats on those 12 weeks and over? Can you work out who these are? If so then we should include. If not, then reject OR save to create special table of studies for whom certain criteria (here duration of CP) could not be teased out	**Reject** (unsure of length of pain) waiting for author reply
143) 798. Sundstrup et al. (2014)	**Reject** – not RTW		agreed
144) 799. Sundstrup et al. (2014)	**Reject** – not RTW		agreed

145) 802. Svensson et al. (2011)	**Reject** – not RTW&CP		agreed
146) 803. Svensson et al. (2009)	**Reject** – not RTW&CP		agreed
147) 806. Szczurko et al. (2007)	**Reject** – not RTW		agreed
148) 815. Torstensen et al. (1998) EMAIL AUTHORS [3 week reply deadline] →22/12/16 no reply→ rejected 29/01/17	**Include/Discuss** – pps with CP, sick-listed 8-52 weeks	Are there stats on those 12 weeks and over? Can you work out who these are? If so then we should include. If not, then reject OR save to create special table of studies for whom certain criteria (here duration of CP) could not be teased out → **Not sure re about 12 weeks?? All pps had CP and 8-52 weeks (SLR inclusion is 4+ weeks SL)** **Reject confirmed via Skype on 12/05/2017 as although other criteria fit, the SD provided in Table 1 suggests that pain length was not necessary as long as 3 months**	waiting for author reply
149) 825. Tveito et al. (2009)	**Reject** – not RTW		agreed
150) 842. Varekamp et al. (2011)	**Reject** – not RTW		agreed

151) 846. VenegasRios et al. (2011)	**Reject** – not full text RCT		agreed
152) 849. Verbeek (2013)	**Reject** – not RCT		agreed
153) 852. Verbeek et al. (2002) rejected - confirmed 14/12/2016	**Reject** – non-specific LBP, on sick-leave ≤10 days and no consultation re back pain in the last 3 months, thus subacute?	Agreed IF if specifically says subacute LBP in the text. **Otherwise, it is hard to tell if CP or not – as someone can have fluctuating CP and still "recover" enough to go back to work but still be a CP patient. This caveat applies to a lot of the articles so they will need to be read really carefully to see if CP or Non CP population. You could say you are being pragmatic and taking time of SL as indication of CP ie taking 3 mo or more of SL as indicative of CP**	**Reject**
154) 854. Vermeulen et al. (2011) rejected - confirmed 14/12/2016	**Reject** – musculoskeletal disorders sick-listed 2-8 weeks, thus subacute? RTW as outcome measure	Agreed IF if specifically says subacute LBP in the text. **Otherwise, it is hard to tell if CP or not – as someone can have fluctuating CP and still "recover" enough to go**	**Reject**

		back to work but still be a CP patient. This caveat applies to a lot of the articles so they will need to be read really carefully to see if CP or Non CP population. You could say you are being pragmatic and taking time of SL as indication of CP ie taking 3 mo or more of SL as indicative of CP	
155) 858. Viljanen et al. (2003)	**Reject/Discuss** – don’t think this is RTW, although one OM is ‘proportion of those who recovered’		**agreed**
156) 870. Wang et al. (2008)	**Reject** – not RTW&CP		agreed
157) 891. Ylinen et al. (2003)	**Reject** – not RCT [summary of 892. Ylinen et al. (2003)]		agreed
158) 892. Ylinen et al. (2003)	**Reject** – not RTW		agreed
REFERENCES FROM GOOGLE SCHOLAR (3)			
159) GSch.5 Arnetz et al. (2003) rejected 6/01/17 **EMAIL AUTHORS [3 week reply deadline] →22/12/16 →reply received 26/12/2016, pps ‘mostly with CP’ but no data available.**	**Discuss** – MSDs, but don’t think it’s CP… (“The time between the initial sickness episode and the initiation of work-related vocational rehabilitation was a mean of 88.1 (11.7) days for the intervention group and 190.7 (22.7) days for the reference group”:503); RTW data presented	Could be CP still but prob not as says “first or recurrent MSD” – SO IF WE CANNOT TELL in results who is who then we cannot disentangle CP from acute pain and can reject or save for the table of ones that were potentially relevant but issues could not	**Reject**. Less than 3 months average. **6/01/ 17 reject**

		be disentangled. If we can disentangle CP from AC, then keep	
160) GSch.9 Aure et al. (2003) **EMAIL AUTHORS [3 week reply deadline] →22/12/16 no reply→ rejected 29/01/17**	**Include**/**Discuss** – authors state CP but operationalised via sick-leave >8wks and <6mths; RTW recorded	Can you work out who the CP of 3 months and more are? If so then we should include. If not, then reject OR save to create special table of studies for whom certain criteria (here duration) could not be teased out → ICPC codes state CP, just like 733 and 734 and Brendbekken, so my original comment was not entirely correct; SL criterion for the SLR met, but Table 1 states pain duration in weeks M=10 (9-18) and 16 (11-24), so too short in a few cases...	**Reject** (unsure of length of pain)
161) GSch.35 Bendix et al. (1998) emailed authors 12/05/2017 (also re ref. 3&4) - no reply	**Include** – CP with sick-leave >6mths; OM ability to work → discuss re %pps not on SL and only between groups differences in workability reported (no subgroup for non-working pps distinguished) **& design? → follow-up from an earlier RCT**		agreed

REFERENCES FOUND in articles selected by us from the original search results (OFFICIAL HAND-SEARCH OF REFS)			
162) In 209: Leeuw et al. (2008) rejected - confirmed 14/12/2016 THAT WAS GSCH before refs…!!	**Reject** – back pain for at least 3 months but RTW not an outcome measure here	**Ok agreed**	agreed
163) In 269 ref.2 Sullivan et al. (2005)	**Include/Discuss** – pps with WRMD off work for >4weeks but <2years (mean 28.8 weeks, SD=17.8), RTW as OM; the only '?' I have is the age range for women was ***17***-60 (although Age did not contribute significantly to the regression model for RTW predictors)		The issue is less whether it effects outcomes, and more to do with ethics - is it OK to include 17 year olds? Probably is as this is a review - let's (briefly) discuss this tomorrow! 13/01/17 reject but discuss age in SLR
164) In 285 ref.2 Corey et al. (1987) to reject?	**Discuss/Reject (28/01)** – on CP and CBT, however this is not RCT, no control group; useful for general lit review/discussion		Include 13/01 **11/03 (PW) THIS IS NOT RCT (p.222)**
165) In 285 ref.6 Deardorff et al. (1991) to reject?	**Include** – CP; only some pps (n=32) on sick-leave (see baseline characteristics table) but authors provide details for this subsample in the Results section → discuss - slightly worried re study design - think this possibly is non-randomised		Include 13/01 **BUT looking at ROB spotted a different design to an RCT thus reject (discussed with EW in email on 30/01/17) → check with JR**

166) In 419 ref. Dozois et al. 1995	**Reject** – “the purpose was to longitudinally investigate…”, not RCT		**reject**
167) In 485 ref. Johansson et al. (1998) [accessible through Science Direct→ cannot save a copy as protected] EMAILED AUTHORS on 19th June 2017 RE stats for those on SL for 4 weeks or longer, no reply → REJECTED 12/09/2017	**Include/Discuss** – Occupational activity OM as proxy of RTW; not all pps on sick-leave but those who weren’t were excluded from the occupational activity analysis → 29/01 discuss - study design (randomised, waiting-list controls, 2 subsequent studies)		Include 13/01
168) In 485 ref. Turner et al. (1990) **EMAIL SENT VIA RESEARCHGATE TO K. J. MCQUADE AND D.D.CARDENAS 29/01/2017→ 1 WEEK DEADLINE** **→ 9/03/17 rejected as no reply**	**Reject -** CLBP patients, LBP persisting longer than 6 months, age 20-65 BUT “Seventy-three percent were employed full-time or part-time, 8% were not working due to pain, 10% were unemployed for reasons other than pain, and 9% were homemakers. Eight percent were receiving financial compensation for pain, and 11% were involved in or anticipating future litigation related to pain.” AND **“…return to work following treatment was not analyzed because it was an issue for only 8% of the 96 subjects in the study” (p.574)**		I think this is another email that needs to be sent to see if that 8% of participants can be identified, with a week left for reply. Study is now 27 years old, so there won’t be any data (and researchers probably not there any more) but need to follow procedure used thus far.
169) In Myhre et al. ref.15 Jensen et al. (2013) rejected 6/01/17 as cohort study KEEP FOR GENERAL INFO	**Reject/Discuss** – cohort study based on a randomised clinical study, so overall not RCT; original and validation study groups; Sick-leave range ***3***-16 weeks in	Reject 6/01/17	**Reject 6/01/17**

EMAIL AUTHORS [3 week reply deadline] →27/12/2016 → reply received 28/12/2016 "When taking into account the missing data (5 missing regarding duration of pain), 67 patients reported more than 3 months of pain duration at baseline and also did not succeed in returning to work at one year. Of these 67 patients 41 were women."	the original study group; can only confirm 50% of pps had CP (≥3months; Table 2) and authors do not distinguish in results → **emailed the authors to ask for data**; RTW/unsuccessful RTW as OM→meeting 6/01/2017 **reject** as cohort study, but keep for general write-up		
170) In 419 ref. Alaranta et al. (1994)	**Reject/Discuss - this is a RCT but seems like pps were not necessary on SL at baseline but rather "in the last 12 months"; The majority of pps were on SL of < or = 30 days; Therefore, I am swaying towards rejecting this one...**		
171) In 419 ref. Bendix et al. (1997) re-check as earlier Bendixes included - see below	**Reject/Discuss - Although some of the inclusion criteria for pps is ok (e.g. length of SL, age, CLBP), not all of the pps were employed (all were "threatened in their job situation owing to back problems: the majority was sick-listed or did not have a job", p.83); analysis is about being "work-ready" but is not specific enough to distinguish these sub-groups of pps who did/didn't have a job**		
172) In 419 ref. Bendix et al. (2000)	**Reject - "A predetermined number of days off**		

re-check as earlier Bendixes included - see below	**work was not necessary because persons actually working but in danger of losing their job were included if they had to devote their entire day to managing work…"**		
173) In 419 ref. Haland Haldorsen et al. (1998b) ROB'd - to check rejected in Sept 2017 during ROB meet with EW, not RCT	Include/Discuss – CP pps on SL; study reports predictors of outcome of an intervention; analysis split into Returners and Non-returners and accuracy of this classification vs predictors is provided **→ basically, I am not 100% sure if the 'angle' is right, although the article seems useful (especially re the psychosocial factors) and fits I/E**		
174) In 419 ref. Haland Haldorsen et al. (1998c)	Reject - this another study re predictors of FR success but it is not a RCT (but useful for info)		
175) In Brendbekken et al. (2016) ref. 42 Brendbekken et al. (2015)	Reject - **not on RTW; other OMs reported (e.g. Healthcare use, Depression scale)**		
176) In Brendbekken et al. (2016) ref. 11 Bendix et al. (1998)	Discuss – the authors are looking for predictors of referrals to FR, so there's some relevance but 'the angle' might be too different… was thinking include, but now more towards reject and keep for useful reference	Reject - email 12/05/2017	
177) In 485 ref Johansson et al ref Dahl and Fallstrom (1989)	Reject - **not RCT - A B design**		

178) In 485 ref Johansson et al ref Peters et al (1992)	**Reject - not all pps on SL at baseline and OM ‘vocational status’ rather than RTW, so could include just simply increase in activity but not working**		
179) In G.Sch.35 ref. 3 Bendix et al. (1995)	**Include** – “majority” on SL → **Reject (Skype with JR 4.05.2017)**		
180) In G.Sch.35 ref. 4 Bendix et al. (1996)	**Include** – not all on SL but some analysis for SL pps separate → **Reject (Skype with JR 4.05.2017)**		
UPDATED SEARCH - full text to be assessed			
181) GSch updated 17 Aasdahl et al. (2017)	**Discuss** – this is NEARLY what I am looking for… HOWEVER, **most of the participants (65%) worked full time prior to their sick-leave, while 18% worked part time, 4% had a graded disability pension and 13% had no job → so not all employed as per my incl. criteria and subgroups not distinguished in the Results… Authors focus their results on reporting sustainable RTW; in the Method they described primary OM = SL monitored both as number of days per month and as a dichotomous measure of whether or not the participant was registered on sick leave that month. The secondary OM was**		

	time until full sustainable RTW. **-->HAVE EMAILED the authors 25/10** Also, EW - you may have to reject anyway since not all are employed		
182) GSch updated 18 Pedersen et al. (2017)	**Reject - this is a FU of 480.Jensen et al. 2011, which we rejected as it included pps who were 16y.o. (my incl. states min.18 y.o.)** **EW - I think reject as you say**		
183) GSch updated 21 Demou et al. (2016)	**Reject - not RCT, but shall keep for my RAR** **EW agreed**		
184) GSch updated 44 Bramberg et al. (2017)	**Reject - pps not on SL OR SL less than 8 weeks and it seems the SL was indeed short-term** **EW agreed**		
185) GSch updated 46 Comper et al. (2017)	**Reject - I don't think this is on RTW, no mention on SL prior to the intervention**		**reject** - preventing future SL
186) GSch updated 55 Lammerts et al. (2017)	**Reject – evaluation of RCT process, pps without an employment contract**		**reject**
187) MEDLINE updated 14 Johnsen et al. (2018)	**Reject - on reducing SL rather than on RTW as such, not specific to CP**		**reject** - comparing rates of SL for everybody in kindergardens
188) MEDLINE updated 31 Park et al. (2018)	**Discuss/Reject - so this is definitely on RTW for people with MSK problems BUT the authors mention "disability duration" rather than the length of pain/SL (although this is longer than 3 months, see Tables on p.259-260).. the demographics data**		**reject** - not all employed; may change if email back

	suggest that not all pps were employed... the authors say they were "predominantly employed" (p. 257) and "Claimants were included in the study if they had active workers' compensation claims for a MSK disorder and were participating in a RTW program" (p. 254)... They also say in the REsults "Successful RTW at program discharge was 12.1% higher for unemployed claimants in the intervention group (intervention group 21.6 vs. 9.5% in control, p = 0.03) and 3.0% higher for job attached claimants compared to the control group (intervention group 97.1 vs. 94.1% in control, p = 0.10) (see Table 5)" (p. 259)... Is this enough? → HAVE emailed as well		
189) MEDLINE updated 40 Moll et al. (2018) Reject – no reply	Include - although the authors do not specifically use the term CP, they say MSK disorders so I guess I can accept this as a proxy to CP, based on previous studies etc.; the authors refer to Myhre et al. and Brendbekken et al. as well, and those were CP. SL duration ok, since 4-16 weeks (my incl. criteria were more than 4 weeks) and all		reject - doesn't state CP/3 months etc. CHECK MSK issue and 253. Bultman et al. re the same

	pps employed and over 18y.o. **→ just in case, I have emailed re length of pain**		
190) PsycINFO 4 Hartfiel et al. 2017	**Reject – pps not on SL**		**reject**
191) GSch updated 9 Lytsy et al. ref Braathen et al. 2007	**Reject -** 52% MSK but no sub-group analysis, no length of pain given, although SL 6-12mths EMAILED 30/10-->no reply		**reject**
192) G Sch updated 9 Lytsy et al. ref. Roche-Leboucher	**Reject – not RTW but SL days, length of SL not given**		**reject**
193) G Sch updated 9 Lytsy et al. ref. Marnetoft and Selander 2002	**Reject – not RCT**		**reject**
194) GSch Reme et al. ref. Hagen et al. 2003	**Reject -** subacute pain, pps on sick-leave 8-12weeks, follow up (reports RTW)		**reject**

Appendix 5. Table - systematic literature review - characteristics and population demographics of included trials and follow-up studies

Study	Population					Gender (%)		Mean age	Sample size *n*
	Country	CP type	SL inclusion criteria	SL duration	Occupation type	Male	Female		
Brendbekken et al. 2016	Norway	MSK	50-100% and <12 months	Mean days (SD)=147 (60.1); f/t SL I=85 (60.4%) CG=85 (59.2%)	Physically demanding 55.1%(I), 52.5%(CG) Mentally demanding 29.2%(I), 19.9%(CG)	I 45.4 CG 46.9	I 54.6 CG 53.1	I 40.9 CG 41.6	I=141 CG=143
Cheng and Hung 2007	Hong Kong	MSK	>90 days from claim	Mean days (SD) I=136.41 (35.99) CG=139.35 (39.95)	Unclear; medium and large sized organisations	I 80.4 CG 72.9	I 19.6 CG 27.1	I 32.6 CG 32.1	I=46 CG=48 (before dropouts I 53; CG 50)
Corey et al. 1996	Canada	LBP and non-back soft tissue injuries	3-6 month post injury	Disability duration in months I=4.6 CG=4.6	Unskilled labour 62.5% Skilled labour 27.8% Services 6.9% Office/professional 2.8%	I 73.6 CG 62.5	I 26.4 CG 37.5	Unclear	I=100 CG=100 (FU interviews I 74; CG 64)
Haland Haldorsen et al. 1998b	Norway	generalised muscle pain including BP, NP, SP	>50% for 8 weeks – 6 months	SL participant data unclear	Industry, building and construction 22%(I), 21%(CG) Farming, forestry, fishing, seamen 2%(I), n/a(CG) Office, health service 44%(I), 54%(CG) Teacher, science 5%(I), 3%(CG) Transport 9%(I), 7%(CG) Administration 2%(I), 2%(CG) Other 16%(I), 13%(CG)	I 36 CG 38	I 64 CG 62	I 43 CG 43	I=312 CG=157
Haland Haldorsen et al. 1998c	Norway	LBP	>50% for 8 weeks	SL participant data unclear; returners vs non-returners	Industry, building, construction 23%(I), 24%(CG) Farming, forestry, fishing, seamen 4%(I), n/a(CG) Office, health service 39%(I), 58%(CG) Teacher, science 7%(I), 1%(CG) Transport 13%(I), 6%(CG) Administration 2%(I), 1%(CG) Other 12%(I), 10%(CG)	I 49 CG 43	I 51 CG 57	I 43 CG 43	I=142 CG=81
Haland Haldorsen et al. 2002	Norway	MSK	>50% for more than 8 weeks or at least 2 months in the last 2 years	90% sick-listed for 8 weeks	Unclear; included government workers 8 govt*, 46 good, 116 medium, 60 poor prognosis(I1) 4 govt*, 26 good, 92 medium, 51 poor	I1 32.4 I2 31.4 CG 36.8	I1 67.6 I2 68.6 CG 63.2	I1 43 I2 43 CG 44	I1=228 I2=169 CG=263 *RTW data not

					prognosis(I2) 15 govt*, 70 good, 120 medium, 73 poor prognosis(CG)				available (*n*=27)
Heinrich et al. 2009	The Netherlands	MSK	1 day – 8 weeks (8 weeks from onset of claim to randomisation and another 4 weeks to I, therefore in pain for 12 weeks)	Disability duration median weeks (IQR) I1=8 (6-13) CG1=9 (6-16) I2=10 (5-14) CG2=8 (5-14)	Self-employed, predominantly agricultural workers	I1 93 CG1 96 I2 91 CG2 93	I1 7 CG1 4 I2 9 CG2 7	I1 46 CG1 45 I2 45 CG2 45	I1=53 CG1=50 I2=76 CG2=75 (reported before droupouts)
Jensen et al. 2001; 2005	Sweden	non-specific spinal pain	1-6 months	In the year prior to inclusion, mean (SD) I1 136(64) I2 153(62) I3 162(61) CG 135(60)	Blue-collar and service/care workers Employed 78%(I1), 86%(I2), 84%(I3), 94%(CG)	I1 32 I2 55 I3 52 CG 42	I1 68 I2 45 I3 48 CG 58	I1 43 I2 44 I3 43 CG 44	I1=54 I2=49 I3=63 CG=48 (at 3-year FU ITT=208, PP=181)
Lambeek et al. 2010	Canada	LBP	absence/p-absence <2 years	p/f-SL numbers reported; Median days (IQR) I=142 (54-173) CG=163 (64-240)	Unclear	I 56 CG 60	I 44 CG 40	I 45.5 CG 46.8	I=66 CG=68
Lytsy et al. 2017	Sweden	Pain syndrome incl. MSK	About to reach the maximum sickness benefit (≥1.5 years)	Mean years SL for CP pps (SD)=7.7 (3.3)	Unclear	n/a	I1 100 I2 100 CG 100	CP employed sub-group 50	CP employed sub-group=73
Mitchell and Carmen 1994	Canada	LBP, non-back soft tissue injuries	≥90 days	SL participant data unclear	Unclear	I 71 CG 72	I 29 CG 28	I 63% <45 y.o. CG 65% <45y.o.	I=271 CG=271
Myhre et al. 2014	Norway	NP, BP	1-12 months	Median days (IQR) I=109 (69-168) CG=115 (71-189)	High and low blue and white collar workers	I 55.7 CG 51.5	I 44.3 CG 48.5	I 40.2 CG 41	I=209 CG=204 (Analysed I 203; CG 202)
Reme et al. 2016	Norway	LBP	2-10 months, at least 50% SL	Unclear	Unclear	I1 44 I2 45.6 I3 47.6 I4 52.4	I1 56 I2 54.4 I3 52.4 I4 47.6	I1 44.8 I2 44.2 I3 44.2 I4 42.9	I1=100 I2=103 I3=105 I4=105
Skouen et al.	Norway	LBP	At least 8 weeks or 2	90% sick-listed for 8	Unclear	I1 40	I1 60	I1 43.7	I1=52

2002			months in the last 2 years, >50% SL	weeks, 3 months on average		I2 30 CG 36	I2 70 CG 64	I2 42.9 CG 44	I2=57 CG=86 (211 LBP only sub-group from Haland Haldorsen et al. 2002)
Steenstra et al. 2006	The Netherlands	LBP	>8 weeks	Mean days (SD) I=26.2 (9.2) CG=26.1 (9.6)	Industrial 12.7%(I), 5.3%(CG) Transportation 1.8%(I), 1.8%(CG) Office work 14.5%(I), 26.3%(CG) Healthcare services 65.5%(I), 61.4%(CG) Other 5.5%(I), 5.3%(CG)	I 35 CG 46	I 65 CG 54	I 41.3 CG 43.2	I=55 CG=57 (ITT I 55, CG 57; PP I 36PP, CG 53PP)

Note. *BP=back pain; CG=control group; CP=chronic pain; FU=follow-up; govt=government; I=intervention; IQR=interquartile range; ITT=intention-to-treat; LBP=low back pain; MSK=musculoskeletal; NP=neck pain; PP=per protocol; pps=participants; RTW=return to work; SD=standard deviation; SL=sick-leave; SP=shoulder pain;*

Appendix 6. Table - systematic literature review – description of RTW interventions and outcomes for included trials and follow-up studies

Table 5. Description of RTW interventions and outcomes for included trials and follow-up studies

Study	Setting	Intervention type	Control	Intervention and FU schedule	RTW		Secondary measures	
					Measure	Results	Measure	Results
Brendbekken et al. 2016	Two outpatient clinics at the Department of Physical Medicine and Rehabilitation, Innlandet Hospital Trust	Patient-centred Interdisciplinary Structured Interview and Visual Education Tool (ISIVET), to facilitate patient-therapist communication, focusing on psychosocial and work factors and designed to strengthen motivation and coping	Brief intervention – active controls; based on non-injury model, emphasises the importance of normal activity resumption; includes cognitive and medical assessment, and education	I: 3.5 hrs at baseline, at 2 weeks with physiotherapist and at 3 months with whole team to review all plans CG: 2.5 hrs at baseline with physician and physiotherapist, followed by 2 week FU session with a physiotherapist FU: 2 weeks (I, CG) 3 months (I) 12 months (all) 24 month (all; data available for 26 months)	"partial RTW" (p-RTW, if more than 50% of workdays per month were spent on part-time sick-leave) or "full RTW" (f-RTW, if more than 50% of workdays per month were spent without sickness benefits)	No differences between groups on f-RTW at 12 or 24 months FU (the highest RR was at month 23, RR=1.42, 95% CI 0.87-2.33, p=0.17) MD leads to faster RTW via people using partial sick-leave option (the highest RR was at month 7, RR=2.31, 95% CI 1.19-4.51, p=0.01)	n/a	Authors mention that I group pps improved faster on mental and physical symptoms, functional ability and coping versus BI; outcomes described in a separate paper
Cheng and Hung 2007	Clinic-based and workplace-based	Workplace-based work hardening program with a job coach assigned to each worker to liaise with employer to arrange suitable work tasks, biomechanics and ergonomic education, shoulder-specific exercises and job-specific	Clinic-based work hardening program - comparable in nature to the I program, but no workplace-based intervention or liaison with the employer	Assessment at intake, 3 sessions p/w (all), monitoring of progress reports for I and CG to ensure comparison of content, frequency, and duration FU: at 4 weeks	self-reported "resumption of occupational activities", including normal, modified, or alternative duties	Both I and CG could improve RTW; Higher RTW (normal or modified duties) rate for I vs CG (71.7% vs 37.5%, χ^2=11.095, p=0.001)	self-reported 10-point scale of psychosocial workplace factors (intensified workload, social support, job satisfaction, job control, monotonous work), SPADI, FCE (measured active range motion of the shoulder joint and basic functional work capabilities and strength)	Significant decrease in perceived shoulder problem for the I group (two-way repeated measures ANOVA F=4.607, df 1, p=0.034) Differences in lowering of self-perceived shoulder problem and

		activity training						functional capability for I vs CG were significant (p<0.05)
Corey et al. 1996	Clinic-based intervention	Functional Restoration Program: a limited interdisciplinary program emphasising active strategies, comprising exercise, work conditioning, group education and behavioural intervention, with an aim to improve pain coping strategies, restore function, and help with RTW	TAU ("usual care" prescribed by family physicians, included physiotherapy, exercise, chiropractic treatments etc.)	Screening at baseline 6.5 hours per day (max. 35 days, median 35, range 3-35) FU: at variable times by telephone (9-27 months and 17.9 months on average)	patient's self-reported work status ("working", or "work ready" when looking for work)	I was effective in enhancing RTW for claimants with CP (specifically LBCP, t=3.28, p=0.002). No differences between I and CG for NBCP (t=-.07, p=0.95)	pain levels (non-VAS), medication use, quality of sleep (3-point scale), depression, enjoyment of life, perception of quality of life, frequency of doctor's visits due to pain, type of pain management strategies	I effective in reducing subjective pain levels (t=-2.70, p=0.008) and improving sleep (t=3.18, p=0.002; but CG reported deterioration in the quality of sleep). No differences in QoL, use of active pain management strategies, and frequency of doctor's visits
Haland Haldorsen et al. 1998b	Clinic-based	Multimodal CBT treatment: Partially individual and partially group cognitive behavioural modification (including coping strategies), education, exercise, workplace interventions (including negotiation of modifications); encouraging pps to take responsibility for lifestyle and consider functionality not	GP care, no advice or therapy feedback	Baseline assessment 6 hour session 5 days p/w for 4 weeks FU: 4 weeks, 2, 6, 10, 12 months (at the clinic and post-test by the pre-test physiotherapist); Telephone contacts; Individual FUs at the clinic delivering the intervention arranged for 'risk patients'	absence of benefit payments for a calendar month	At 12 months, I group had not returned to work at a higher rate than controls (52% I vs 53% CG), independent of CP type or gender (all differences ns)	subjective well-being (7-point scale), QoL (six item-scale), pain (VAS), daily activities (activity discomfort scale), subjective health (UHI), subjective work ability (GRWA), Health LoC (MHLC – Form A), anxiety (STAI I-II), psychological distress (HSCL-23), Personality (EPI – Form A), physical activity and training	At 12 months, I group had improved pain (t(127)=6.50, p<0.05), ergonomic behaviour (e.g. ergonomic performance, F(1,244)=11, p<0.01), work potential (e.g. possibilities to perform in work, F(1,279)=5.75, p<0.02), life quality, physical health (e.g. increase of physical activity, F(1,307)=3.53, p<0.06) and

		graded activity program;		average 3 FUs and appointments offered at 3, 6, and 10 months (study reported data based on FU for the first 14 months)		results; differences between I1 vs TAU (n = 71 vs n= 48, χ^2=5.5, df = 1, p <0.02) and I2 vs TAU (n = 55 vs n = 54, χ^2 = 3.9, df = 1 P < 0.05) Poor prognosis: I2 most suitable; I2 vs TAU (n = 28 vs n = 26, χ^2 = 3.79, df = 1, p < 0.05)		
Heinrich et al. 2009	Clinic-based with exercises done at workplace	(I1) Physical training: cardiovascular training, relaxation, strengthening, and postural group exercise; co-intervention allowed (I2) Physical training with CBT and workplace specific exercises: all components from I1 (without co-intervention), CBT training towards functional way of thinking; workplace exercises discussed following a workplace visit and pps responsible for training	Usual GP care	Baseline questionnaires (I1):2-3 times p/w for 1-1.5 hours, during 3 months, continued with RTW, with intensity decided at intake (I2): as in I1, with added 30 minutes for CBT FU: at 6 and 12 months; claim duration data collected continuously	"claim duration" (days of work disability compensation payments from randomisation until 12 months later) with the end classed as "less than 25% work disability" for minimum of four weeks	I1 and I2 were not shown to be effective on claim duration at 12 months follow-up; (I1): In the first 6 months there was a significant difference in claim duration in favour of CG vs I1 (I1 median claim duration 181, range 119 – 184 vs CG 153, 48 – 181, log rank test, p=0.03; HR 0.5, 95%CI 0.3 – 0.9, p=0.03); At 12 months the difference in claim duration between CG vs I1 was ns (I1 median claim duration 228, range 122 – 365 vs CG 165, 48 – 365, log rank test, p=0.18; HR 0.7, 95%CI 0.4 – 1.1, p=0.12) (I2): At 6 months I2 133, 70-183 vs CG 137, 48 – 181, log rank test, p=0.60; HR 0.8, 95%CI 0.5–1.3, p=0.43); At 12	pain severity (2 questions on a scale), NPDI, QBPDS, prognostic factors such as RTW expectation, claim duration, history of complaints	Over time both types of interventions and CG improved in pain and functional status (with the only significant difference in favour of I1 on pain improvement at 6 month FU, ITT only)

		pain.						subjective health (F(1,256)=5.22, p<0.03)
Haland Haldorsen et al. 1998c*	Clinic-based	Multimodal CBT treatment: Partially individual and partially group cognitive behavioural modification (including coping strategies), education, exercise, workplace interventions (including negotiation of modifications); encouraging pps to take responsibility for lifestyle and consider functionality not pain.	GP care, no advice or therapy feedback	Baseline assessment 6 hour session 5 days p/w for 4 weeks FU: FU: 4 weeks, 2, 6, 10, 12 months (at the clinic and post-test by the pre-test physiotherapist); Telephone FU at 2 weeks, 4 months, and 8 months Individual FUs at the clinic delivering the intervention arranged for 'risk patients'	analysis and reported outcomes for returners and non-returners	I returned 50% of pps to work at 12-month FU vs 58% from CG	pain (VAS), daily activities (Activity Discomfort Scale), subjective health (UHI), subjective work ability (GRWA), Health LoC (MHLC Form A), anxiety (STAI I-II), psychological distress (HSCL), personality (EPI Form A), questionnaire including subjective well-being (7-point scale), QoL (5-point scale of six items), work-related conditions	In I group returners with a good RTW prognosis had less pain, more psychological strength, and lower education
Haland Haldorsen et al. 2002	Outpatient clinic	(I1) Light multidisciplinary treatment program: lecture on exercise, lifestyle and fear-avoidance advice, graded activity program (I2) Extensive multidisciplinary treatment program: cognitive behavioural modification, education, exercise, workplace interventions,	GP advice	Assessment at baseline to establish prognosis, treatment 1-2 months later (I1): 1 session followed by up to 12 additional sessions (I2): 6 hour session 5 days p/w for 4 weeks FU: all pps followed up for up to 12 months with	absence of benefit payments for a calendar month	Light and extensive interdisciplinary interventions increase the possibility of RTW after 14 months by about 10% (I1 vs TAU $\chi^2 = 3.6$, df = 1, p=0.05; I2 vs TAU $\chi^2 = 4.6$, df = 1, p<0.04) Good prognosis: no treatment advantageous Medium prognosis: I1 seemed sufficient and I2 gave no additional effect, but TAU gave poor	Cost-benefit analysis	economic benefits and estimates of productivity gains due to RTW following the RTW intervention

						months I2 148, 75 – 343 vs CG 137, 48 – 365, log rank test, p=0.95; HR 0.9, 95%CI 0.6 – 1.4, p=0.72		
Jensen et al. 2001; 2005*[a]	Multicentre trial	(I1) Behaviour-oriented physiotherapy: Individually tailored programme, of goal-setting, increasing exercise and relaxation (I2) CBT: goal setting, problem solving, relaxation, cognitive coping techniques, assertion training (I3) F/t Behavioural Medicine Rehab (BM): combined I1 and I2	Normal routines in health-care	Assessment pre-treatment and post-treatment (I1): 20 scheduled hours per week (I2): 13-14 scheduled hours per week (I3): combined I1 and I2 All interventions lasted 4 weeks FU: 6 and 18 months, 3 years[a]	"absence from work" and early retirement post-intervention (obtained data from the National Social Insurance Board)	Risk of early retirement lower for women in I1 and I2 vs CG over 18 month FU (odds ratio I1=0.1, 95%CI 0.0-0.6; I2=0.1, 95%CI 0.0-0.8); The decrease in absence from work was higher for females in treatment groups vs CG; Total absence from work was not significantly different in CG compared with treatment groups, but absence rate for men in I2 was higher compared to other conditions (parameter estimate from covariance analysis 65, 95%CI -39-169, ns) [a]At 3-year FU women I3 group had the best improvement to absence from work (ANCOVA p<0.05, PP only) and returned to work faster than controls. Physiotherapy was better than CBT for both genders.	Health-related QoL (SF-36) perceived relevance of rehabilitation and adherence to lifestyle plan [a]Cost-effectiveness and healthcare utilisation analysis at 3 year FU	No statistically significant differences for relevance of rehabilitation, but I3 seems to have 'higher face validity' At 18 month FU health-related QoL was statistically significant for women (Wilk's Lambda=0.72, F(18,255)=1.7, p=0.036) and I2 group reported a significant improvement in five out of six SF-36 variables in women. [a]QoL – females in I3 a moderate to strong effect size (ITT=0.74; PP=0.79); healthcare use – the I3 group consulted physiotherapists the least (p<0.05), CG contacted social services the least

								(p<0.05)
Lambeek et al. 2010	Primary and secondary care settings	Integrated care: interdisciplinary program comprising graded activity exercises with cognitive behavioural principles and workplace ergonomics intervention, aiming to restore function instead of pain reduction; provision and monitoring of treatment plan	Usual care from a medical professional	Baseline assessment followed by a treatment plan in week 1, workplace element from week 3-12, graded activity from week 2 till RTW FU: 12 weeks, 6, 12 months	duration of sick-leave in calendar days from randomisation until full RTW for four weeks without sickness absence recurrence, and either in the same or different employment	At 12 months median no. of SL days for I was 82 (IQR 51-164) vs CG 175 (IQR 91-365; Mann-Whitney U test, p=0.003)	pain intensity (VAS), functional status (Roland-Morris Disability-24), prognostic factors for the duration of SL=work-related psychosocial factors (the job content questionnaire), data on workload (the Dutch musculoskeletal questionnaire)	functional status (p=0.01) in favour of IC) and pain intensity (ns) improved for both IC and TAU
Lytsy et al. 2017	Clinic-based, with optional sessions at home/workplace	(I1) Acceptance and Commitment Therapy: A form of a CBT, using acceptance, mindfulness, and behavioural approach to increase QoL rather than decreasing symptoms; included multidisciplinary assessment (I2) TEAM: Multidisciplinary, assessment and individualised RTW plan; Acceptance and Commitment Therapy was an option here too; pps able to accept	No planned treatment, but pps free to receive usual care	Baseline assessment, length of Is individualised FU: 12 months	returning to health insurance (national registry data) self-report: number of reimbursed days during first year FU self-report: change in working hours self-report: increased work-related engagement	Overall, at FU there was a trend for I2 to support RTW for the study pps, both for the register data (ns) as well as self-reported values: self-reported change in working time I2 38.5% vs CG 22.4% (OR 2.20, 95% CI 1.09-4.44, p=0.02); self-reported change in work engagement I2 50.8% vs CG 29.9% (OR 2.20, 95% CI 1.19-4.95, p=0.01) However, RTW for employed CP pps (n=73) at 12-month FU: the results for the sub-group differed from the overall results, with a trend for I1 to have a positive	n/a	n/a

		all/parts of the RTW plan; regular evaluations Neither included work-directed interventions, but meetings with the administrator at the employment office and a contact person for the project were available				effect on RTW (significance not stated), apart from self-reported change in reimbursed days where CG reported a lesser number of days utilising health insurance: Returned to health ins. % (n/group) n=73: I1:9/17 I2: 12/28 CG: 13/28 Number of reimbursed days during first year FU, median (IQR) n=73: I1:138(0-210) I2:83(0-235) CG:59(0-180) Self-reported change in working hours, ordinal variable (<0, 0, >0), % n=73: I1:20.0/40.0/40.0 I2:11.1/50.0/38.9 CG:13.0/52.2/34.8 Self-reported increased work-related engagement, %(n) n=73: I1:50 (5/5) I2:50 (9/9) CG:39.1 (9/14)		
Mitchell and Carmen 1994	Clinic-based, multicentre	Functional restoration: active group exercise program (physical	Treatment by the primary care provider; principles of	Pre-treatment assessment 7 hours per day, 5	working full-time, either in the same or different employment, but not part-time or in	No significant advantage of the rehabilitation group	compensation costs	findings related to savings were ns, one clinic performance was

		training and a functional simulation) aiming to restore function, leading to increase in control and, if possible, resolution of the pain	treatment outlined in a letter to a GP	times p/w for 8 weeks=40 treatment days (not all pps required this duration); One clinic provided the program comprising 40 days over 12 weeks FU: 12, 24 months	modified work duties "cessation of wage loss payments", in some cases confirmed via telephone	RTW at the end of the 12-month FU was 79%(I) and 78%(CG), ns At 24 months the total no. of days off work was less for I and BP only pps but both were ns		better but also ns number of CP patients who were granted a disability pension was lower for I ($p < 0.05$)
Myhre et al. 2014	Multicentre	Work-focused rehabilitation: Part 1 - Clinical exam, imaging, reassurance. Removing fear avoidance, restoring activity, enhancing self-care and coping Part 2: 2-3 individual appointments with case worker: work history, family life, RTW obstacles, creating RTW schedule; slight variation between the treatment delivery sites	Control - multidisciplinary rehabilitation, either brief or comprehensive; Part 1 - Clinical exam, imaging, reassurance. Removing fear avoidance, restoring activity, enhancing self-care and coping, no case-worker contact	Baseline (I) Part 1: for 3-4 weeks, 3 hours p/w (CG) Part 1: for 3-4 weeks, 3 hours p/w FU: 12 months	the first 5-week period with no sickness benefit	A focus on the workplace in specialist care does not substantially alter the RTW rate c.f. standard multi-disciplinary treatments (in secondary care) RTW within 12 months: I 142(70%), CG 152 (75%) Median days before RTW: I 161, CG 158 (Breslow test, p=0.45, ns), separate sites also ns	Baseline data only for pain intensity (numeric scale), the Oswestry Disability Index, neck disability index, emotional distress (Hopkins Symptom Checklist), the Waddell Fear-Avoidance Belief Questionnaire (FABQ)	n/a
Reme et al. 2016	Clinic-based	(I1) Brief intervention: cognitive approach, based on a non-injury model and fear avoidance, educational and behavioural elements during a FU with a physio	No CG	Baseline (I1): FU with a physio, option of 2 booster sessions (I2): 7 individual sessions over 2-3 months FU: 3, 6, and 12	transition from f/t SL to partial SL or f/t RTW (national registry data) transition from p/t SL to lower gradient SL or f/t RTW (national registry data)	I1 superior in facilitating fast RTW vs other groups I2 (or I3, I4) had no additional benefits over I1 on RTW At 12-month FU: reduced SL and p/t or f/t RTW I1 60%	Subjective Health Complaints, Hospital Anxiety and Depression Scale, Oswestry Disability Index, pain intensity, Health-related QoL (EQ5D)	I2 (or I3, I4) had no additional benefits over I1 on secondary outcome measures, except 3 sign. differences in favour of I2 on less gastrointestinal complaints at 6mths, LBP intensity and pain

		(I2) (Brief I+CBT): building on the message from the brief intervention, aimed at changing behavioural and cognitive factors assumed to be linked to symptom maintenance In I3 and I4 CBT was combined with the administration of supplements		months		I2 50% (I3 51%, I4 53%), ns Comparison of f/t RTW at 12-month FU: I1 56% I2 47% (I3 51%, I4 48%), ns The only sign. difference between treatment groups for the first 3 months of FU: pairwise comparison suggested that sign. difference related to the lower SL rate in I1 vs other groups		activity at 12mths
Skouen et al. 2002*	Outpatient spine clinic	(I1) Light multidisciplinary treatment program: lecture on exercise, lifestyle and fear-avoidance advice, graded activity program (I2) Extensive multidisciplinary treatment program: cognitive behavioural modification, education, exercise, workplace interventions, graded activity program;	GP advice	Baseline assessment (1.5 hours) (I1): 1 session followed by up to 12 additional sessions (I2): 6 hour session 5 days p/w for 4 weeks FU: proportion of pps back at work recorded monthly and reported at 12, 18, and 24 months, data available for the first 26 months post-treatment	absence of benefit payments for a calendar month	I1 increased fRTW in men vs TAU (LDS post hoc test, p=0.03 at 12, p=0.02 at 18, and p=0.02 at 24 months); no statistically significant treatment effects between the groups for women; no statistically significant differences for I2 for men or women vs TAU	Cost-benefit analyses	Economic benefits for treating male LBCP pps with I1 instead of TAU
Steenstra et al. 2006	In-company and out-company physiotherapy centres	Graded activity: exercise program inclusive of operant-conditioning	TAU guided by Dutch Occupational Physicians	Half-hour physical examination during the first session, then 26 one-hour	duration of sick-leave in calendar days from the first day of sick-leave until full RTW for four	Median time until lasting RTW longer for I vs CG (139, IQR=69 vs 111, IQR=76, Kaplan-Meier	functional status with the Roland-Morris Disability-24 questionnaire and pain	Both groups improved on secondary outcomes, but pain

		behavioural approach, focused on restoring occupational function, physiotherapist as a coach with hands-off approach to encourage pps to actively participate in RTW	guidelines	sessions, 2 sessions p/w FU: 12, 26 weeks	weeks without sickness absence recurrence, and either in the same or different employment total number of sick-leave days in the follow-up period post-intervention	survival calculation, p<0.05)	intensity, healthcare use	differences were statistically significant in favour of CG at 26 weeks FU; visits to physiotherapist were comparable between I and CG

Note. * - follow-up study; BI=brief intervention; BP=back pain; CBT=cognitive-behavioural therapy; CG=control group; CI=confidence interval; CP=chronic pain; f-RTW=full return to work; f/t=full-time; FABQ=Fear-Avoidance Belief Questionnaire; EPI=Eysenck Personality Inventory; FCE=functional capacity evaluation; FU=follow-up; GRWA= Graded Reduced Work Ability scale; HSCL=Hopkins Symptom Check List; I=intervention; IQR=interquartile range; ITT=intention-to-treat; LBCP=low-back chronic pain; LBP=low-back pain; LoC=locus of control; MD=multidisciplinary; MHLC=Multidimensional Health Locus of Control; NBCP=non-back chronic pain; NPDI=Neck Pain Disability Index; ns=not statistically significant; QBPDS=Quebeck Back Pain Disability Index; QoL=quality of life; p-RTW=partial return to work; p/t=part-time; p/w=per week; pps=participants; RR=relative risk; RTW=return to work; SF-36=Short Form 36; SL=sick-leave; SPADI=Shoulder and Pain disability Index; STAI=State-Trait Anxiety scale; TAU=treatment as usual; UHI= Ursin Health Inventory; VAS=visual analogue scale;

Appendix 7. Rapid access review – search strategy

Original RAR Google Scholar searches May 2017

NHS provision AND chronic pain

clinical guidelines AND return to work AND intervention* AND chronic pain AND UK

implement* chronic pain treatment UK

pathways advisory service AND return to work AND GP*

Search updated 29/11/2017

chronic pain AND work* AND UK (since 2013 but not ordered in any way other than by relevance)

survey AND chronic pain AND service* AND UK

Search updated 1/12/2017

key MSK interventions UK

key MSK return to work interventions UK

(chronic pain OR musculoskeletal OR MSK) AND return to work intervention* AND (United Kingdom OR UK)

Search updated May/2018

occupational health physicians UK chronic pain return to work

occupational therapist UK chronic pain return to work

occupational health nurse UK chronic pain return to work

GPs UK chronic pain return to work

All above search terms (with and without Boolean operator "AND") were used again in May 2018

Appendix 8. Recruitment advert/poster (with phone slips) – all studies

Ethical Approval: BSU College of Liberal Arts Research Committee & Health Research Authority

Study Co-ordinator: Ms Paula Wegrzynek
Supervisors: Dr Elaine Wainwright, Dr Jermaine Ravalier

CHRONIC PAIN STUDY

- Are you an **employee who has experienced sick-leave due to chronic pain**?
- Are you an **occupational health physician/occupational therapist/occupational health nurse** who has worked with employees sick-listed for any chronic pain condition?

Would you be happy to spare up to 40 minutes for an anonymous interview?

tel. [redacted]
[redacted]
CHRONIC PAIN STUDY

tel. [redacted]
[redacted]
CHRONIC PAIN STUDY

tel. [redacted]
[redacted]
CHRONIC PAIN STUDY

tel. [redacted]
[redacted]
CHRONIC PAIN STUDY

tel. [redacted]
[redacted]
CHRONIC PAIN STUDY

tel. [redacted]
[redacted]
CHRONIC PAIN STUDY

tel. [redacted]
[redacted]
CHRONIC PAIN STUDY

tel. [redacted]
[redacted]
CHRONIC PAIN STUDY

[redacted]
[redacted]

Appendix 9. Recruitment advert/poster 2 (display or leaflet format) – all studies

Ethical Approval: BSU College of Liberal Arts Research Committee &
Health Research Authority

Study Co-ordinator: Ms Paula Wegrzynek
Supervisors: Dr Elaine Wainwright, Dr Jermaine Ravalier

RETURN TO WORK INTERVENTIONS FOR PEOPLE WITH CHRONIC PAIN

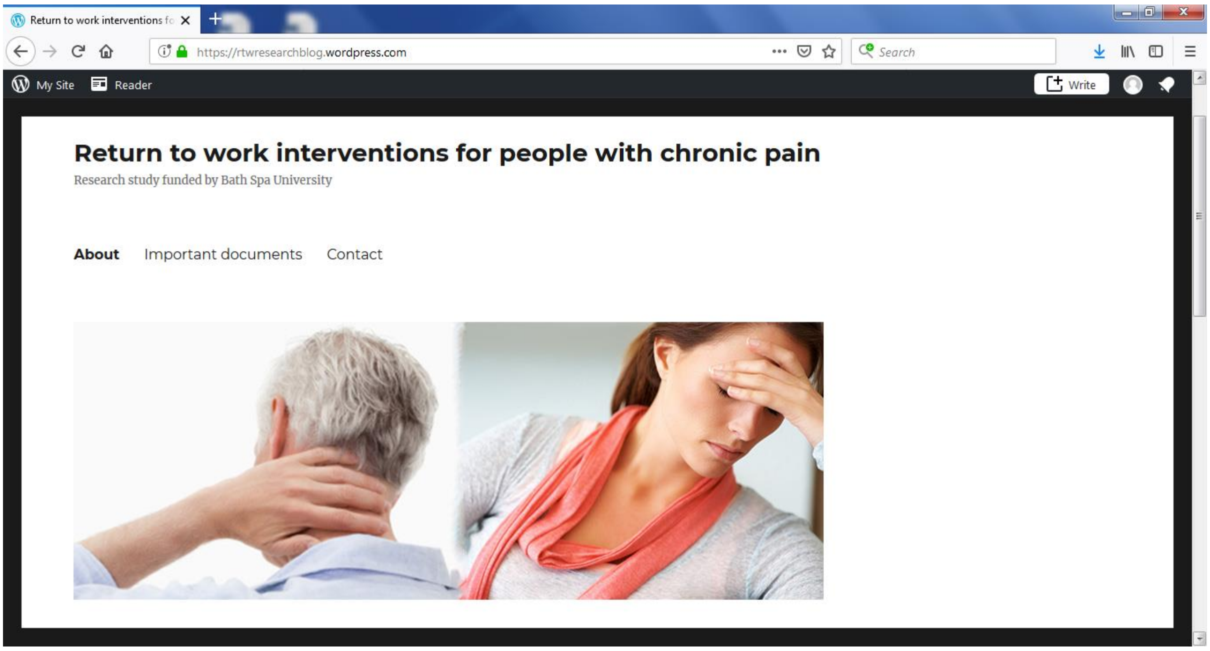
Are you an employee who has experienced sick-leave due to chronic pain?
Are you an occupational health physician, occupational therapist, occupational health nurse who has worked with employees sick-listed for any chronic pain condition?

Would you be happy to spare up to 40 minutes for an anonymous interview?

Researchers from Bath Spa University are running a project into return to work interventions for chronic pain patients. We are interested in talking to **people suffering with chronic pain** to help us understand your perspective on return to work after a period of sickness absence and the processes in place to promote return to work. In addition, we are interested in **occupational therapists, occupational health nurses, and occupational health physicians' views** of the current UK **return to work interventions** for patients with chronic pain.

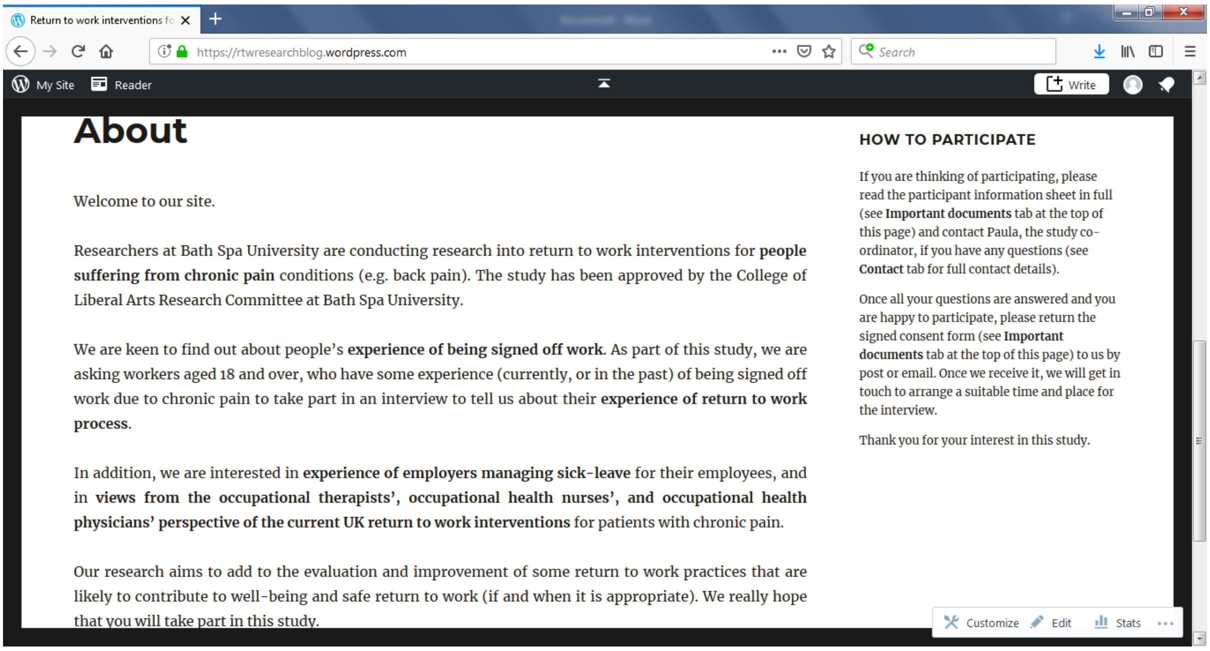
If you are happy to take part in the study, please contact the study co-ordinator Paula Wegrzynek at [redacted], tel. [redacted] [redacted] to receive full study information. You can also find out a little more about the study here https://rtwresearchblog.wordpress.com/

Appendix 10. Recruitment website



Return to work interventions for people with chronic pain

Research study funded by Bath Spa University



About

Welcome to our site.

Researchers at Bath Spa University are conducting research into return to work interventions for **people suffering from chronic pain** conditions (e.g. back pain). The study has been approved by the College of Liberal Arts Research Committee at Bath Spa University.

We are keen to find out about people's **experience of being signed off work**. As part of this study, we are asking workers aged 18 and over, who have some experience (currently, or in the past) of being signed off work due to chronic pain to take part in an interview to tell us about their **experience of return to work process**.

In addition, we are interested in **experience of employers managing sick-leave** for their employees, and in **views from the occupational therapists', occupational health nurses', and occupational health physicians' perspective of the current UK return to work interventions** for patients with chronic pain.

Our research aims to add to the evaluation and improvement of some return to work practices that are likely to contribute to well-being and safe return to work (if and when it is appropriate). We really hope that you will take part in this study.

HOW TO PARTICIPATE

If you are thinking of participating, please read the participant information sheet in full (see **Important documents** tab at the top of this page) and contact Paula, the study co-ordinator, if you have any questions (see **Contact** tab for full contact details).

Once all your questions are answered and you are happy to participate, please return the signed consent form (see **Important documents** tab at the top of this page) to us by post or email. Once we receive it, we will get in touch to arrange a suitable time and place for the interview.

Thank you for your interest in this study.

Appendix 11. List of contacted pain charities and occupational health organisations

Charities and Pain Support Forums

Action-on-pain.co.uk (aopisat@btinternet.com)

Away with pain (via website awaywithpain.co.uk)

BackCare (info@backcare.org.uk)

British Society for Rheumatology (Twitter @RheumatologyUK)

Chronic Pain Support Group (info@chronicpainsupportgroup.co.uk)

Crps UK (Twitter @CRPSUK)

Cysters (info@cysters.co.uk)

Health Foundation (Twitter @HealthFdn) – I received a message to say their policy was only to 'tweet' about work they were involved in or by stakeholders who they funded

Pain Concern (via website painconcern.org.uk and Twitter @PainConcern)

Pain Relief Foundation (administrator@painrelieffoundation.org)

Pain Support (via website painsupport.co.uk and [redacted]) – I received a confirmation that my ad would be posted on their forum

PainToolKit ([redacted]) – I received a confirmation that my ad would be included on the paintoolkit.org website, posted every 5 hours for 7 days

Pain UK (info@painuk.org)

Patient and Public Engagement for Bath Institute for Rheumatic Diseases (BIRD) (PPE@birdbath.org.uk)

Psoriatic Arthritis (Twitter @PsAZZGroup)

The King's Fund (Twitter @TheKingsFund)

Versus Arthritis (Twitter @VersusArthritis)

Occupational Health and Well-being organisations and service providers:

Healthywork Ltd ([redacted])

NHS Health@Work (admin@nhshealthatwork.co.uk) – I received a confirmation that my ad was included in their newsletter

RCOTSS Rheumatology (cotssrenquiries@gmail.com) – subsequently, I was notified that the specialist section in rheumatology no longer formerly exists and my email was forwarded to the head of the Clinical Pain Forum ([redacted])

Royal College of Occupational Therapists (reception@rcot.co.uk)

Sandy Quinn ([redacted]), who was a recommended contact for ALAMA OH conference in Edinburgh, 21-23 March 2018 – I received a confirmation that my ad would be displayed during the conference

Society of Occupational Medicine (SOM) ([redacted]) – I received a confirmation that my ad would be sent out to the SOM members and posted via social media channels

The At Work Partnership Ltd ([redacted]) – I received a confirmation that my ad was included in their newsletter

The OT Practice (enquiries@theotpractice.co.uk)

Wirral.clinic@people-am.com

Warrington.clinic@people-am.com

Oxford.clinic@people-am.com

Nottingham.clinic@people-am.com

Norwich.clinic@people-am.com

Mk.clinic@people-am.com

Waterloo.clinic@people-am.com

Leeds.clinic@people-am.com

Folkestone.clinic@people-am.com

Doncaster.clinic@people-am.com

blackburn.clinic@people-am.com

birmingham.clinic@people-am.com

info@themedical.co.uk

info@everwelloh.co.uk

contact@maned.co.uk

info@occhealth.co.uk

Other:

Avon Fire and Rescue Service (Twitter @AvonFireRescue)

Barclays (ukcommunity@barclays.com)

Devon and Somerset Fire and Rescue Service (comments@dsfire.gov.uk)

Dorset and Wiltshire Fire and Rescue Service (enquiries@dwfire.org.uk)

Gloucestershire Fire and Rescue Authority (fire@glosfire.co.uk)

NUT (enquiries@Nnut.org.uk)

Royal Mail (psc@royalmail.com and Twitter @RoyalMail)

Appendix 12. Example of a recruitment email

Recruitment email to charities (adapted from Employee Recruitment Letter approved by the BSU Ethics Committee on 31 July 2017)

Dear Away With Pain [change as appropriate] Members

My name is Paula Wegrzynek and I am a doctoral researcher at Bath Spa University. Together with my colleagues, Dr Elaine Wainwright and Dr Jermaine Ravalier, we are conducting research into return to work interventions for people suffering from chronic pain conditions (e.g. back pain). I am contacting your organisation as I am hoping that you may be able to help with this study.

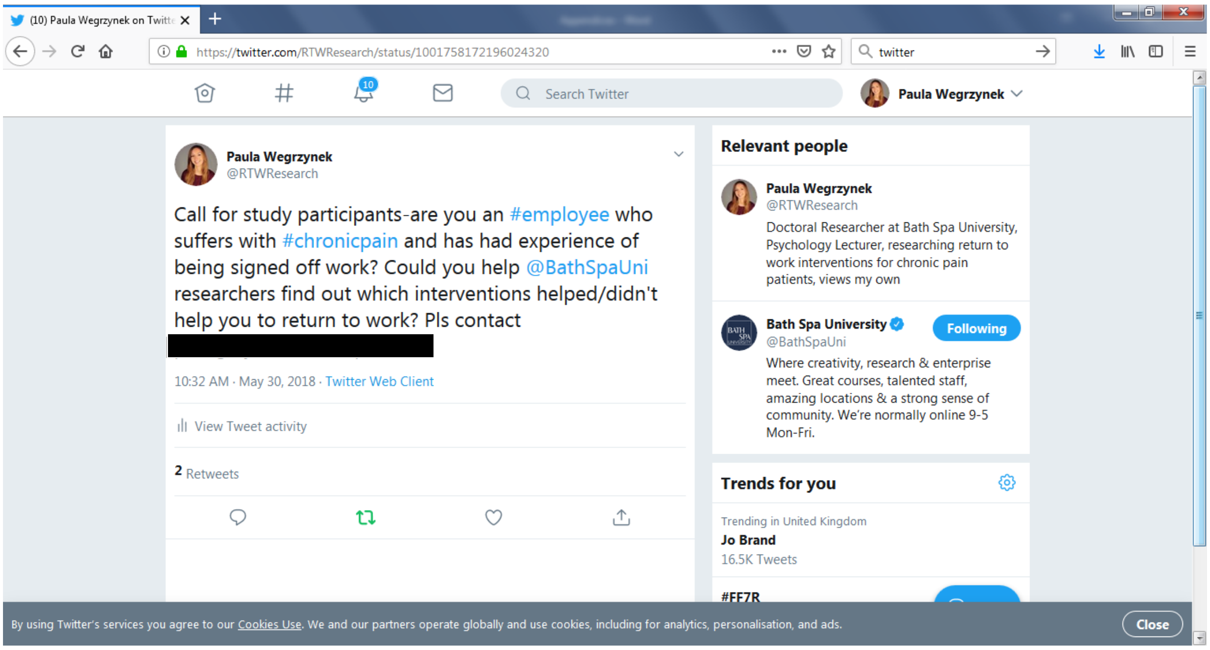
We are keen to find out about people's experience of being signed off work. As part of this study, we are asking workers aged 18 and over, who have some experience (currently, or in the past) of being signed off work due to chronic pain to take part in an interview to tell us about their experience of return to work process.
The study has been approved by the College of Liberal Arts Research Committee at Bath Spa University. We are approaching you as we would be exceptionally grateful if you could please mention the study on your website / via social media and/or in a newsletter to enable individuals who visit 'Away with Pain' [change as appropriate] to know about the study.
You can find some further information about the study here [website link] and I am more than happy to send you a brief example note about the study or even an example tweet with the website link if helpful. Any interested individuals can then contact the research team directly via email/phone. We are not asking your organisation/Away with Pain [fill in as appropriate] to take any role other than to kindly alert any people suffering with chronic pain who may be interested in taking part in our study about what we are doing.

Thank you for taking time to read this email and I hope that you are able to help our team with our project. If you have any questions, please do not hesitate to contact me.

Yours sincerely

Paula Wegrzynek
Research Co-ordinator, Bath Spa University

Appendix 13. Example of a recruitment ‘tweet’



Paula Wegrzynek @RTWResearch

Call for study participants-are you an #employee who suffers with #chronicpain and has had experience of being signed off work? Could you help @BathSpaUni researchers find out which interventions helped/didn't help you to return to work? Pls contact [redacted]

10:32 AM · May 30, 2018 · Twitter Web Client

View Tweet activity

2 Retweets

Relevant people

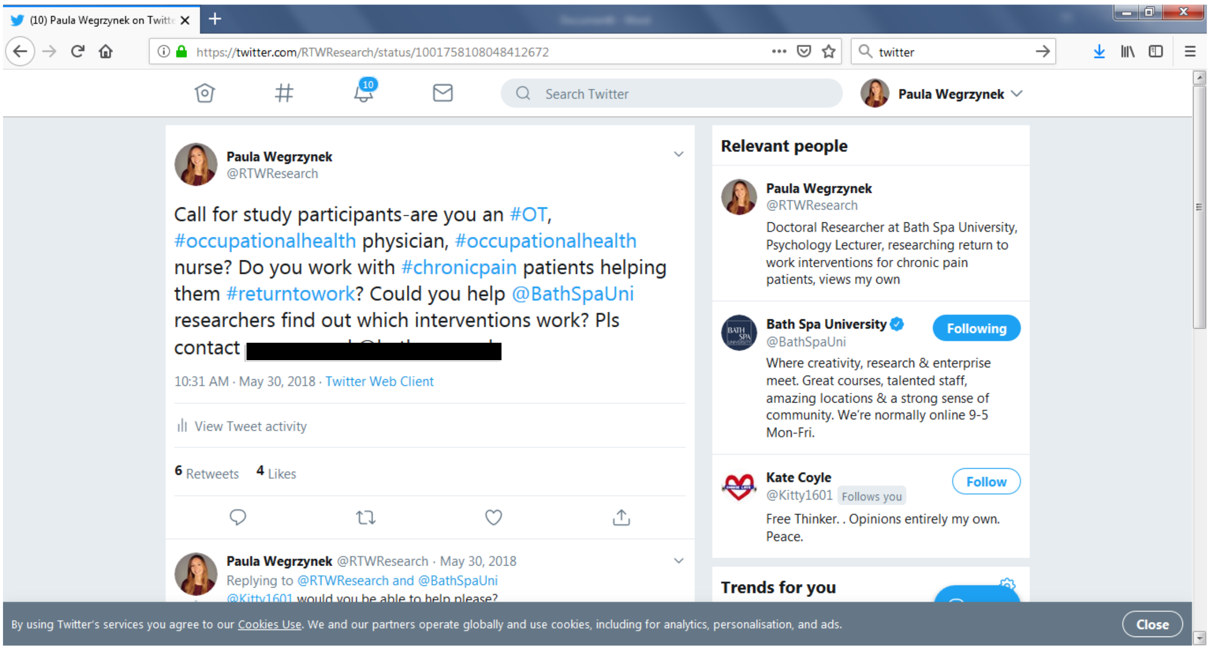
Paula Wegrzynek @RTWResearch
Doctoral Researcher at Bath Spa University, Psychology Lecturer, researching return to work interventions for chronic pain patients, views my own

Bath Spa University @BathSpaUni
Where creativity, research & enterprise meet. Great courses, talented staff, amazing locations & a strong sense of community. We're normally online 9-5 Mon-Fri.

Trends for you

Trending in United Kingdom
Jo Brand
16.5K Tweets
#FE7R

By using Twitter's services you agree to our Cookies Use. We and our partners operate globally and use cookies, including for analytics, personalisation, and ads.



Paula Wegrzynek @RTWResearch

Call for study participants-are you an #OT, #occupationalhealth physician, #occupationalhealth nurse? Do you work with #chronicpain patients helping them #returntowork? Could you help @BathSpaUni researchers find out which interventions work? Pls contact [redacted]

10:31 AM · May 30, 2018 · Twitter Web Client

View Tweet activity

6 Retweets 4 Likes

Paula Wegrzynek @RTWResearch · May 30, 2018
Replying to @RTWResearch and @BathSpaUni
@Kitty1601 would you be able to help please?

Relevant people

Paula Wegrzynek @RTWResearch
Doctoral Researcher at Bath Spa University, Psychology Lecturer, researching return to work interventions for chronic pain patients, views my own

Bath Spa University @BathSpaUni
Where creativity, research & enterprise meet. Great courses, talented staff, amazing locations & a strong sense of community. We're normally online 9-5 Mon-Fri.

Kate Coyle @Kitty1601 Follows you
Free Thinker. . Opinions entirely my own. Peace.

Trends for you

By using Twitter's services you agree to our Cookies Use. We and our partners operate globally and use cookies, including for analytics, personalisation, and ads.

Appendix 14. Health Research Authority ethical approval and amendment approval confirmation

NHS
Health Research Authority

Ms Paulina Wegrzynek
PhD Student
Doctoral Student at Bath Spa University
Bath Spa University
Psychology Department
Newton Park Campus
Newton St Loe
BA2 9BN
[redacted]

Email: hra.approval@nhs.net

19 December 2017

Dear Ms Wegrzynek,

Letter of HRA Approval

Study title:	**Return to work interventions for workers with chronic pain - a qualitative study of stakeholders' perceptions of the current return to work processes.**
IRAS project ID:	**234800**
Sponsor	**Bath Spa University**

I am pleased to confirm that **HRA Approval** has been given for the above referenced study, on the basis described in the application form, protocol, supporting documentation and any clarifications noted in this letter.

Participation of NHS Organisations in England

The sponsor should now provide a copy of this letter to all participating NHS organisations in England.

Appendix B provides important information for sponsors and participating NHS organisations in England for arranging and confirming capacity and capability. **Please read *Appendix B* carefully**, in particular the following sections:

- *Participating NHS organisations in England* – this clarifies the types of participating organisations in the study and whether or not all organisations will be undertaking the same activities
- *Confirmation of capacity and capability* - this confirms whether or not each type of participating NHS organisation in England is expected to give formal confirmation of capacity and capability. Where formal confirmation is not expected, the section also provides details on the time limit given to participating organisations to opt out of the study, or request additional time, before their participation is assumed.
- *Allocation of responsibilities and rights are agreed and documented (4.1 of HRA assessment criteria)* - this provides detail on the form of agreement to be used in the study to confirm capacity and capability, where applicable.

Page **1** of **9**

Further information on funding, HR processes, and compliance with HRA criteria and standards is also provided.

It is critical that you involve both the research management function (e.g. R&D office) supporting each organisation and the local research team (where there is one) in setting up your study. Contact details and further information about working with the research management function for each organisation can be accessed from the HRA website.

Appendices

The HRA Approval letter contains the following appendices:

- A – List of documents reviewed during HRA assessment
- B – Summary of HRA assessment

After HRA Approval

The attached document *"After HRA Approval – guidance for sponsors and investigators"* gives detailed guidance on reporting expectations for studies with HRA Approval, including:

- Working with organisations hosting the research
- Registration of Research
- Notifying amendments
- Notifying the end of the study

The HRA website also provides guidance on these topics and is updated in the light of changes in reporting expectations or procedures.

Scope

HRA Approval provides an approval for research involving patients or staff in NHS organisations in England.

If your study involves NHS organisations in other countries in the UK, please contact the relevant national coordinating functions for support and advice. Further information can be found through IRAS.

If there are participating non-NHS organisations, local agreement should be obtained in accordance with the procedures of the local participating non-NHS organisation.

User Feedback

The Health Research Authority is continually striving to provide a high quality service to all applicants and sponsors. You are invited to give your view of the service you have received and the application procedure. If you wish to make your views known please use the feedback form available on the HRA website.

HRA Training

We are pleased to welcome researchers and research management staff at our training days – see details on the HRA website.

Your IRAS project ID is **234800**. Please quote this on all correspondence.

Yours sincerely

Gemma Oakes
Assessor

Email: hra.approval@nhs.net

Copy to: *Prof John Strachan, Bath Spa University [Sponsor Contact]*
[redacted]
Participating NHS Organisations

Appendix A - List of Documents

The final document set assessed and approved by HRA Approval is listed below.

Document	*Version*	*Date*
Participant information sheet (PIS) [Protocol Appendix 1 - Participant Information Sheet for OTs]	2.0	26 November 2017
Participant information sheet (PIS) [Appendix 1a - Participant Information Sheet for OTs (Wales)]	1.0	26 November 2017
Participant information sheet (PIS) [Protocol Appendix 2 - Participant Information Sheet for OHPs]	2.0	26 November 2017
Participant information sheet (PIS) [Protocol Appendix 2a - Participant Information Sheet for OHPs (Wales)]	1.0	26 November 2017
Participant information sheet (PIS) [Protocol Appendix 3 - Participant Information Sheet for Employers]	2.0	26 November 2017
Participant information sheet (PIS) [Protocol Appendix 3a - Participant Information Sheet for Employers (Wales)]	1	26 November 2017
Participant information sheet (PIS) [Protocol Appendix 4 - Participant Information Sheet for Employees]	2.0	26 November 2017
Participant information sheet (PIS) [Protocol Appendix 4a - Participant Information Sheet for Employees (Wales)]	1.0	26 November 2017
Letters of invitation to participant [Protocol Appendix 5a - Recruitment Letter for possible participants (OTs)]	1	26 November 2017
Letters of invitation to participant [Protocol Appendix 6a - Recruitment letter for possible participants (OHPs) (Wales)]	1.0	26 November 2017
Letters of invitation to participant [Appendix 7a - Example recruitment letter for possible participants (Employers) (Wales)]	1.0	26 November 2017
Letters of invitation to participant [Protocol Appendix 8a - Example recruitment letter for possible participants (employees) (Wales)]	1.0	26 November 2017
Participant consent form [Protocol Appendix 9 - Informed Consent Form for all participants]	2.0	26 November 2017
Participant consent form [Protocol Appendix 9a - Informed Consent Form for all participants (Wales)]	1.0	26 November 2017
Other [Protocol Appendix 10 Debriefing Sheet OTs IRAS ID 234800 v1.0 17.10.2017]	1.0	17 October 2017
Other [Protocol Appendix 11 Debriefing Sheet OHPs IRAS ID 234800 v1.0 17.10.2017]	1.0	17 October 2017
Other [Protocol Appendix 12 Debriefing Sheet Employers IRAS ID 234800 v1.0 17.10.2017]	1.0	17 October 2017
Other [Protocol Appendix 13 Debriefing Sheet Employees IRAS ID 234800 v1.0 17.10.2017]	1.0	17 October 2017
Copies of advertisement materials for research participants [Protocol Appendix 14 Recruitment Advert IRAS ID 234800 v1.0 17.10.2017]	1.0	17 October 2017
Copies of advertisement materials for research participants [Protocol Appendix 15a - Recruitment advertisements/poster (Wales)]	1.0	26 November 2017
IRAS Application Form [IRAS_Form_23102017]		23 October 2017
IRAS Application Form XML file [IRAS_Form_23102017]		23 October 2017
IRAS Checklist XML [Checklist_23102017]		23 October 2017
Evidence of Sponsor insurance or indemnity (non NHS Sponsors only) [Sponsor PI Insurance IRAS ID 234800 17.10.2017]	1.0	03 August 2017
HRA Schedule of Events	1	04 December 2017
HRA Statement of Activities	1	04 December 2017
Research protocol or project proposal [Protocol IRAS ID 234800	1.0	17 October 2017

v1.0 17.10.2017]		
Summary CV for Chief Investigator (CI) [PI CV IRAS ID 234800 v1.0 17.10.2017]	1.0	17 October 2017
Summary CV for supervisor (student research) [Supervisor 1 CV IRAS ID 234800 v1.0 17.10.2017]	1.0	17 October 2017
Summary CV for supervisor (student research) [Supervisor 2 CV IRAS ID 234800 v1.0 17.10.2017]	1.0	17 October 2017
Summary of any applicable exclusions to sponsor insurance (non-NHS sponsors only) [Sponsor Insurance IRAS ID 234800 17.10.2017]	1.0	17 October 2017

Appendix B - Summary of HRA Assessment

This appendix provides assurance to you, the sponsor and the NHS in England that the study, as reviewed for HRA Approval, is compliant with relevant standards. It also provides information and clarification, where appropriate, to participating NHS organisations in England to assist in assessing and arranging capacity and capability.

For information on how the sponsor should be working with participating NHS organisations in England, please refer to the, *participating NHS organisations, capacity and capability* and *Allocation of responsibilities and rights are agreed and documented (4.1 of HRA assessment criteria)* sections in this appendix.

The following person is the sponsor contact for the purpose of addressing participating organisation questions relating to the study:

Name: Ms Paulina Wegrzynek
Tel: [redacted]
Email: [redacted]

HRA assessment criteria

Section	HRA Assessment Criteria	Compliant with Standards	Comments
1.1	IRAS application completed correctly	Yes	The applicant confirmed Part C of IRAS should list [redacted] as Participant Identification Centres for the study. Any additional Participant Identification Centres added to the study following approval, require submission of an amendment.
2.1	Participant information/consent documents and consent process	Yes	No comments.
3.1	Protocol assessment	Yes	No comments.
4.1	Allocation of responsibilities and rights are agreed and documented	Yes	The sponsor has submitted a completed Statement of Activities and Schedule of Events, and intends for these to form the contract between itself

Section	HRA Assessment Criteria	Compliant with Standards	Comments
			and the NHS sites participating in the study. No additional contracts will be entered into.
4.2	Insurance/indemnity arrangements assessed	Yes	Where applicable, independent contractors (e.g. General Practitioners) should ensure that the professional indemnity provided by their medical defence organisation covers the activities expected of them for this research study.
4.3	Financial arrangements assessed	Yes	External funding has not been obtained to run the study at site, however recruitment posters/adverts will be provided to participating NHS sites.
5.1	Compliance with the Data Protection Act and data security issues assessed	Yes	No comments.
5.2	CTIMPS – Arrangements for compliance with the Clinical Trials Regulations assessed	Not Applicable	No comments.
5.3	Compliance with any applicable laws or regulations	Yes	No comments.
6.1	NHS Research Ethics Committee favourable opinion received for applicable studies	Not Applicable	No comments.
6.2	CTIMPS – Clinical Trials Authorisation (CTA) letter received	Not Applicable	No comments.
6.3	Devices – MHRA notice of no objection received	Not Applicable	No comments.
6.4	Other regulatory approvals and authorisations received	Not Applicable	No comments.

Participating NHS Organisations in England

This provides detail on the types of participating NHS organisations in the study and a statement as to whether the activities at all organisations are the same or different.

All NHS sites participating in the study will undertake the same study activity, as detailed in the Schedule of Events. There is therefore only one 'site type' participating in the study. This study activity constitutes PIC activity and requires sites to:

- Display a recruitment poster (these will be provided by the research team); and
- Mail out study information to potential participants via NHS Bulletins.

The remaining study activities will take place on non-NHS premises.

Please note that the remit of HRA Approval is limited to the NHS involvement in the study. Research activity undertaken at non-NHS sites is therefore not covered and the research team should make appropriate alternative arrangements with relevant management at these organisations to conduct the research there.

The Chief Investigator or sponsor should share relevant study documents with participating NHS organisations in England in order to put arrangements in place to deliver the study. The documents should be sent to both the local study team, where applicable, and the office providing the research management function at the participating organisation. For NIHR CRN Portfolio studies, the Local LCRN contact should also be copied into this correspondence. For further guidance on working with participating NHS organisations please see the HRA website.

If chief investigators, sponsors or principal investigators are asked to complete site level forms for participating NHS organisations in England which are not provided in IRAS or on the HRA website, the chief investigator, sponsor or principal investigator should notify the HRA immediately at hra.approval@nhs.net. The HRA will work with these organisations to achieve a consistent approach to information provision.

Confirmation of Capacity and Capability

This describes whether formal confirmation of capacity and capability is expected from participating NHS organisations in England.

The HRA has determined that participating NHS organisations in England **are not expected to formally confirm their capacity and capability to host this research**

- The HRA has informed the relevant research management offices that you intend to undertake the research at their organisation. However, you should still support and liaise with these organisations as necessary.
- Following issue of the Letter of HRA Approval the sponsor may commence the study at these organisations when it is ready to do so.
- The document "Collaborative working between sponsors and NHS organisations in England for HRA Approval studies, where no formal confirmation of capacity and capability is expected" provides further information for the sponsor and NHS organisations on working with NHS organisations in England where no formal confirmation of capacity and capability is expected, and the processes involved in adding new organisations. Further study specific

details are provided the *Participating NHS Organisations* and *Allocation of responsibilities and rights are agreed and documented (4.1 of HRA assessment criteria)* sections of this Appendix.

Principal Investigator Suitability

This confirms whether the sponsor position on whether a PI, LC or neither should be in place is correct for each type of participating NHS organisation in England and the minimum expectations for education, training and experience that PIs should meet (where applicable).

Principal Investigators and Local Collaborators will not be required at NHS sites participating in the study. Should additional NHS site types be added to the study then a new assessment of the need for Principal Investigators or Local Collaborators will be required.

GCP training is not a generic training expectation, in line with the HRA/MHRA statement on training expectations.

HR Good Practice Resource Pack Expectations

This confirms the HR Good Practice Resource Pack expectations for the study and the pre-engagement checks that should and should not be undertaken

In accordance with HR Good Practice guidelines, access arrangements are not required for this study.

Other Information to Aid Study Set-up

This details any other information that may be helpful to sponsors and participating NHS organisations in England to aid study set-up.

The applicant has indicated that they do not intend to apply for inclusion on the NIHR CRN Portfolio.

RE: IRAS 234800. Confirmation of Amendment Assessment

2 messages

TOTENHOFER, Ashley (HEALTH RESEARCH AUTHORITY) <[redacted]>	6 April 2018 at 13:26
To: "[redacted]" <[redacted]>, "[redacted]" <[redacted]>

Dear Paula

Further to the below, I am pleased to confirm **HRA Approval** for the referenced amendment.

You should implement this amendment at NHS organisations in England, in line with the conditions outlined in your categorisation email.

User Feedback

The Health Research Authority is continually striving to provide a high quality service to all applicants and sponsors. You are invited to give your view of the service you have received and the application procedure. If you wish to make your views known please use the feedback form available on the HRA website: http://www.hra.nhs.uk/about-the-hra/governance/quality-assurance/.

Please contact hra.amendments@nhs.net for any queries relating to the assessment of this amendment.

Kind regards

Ashley

Ashley Totenhofer

Technical Assurance Officer

Health Research Authority

HRA Centre Manchester | 3rd Floor, Barlow House | 4 Minshull Street, Manchester | M1 3DZ

T. [redacted]

E. [redacted]

W. www.hra.nhs.uk

From: hra.amendments@nhs.net [mailto:hra.amendments@nhs.net]
Sent: 12 March 2018 10:56
To: [redacted]; [redacted]
Subject: IRAS 234800. Amendment categorisation and implementation information

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Amendment Categorisation and Implementation Information

Dear Ms Wegrzynek

Thank you for submitting an amendment to your project.

If you have participating NHS/HSC organisations in any other UK nations we will forward the information to the relevant national coordinating function(s).

Please note that you may only implement changes described in the amendment notice.

What Happens Next?

When available, please forward any other regulatory approvals that are expected for this amendment to hra.amendments@nhs.net.

Information Specific to Participating NHS Organisations in England

1. You should now share details of the amendment and, if applicable, amended documents, together with this email, with all participating NHS organisations in England. In doing so, you should include the NHS R&D Office, LCRN (where applicable) as well as the local research team. A template email to notify participating NHS organisations in England is provided on the HRA website.
2. The participating NHS organisations in England should prepare to implement this amendment.
3. Your amendment will be assessed against HRA standards.
4. Once the HRA assessment has been successfully completed, you will receive an email confirming that your amendment has HRA Approval.
5. You may implement your amendment at all participating NHS organisations in England 35 calendar days from the day on which you provide the organisations with this email and your amended documents (or as soon as the participating NHS organisation confirm that you may implement, if sooner), so long as you have HRA Approval for your amendment by this date. **NHS organisations do not have to confirm they are happy with the amendment.** If HRA Approval is issued subsequent to this date, you may implement following HRA Approval.
6. You may not implement the amendment at any participating NHS organisations in England that requests additional time to assess, until it confirms that it has concluded its assessment.
7. You may not implement at any participating NHS organisation in England that declines to implement the amendment.

IRAS Project ID:	**234800**
REC Reference:	**18/HRA/0341**
Short Study Title:	**Return to work interventions for workers with chronic pain**
Date complete amendment submission received:	**02 March 2018**
Sponsor Amendment Reference Number:	**1**
Sponsor Amendment Date:	**01 March 2018**
Amendment Type:	Non-Substantial
Outcome of HRA Assessment:	. **HRA Approval for the amendme pending.** The HRA will separately confirm HRA Approval for the amendment by email.
Implementation date in NHS organisations in England:	35 days from date amendment information together with this emai supplied to participating organisati **(provided HRA Approval is in pl and conditions above are met)**
For NHS/HSC R&D Office information	
Amendment Category	**A**

If you have any questions relating to the wider HRA approval process, please direct these to hra.approval@nhs.net

If you have any questions relating to this amendment in one of the devolved administrations, please direct these to the relevant national coordinating function.

Additional information on the management of amendments can be found in the IRAS guidance.

Please do not hesitate to contact me if you require further information.

Kind regards

Sarah Urmson

Health Research Authority
Ground Floor | Skipton House | 80 London Road | London | SE1 6LH
E.hra.amendments@nhs.net
W. www.hra.nhs.uk

Sign up to receive our newsletter HRA Latest.

Paulina Anna Wegrzynek <[redacted]> 6 April 2018 at 13:50
To: "TOTENHOFER, Ashley (HEALTH RESEARCH AUTHORITY)" <[redacted]>

Dear Ashley,

Thank you very much for your help, much appreciated.

Best wishes,
Paula
[Quoted text hidden]

Appendix 15. Interview schedule – employees with chronic pain

Semi-structured interview schedule – study with EMPLOYEES:

Interviewee characteristics

1. Tell me a little about yourself… (job title? how long have you been working for the organisation? can you tell me your gender? Age? Marital status? Number of children?)
2. Do you work full-time or part-time?
3. Do you have a set place of work? Do you work from home? Would you like to have some flexibility of choosing where to work? (e.g. from home? if applicable)
4. Tell me about your pain… How long have you been experiencing this pain? Have you got a diagnosis? What CP condition have you been diagnosed with? Do you think having a diagnosis would help/how? (if applicable)

Effectiveness of interventions

1. Can you talk me through an example of a RTW intervention, including any fit notes, you took part in? (at workplace? Fit note – type?)
2. What factors have allowed you to RTW? (if applicable)
3. In what ways has the intervention program helped/hindered your RTW?
4. Why do you think you dropped out of/did not turn up to the RTW intervention? (if applicable)
5. What could have been done better to encourage you to RTW?
6. A recent review of literature found that multidisciplinary and workplace-based elements are important in RTW interventions (PW to expand re vocational rehab, job coach, ergonomics etc.). Based on your experience, do you agree?
7. How did you find the access to the OTs/OHPs to be like? (benefits of?)

GENERAL PROBES for each of the interview schedules (adapted from Morgan and Kreuger, 1998)

Elaborative

Can you give me an example of that?
Can you tell me a bit more about that?
Why do you think that is?

Retrospective

Can I take you back to something you said earlier?
You said… could I ask you a bit more about that?

Comparative

How does this compare with your experience of…?
How could things have been different?
What advice would you offer to someone in a similar position to you?
How would you improve x?

Appendix 16. Interview schedule – occupational health physicians

Semi-structured interview schedule – study with OHPs:
Interviewee characteristics
1. Tell me a little about yourself… (how did you come to be an occupational health physician working with chronic pain patients? how long have you been working in your role? how long have you been working with CP patients helping them RTW? can you tell me your gender?)

Effectiveness of interventions and future recommendations
1. What RTW interventions do you currently use with your CP patients?
2. Can you tell me of a memorable experience of using X INTERVENTION?
3. What are the strengths of using X INTERVENTION?
4. What are the challenges of using X INTERVENTION?
5. Are the current RTW interventions doing what they should do? What do you like about the current RTW intervention? What do you dislike? How should the intervention be changed? What aspects of the current interventions contribute to RTW?
6. How do you match RTW treatments to your clients?
7. What do you think affects RTW? (e.g. work-life balance?)
8. A recent review of literature found that stratification of care, multidisciplinary, psychological interventions, and workplace elements are all important in RTW interventions (PW to expand briefly). What do you think about these findings?
9. Does the evidence from the recent review alter your impressions of the effectiveness of RTW interventions you use?
10. How do you perceive the input of OHPs re RTW within the multidisciplinary team?
11. What training, CPD opportunities do you get? (communication systems? Procedures?)
12. Where do you get information regarding effective interventions/strategies to use to promote RTW with workers with CP?

GENERAL PROBES for each of the interview schedules (adapted from Morgan and Kreuger, 1998)
Elaborative
Can you give me an example of that?
Can you tell me a bit more about that?
Why do you think that is?

Retrospective
Can I take you back to something you said earlier?
You said… could I ask you a bit more about that?
Comparative
How does this compare with your experience of…?
How could things have been different?
What advice would you offer to someone in a similar position to you?
How would you improve x?

Appendix 17. Interview schedule – occupational therapists and occupational health nurses

Semi-structured interview schedule – study with OTs/OH nurses:

Interviewee characteristics

1. Tell me a little about yourself… (how did you come to be an occupational therapist working with chronic pain patients? how long have you been working in your role? how long have you been working with CP patients helping them RTW? can you tell me your gender?)

Effectiveness of interventions and future recommendations

1. What RTW interventions do you currently use with your CP patients? (fit note?)
2. Can you tell me of a memorable experience of using X INTERVENTION?
3. What are the strengths of using X INTERVENTION?
4. What are the challenges of using X INTERVENTION?
5. Are the current RTW interventions doing what they should do? What do you like about the current RTW intervention? What do you dislike? How should the intervention be changed? What aspects of the current interventions contribute to RTW?
6. How do you match RTW treatments to your clients?
7. What do you think affects RTW? (e.g. work-life balance?)
8. A recent review of literature found that stratification of care, multidisciplinary, psychological interventions, and workplace elements are all important in RTW interventions (PW to expand briefly). What do you think about these findings?
9. Does the evidence from the recent review alter your impressions of the effectiveness of RTW interventions you use?
10. How do you perceive the input of OT/OH nurses re RTW within the multidisciplinary team?
11. What training, continuous personal development (CPD) opportunities do you get? (communication systems? Procedures?)
12. Where do you get information regarding effective interventions/strategies to use to promote RTW with workers with CP?

GENERAL PROBES for each of the interview schedules (adapted from Morgan and Kreuger, 1998)

Elaborative

Can you give me an example of that?
Can you tell me a bit more about that?
Why do you think that is?

Retrospective

Can I take you back to something you said earlier?
You said… could I ask you a bit more about that?

Comparative

How does this compare with your experience of…?
How could things have been different?
What advice would you offer to someone in a similar position to you?
How would you improve x?

Appendix 18. Example field note

Please note: This field note was originally handwritten.

“12th February 2018

Telephone interview – OHP

People are just left there – no one to follow-up, “sausage machine”

Services not joined up, no rehab, no one-to-one (important?)

GPs don’t manage pain – opioids! “amazed” (negative) how many people are on them…

Rant… but keen to share views, we need change/action

Job=barrier, commercial employers difficult

“YES” to SLR findings”

Appendix 19. Participant Information Sheet – employees with chronic pain

Participant Information Sheet

The purpose of this information sheet is to explain why a piece of research is taking place, what that study means for you, and what you are being asked to do.

Thank you for taking the time to read this Information sheet regarding the piece of research being carried out at Bath Spa University. We would like to invite you to participate in a research study examining return to work experience of employees with chronic pain. Before you decide whether you would like to participate, you need to understand why the research is being done and what it would involve for you.

What is the purpose of this study?

This study aims to work with employees who are, or have been unable to work due to sickness. This is an important piece of work because it is well known that the employee is the essential part of any organisation (Donovan *et al*., 2013). At the same time, a very large number of workdays are lost due to chronic pain (ONS, 2017).

The purpose of this study is to investigate the processes that are in place currently and which have been designed to help employees return to work. We are also interested in finding out if the current practices can be improved, so your views are really important in informing any potential changes.

Why have I been approached?

You are a non-managerial employee who has had, or is taking sick-leave due to having a chronic pain condition. The definition of chronic pain states that it is pain which lasts for more than three months, and it may vary in intensity and fluctuate.

Am I eligible to take part?

If you are an employee eligible to take part in this project, you must:

-Be aged 18 and over, and able to give informed consent, i.e. understand and accept the information on these sheets,
-Be employed (on a full-time, part-time, self-employed basis)
-Have some experience (currently, or in the past) of being signed off work due to chronic pain.

What am I asked to do?

You will be invited to an interview, which will last for about 40 minutes and which will be held at a time and place convenient to you. During these interviews we will be asking about the length of absence from work and employee feelings about the current return to work practices (e.g. If/and how helpful you found those currently available strategies).

We would like to reassure you that you *do not have to answer* any questions that you think are too private and you do not feel comfortable responding to. We will *not* be asking you to give out any personal information about you or your job, and we will not be looking for in depth information about your medical history. Instead, we would like you to reflect generally on your experience of sick-leave and return to work with chronic pain. If you consent to take part in this study, the audio recording and all data will be handled and stored following ethical and legal guidelines. The audio recording will only be used to generate data for this study, not for any commercial purposes.

Your answers will be completely ***confidential*** – meaning anything that you say will be kept in the strictest confidence and will not be shared with anyone outside the research team, University external examiners, and professional transcribing company, whose members are bound by the principles of the Code of Human Research Ethics (BPS, 2014) and by the University and legal guidelines – and ***anonymous*** – this means that no one will know who has taken part in the study as all identifiable details will be removed. Transcription will be conducted either by the study co-ordinator, or by an ethically bound professional transcribing company. Data storage, both on paper, and electronically, will comply with the General Data Protection Regulation guidelines and University policies; audio recordings will be kept on a password protected computer file and any personal data on paper will be securely stored in a locked cabinet. Anything that you say will be anonymised prior to the analysis and thus no identifiable information will be contained within the transcripts. All of the described procedures will help to ensure that your information will be protected so the organisation you work for, your clients, or the government agencies will also never know whether you have taken part or not. All personal data (for example, signed consent forms) will be destroyed 12 months after the end of the study, and data transcripts will be destroyed 2 years after the study has ended.

GDPR specific information

Bath Spa University is the sponsor for this study based in the United Kingdom. We will be using information from you in order to undertake this study and will act as the data controller for this study. This means that we are responsible for looking after your information and using it properly. Bath Spa University will keep identifiable information about you for 12 months after the study has finished.

Your rights to access, change or move your information are limited, as we need to manage your information in specific ways in order for the research to be reliable and accurate. If you withdraw from the study, we will keep the information about you that we have already obtained. To safeguard your rights, we will use the minimum personally-identifiable information possible.

You can find out more about how we use your information by contacting Paula (study co-ordinator).

Do I have to take part?

No – your taking part is entirely voluntary. You also have the right to withdraw from the study, or withdraw your data from the study, at any time you would like to. Just contact the researcher (see contact details below).

Are there any advantages or disadvantages to taking part?

You will receive no direct benefit from taking part, but in future employees and employers may benefit from our having gained a greater understanding of how sick-leave for chronic pain is managed. You will be contributing to evaluation and improvement of some return to work practices that are likely to contribute to well-being and safe return to work (if and when it is appropriate). If you participate in the study, the data collected will be analysed and a report will be written. The data will also be used for a doctorate, and may be used in a publication in a peer-reviewed journal. Anonymised findings may also be presented at conferences. If you would like a summary of the research findings when they are written up, please indicate this on the informed consent sheet and one will be emailed or posted to you.

Who has reviewed the study?

The ethical aspects of this study have been approved by the College of Liberal Arts Research Committee at Bath Spa University and by the Health Research Authority. If you have any complaints or reservations about any ethical aspect of your participation in this research, contact the Research Committee through its Ethics Co-ordinator, Dr Andrew Smart (telephone: [redacted], email: [redacted]). Any complaint you make will be treated in confidence and investigated, and you will be informed of the outcome.

If you consent to take part in this study, please indicate so on the informed consent sheet. You can print this version of the consent sheet, sign and post to Paula (study co-ordinator), or you can scan in your signature and email the signed version to her. Alternatively, you can contact Paula with your address to receive a printed version of this sheet. There are two consent forms so that you can keep one for your records if you wish.

If you would like to discuss anything about the study please contact Paula, the study co-ordinator, via phone ([redacted]), email ([redacted]) or post (see address details below). Your consent form will be kept separately from your data, which again means that anything you say will be completely anonymous and confidential. The findings from the study will be made available at the end of the research project, which is estimated to be in February 2019.

Thank you very much for your time and co-operation.
The Research Team

Ms Paulina A Wegrzynek, PhD Researcher, MSc BSc(Hons)
Bath Spa University,
Department of Psychology, Stanton Building,
Newton St Loe,
Bath
BA2 9BN
Email:[redacted]
Tel: [redacted]

Appendix 20. Participant Information Sheet – occupational health physicians

Participant Information Sheet

The purpose of this information sheet is to explain why a piece of research is taking place, what that study means for you, and what you are being asked to do.

Thank you for taking the time to read this Information sheet regarding the piece of research being carried out at Bath Spa University. We would like to invite you to participate in a research study examining occupational health physicians' perspective on the current return to work interventions for employees with chronic pain. Before you decide whether you would like to participate, you need to understand why the research is being done and what it would involve for you.

What is the purpose of this study?
This study aims to work with occupational health physicians who have experience of working with employees who suffer with chronic pain. This is an important piece of work because it is well known that the employee is the essential part of any organisation (Donovan *et al*., 2013). At the same time, a very large number of workdays are lost due to chronic pain (e.g. ONS, 2017). A lot of return to work research has focused on samples of GPs and their patients (e.g. Daykin and Richardson, 2004; Jeffrey and Foster 2012; Pincus et al., 2007; Wainwright et al., 2015) but little is known about the return to work interventions/processes from the occupational therapists' or occupational health physicians' perspective (Coole et al., 2013).
The purpose of this study is to investigate the processes that are in place currently and which have been designed to help employees return to work. We are also interested in finding out if the current practices can be improved, so your views are really important in informing any potential changes in policy.

Why have I been approached?
You are an occupational health physician who has experience of working with someone with chronic pain, helping them return to work. The definition of chronic pain states that it is pain which lasts for more than three months, and it may fluctuate and vary in intensity.

Am I eligible to take part?
Inclusion criteria for occupational health physicians:
If you are an occupational health physician, to be included in the current study you must meet the following criteria:
-Be aged 18 and over, and able to give informed consent, i.e. understand and accept the information on these sheets,
-Have some experience of working with employees who are/have been signed off work due to chronic pain,

What am I being asked to do?
You will be invited to an interview, which will last for about 40 minutes and which will be held at a time and place convenient to you. You can choose whether the interview is done face-to-face or over

the phone. During the interview we will be asking about your perceptions about the current return to work practices (e.g. If/and how helpful you found those currently available strategies).

We would like to reassure you that you ***do not have to answer*** any questions that you think are too private and you do not feel comfortable responding to. We will *not* be asking you to give out any personal information about specific clients. Instead, we would like you to reflect generally on the topic of return to work interventions for people with chronic pain. If you participate in this study, the audio recording and all data will be handled and stored following ethical and legal guidelines. The audio recording will only be used to generate data for this study, not for any commercial purposes.

Your answers will be completely ***confidential*** – meaning anything that you say will be kept in the strictest confidence and will not be shared with anyone outside the research team, University external examiners, and professional transcribing company, whose members are bound by the principles of the Code of Human Research Ethics (BPS, 2014) and by the University and legal guidelines – and ***anonymous*** – this means that no one will know who has taken part in the study as all identifiable details will be removed. Transcription will be conducted either by the study co-ordinator, or by an ethically bound professional transcribing company. Data storage, both on paper, and electronically, will comply with the General Data Protection Regulation guidelines and University policies; audio recordings will be kept on a password protected computer file and any personal data on paper will be securely stored in a locked cabinet. Anything that you say will be anonymised prior to the analysis and thus no identifiable information will be contained within the transcripts. All of the described procedures will help to ensure that your information will be protected so the organisation you work for, your clients, or the government agencies will also never know whether you have taken part or not. All personal data (for example, signed consent forms) will be destroyed 12 months after the end of the study, and data transcripts will be destroyed 2 years after the study has ended.

GDPR specific information

Bath Spa University is the sponsor for this study based in the United Kingdom. We will be using information from you in order to undertake this study and will act as the data controller for this study. This means that we are responsible for looking after your information and using it properly. Bath Spa University will keep identifiable information about you for 12 months after the study has finished.

Your rights to access, change or move your information are limited, as we need to manage your information in specific ways in order for the research to be reliable and accurate. If you withdraw from the study, we will keep the information about you that we have already obtained. To safeguard your rights, we will use the minimum personally-identifiable information possible.

You can find out more about how we use your information by contacting Paula (study co-ordinator).

Do I have to take part?

No – your taking part is entirely voluntary. You also have the right to withdraw from the study, or withdraw your data from the study, at any time you would like to. Just contact the researcher (see contact details below).

Are there any advantages or disadvantages to taking part?

You will receive no direct benefit from taking part, but in future a range of stakeholders (including employees, employers, the Government, the healthcare providers) may benefit from us having gained a greater understanding of return to work interventions for chronic pain patients. You will be contributing to evaluation and improvement of some return to work practices that are likely to contribute to well-being and safe return to work (if and when it is appropriate). If you participate in the study, the data collected will be analysed and a report will be written. The data will also be used for a doctorate, and may be published in a peer-reviewed journal. Anonymised findings may also be presented at research conferences. If you would like a summary of the research findings when the study has finished, please indicate so on the informed consent sheet and one will be emailed or posted to you.

Who has reviewed the study?
The ethical aspects of this study have been approved by the College of Liberal Arts Research Committee at Bath Spa University and by the Health Research Authority. If you have any complaints or reservations about any ethical aspect of your participation in this research, contact the Research Committee through its Ethics Co-ordinator, Dr Andrew Smart (telephone: [redacted], email: [redacted]). Any complaint you make will be treated in confidence and investigated, and you will be informed of the outcome.

If you consent to take part in this study, please indicate so on the informed consent sheet. You can print this version of the consent sheet, sign and post to Paula (study co-ordinator), or you can scan in your signature and email the signed version to her. Alternatively, you can contact Paula with your address to receive a printed version of this sheet. There are two consent forms so that you can keep one for your records if you wish.

If you would like to discuss anything about the study please contact Paula, the study co-ordinator, via phone ([redacted]), email ([redacted]) or post (see address details below). Your consent form will be kept separately from your data, which again means that anything you say will be completely anonymous and confidential. The findings from the study will be made available at the end of the research project, which is estimated to be in February 2019.

Thank you very much for your time and co-operation.
The Research Team

Ms Paula Wegrzynek, PhD Researcher, MSc BSc(Hons)
Bath Spa University,
Department of Psychology, Stanton Building,
Newton St Loe,
Bath
BA2 9BN
Email: [redacted]
Tel: [redacted]

Appendix 21. Participant Information sheet – occupational therapists

Participant Information Sheet

The purpose of this information sheet is to explain why a piece of research is taking place, what that study means for you, and what you are being asked to do.

Thank you for taking the time to read this Information sheet regarding the piece of research being carried out at Bath Spa University. We would like to invite you to participate in a research study examining occupational therapists' perspective on the current return to work interventions for employees with chronic pain. Before you decide whether you would like to participate, you need to understand why the research is being done and what it would involve for you.

What is the purpose of this study?
This study aims to work with occupational therapists who have experience of working with employees who suffer with chronic pain. This is an important piece of work because it is well known that the employee is the essential part of any organisation (Donovan *et al.*, 2013). At the same time, a very large number of workdays are lost due to chronic pain (e.g. ONS, 2017). A lot of return to work research has focused on samples of GPs and their patients (e.g. Daykin and Richardson, 2004; Jeffrey and Foster 2012; Pincus et al., 2007; Wainwright et al., 2015) but little is known about the return to work interventions/processes from the occupational therapists' or occupational health physicians' perspective (Coole et al., 2013).
The purpose of this study is to investigate the processes that are in place currently and which have been designed to help employees return to work. We are also interested in finding out if the current practices can be improved, so your views are really important in informing any potential changes in policy.

Why have I been approached?
You are an occupational therapist who has experience of working with someone with chronic pain, helping them return to work. The definition of chronic pain states that it is pain which lasts for more than three months, and it may fluctuate and vary in intensity.

Am I eligible to take part?
Inclusion criteria for occupational therapists:
If you are an occupational therapist, to be included in the current study you must meet the following criteria:
-Be aged 18 and over, and able to give informed consent, i.e. understand and accept the information on these sheets,
-Have some experience of working with employees who are/have been signed off work due to chronic pain,
-Have a recognised qualification in occupational therapy and experience in practice.

What am I being asked to do?
You will be invited to an interview, which will last for about 40 minutes and which will be held at a time and place convenient to you. You can choose whether the interview is done face-to-face or over

the phone. During the interview we will be asking about your perceptions about the current return to work practices (e.g. If/and how helpful you found those currently available strategies).

We would like to reassure you that you ***do not have to answer*** any questions that you think are too private and you do not feel comfortable responding to. We will *not* be asking you to give out any personal information about specific clients. Instead, we would like you to reflect generally on the topic of return to work interventions for people with chronic pain. If you participate in this study, the audio recording and all data will be handled and stored following ethical and legal guidelines. The audio recording will only be used to generate data for this study, not for any commercial purposes.

Your answers will be completely ***confidential*** – meaning anything that you say will be kept in the strictest confidence and will not be shared with anyone outside the research team, University external examiners, and professional transcribing company, whose members are bound by the principles of the Code of Human Research Ethics (BPS, 2014) and by the University and legal guidelines – and ***anonymous*** – this means that no one will know who has taken part in the study as all identifiable details will be removed. Transcription will be conducted either by the study co-ordinator, or by an ethically bound professional transcribing company. Data storage, both on paper, and electronically, will comply with the General Data Protection Regulation guidelines and University policies; audio recordings will be kept on a password protected computer file and any personal data on paper will be securely stored in a locked cabinet. Anything that you say will be anonymised prior to the analysis and thus no identifiable information will be contained within the transcripts. All of the described procedures will help to ensure that your information will be protected so the organisation you work for, your clients, or the government agencies will also never know whether you have taken part or not. All personal data (for example, signed consent forms) will be destroyed 12 months after the end of the study, and data transcripts will be destroyed 2 years after the study has ended.

GDPR specific information

Bath Spa University is the sponsor for this study based in the United Kingdom. We will be using information from you in order to undertake this study and will act as the data controller for this study. This means that we are responsible for looking after your information and using it properly. Bath Spa University will keep identifiable information about you for 12 months after the study has finished.

Your rights to access, change or move your information are limited, as we need to manage your information in specific ways in order for the research to be reliable and accurate. If you withdraw from the study, we will keep the information about you that we have already obtained. To safeguard your rights, we will use the minimum personally-identifiable information possible.

You can find out more about how we use your information by contacting Paula (study co-ordinator).

Do I have to take part?

No – your taking part is entirely voluntary. You also have the right to withdraw from the study, or withdraw your data from the study, at any time you would like to. Just contact the researcher (see contact details below).

Are there any advantages or disadvantages to taking part?

You will receive no direct benefit from taking part, but in future a range of stakeholders (including employees, employers, the Government, the healthcare providers) may benefit from us having gained a greater understanding of return to work interventions for chronic pain patients. You will be contributing to evaluation and improvement of some return to work practices that are likely to contribute to well-being and safe return to work (if and when it is appropriate). If you participate in the study, the data collected will be analysed and a report will be written. The data will also be used for a doctorate, and may be published in a peer-reviewed journal. Anonymised findings may also be presented at research conferences. If you would like a summary of the research findings when the study has finished, please indicate so on the informed consent sheet and one will be emailed or posted to you.

Who has reviewed the study?
The ethical aspects of this study have been approved by the College of Liberal Arts Research Committee at Bath Spa University and by the Health Research Authority. If you have any complaints or reservations about any ethical aspect of your participation in this research, contact the Research Committee through its Ethics Co-ordinator, Dr Andrew Smart (telephone: [redacted], email: [redacted]). Any complaint you make will be treated in confidence and investigated, and you will be informed of the outcome.

If you consent to take part in this study, please indicate so on the informed consent sheet. You can print this version of the consent sheet, sign and post to Paula (study co-ordinator), or you can scan in your signature and email the signed version to her. Alternatively, you can contact Paula with your address to receive a printed version of this sheet. There are two consent forms so that you can keep one for your records if you wish.

If you would like to discuss anything about the study please contact Paula, the study co-ordinator, via phone ([redacted]), email ([redacted]) or post (see address details below). Your consent form will be kept separately from your data, which again means that anything you say will be completely anonymous and confidential. The findings from the study will be made available at the end of the research project, which is estimated to be in February 2019.

Thank you very much for your time and co-operation.
The Research Team

Ms Paula Wegrzynek, PhD Researcher, MSc BSc(Hons)
Bath Spa University,
Department of Psychology, Stanton Building,
Newton St Loe,
Bath
BA2 9BN
Email: [redacted]
Tel: [redacted]

Appendix 22. Participant Information Sheet – occupational health nurses (advisers)

Participant Information Sheet

The purpose of this information sheet is to explain why a piece of research is taking place, what that study means for you, and what you are being asked to do.

Thank you for taking the time to read this Information sheet regarding the piece of research being carried out at Bath Spa University. We would like to invite you to participate in a research study examining occupational health advisers' perspective on the current return to work interventions for employees with chronic pain. Before you decide whether you would like to participate, you need to understand why the research is being done and what it would involve for you.

What is the purpose of this study?

This study aims to work with occupational health advisers/nurses who have experience of working with employees who suffer with chronic pain. This is an important piece of work because it is well known that the employee is the essential part of any organisation (Donovan *et al*., 2013). At the same time, a very large number of workdays are lost due to chronic pain (e.g. ONS, 2017). A lot of return to work research has focused on samples of GPs and their patients (e.g. Daykin and Richardson, 2004; Jeffrey and Foster 2012; Pincus et al., 2007; Wainwright et al., 2015) but little is known about the return to work interventions/processes from the occupational therapists/advisers' or occupational health physicians' perspective (Coole et al., 2013).

The purpose of this study is to investigate the processes that are in place currently and which have been designed to help employees return to work. We are also interested in finding out if the current practices can be improved, so your views are really important in informing any potential changes in policy.

Why have I been approached?

You are an occupational health adviser/nurse who has experience of working with someone with chronic pain, helping them return to work. The definition of chronic pain states that it is pain which lasts for more than three months, and it may fluctuate and vary in intensity.

Am I eligible to take part?

Inclusion criteria for occupational health advisers/nurses:

If you are an occupational therapist, to be included in the current study you must meet the following criteria:

-Be aged 18 and over, and able to give informed consent, i.e. understand and accept the information on these sheets,

-Have some experience of working with employees who are/have been signed off work due to chronic pain,

-Have the qualification such as 'Specialist Practitioner in Occupational Health' (registered nurse with a BSc or MSc in Occupational Health)

What am I being asked to do?
You will be invited to an interview, which will last for about 40 minutes and which will be held at a time and place convenient to you. You can choose whether the interview is done face-to-face or over the phone. During the interview we will be asking about your perceptions about the current return to work practices (e.g. If/and how helpful you found those currently available strategies).

We would like to reassure you that you ***do not have to answer*** any questions that you think are too private and you do not feel comfortable responding to. We will *not* be asking you to give out any personal information about specific clients. Instead, we would like you to reflect generally on the topic of return to work interventions for people with chronic pain. If you participate in this study, the audio recording and all data will be handled and stored following ethical and legal guidelines. The audio recording will only be used to generate data for this study, not for any commercial purposes.
Your answers will be completely ***confidential*** – meaning anything that you say will be kept in the strictest confidence and will not be shared with anyone outside the research team, University external examiners, and professional transcribing company, whose members are bound by the principles of the Code of Human Research Ethics (BPS, 2014) and by the University and legal guidelines – and ***anonymous*** – this means that no one will know who has taken part in the study as all identifiable details will be removed. Transcription will be conducted either by the study co-ordinator, or by an ethically bound professional transcribing company. Data storage, both on paper, and electronically, will comply with the General Data Protection Regulation guidelines and University policies; audio recordings will be kept on a password protected computer file and any personal data on paper will be securely stored in a locked cabinet. Anything that you say will be anonymised prior to the analysis and thus no identifiable information will be contained within the transcripts. All of the described procedures will help to ensure that your information will be protected so the organisation you work for, your clients, or the government agencies will also never know whether you have taken part or not. All personal data (for example, signed consent forms) will be destroyed 12 months after the end of the study, and data transcripts will be destroyed 2 years after the study has ended.

GDPR specific information
Bath Spa University is the sponsor for this study based in the United Kingdom. We will be using information from you in order to undertake this study and will act as the data controller for this study. This means that we are responsible for looking after your information and using it properly. Bath Spa University will keep identifiable information about you for 12 months after the study has finished.
Your rights to access, change or move your information are limited, as we need to manage your information in specific ways in order for the research to be reliable and accurate. If you withdraw from the study, we will keep the information about you that we have already obtained. To safeguard your rights, we will use the minimum personally-identifiable information possible.
You can find out more about how we use your information by contacting Paula (study co-ordinator).

Do I have to take part?
No – your taking part is entirely voluntary. You also have the right to withdraw from the study, or withdraw your data from the study, at any time you would like to. Just contact the researcher (see contact details below).

Are there any advantages or disadvantages to taking part?
You will receive no direct benefit from taking part, but in future a range of stakeholders (including employees, employers, the Government, the healthcare providers) may benefit from us having gained a greater understanding of return to work interventions for chronic pain patients. You will be contributing to evaluation and improvement of some return to work practices that are likely to contribute to well-being and safe return to work (if and when it is appropriate). If you participate in the study, the data collected will be analysed and a report will be written. The data will also be used for a doctorate, and may be published in a peer-reviewed journal. Anonymised findings may also be

presented at research conferences. If you would like a summary of the research findings when the study has finished, please indicate so on the informed consent sheet and one will be emailed or posted to you.

Who has reviewed the study?

The ethical aspects of this study have been approved by the College of Liberal Arts Research Committee at Bath Spa University and by the Health Research Authority. If you have any complaints or reservations about any ethical aspect of your participation in this research, contact the Research Committee through its Ethics Co-ordinator, Dr Andrew Smart (telephone: [redacted], email: [redacted]). Any complaint you make will be treated in confidence and investigated, and you will be informed of the outcome.

If you consent to take part in this study, please indicate so on the informed consent sheet. You can print this version of the consent sheet, sign and post to Paula (study co-ordinator), or you can scan in your signature and email the signed version to her. Alternatively, you can contact Paula with your address to receive a printed version of this sheet. There are two consent forms so that you can keep one for your records if you wish.

If you would like to discuss anything about the study please contact Paula, the study co-ordinator, via phone ([redacted]), email ([redacted]) or post (see address details below). Your consent form will be kept separately from your data, which again means that anything you say will be completely anonymous and confidential. The findings from the study will be made available at the end of the research project, which is estimated to be in February 2019.

Thank you very much for your time and co-operation.
The Research Team

Ms Paula Wegrzynek, PhD Researcher, MSc BSc(Hons)
Bath Spa University,
Department of Psychology, Stanton Building,
Newton St Loe,
Bath
BA2 9BN
Email: [redacted]
Tel: [redacted]

Appendix 23. Information pack – study invitation letter for workers with chronic pain

Title and name of potential interviewee
Job title, if this information is publicly available
Work address
Department

Ms Paula Wegrzynek
Bath Spa University
Psychology

Newton St Loe
Bath
BA2 9BN
[redacted]

[redacted]

Date

Dear X

Bath Spa University is conducting research into return to work interventions for people suffering from chronic pain conditions (e.g. back pain). The researchers are keen to find out about your experience of being signed off work.

If you match the inclusion criteria as listed in the enclosed study information pack, we would like to invite you for a short interview. The interview will be held at a time and place to suit you. During the interview we would like you to reflect generally on your experience of sick-leave and return to work with chronic pain. We would like to reassure you that all identifiable details will be removed and data will be kept confidential so that your employer, healthcare provider, GP, or the government agencies will not know whether you have taken part or not. We will not be looking for in depth information about your medical history. Your data will be treated in accordance with the General Data Protection Regulation (please see the Participant Information Sheet for a detailed explanation of our responsibility for looking after your information and using it properly).

We hope you will take part in this study. Please read the enclosed study information pack which provides you with detailed information about the research. If you have any questions, please do not hesitate to contact me. If you require, a copy of the study findings will be made available to you once the study has finished. If you are happy to participate, please return the enclosed consent form to me by post or email. Once I receive it, I will get in touch to arrange a suitable time and place for the interview.

Thank you for your interest in this study.

Yours sincerely

[redacted]

Paula Wegrzynek
Research Co-ordinator, Bath Spa University

Appendix 24. Information pack – study invitation letter for occupational health physicians

Dr

Department

Ms Paula Wegrzynek
Bath Spa University
Psychology

Newton St Loe
Bath
BA2 9BN
[redacted]

[redacted]

Date 2018

Dear

Bath Spa University is conducting research into return to work interventions for people suffering from chronic pain conditions (e.g. back pain). The research team would like to invite you to participate in this project. We are keen to find out about your views and experience of delivering occupational health services with an aim of supporting employees with chronic pain to return to work. We hope that your responses will help to inform the current gap in knowledge around the UK return to work processes.

We would like to reassure you that all identifiable details will be removed and data will be kept confidential so no one will know whether you have taken part or not. We will not be asking you to give out any personal information about specific clients. Instead, we would like you to reflect generally on the topic of return to work interventions for people with chronic pain.

Your data will be treated in accordance with the General Data Protection Regulation (please see the Participant Information Sheet for a detailed explanation of our responsibility for looking after your information and using it properly). If you match the inclusion criteria as listed in the enclosed study information pack, we would like to invite you for a short interview. The interview will be held at a time and place to suit you.

We hope you will take part in this study. Please read the enclosed study information pack which provides you with detailed information about the research. If you have any questions, please do not hesitate to contact me. If you require, a copy of the study findings will be made available to you once the study has finished. If you are happy to participate, please return the enclosed consent form to me by post or email. Once I receive it, I will get in touch to arrange a suitable time and place for the interview.

Thank you for your interest in this study.

Yours sincerely

[redacted]

Paula Wegrzynek
Research Co-ordinator, Bath Spa University

Appendix 25. Information pack – study invitation letter for occupational therapists

XX

Department

Ms Paula Wegrzynek
Bath Spa University
Psychology

Newton St Loe
Bath
BA2 9BN
[redacted]

[redacted]

2018

Dear

Bath Spa University is conducting research into return to work interventions for people suffering from chronic pain conditions (e.g. back pain). The research team would like to invite you to participate in this project. We are keen to find out about your views and experience of delivering occupational therapy services with an aim of supporting employees with chronic pain to return to work. We hope that your responses will help to inform the current gap in knowledge around the UK return to work processes.

We would like to reassure you that all identifiable details will be removed and data will be kept confidential so no one will know whether you have taken part or not. We will not be asking you to give out any personal information about specific clients. Instead, we would like you to reflect generally on the topic of return to work interventions for people with chronic pain.

Your data will be treated in accordance with the General Data Protection Regulation (please see the Participant Information Sheet for a detailed explanation of our responsibility for looking after your information and using it properly). If you match the inclusion criteria as listed in the enclosed study information pack, we would like to invite you for a short interview. The interview will be held at a time and place to suit you.

We hope you will take part in this study. Please read the enclosed study information pack which provides you with detailed information about the research. If you have any questions, please do not hesitate to contact me. If you require, a copy of the study findings will be made available to you once the study has finished. If you are happy to participate, please return the enclosed consent form to me by post or email. Once I receive it, I will get in touch to arrange a suitable time and place for the interview.

Thank you for your interest in this study.

Yours sincerely

[redacted]

Paula Wegrzynek
Research Co-ordinator, Bath Spa University

Appendix 26. Information pack – study invitation letter for occupational health nurses

XX

Department

Ms Paula Wegrzynek
Bath Spa University
Psychology

Newton St Loe
Bath
BA2 9BN
[redacted]

[redacted]

2018

Dear

Bath Spa University is conducting research into return to work interventions for people suffering from chronic pain conditions (e.g. back pain). The research team would like to invite you to participate in this project. We are keen to find out about your views and experience of delivering occupational health services with an aim of supporting employees with chronic pain to return to work. We hope that your responses will help to inform the current gap in knowledge around the UK return to work processes.

We would like to reassure you that all identifiable details will be removed and data will be kept confidential so no one will know whether you have taken part or not. We will not be asking you to give out any personal information about specific clients. Instead, we would like you to reflect generally on the topic of return to work interventions for people with chronic pain.

Your data will be treated in accordance with the General Data Protection Regulation (please see the Participant Information Sheet for a detailed explanation of our responsibility for looking after your information and using it properly). If you match the inclusion criteria as listed in the enclosed study information pack, we would like to invite you for a short interview. The interview will be held at a time and place to suit you.

We hope you will take part in this study. Please read the enclosed study information pack which provides you with detailed information about the research. If you have any questions, please do not hesitate to contact me. If you require, a copy of the study findings will be made available to you once the study has finished. If you are happy to participate, please return the enclosed consent form to me by post or email. Once I receive it, I will get in touch to arrange a suitable time and place for the interview.

Thank you for your interest in this study.

Yours sincerely

[redacted]

Paula Wegrzynek
Research Co-ordinator, Bath Spa University

Appendix 27. Consent Form for all study participants

Consent form

Unique participant number: [*for researcher to complete*]

Title: Name:

Address:

Daytime telephone number:

Mobile telephone number:

Email address:

INITIALS

Please initial in the box next to each point to confirm your consent to the following:

1. I am 18 years old or over ☐

2. I have read and/or had explained to me by Paula Wegrzynek (the study co-ordinator) information relating to the above project. ☐

3. I have read and understood why I am eligible to take part in this study. ☐

4. I understand the purpose of the project and what will be required of me. I agree to the arrangements described in the information sheet, in so far as they relate to my participation. ☐

5. I consent to the interview being audio recorded. ☐

6. I understand that the study records will be dealt with in accordance to the strict confidentiality and anonymity rules and apart from the research team they may be subject to an audit from the external examiners at Bath Spa University. An ethically bound transcribing company may be used to transcribe the interviews. ☐

7. I understand that I have the right to withdraw at any time and that I am free to omit any questions I do not wish to provide an answer to. ☐

8. I have received a copy of this consent form and of the accompanying information sheet. ☐

9. I would/would not (please delete) like to receive a report on the study findings. I would like to receive this by email/by post (please delete as appropriate). ☐

Name…………………………………………… Date………………………
Signature…………………………………………………………………

This form has been signed in the presence of ……………………………………….. (Name)*
Signature of the witness…………………………………………………… Date…………………………..
*Complete when obtaining informed consent face to face

Appendix 28. Debrief Form – employees with chronic pain

Debriefing information sheet

Thank you for participating in this study.

The main aim of this research project is to investigate the processes that are in place already to help employees return to work after a period of sickness absence, as well as anything that can be improved. One reason why understanding this is valuable is because it is well known that the employee is the essential resource at any organisation (Donovan *et al*., 2013). At the same time, a very large number of workdays are lost due to chronic pain (e.g. ONS, 2017). The data you have contributed will help to evaluate and improve some return to work practices that are likely to contribute to well-being and safe return to work when appropriate. It is also important for you to know that this project is separate and external to your healthcare provider, your GP, and the company you work for – so none of them will know whether you took part in this project.

If you would like more information, or have any further questions about any aspect of this study, then please contact Paula, the study co-ordinator via phone ([redacted] [redacted]), email ([redacted]) or post (see address details below).

As a final point, all data collected in this study remain confidential and will not be made available to anyone outside the research team. The data will mostly be analysed in an aggregated form and although following the interviews individual quotations are likely to be used, no personal/identifiable data will be quoted. Therefore, the researchers will make sure that you will remain anonymous to anyone outside the research team throughout the research process and when the results of this study are published. This also means that your employer, your healthcare provider, your GP, or the government agencies will never know whether you have taken part or not. However, if ***you*** want to discuss this study with anyone, then please feel free to do so. If you later decide that you no longer want to be part of this project, please contact Paula (see details below) to have your data removed from the study and destroyed.

If you (or a member of your family) are worried about any of the issues related to the topic of this study (including things like low mood, finance, or work worries), please do not hesitate to contact Paula, or any of the research team members (Dr Elaine Wainwright, Dr Jermaine Ravalier; see contact details below) so that we can direct you to someone who might be able to help. If you do not feel comfortable contacting any of us, we have provided details of the local services which you may wish to get in touch with (see contact details below). Your employer may also be able to offer confidential support via an Employee Assistance Programme (EAP). With regards to any health-related issues, you should also contact your GP.

The ethical aspects of this study have been approved by the College of Liberal Arts Research Committee at Bath Spa University. If you have any complaints or reservations about any ethical aspect of your participation in this research, please in the first instance contact the members of the research team who will do their upmost to resolve any issues. Alternatively, please contact the Research Committee through its Ethics Co-ordinator, Dr Andrew Smart (telephone: [redacted], email: [redacted]). Any complaint you make will be treated in confidence and investigated, and you will be informed of the outcome.

Once again, thank you for taking part in this project.

Kind regards,
The Research Team

Ms Paula Wegrzynek, PhD Researcher, MSc BSc(Hons)
Bath Spa University,
Department of Psychology,
Newton St Loe, Bath, BA2 9BN
Email: [redacted]
Tel: [redacted]

Supervisor's name and email: Dr Elaine Wainwright ([redacted]), Dr Jermaine Ravalier ([redacted]).

College of Liberal Arts Research Committee **Ethics Co-ordinator**: Dr Andrew Smart (telephone: [redacted], email: [redacted])

If you require advice or are worried about the issues related to the topic of this study, you may wish to contact the following:

LIFT psychology – support for people with emotional difficulties, anxiety, etc.
Website: https://lift.awp.nhs.uk/

B&NES Talking Therapies – community based psychological therapies
Website: https://iapt-banes.awp.nhs.uk/

MIND – information and support for better mental health
Website: https://mind.org.uk/

NHS 111 Service – non-emergency health advice
Tel: 111

B&NES Citizens Advice – free, confidential, impartial independent advice on many problems/topics
Website: http://www.cab-banes.org
Tel: 0344 848 7919

The Money Advice Service – free and impartial money advice service
Website: https://www.moneyadviceservice.org.uk/en

Appendix 29. Debrief Form – occupational health physicians

Debriefing information sheet

Thank you for participating in this study.

The main aim of this research project is to investigate occupational health physicians' perspective on the processes that are in place already to help employees return to work after a period of sickness absence, as well as anything that can be improved. One reason why understanding this is valuable is because it is well known that the employee is the essential resource at any organisation (Donovan *et al*., 2013). At the same time, a very large number of workdays are lost due to chronic pain (e.g. ONS, 2017). The data you have contributed will help to evaluate and improve some return to work practices that are likely to contribute to well-being and safe return to work when appropriate. It is also important for you to know that this project is separate and external to the company you work for – so your employer will not know whether you took part in this project.

If you would like more information, or have any further questions about any aspect of this study, then please contact Paula, the study co-ordinator via phone ([redacted] [redacted]), email ([redacted]) or post (see address details below).

As a final point, all data collected in this study remain confidential and will not be made available to anyone outside the research team. The data will mostly be analysed in an aggregated form and although following the interviews individual quotations are likely to be used, no personal/identifiable data will be quoted. Therefore, the researchers will make sure that you will remain anonymous to anyone outside the research team throughout the research process and when the results of this study are published. This also means that your clients, employer, or the government agencies will never know whether you have taken part or not. However, if ***you*** want to discuss this study with anyone, then please feel free to do so. If you later decide that you no longer want to be part of this project, please contact Paula (see details below) to have your data removed from the study and destroyed.

If you are worried about any of the issues related to the topic of this study, please do not hesitate to contact Paula, or any of the research team members (Dr Elaine Wainwright, Dr Jermaine Ravalier; see contact details below) so that we can direct you to someone who might be able to help. If you do not feel comfortable contacting any of us, we have provided details of the local services which you may wish to get in touch with (see contact details below). Your employer may also be able to offer confidential support via an Employee Assistance Programme (EAP).

The ethical aspects of this study have been approved by the College of Liberal Arts Research Committee at Bath Spa University. If you have any complaints or reservations about any ethical aspect of your participation in this research, please in the first instance contact the members of the research team who will do their upmost to resolve any issues. Alternatively, please contact the Research Committee through its Ethics Co-ordinator, Dr Andrew Smart (telephone: [redacted], email: [redacted]). Any complaint you make will be treated in confidence and investigated, and you will be informed of the outcome.

Once again, thank you for taking part in this project.

Kind regards,
The Research Team

Ms Paula Wegrzynek, PhD Researcher, MSc BSc(Hons)
Bath Spa University,
Department of Psychology,
Newton St Loe, Bath, BA2 9BN
Email: [redacted]
Tel: [redacted]

Supervisor's name and email: Dr Elaine Wainwright ([redacted]), Dr Jermaine Ravalier ([redacted]).

College of Liberal Arts Research Committee **Ethics Co-ordinator**: Dr Andrew Smart (telephone: [redacted], email: [redacted])

If you require advice or are worried about the issues related to the topic of this study, you may wish to contact the following:

LIFT psychology – support for people with emotional difficulties, anxiety, etc.
Website: https://lift.awp.nhs.uk/

B&NES Talking Therapies – community based psychological therapies
Website: https://iapt-banes.awp.nhs.uk/

MIND – information and support for better mental health
Website: https://mind.org.uk/

B&NES Citizens Advice – free, confidential, impartial independent advice on many problems/topics
Website: http://www.cab-banes.org
Tel: 0344 848 7919

Appendix 30. Debrief Form – occupational therapists

Debriefing information sheet

Thank you for participating in this study.

The main aim of this research project is to investigate occupational therapists' perspective on the processes that are in place already to help employees return to work after a period of sickness absence, as well as anything that can be improved. One reason why understanding this is valuable is because it is well known that the employee is the essential resource at any organisation (Donovan *et al*., 2013). At the same time, a very large number of workdays are lost due to chronic pain (e.g. ONS, 2017). The data you have contributed will help to evaluate and improve some return to work practices that are likely to contribute to well-being and safe return to work when appropriate. It is also important for you to know that this project is separate and external to the company you work for – so your employer will not know whether you took part in this project.

If you would like more information, or have any further questions about any aspect of this study, then please contact Paula, the study co-ordinator via phone ([redacted] [redacted]), email ([redacted]) or post (see address details below).

As a final point, all data collected in this study remain confidential and will not be made available to anyone outside the research team. The data will mostly be analysed in an aggregated form and although following the interviews individual quotations are likely to be used, no personal/identifiable data will be quoted. Therefore, the researchers will make sure that you will remain anonymous to anyone outside the research team throughout the research process and when the results of this study are published. This also means that your clients, employer, or the government agencies will never know whether you have taken part or not. However, if ***you*** want to discuss this study with anyone, then please feel free to do so. If you later decide that you no longer want to be part of this project, please contact Paula (see details below) to have your data removed from the study and destroyed.

If you are worried about any of the issues related to the topic of this study, please do not hesitate to contact Paula, or any of the research team members (Dr Elaine Wainwright, Dr Jermaine Ravalier; see contact details below) so that we can direct you to someone who might be able to help. If you do not feel comfortable contacting any of us, we have provided details of the local services which you may wish to get in touch with (see contact details below). Your employer may also be able to offer confidential support via an Employee Assistance Programme (EAP).

The ethical aspects of this study have been approved by the College of Liberal Arts Research Committee at Bath Spa University. If you have any complaints or reservations about any ethical aspect of your participation in this research, please in the first instance contact the members of the research team who will do their upmost to resolve any issues. Alternatively, please contact the Research Committee through its Ethics Co-ordinator, Dr Andrew Smart (telephone: [redacted], email: [redacted]). Any complaint you make will be treated in confidence and investigated, and you will be informed of the outcome.

Once again, thank you for taking part in this project.

Kind regards,
The Research Team

Ms Paula Wegrzynek, PhD Researcher, MSc BSc(Hons)
Bath Spa University,
Department of Psychology,
Newton St Loe, Bath, BA2 9BN
Email: [redacted]
Tel: [redacted]

Supervisor's name and email: Dr Elaine Wainwright ([redacted]), Dr Jermaine Ravalier ([redacted]).

College of Liberal Arts Research Committee **Ethics Co-ordinator**: Dr Andrew Smart (telephone: [redacted], email: [redacted])

If you require advice or are worried about the issues related to the topic of this study, you may wish to contact the following:

LIFT psychology – support for people with emotional difficulties, anxiety, etc.
Website: https://lift.awp.nhs.uk/

B&NES Talking Therapies – community based psychological therapies
Website: https://iapt-banes.awp.nhs.uk/

MIND – information and support for better mental health
Website: https://mind.org.uk/

B&NES Citizens Advice – free, confidential, impartial independent advice on many problems/topics
Website: http://www.cab-banes.org
Tel: 0344 848 7919

Appendix 31. Debrief Form – occupational health nurses

Debriefing information sheet

Thank you for participating in this study.

The main aim of this research project is to investigate occupational advisers' perspective on the processes that are in place already to help employees return to work after a period of sickness absence, as well as anything that can be improved. One reason why understanding this is valuable is because it is well known that the employee is the essential resource at any organisation (Donovan *et al*., 2013). At the same time, a very large number of workdays are lost due to chronic pain (e.g. ONS, 2017). The data you have contributed will help to evaluate and improve some return to work practices that are likely to contribute to well-being and safe return to work when appropriate. It is also important for you to know that this project is separate and external to the company you work for – so your employer will not know whether you took part in this project.

If you would like more information, or have any further questions about any aspect of this study, then please contact Paula, the study co-ordinator via phone ([redacted] [redacted]), email ([redacted]) or post (see address details below).

As a final point, all data collected in this study remain confidential and will not be made available to anyone outside the research team. The data will mostly be analysed in an aggregated form and although following the interviews individual quotations are likely to be used, no personal/identifiable data will be quoted. Therefore, the researchers will make sure that you will remain anonymous to anyone outside the research team throughout the research process and when the results of this study are published. This also means that your clients, employer, or the government agencies will never know whether you have taken part or not. However, if ***you*** want to discuss this study with anyone, then please feel free to do so. If you later decide that you no longer want to be part of this project, please contact Paula (see details below) to have your data removed from the study and destroyed.

If you are worried about any of the issues related to the topic of this study, please do not hesitate to contact Paula, or any of the research team members (Dr Elaine Wainwright, Dr Jermaine Ravalier; see contact details below) so that we can direct you to someone who might be able to help. If you do not feel comfortable contacting any of us, we have provided details of the local services which you may wish to get in touch with (see contact details below). Your employer may also be able to offer confidential support via an Employee Assistance Programme (EAP).

The ethical aspects of this study have been approved by the College of Liberal Arts Research Committee at Bath Spa University. If you have any complaints or reservations about any ethical aspect of your participation in this research, please in the first instance contact the members of the research team who will do their upmost to resolve any issues. Alternatively, please contact the Research Committee through its Ethics Co-ordinator, Dr Andrew Smart (telephone: [redacted], email: [redacted]). Any complaint you make will be treated in confidence and investigated, and you will be informed of the outcome.

Once again, thank you for taking part in this project.

Kind regards,
The Research Team

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College of Liberal Arts Research Committee **Ethics Co-ordinator**: Dr Andrew Smart (telephone: [redacted], email: [redacted])

If you require advice or are worried about the issues related to the topic of this study, you may wish to contact the following:

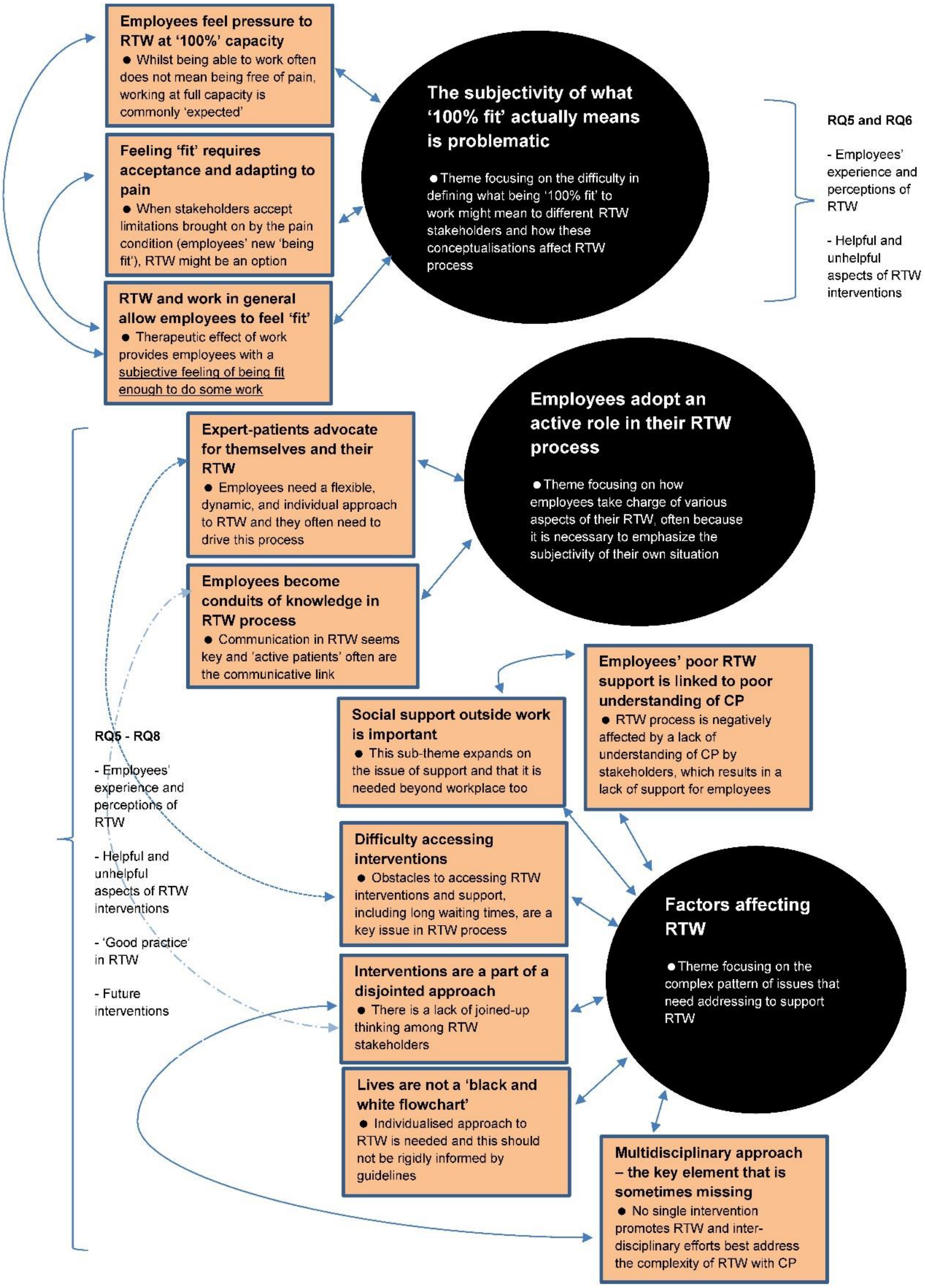
LIFT psychology – support for people with emotional difficulties, anxiety, etc.
Website: https://lift.awp.nhs.uk/

B&NES Talking Therapies – community based psychological therapies
Website: https://iapt-banes.awp.nhs.uk/

MIND – information and support for better mental health
Website: https://mind.org.uk/

B&NES Citizens Advice – free, confidential, impartial independent advice on many problems/topics
Website: http://www.cab-banes.org
Tel: 0344 848 7919

Appendix 32. Study one – definitions of themes and sub-themes



Employees feel pressure to RTW at '100%' capacity
- Whilst being able to work often does not mean being free of pain, working at full capacity is commonly 'expected'

Feeling 'fit' requires acceptance and adapting to pain
- When stakeholders accept limitations brought on by the pain condition (employees' new 'being fit'), RTW might be an option

RTW and work in general allow employees to feel 'fit'
- Therapeutic effect of work provides employees with a <u>subjective feeling of being fit enough to do some work</u>

The subjectivity of what '100% fit' actually means is problematic
- Theme focusing on the difficulty in defining what being '100% fit' to work might mean to different RTW stakeholders and how these conceptualisations affect RTW process

RQ5 and RQ6

- Employees' experience and perceptions of RTW

- Helpful and unhelpful aspects of RTW interventions

Expert-patients advocate for themselves and their RTW
- Employees need a flexible, dynamic, and individual approach to RTW and they often need to drive this process

Employees become conduits of knowledge in RTW process
- Communication in RTW seems key and 'active patients' often are the communicative link

Employees adopt an active role in their RTW process
- Theme focusing on how employees take charge of various aspects of their RTW, often because it is necessary to emphasize the subjectivity of their own situation

Employees' poor RTW support is linked to poor understanding of CP
- RTW process is negatively affected by a lack of understanding of CP by stakeholders, which results in a lack of support for employees

Social support outside work is important
- This sub-theme expands on the issue of support and that it is needed beyond workplace too

RQ5 - RQ8

- Employees' experience and perceptions of RTW

- Helpful and unhelpful aspects of RTW interventions

- 'Good practice' in RTW

- Future interventions

Difficulty accessing interventions
- Obstacles to accessing RTW interventions and support, including long waiting times, are a key issue in RTW process

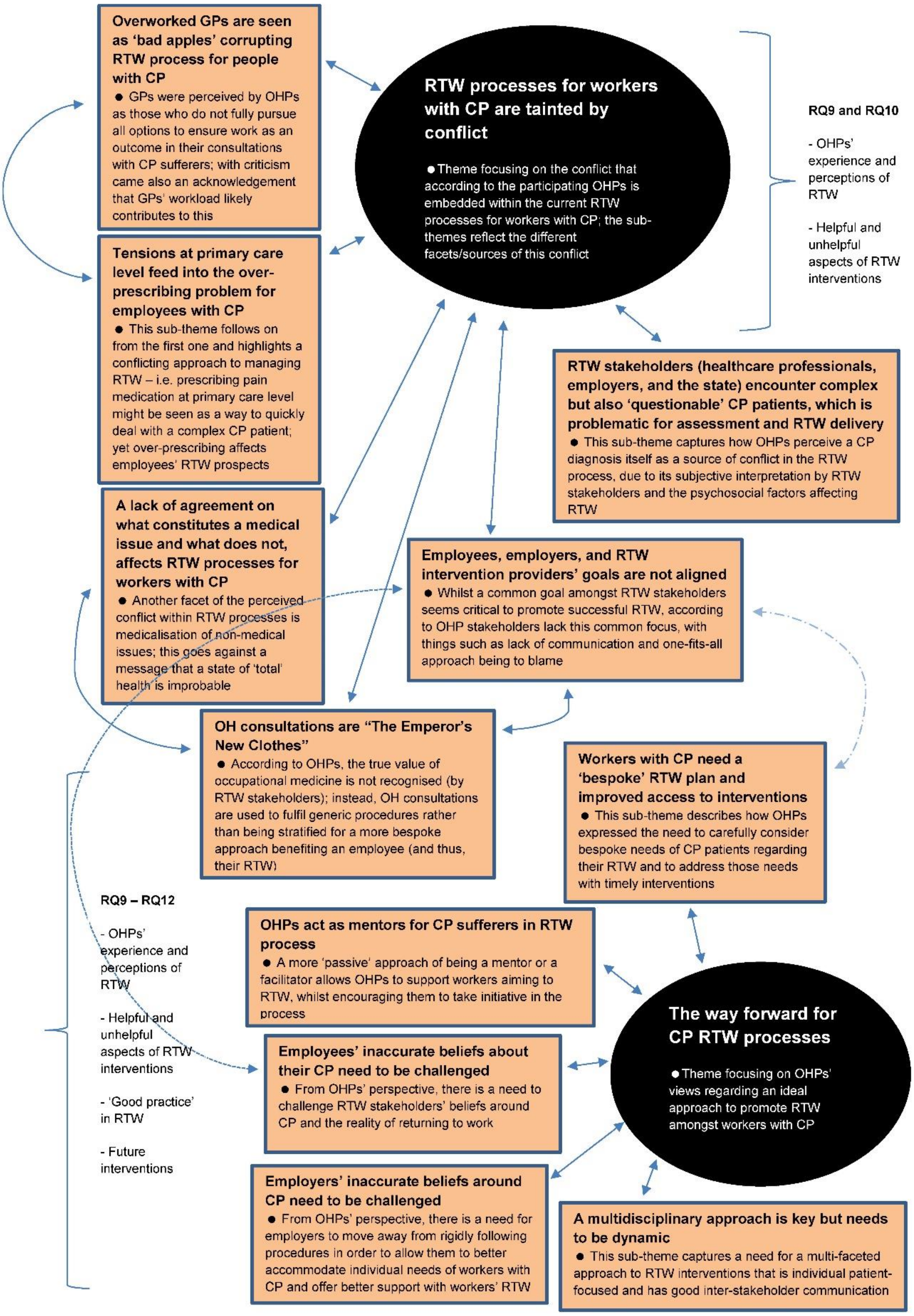
Interventions are a part of a disjointed approach
- There is a lack of joined-up thinking among RTW stakeholders

Factors affecting RTW
- Theme focusing on the complex pattern of issues that need addressing to support RTW

Lives are not a 'black and white flowchart'
- Individualised approach to RTW is needed and this should not be rigidly informed by guidelines

Multidisciplinary approach – the key element that is sometimes missing
- No single intervention promotes RTW and inter-disciplinary efforts best address the complexity of RTW with CP

Appendix 33. Study two – definitions of themes and sub-themes



RTW processes for workers with CP are tainted by conflict

- Theme focusing on the conflict that according to the participating OHPs is embedded within the current RTW processes for workers with CP; the sub-themes reflect the different facets/sources of this conflict

RQ9 and RQ10

- OHPs' experience and perceptions of RTW

- Helpful and unhelpful aspects of RTW interventions

Overworked GPs are seen as 'bad apples' corrupting RTW process for people with CP

- GPs were perceived by OHPs as those who do not fully pursue all options to ensure work as an outcome in their consultations with CP sufferers; with criticism came also an acknowledgement that GPs' workload likely contributes to this

Tensions at primary care level feed into the over-prescribing problem for employees with CP

- This sub-theme follows on from the first one and highlights a conflicting approach to managing RTW – i.e. prescribing pain medication at primary care level might be seen as a way to quickly deal with a complex CP patient; yet over-prescribing affects employees' RTW prospects

RTW stakeholders (healthcare professionals, employers, and the state) encounter complex but also 'questionable' CP patients, which is problematic for assessment and RTW delivery

- This sub-theme captures how OHPs perceive a CP diagnosis itself as a source of conflict in the RTW process, due to its subjective interpretation by RTW stakeholders and the psychosocial factors affecting RTW

A lack of agreement on what constitutes a medical issue and what does not, affects RTW processes for workers with CP

- Another facet of the perceived conflict within RTW processes is medicalisation of non-medical issues; this goes against a message that a state of 'total' health is improbable

Employees, employers, and RTW intervention providers' goals are not aligned

- Whilst a common goal amongst RTW stakeholders seems critical to promote successful RTW, according to OHP stakeholders lack this common focus, with things such as lack of communication and one-fits-all approach being to blame

OH consultations are "The Emperor's New Clothes"

- According to OHPs, the true value of occupational medicine is not recognised (by RTW stakeholders); instead, OH consultations are used to fulfil generic procedures rather than being stratified for a more bespoke approach benefiting an employee (and thus, their RTW)

Workers with CP need a 'bespoke' RTW plan and improved access to interventions

- This sub-theme describes how OHPs expressed the need to carefully consider bespoke needs of CP patients regarding their RTW and to address those needs with timely interventions

RQ9 – RQ12

- OHPs' experience and perceptions of RTW

- Helpful and unhelpful aspects of RTW interventions

- 'Good practice' in RTW

- Future interventions

OHPs act as mentors for CP sufferers in RTW process

- A more 'passive' approach of being a mentor or a facilitator allows OHPs to support workers aiming to RTW, whilst encouraging them to take initiative in the process

The way forward for CP RTW processes

- Theme focusing on OHPs' views regarding an ideal approach to promote RTW amongst workers with CP

Employees' inaccurate beliefs about their CP need to be challenged

- From OHPs' perspective, there is a need to challenge RTW stakeholders' beliefs around CP and the reality of returning to work

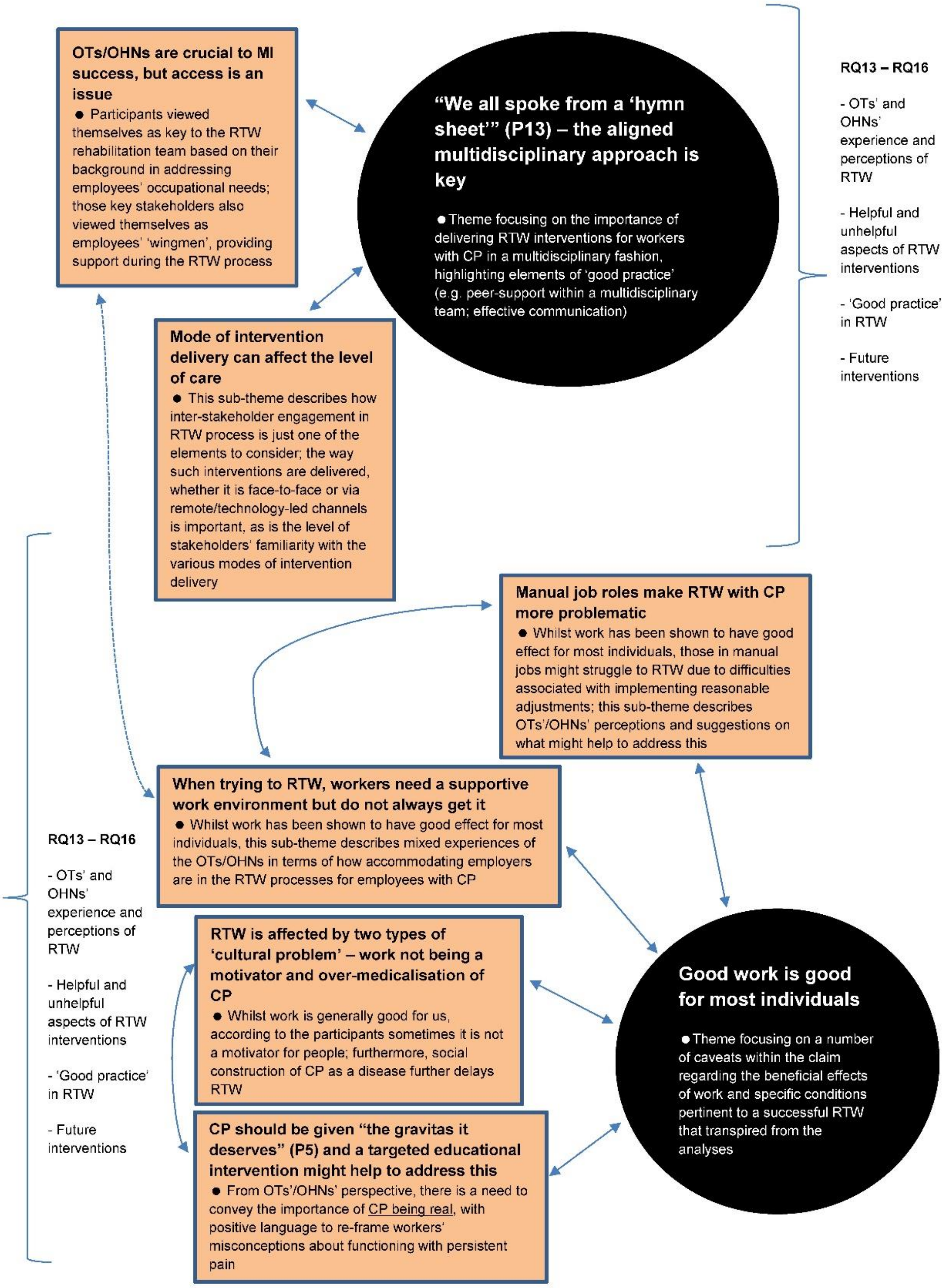
Employers' inaccurate beliefs around CP need to be challenged

- From OHPs' perspective, there is a need for employers to move away from rigidly following procedures in order to allow them to better accommodate individual needs of workers with CP and offer better support with workers' RTW

A multidisciplinary approach is key but needs to be dynamic

- This sub-theme captures a need for a multi-faceted approach to RTW interventions that is individual patient-focused and has good inter-stakeholder communication

Appendix 34. Study three – definitions of themes and sub-themes



OTs/OHNs are crucial to MI success, but access is an issue

- Participants viewed themselves as key to the RTW rehabilitation team based on their background in addressing employees' occupational needs; those key stakeholders also viewed themselves as employees' 'wingmen', providing support during the RTW process

"We all spoke from a 'hymn sheet'" (P13) – the aligned multidisciplinary approach is key

- Theme focusing on the importance of delivering RTW interventions for workers with CP in a multidisciplinary fashion, highlighting elements of 'good practice' (e.g. peer-support within a multidisciplinary team; effective communication)

RQ13 – RQ16

- OTs' and OHNs' experience and perceptions of RTW

- Helpful and unhelpful aspects of RTW interventions

- 'Good practice' in RTW

- Future interventions

Mode of intervention delivery can affect the level of care

- This sub-theme describes how inter-stakeholder engagement in RTW process is just one of the elements to consider; the way such interventions are delivered, whether it is face-to-face or via remote/technology-led channels is important, as is the level of stakeholders' familiarity with the various modes of intervention delivery

Manual job roles make RTW with CP more problematic

- Whilst work has been shown to have good effect for most individuals, those in manual jobs might struggle to RTW due to difficulties associated with implementing reasonable adjustments; this sub-theme describes OTs'/OHNs' perceptions and suggestions on what might help to address this

When trying to RTW, workers need a supportive work environment but do not always get it

- Whilst work has been shown to have good effect for most individuals, this sub-theme describes mixed experiences of the OTs/OHNs in terms of how accommodating employers are in the RTW processes for employees with CP

RQ13 – RQ16

- OTs' and OHNs' experience and perceptions of RTW

- Helpful and unhelpful aspects of RTW interventions

- 'Good practice' in RTW

- Future interventions

RTW is affected by two types of 'cultural problem' – work not being a motivator and over-medicalisation of CP

- Whilst work is generally good for us, according to the participants sometimes it is not a motivator for people; furthermore, social construction of CP as a disease further delays RTW

Good work is good for most individuals

- Theme focusing on a number of caveats within the claim regarding the beneficial effects of work and specific conditions pertinent to a successful RTW that transpired from the analyses

CP should be given "the gravitas it deserves" (P5) and a targeted educational intervention might help to address this

- From OTs'/OHNs' perspective, there is a need to convey the importance of <u>CP being real</u>, with positive language to re-frame workers' misconceptions about functioning with persistent pain

Appendix 35. Return to work interventions for chronic pain - Wegrzynek et al. (2020)

Please note - the article on pp. 434-443 has been redacted from the digitised version of the thesis for copyright reasons. The accepted manuscript of the article is available to read at http://researchspace.bathspa.ac.uk/13186/
