

# Occupational safety and health considerations of returning to work after cancer



Report submitted to the IOSH Research Committee

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## **Abstract**

Increasing numbers of people undergo a return to work (RTW) after a cancer diagnosis and treatment. Although there is evidence available in relation to managing the RTW process, at the current time, there is limited information available in relation to any safety and health issues associated with this process. Using a systematic review and organisational case studies, this project aimed to understand the health and safety implications of returning to work or staying in work during treatment, to identify what employers can do to facilitate this process for cancer survivors and to develop guidance for IOSH from the work carried out. The systematic review identified that understanding the potential changes in individual capacity (both physical and mental) are essential, as are the role of the line manager, being able to offer flexibility in returning to work, and understanding that the process can be long term. The case studies aimed to identify good practice and found that different aspects can impact on the RTW or continuation to work, including using risk assessments of work tasks rather than job roles, and considering the impact of physical and psychological demands. Different factors need to be considered within the risk assessment, including the impact of fatigue, risks of infection, work planning and breaks in the working day, the inclusion of emergency planning, and flexibility in start times or workplace. The work has also highlighted a number of evidence gaps, including: the lack of an evidence base for safety, health or ergonomic interventions; a lack of information in relation to manual workers and their RTW needs; a lack of information on those who have had to change jobs or on their future employability; and a need for more in-depth, longer-term research. Content for an IOSH OH Toolkit on RTW after cancer was also produced as part of this work.

## **Executive summary**

### **Introduction**

Increasing numbers of individuals are either returning to work after cancer treatment or continuing to work through treatment. Although there are sources of information available for those in human resources (HR) or occupational health, there is limited information available to aid in risk management for such individuals. The aim of this project was to examine occupational safety and health issues in relation to those returning to work after cancer and cancer treatments and it does this by fulfilling the following objectives:

- To understand the health and safety implications of returning to work after cancer by undertaking a systematic review of existing literature
- To identify what employers can do to facilitate RTW and what is best or good practice in dealing with health and safety issues for cancer survivors returning to work
- To develop guidance to support employers to implement appropriate adjustments for cancer survivors and support measures to manage health and safety issues relating to their RTW

### **Systematic review**

A search protocol was developed and searches carried out in both the peer-reviewed literature and grey literature. In total, 609 publications were evaluated, leading to 17 being included in the review. A further 40 papers were included that had some relevance to the review.

The research papers identified different aspects of work that had an impact on those coming back to the workplace following cancer treatment. These included: the physical demands of the work and the impact of co-morbidities and fatigue; limited evidence in relation to accident risk; and the negative impact of psychological and physical factors, including fatigue, memory deficits, poor concentration and job content and mental demands on the RTW process.

A number of factors were found to mitigate the RTW process, including: workplace adjustments to manage physical load, flexible working, limiting overtime and ensuring the work fits the capabilities of the worker. Support from organisations and co-workers were also a vital factor in the success of the RTW.

RTW policies were not used by the majority of organisations; but the use of such policies can aid the individual, as well as involve others in a successful return. The work ability concept applied to this area has been found to help identify job factors that require modification, including physical and mental demands.

The use of a critical illness policy or a workplace cancer policy was also seen as a central part of the RTW process and key elements were identified, including:

- respect the employee's dignity and privacy
- maintain employee involvement and engagement
- ensure the employee suffers no financial detriment
- continue to provide employee benefits
- adopt a flexible approach
- continue to provide access to development opportunities
- provide information and support
- support the rest of the team, including the line manager.

The use of individualised risk assessments was also seen as a valuable way of integrating individuals back into the workplace. Communication between employers, employees and the individual returning was also important in a successful return.

The papers that did not meet the inclusion criteria but still had some relevance provided valuable insights on a number of different topics. These included the need for information and training for professionals and individuals in relation to the demands of the work, including: physical work, lifting heavy loads, concentrating for long period, keeping pace with others and learning new things. The importance of vocational rehabilitation and the support of the line manager are also essential. The need for a supportive working environment and an understanding of the potential long-term impact of cancers and their treatments are important for the employer, colleagues and the individual.

From the review, the factors identified as having an impact on RTW included: understanding that the physical capacities of the cancer survivor may have changed, the importance of work and work modifications, and the impact of ongoing health symptoms and fatigue, which may be a risk to the individual.

There are limited data in relation on the impact of cancer and cancer treatment on RTW in the longer term; for example, some symptoms can still be problematic five years after treatment. However, it is clear that taking a flexible approach and involving different disciplines are essential.

### **Organisational case studies**

In order to gain further information, a case study methodology was used to explore the RTW process in eight different organisations. A structured interview methodology was used with the range of stakeholders involved in the process (the individual, the line manager and other actors, including HR, OSH or occupational health where available). Factors examined in the interviews included the following:

- aspects of RTW, work adjustment management, the roles of those involved and when they become involved
- awareness of health and safety issues associated with cancer and cancer treatment
- details of any health and safety risks identified
- details of the processes undertaken
- perceived cost to the organisation
- work adjustments offered to employees in relation to job role, potential ongoing health problems and health and safety risks
- perceived ease/difficulty and effectiveness of implementing advice and obtaining information on the topic of RTW after cancer.

The aim was to carry out the case studies in a mix of large, medium and small organisations. In total eight organisations were involved: four large companies, three medium companies and one small company. The majority of participants were female and one individual had continued to work throughout treatment.

Good practice findings from the case studies included the use of risk assessment as a key cornerstone in relation to safety and health at work. However, not all of the case studies had carried out a risk assessment. In some organisations the occupational health team had carried them out. Although risk assessments hadn't been completed in all case studies, the results identified that there is a need for these and for regular (possibly weekly) re-assessment of work tasks to ensure that the role is suitable for the individual. In relation to fatigue, all the case studies took a flexible approach to work, either changing start or finish times or, where possible, allowing individuals to work from home.

A number of other aspects were also identified within the case studies, including: maintaining contact between the workplace and the employee through both formal and informal routes; having discussions about the RTW; planning the RTW; and continuing to meet after the RTW. Continuing meetings before, during and after the return was also perceived as a good idea. A summary of good practice has been collated below:

- Maintaining both formal and informal contact between employer, employee and work colleagues before RTW
- Maintaining contact with line manager before RTW
- Having a plan for RTW
- Following guidance in relation to a graduated RTW
- Having an RTW policy in place for all illnesses, including cancer, and ensuring occupational safety and health are involved in policy development
- Ensuring that a risk assessment is carried out for work tasks and is re-assessed when necessary
- Identifying risk reduction measures, including consideration of the journey to work, work tasks and interactions with the public (or other potential infection sources)
- Managing workload to reduce any pressure points

The case study research was limited by the small number of organisations involved and did not aim to be a representative sample. Engaging companies in this type of work does result in a positive bias where only those who have been successful will want to be involved in research.

Important findings from the work include the need for an individualised approach and the lack of consistent risk assessment. This was perhaps due to the work being carried out, as office jobs tend to be seen as lower risk and are not necessarily the focus of risk assessments in many organisations. The case studies did identify that individuals were involved in lifting and other physical demands, even in office environments; therefore, there is a clear need to understand work tasks for a particular individual, not just assume the tasks by job title alone.

One perception from the employee participants was that once they were fully returned to work, the process was complete and they were back to full health. This suggests a lack of awareness of the potential impact of longer-term changes and the possible need for continued monitoring.

### **Overview of findings**

At the current time there is limited evidence in relation to the safety aspects of RTW after cancer. This project identified the importance of risk assessment, which should:

- be regularly followed up due the fluctuating nature of some of the symptoms
- be individualised, as the nature of the symptoms are individual and personal, and job roles and demands vary.

There are also a number of essential areas that should be covered by the risk assessment, including:

- the physical aspects of the work
  - physical demands and limitations
  - ergonomic or job design changes due to back or joint pain or lymphoedema
- the impact of fatigue on work tasks
- the psychological demands of the work
- cognitive impairment following chemotherapy, ie 'chemo brain'
- risks of infection
- the journey to work
- driving for work
- reducing the onset of fatigue by planning breaks
- including emergency planning, if necessary
- if working at home, ensuring the environment is safe and ergonomically sound.

The review and case studies also identified that co-morbidities, such as lymphoedema and the effects of sun exposure, need to be considered in relation to work and work tasks. In addition to physical demands, psychological demands as well as psychosocial factors can have a positive

or negative influence on the individual. The lack of research evidence in relation to accidents, work and cancer survivorship also needs to be addressed.

### **OH toolkit**

An OH toolkit was developed on the evidence collated from the review and case studies to cover RTW after cancer in relation to OSH. This was designed to fit with the current IOSH OH Toolkit available on the IOSH website, providing information on:

- support for employees returning to work
- advice for employers and employees
- good practice in rehabilitation and RTW.

### **Conclusions and further research**

This project has identified good practice in relation to RTW after cancer. Although there is a large amount of useful information available from other sources, there is very limited information available for those involved in the safety professions to support a successful return to the workplace. Evidence gaps include:

- a lack of knowledge in relation to manual workers and their outcomes in the RTW process
- insufficient information on those who have had to change jobs because of their health or their future employability
- a lack of evidence in relation to safety or ergonomics aspects of work; and how they can contribute to the success or failure of an RTW
- a lack of evidence in relation to accident risk during treatment and when the employee has returned to work
- a need for more research, including the development of a cohort of individuals who can be followed up over five years, to identify the barriers and facilitators in staying in work or changing the work they do.

## 1. Introduction

The latest statistics from the Office for National Statistics identify that in the UK in 2013 there were 352,197 people diagnosed with cancer; this equates to around 960 people being diagnosed every day.\* If the rate of cancer diagnosis continues to rise by over 3% a year, there could be four million people living with cancer by 2030.<sup>1</sup> There is a large degree of variation in relation to survival rates, impacted upon by the cancer stage at diagnosis, with statistics showing that more people are being diagnosed at an earlier rather than later stage, with 54% being diagnosed at stage I or II.<sup>†</sup> There are also variations in survival rates due to cancer type, age at diagnosis and treatment, with half of those now diagnosed with cancer surviving their disease for at least 10 years, a figure that has doubled in the last 40 years.<sup>‡</sup> These survivor numbers are also set to increase with the number of people that live more than five years from initial diagnosis predicted to more than double to 2.7 million in 2030.<sup>§</sup>

In the UK, adults aged 25–49 contributed to around a tenth (10%) of all new cancer cases in 2009–2011, and in the same period, over half (53%) of all cancers were diagnosed in adults aged 50–74 in the same period. This provides an approximation of the incidence of cancer diagnosis within the working population. In addition to this, Crepaldi *et al.* estimated that as a result of the combined effects of ageing of the working population and retirement age increasing, the incidence of cancer in the working population will increase.<sup>4</sup> Estimates from Rowland *et al.* (2001) also suggest that 41–84% of people who have had cancer return to work (RTW).<sup>5</sup>

While this is very positive in relation to cancer treatment, it does bring new challenges for those involved in supporting employees' RTW and managing workplace risks. Among those who are working when they are diagnosed, four in 10 people have to make changes to their working lives after diagnosis, with almost half changing jobs or leaving work altogether.<sup>6</sup> However, research in the UK found that almost half (47%) of a sample of 1,740 UK adults living with cancer who informed their employer of their diagnosis did not have sick pay entitlement, or access to flexible working or workplace adjustments.<sup>7</sup> The same survey also found that almost one in five people who returned to work after their diagnosis experienced a lack of understanding of their needs from their employer or colleagues.

The process of RTW after cancer can be disrupted by physical health problems and/or limitations as a result of cancer and cancer treatment. The long-term health impairments from the disease itself or the treatment can delay or prevent individuals returning to full capacity. Reported problems include: disability (eg lymphoedema has been found to occur in 20% of women after breast cancer treatment), loss of confidence, and continuing health problems/secondary health issues which may result in frequent GP or hospital visits. Furthermore, later side-effects from the cancer and cancer treatment can include: heart problems; high blood pressure; lung problems (including reduction in lung capacity); hormone changes (including menopause onset or reduced fertility); bone or joint problems; nervous system side-effects (including peripheral neuropathy) and digestive problems.<sup>‡</sup> The type of cancer also has an impact in relation to work. For example, bladder or bowel cancer can require individuals to use the toilet more frequently or use a colostomy bag, or stomach cancer where an individual must eat more often.<sup>§</sup> As well as physical health problems, cognitive difficulties including deficits in memory and concentration abilities have also been reported. Such effects can last several years post-treatment.<sup>8</sup> In addition to the consequences of cancer and cancer treatment impacting on RTW, the attributes of a job such as physical or cognitive demands can have a direct influence.<sup>9,10</sup> These issues also have safety implications for those returning to

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\* Office for National Statistics <http://www.ons.gov.uk/ons/rel/vsob1/cancer-statistics-registrations--england--series-mb1-/index.html>

† National Cancer Intelligence Network. Stage Breakdown by CCG 2013. London: NCIN; 2015. [http://www.ncin.org.uk/publications/survival\\_by\\_stage](http://www.ncin.org.uk/publications/survival_by_stage)

‡ <http://www.cancer.net/survivorship/long-term-side-effects-cancer-treatment>

§ <http://www.macmillan.org.uk/information-and-support/organising/work-and-cancer/information-for-employees/coping-with-side-effects.html#tcm:9-13945>

work, and yet there is a lack of research to understand these from the perspective of cancer and subsequent treatment.

Studies have indicated that only 64% of those who were employed at the time of cancer diagnosis achieved a successful RTW two to three years after diagnosis, with many experiencing difficulty in remaining in work due to a lack of support.<sup>11,12</sup> Menhert and Koch found that perceived employer accommodation, high job requirements, cancer recurrence or progression and problematic social interactions emerged as significant predictors for RTW.<sup>13</sup> Research has also shown that 18 months after a diagnosis of cancer, a lack of workplace intervention was associated with high levels of fatigue, which in turn was correlated with higher levels of depression.<sup>14</sup>

In relation to support for cancer survivors, Taskila *et al.* report that nearly 30% of men and 40% of women returning to work after cancer identified that they needed more practical support from occupational health services in the short and long term.<sup>15,16</sup>

The importance of work for cancer survivors has been investigated, as there are various factors which can be impacted by a lack of work, including quality of life, self-esteem and personal finances.<sup>17,18</sup> As identified by Peteet, work can give cancer survivors normality in their lives, which can aid in their recovery.<sup>19</sup>

There are a number of publications and guidance documents available, in relation to occupational health and human resource management, to support cancer survivors in their journey back to work. However, there is a lack of evidence in relation to occupational safety and health (OSH) in the RTW work process for this particular group of workers. With this in mind, the current research project had the following three aims:

- To understand the health and safety implications of RTW after cancer by undertaking a systematic review of existing literature (Section 2)
- To identify what employers can do to facilitate RTW and what is best or good practice in dealing with health and safety issues for cancer survivors returning to work (Sections 3 and 4)
- To develop guidance to support employers to implement appropriate adjustments for cancer survivors and support measures to manage health and safety issues relating to their RTW (Section 5)

The research project was focused on the occupational safety aspects of returning to work. This was because safety aspects of returning to work were identified as lacking in the scoping work and the need to build an evidence base identified.

The team convened to carry out this research project included individuals from different disciplines including: occupational safety and health, ergonomics, occupational hygiene, occupational psychology, health psychology and occupational cancer epidemiology. This allowed a trans-disciplinary approach to be taken to allow learning from different fields to be applied.

## **2. Systematic literature review**

The aims of the review were to extend the knowledge base specifically in the area of health and safety implications. This section examines relevant factors in relation to their potential to impact on the OSH of those returning to work after cancer, through answering the following questions:

- What factors influence RTW after cancer in relation to OSH?
- What evidence is available on workplace changes, adjustments and other mechanisms to support RTW after cancer in relation to OSH?

- What implications does having suffered from cancer and cancer treatment have for managing the health and safety of cancer survivors when they RTW?
- What evidence is available on workplace changes, adjustments and other mechanisms to support RTW after cancer in relation to safety?
- What evidence is available about best practice in supporting cancer survivors' RTW within the context of safety and health?

## 2.1 Review methods

A search protocol and search strategies were developed and can be seen in Appendix 1. After searches had commenced, the titles and abstracts were initially screened to eliminate papers not relevant to the questions of interest. Inclusion criteria were applied, including: participants being cancer survivors, who were in employment or voluntary work, papers published in English and after 2000. Those titles and abstracts not meeting these criteria were excluded at this stage. Where it was unclear from the title or abstract whether the paper met the criteria, a conservative approach was taken and the paper was included. This was done independently by two research scientists at IOM, with a third opinion from a senior scientist at IOM when the research scientists had disagreed on inclusion or exclusion of a paper.

Following initial screening, the full papers were then obtained for data extraction for the systematic review (note: if it was unclear whether the content of the publication was relevant to the study the full document was obtained to ensure that all informative data were scrutinised). The methodology used for this was based on that developed by the Centre for Reviews and Dissemination at the University of York.<sup>20</sup>

Each study was assessed on its external validity and its applicability to the target population of those that have returned to work and continued to work and settings defined in the search strategy. The following criteria were used to evaluate the applicability of the evidence in relation to each research question:

- Likely to be applicable across a broad range of populations and settings
- Likely to be applicable across a broad range of populations and settings, assuming it is appropriately adapted
- Applicable only to populations or settings included in the studies – the appropriateness of broader application is uncertain
- Applicable only to settings or populations included in the studies

The relevant data from each of the full papers were then extracted into a pre-defined data extraction template and the quality of the study was also evaluated (see section 2.2). The data extraction was undertaken independently by six reviewers from the project team; the division of papers was allocated randomly, with papers being reviewed twice by different pairs of reviewers and differences resolved by a third reviewer.

## 2.2 Quality assessment

For included publications a quality evaluation was carried out using an adapted version of the Effective Public Health Practice Project (EPHPP) quality assessment tool for quantitative research.\* A similar process was carried out for grey literature (non-peer reviewed publications) identified within the additional searches ensuring that quality was assessed in a consistent way throughout. Data from the publications was then collated into evidence tables. The data extraction method is described in Appendix 2.

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\* The EPHPP Methodology  
[http://www.ephpp.ca/PDF/Quality%20Assessment%20Tool\\_2010\\_2.pdf](http://www.ephpp.ca/PDF/Quality%20Assessment%20Tool_2010_2.pdf)



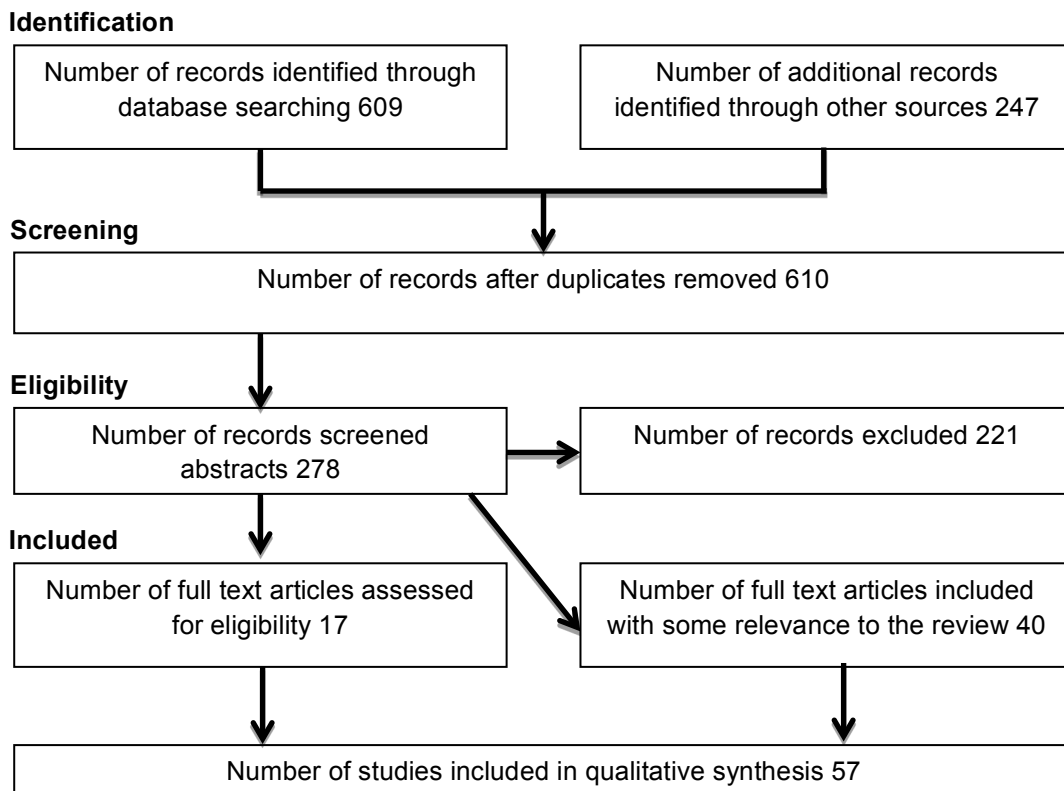
## 2.3 Results

### 2.3.1 Results of searches

The searches, which were completed between March and August 2014, identified a total of 856 papers. These were all subsequently stored electronically, with their abstracts, using Ref Works software. Screening these abstracts resulted in the inclusion of 278 papers for review by the six reviewers. Of these, 17 papers were included in the systematic review. A further 40 papers were included in the review as, after data extraction, it was felt they gave some useful insights into the area of research but had not met the inclusion criteria. In total, 221 were excluded and a further seven could not be obtained within the review timings (Appendix 5). The process is presented in Figure 1.

None of the included studies were characterised as intervention studies. Two studies were retrospective cohort studies, four were cross-sectional surveys, one using a control group, three studies used qualitative methodologies and four studies were reviews. In addition, one guidance document was included and one tool development paper. The characteristics of the studies, type of cancer reported and a quality assessment are reported for each study type in Table 1.

**Figure 1 Reporting results (PRISMA guidelines<sup>21</sup>)**



### 2.3.2 Occupational safety and health concerns that need to be mitigated during the RTW phase

A number of issues were identified within the review process in relation to the RTW experience of cancer survivors that have the potential to influence occupational safety and health and vice versa. These have been considered in relation to physical workplace factors, psychological

workplace factors and the workplace more generally. The papers that examine these issues are presented in a summary form in Table 1.

### Aspects of the physical demands of work

Eight studies reported the physical workplace and other aspects of work as a risk factor for health and safety among those with cancer. The cancers covered by these studies included: breast, colorectal, haematological malignancies and multiple malignancies. Physical workplace factors identified as risk factors in relation to health and safety included: jobs which required awkward movements such as stooping and lifting, heaving lifting, driving; and jobs that were mainly outdoors where the risk was to those who had skin sensitivity following cancer/cancer treatment. Although fatigue is not a physical workplace factor, it was highlighted by five studies to be a potential risk factor for health and safety in both manual and non-manual jobs.

Torp *et al.* (2012) examined work ability and worksite adjustments among cancer survivors.<sup>22</sup> The study identified that 31% of employed cancer survivors reported a reduction in physical work ability. Issues identified from other included papers suggested that the physical demands of work can be a barrier to returning to work.<sup>23,24</sup> Two papers examined these issues within different survivor groups.<sup>24,25</sup> In a systematic review of prostate cancer survivors, 22–30% of survivors reported difficulties with physical tasks, including stooping and lifting.<sup>25</sup> The same review identified that 28% of women with a history of breast cancer reported physical impairments and these included difficulties with stooping (32%), physical effort (49%) and heavy lifting (62%). Heavy lifting and other high physical demands were negatively associated with RTW in lung cancer patients.<sup>24</sup> Given that physical demands, such as those identified, can be related to a risk of musculoskeletal injuries, it can at least be hypothesised that changes in work ability because of cancer or cancer treatment can impact on an employee's work-related health and safety.

Considering these data in relation to work, there is a clear need to understand the impact on physical capability and capacity during cancer treatment and RTW, and to recognise this as an ongoing issue. In a case control study of 100 breast cancer survivors four years post-diagnosis, the cancer survivor group had a significantly higher work limitations score than the controls (5.5 versus 2.8,  $p < 0.0001$ ).<sup>26</sup> This paper also reports that 13% of cancer patients stop work because of persistent or recurrent symptoms within four years of diagnosis. This highlights the continuing nature of limitations within this population. Limitations in work ability were reported in nearly 20% of cancer survivors one to five years post-diagnosis.<sup>27</sup>

Co-morbidities were also identified as problematic in breast cancer survivors and those who had survived haematological malignancies.<sup>23,28</sup> Difficulties when driving were identified by one participant with lymphoedema.<sup>23</sup> The potential for increased sun sensitivity for those in Australia returning to work after haematological malignancies were also identified as a problem.<sup>28</sup> These are both issues that, if identified as a hazard in the workplace, allow risk reduction measures to be put in place to protect those workers.

Fatigue was identified as a work-related issue in five papers.<sup>23,26,28-30</sup> Fatigue and 'fatigability' were identified as barriers to RTW in two qualitative research studies.<sup>23,29</sup> In a survey of 100 women who had undergone treatment for breast cancer, fatigue was more strongly linked to work limitations in the participant group than in the controls.<sup>26</sup> After treatment for gynaecological cancer, it was identified that fatigue or lack of energy was a concern.<sup>30</sup> McGrath *et al.* (2012) interviewed 50 individuals who were one year post-treatment for haematological malignancies.<sup>28</sup> The study identified that there was a sub-group of individuals within the participant group who wanted to RTW but were finding the process difficult. Within this group, the physical effects of both cancer and treatment created barriers to returning to work. One of the main factors influencing this was fatigue. Fatigue was also identified as having the greatest impact on quality of life.<sup>29</sup> Fatigue is a known health and safety risk factor and, together with the importance of fatigue being identified in our review, this suggests potential for a significant impact on health and safety.

Fatigue in itself has the possibility to impact on a number of different areas within the workplace, whether it is physical fatigue or psychological fatigue or a mixture of both. It can lead to an increased risk when controlling machinery, driving or carrying out tasks that require high levels of concentration. For sedentary jobs, it may be an issue for those involved in work where accuracy is required. Identifying the potential risks for those in such work is therefore key to enable a safe RTW.

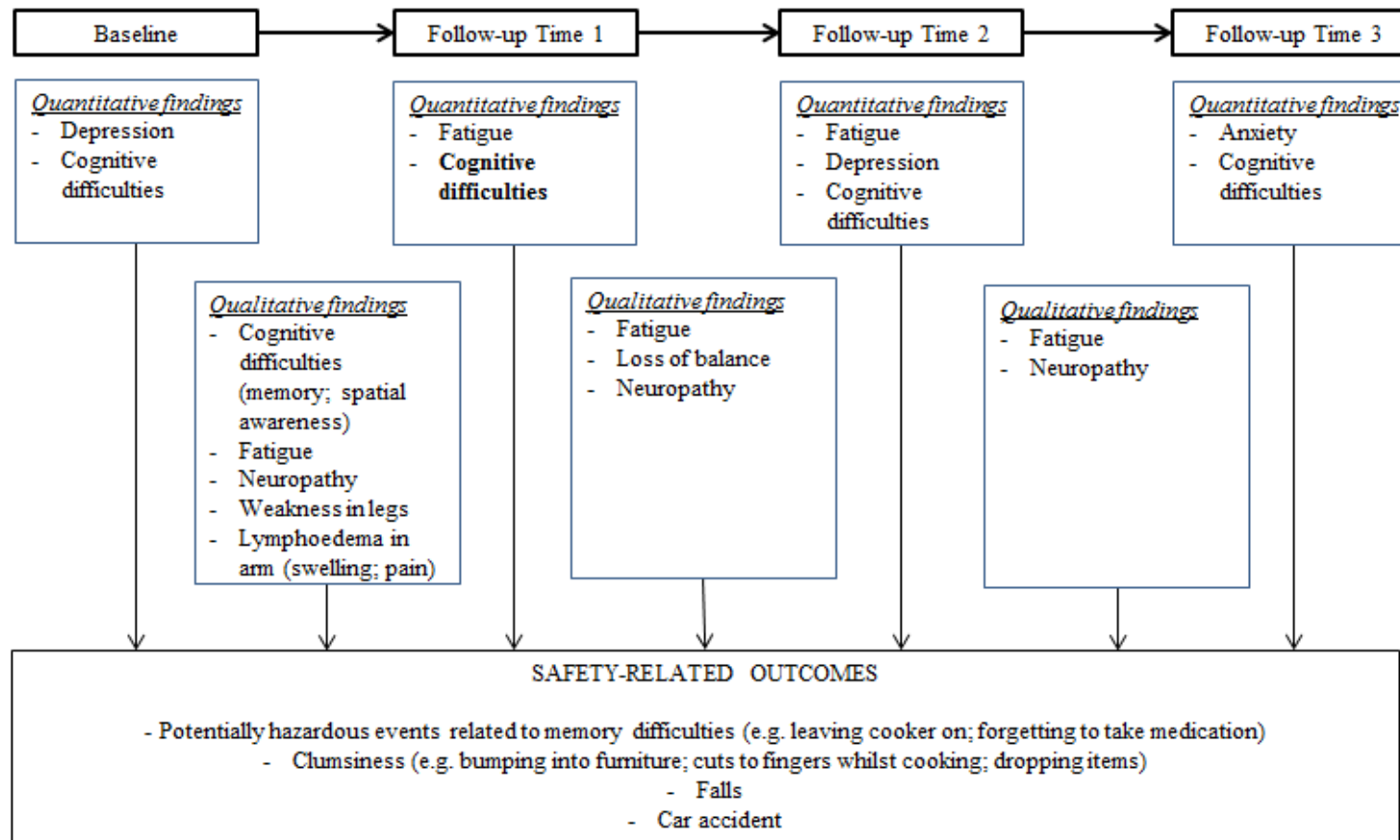
Different types of treatment have different impacts, such as radiation treatment impacting negatively on physical task, eg difficulty lifting heavy loads or a reduced ability to stoop, kneel or crouch. By comparison, women who had chemotherapy were more likely to report issues with cognitive tasks, such as those requiring intense concentration and learning new things.<sup>30</sup> In considering the impact of physiological and psychological load, there may be interactions between those and the individual returning to work. So managing these aspects in relation to work modifications would have to be personalised.

The review also identified that one of the particular issues in relation to RTW after cancer is ill health symptoms related and unrelated to the original cancer. In a sample of 100 working women, four years post breast cancer, higher levels of age-adjusted work limitations were identified within the survivor group ( $p < 0.001$ ) compared with controls.<sup>26</sup> The effects of cancer and cancer treatment were found to vary over time, so it is vital to consider how specific job tasks are affected by both cancer and its treatment.<sup>30</sup> The interaction between physical and psychosocial issues in relation to work and health is only now being picked up. However, the authors do appreciate that fatigue is likely to have both a physical and psychological component.

### **Accidents**

Only one study was identified that examined accidents in relation to treatment, recovery and RTW among cancer survivors.<sup>31</sup> This doctoral study examined this issue within breast cancer patients. From the background literature, it was identified that having a cancer diagnosis was associated with having an increased risk of having an accident such as a fall.<sup>31</sup> The research identified that the risks in breast cancer patients of having an accident in either the home or at work changed over time. Participants were followed up three times after baseline using questionnaires, diaries and interviews. The results identified that the risk factors for safe or unsafe outcomes changed over time; the quantitative research identified that depression and cognitive difficulties may be associated with safety-related outcomes, although this finding was not statistically significant. When analysing the qualitative research within this study, the participants suggested that fatigue, neuropathy, weakness in the legs and lymphoedema could be linked to hazardous events. A suggested model of this process derived from the thesis is presented in Figure 2.

Figure 2 Accident theory model illustrating risk factors as reported by breast cancer patients undergoing chemotherapy<sup>31</sup>



## Psychological factors

The review identified a number of psychological and psychosocial factors that impact on the ability of an individual to return to (or stay at) work after cancer. Few studies have directly examined the impact on work-related health and safety risks of psychosocial and psychological factors related to cancer, its diagnosis and treatment. Factors identified as potential risk factors are cognitive demands (four studies); job demands (two studies); and psychosocial risk factors (two studies). The types of cancer reported in these studies included breast cancer, lung cancer, and leukaemia; and some studies covered several different cancers.

Cognitive issues, including poor concentration, were identified among cancer survivors.<sup>29,30</sup> It is well documented that poor concentration is a risk factor for accident occurrence. Short *et al.* (2006) identified that some of those returning to work found it difficult to keep pace with others (22%), to learn new things (14%) and that prolonged concentration was difficult (12%).<sup>32</sup> One systematic review identified two studies that reported cognitive problems amongst cancer survivors, including poor concentration and memory and attentional problems.<sup>25</sup> This review also identified that breast cancer survivors reported difficulty in learning new things (20%) and keeping up with others (39%). In addition to this, in breast cancer survivors, the loss of concentration had a negative influence on both confidence and self-esteem. This had a knock-on effect on those having to deal with hot flushes from medically induced menopause as part of their treatment.

Loss of memory issues have also been addressed within the research identified.<sup>23,25,29</sup> Deficits in working memory were more prevalent among cancer survivors than in a non-cancer control group.<sup>25</sup> This was identified in a second interview study as a barrier to RTW.<sup>23</sup>

Other psychosocial issues have also been identified within the body of existing research. This includes job content and mental demands as being a problem in relation to RTW.<sup>23</sup> In addition, lack of control over work was also seen as a barrier as it increased pressure on the individual. A lack of emotional support was perceived to be an issue for those returning to work.<sup>29</sup> This included a lack of support from line managers or co-workers when returning to work. Experiencing a lack of control is a known risk factor for work-related injury and therefore these factors are important considerations in relation to health and safety. Similarly, the work of Tamminga *et al.* (2012) reported that lack of support from colleagues and others at work, including human resources and medical consultants, was perceived as a barrier, as many in the work environment did not know how to react to individuals with a cancer diagnosis.<sup>23</sup>

### 2.3.3 Ways of mitigating occupational safety and health concerns

Although research is limited at the current time in relation to OSH concerns and RTW among cancer survivors, a number of different mitigation strategies can be identified from the existing literature. These are discussed below and the papers are summarised in Table 1.

#### Workplace adjustments

In one retrospective cohort study, 26% of participants had made one or more adjustments, including: reducing working hours (16%); changing work tasks to reduce physical strain (10%); and changing tasks to reduce mental strain (8%).<sup>22</sup> There were no significant differences in modifications between the men and women sampled during the study. Thus, using a phased RTW through reducing working hours has the potential to improve the experience of the process and result in a more successful RTW.

In an interview study, flexible working, which in this case included working at home, setting own starting times or setting own task schedule, was seen as important.<sup>29</sup> For those returning to work after haematological malignancies, flexibility in the number of hours worked, managing

time and appointments, as well as flexibility in the tasks carried out, was perceived as a positive factor.<sup>28</sup> Furthermore, having a job that was not physically demanding or a job that could temporarily involve less demanding tasks was seen as positive factor in returning to work after cancer.<sup>23</sup> These data all suggest that having the ability to be flexible in relation to working time and job content (physical and mental) are likely to improve the RTW process for cancer survivors. In addition, allowing the individual some control over the timing of work where possible has the potential to result in reduced pressure on the individual.

A retrospective Japanese study of individuals returning to work after cancer used sickness absence data and records of where workplace limitations were put in place after examination by an occupational physician.<sup>33</sup> In this study of 133 employees in a manufacturing company, 59% of employees were subject to work limitations, including alteration of the work, prohibition of shift work or prohibition of overtime. Such workplace changes were seen as common for those returning to work after cancer and were seen as an important component of the RTW process.

Sesto *et al.* proposed the development of the Work Ability Improvement through Symptom Management and Ergonomics (WISE) programme.<sup>34</sup> This programme is based on an assessment of the work and the worker to ensure that the work fits the capability of the individual. Using a web-based tool, users respond to a number of questions related to their work and work tasks. The tool aims to intervene at both the ergonomics level in the workplace and in aiding the management of symptoms for those returning to work after cancer. At the current time, there has been no reported evaluation of this tool.

### **Support from companies and co-workers**

A number of areas of support have been identified from different groups within the workplace and from healthcare providers. Support from co-workers was identified as an important issue and was seen as a vital factor in terms of emotional support during the RTW process.<sup>29</sup> In a later study, the same author identified that improved communication in the workplace also aided the RTW process.<sup>30</sup> Healthcare provider support and access to rehabilitation services were identified as important issues.<sup>27,29</sup> Rehabilitation therapies are likely to be important in managing long-term impairments but there is a lack of research at the current time about the medical factors that pose the most significant barriers to returning to work.<sup>27</sup> Nachreiner *et al.* suggest that where occupational health nurses are available, they can provide the link between understanding the legal requirements and aiding in workplace changes and accommodations.<sup>29</sup>

In relation to managing psychosocial risks within the workplace, having a process in place is vital to ensure the health and wellbeing of employees. The process of RTW after cancer can take a long time, and ensuring that support is available to employees, and continues to be available, is essential in supporting return. This again highlights the need for linking the risk management process for psychosocial risks to the RTW process.

**Table 1 Papers included in the main review**

<b>Reference</b>	<b>Type of study</b>	<b>Description of population</b>	<b>Implications of suffering from cancer and cancer treatments mentioned?</b>	<b>What evidence is provided on workplace changes, adjustments and OSH to support RTW?</b>	<b>What evidence is provided on best practice of supporting cancer survivors' RTW in context of OSH?</b>	<b>Study outcomes – what were the outcomes from the publication, eg a summary of findings and outcomes?</b>
	<b>Type of cancer(s)</b>	<b>Country</b>				
Duijts, <i>et al.</i> (2014) <sup>25</sup>	Systematic review  Breast Prostate Testicular Brain Non-Hodgkin's lymphoma Lymphoma Uterus Laryngeal Stomach Gynaecological	8,979 articles were identified, after title and abstract exclusion; 64 were retrieved for full text screening and 30 met the inclusion criteria.  International	Physical tasks, stooping, physical effort, heavy lifting, hot flushes, arm pain.  Cognitive tasks, learning, keeping up with others.	Fatigue, short scheduled breaks, going to bed early	Health promotion programmes, supportive interventions (involvement from occupational health care professionals, employers and colleagues).	Ongoing physical and psychosocial problems are present in cancer survivors that have returned to work and may cause difficulties with lifting, cognitive limitations, coping, fatigue, depression and anxiety.

<b>Reference</b>	<b>Type of study</b>	<b>Description of population</b>	<b>Implications of suffering from cancer and cancer treatments mentioned?</b>	<b>What evidence is provided on workplace changes, adjustments and OSH to support RTW?</b>	<b>What evidence is provided on best practice of supporting cancer survivors' RTW in context of OSH?</b>	<b>Study outcomes – what were the outcomes from the publication, eg a summary of findings and outcomes?</b>
	<b>Type of cancer(s)</b>	<b>Country</b>				
Grunfeld <i>et al.</i> (2008) <sup>35</sup>	Survey of organisations  Not identified	HR or occupational health departments in medium to large organisations, 252 returned completed questionnaires (response rate 31%).  UK-based organisations		Contact with employees during absence, contact with employees during the rehabilitation process, RTW policies, inclusion of health and safety guidelines, employee booklet on RTW services and procedures.	RTW services, phased returns, changes in work duties, workplace adjustments, physical environment changes – equipment, informal telephone communication with the employee during absence. Employee's attitude towards work, employee's emotional ability to perform the job, agreement between the employee and employer over any changes in hours or duties.	The study identified that a range of RTW service are provided although only 38% provided employees with written information or guidelines about RTW policies and services. HR and occupational health departments viewed employee-related factors of employee attitude and emotional functioning as key to a successful RTW.



Reference	Type of study	Description of population	Implications of suffering from cancer and cancer treatments mentioned?	What evidence is provided on workplace changes, adjustments and OSH to support RTW?	What evidence is provided on best practice of supporting cancer survivors' RTW in context of OSH?	Study outcomes – what were the outcomes from the publication, eg a summary of findings and outcomes?
	Type of cancer(s)	Country				
Hansen <i>et al.</i> (2008) <sup>26</sup>	Questionnaire survey of case and control groups  Breast cancer	100 female breast cancer survivors (All had returned to work) and 103 non-cancer employed people.  Mean age of the cancer survivor group was 49, mean age of the non-cancer group was 39.  US	Recurrent and persistent symptoms, fatigue.  Fatigue was more strongly related to work in the breast cancer survivor group after accounting for many potential confounders. There is a pressing need to better understand and effectively manage fatigue in the workplace in occupationally active breast cancer survivors.	None	None	The study identified that the cancer survivors group reported significantly higher levels of work limitations, fatigue and depression 4 years after diagnosis. Fatigue was more strongly related to work in the breast cancer survivor group after accounting for many potential confounders.

Reference	Type of study  Type of cancer(s)	Description of population  Country	Implications of suffering from cancer and cancer treatments mentioned?	What evidence is provided on workplace changes, adjustments and OSH to support RTW?	What evidence is provided on best practice of supporting cancer survivors' RTW in context of OSH?	Study outcomes – what were the outcomes from the publication, eg a summary of findings and outcomes?
Lawrence (2012) <sup>31</sup>	Doctoral research  Breast cancer	56 breast cancer patients undergoing radiotherapy, 60 breast cancer patients undergoing chemotherapy and 58 control participants.  UK	Fatigue, cognitive difficulties, accidents	None	Interventions	The study identified the importance of healthcare professionals, breast cancer patients, relatives and employers being aware of potential safety outcomes related to chemotherapy. There is also the suggestion of interventions being developed to help patients manage daily tasks safely both in and out of work.
Maggie's & Unum (2011) <sup>36</sup>	Guidance  All	Not applicable  UK	Yes	Guidance	Health and safety legislation	A guide to help employers answer questions they may have around employee's illness and how an RTW might be managed. It mentions health and safety legislation.

Reference	Type of study  Type of cancer(s)	Description of population  Country	Implications of suffering from cancer and cancer treatments mentioned?	What evidence is provided on workplace changes, adjustments and OSH to support RTW?	What evidence is provided on best practice of supporting cancer survivors' RTW in context of OSH?	Study outcomes – what were the outcomes from the publication, eg a summary of findings and outcomes?
McGrath <i>et al.</i> (2012) <sup>28</sup>	Qualitative interviews and one focus group  Haematologic malignancies	50 participants one year post-diagnosis.  Split into 3 groups, those that did not RTW, those that had a successful RTW and those that had problems returning to work.  Australia	Ongoing fatigue issues	None	Flexible working, support from colleagues and employers.	The study identified that for a successful RTW the employer had to be supportive, flexible in the type of work they undertook (physical) and respect, compassion and care were important. For those who had not had a successful RTW, ongoing health issues were identified as a problem, not being able to continue to do physical work, sun sensitivity, psychological consequences of not feeling able to work, loss of social relationships at work and the loss of earnings.
Moskowitz <i>et al.</i> (2014) <sup>37</sup>	Cross-sectional study  All	A sample of 1542 cancer survivors with an age range of 20–74 years. All participants were actively working at the time of diagnosis.  US	Assessments of health and wellbeing, co-morbidity, fatigue, physical function and cognitive function.	Work ability	Functional limitations, successful RTW.	The study identified that functional impairment is a stronger predictor of work ability than other health variables. This suggests that assessing functional abilities in relation to the work tasks demanded is key in returning people to work.

Reference	Type of study  Type of cancer(s)	Description of population  Country	Implications of suffering from cancer and cancer treatments mentioned?	What evidence is provided on workplace changes, adjustments and OSH to support RTW?	What evidence is provided on best practice of supporting cancer survivors' RTW in context of OSH?	Study outcomes – what were the outcomes from the publication, eg a summary of findings and outcomes?
Munir <i>et al.</i> (2009) <sup>38</sup>	Review  Common cancers	Not applicable  International	Reduction in work ability.	More research needed to identify effective ways of making adjustments.		Those undergoing treatment for cancer are likely to have reduced work ability when compared with healthy workers or those with chronic diseases.
Nachreiner <i>et al.</i> (2007) <sup>29</sup>	Qualitative focus group  Breast Lung Acute myeloid leukaemia Ovarian cancer	There were 7 participants aged between 31–54 years old. The focus group participants were recruited from an oncology department at the metropolitan hospital in Minnesota in 2006.  US	Physical and mental effects of cancer and chemotherapy, fatigue, loss of ability to concentrate, cognitive changes, loss of memory, emotional issues.	Job flexibility to help employees balance their work roles and their personal needs as cancer patients, telecommuting, setting own work hours and flexible scheduling of work activities.		The focus group identified that the participants had not made formal requests for workplace changes. However the research did identify a number of factors that did facilitate RTW including co-worker support, availability of flexible work and health care provider support.

Reference	Type of study  Type of cancer(s)	Description of population  Country	Implications of suffering from cancer and cancer treatments mentioned?	What evidence is provided on workplace changes, adjustments and OSH to support RTW?	What evidence is provided on best practice of supporting cancer survivors' RTW in context of OSH?	Study outcomes – what were the outcomes from the publication, eg a summary of findings and outcomes?
Nachreiner <i>et al.</i> (2013) <sup>30</sup>	Questionnaire Study  Gynaecological (Uterus, Ovary and Uterus)	104 adult gynaecological cancer survivors.  US	Physical symptoms or side effects that would limit ability to keep up, fatigue or lack of energy and decreased ability to concentrate.	Physical symptoms or RTW policy	Specific job tasks and how affected by cancer or cancer treatment.	Cancer and its treatment have important outcomes in RTW and can vary by type of treatment. The use of policies focussed on improved communication and workplace accommodations would be helpful.
Ohguri <i>et al.</i> (2009) <sup>33</sup>	Retrospective study	Data were obtained from 133 consecutive patients' medical records returning to work after sick leave over a five-year period.  Japan	Work limitations	Work limitations, overtime, work adjustments, alteration of work, and prohibition of shift work and prohibition of overtime.	None	Work limitations among employees with cancer were relatively common and were based on both disease-related and work-related factors.

Reference	Type of study	Description of population	Implications of suffering from cancer and cancer treatments mentioned?	What evidence is provided on workplace changes, adjustments and OSH to support RTW?	What evidence is provided on best practice of supporting cancer survivors' RTW in context of OSH?	Study outcomes – what were the outcomes from the publication, eg a summary of findings and outcomes?
	Type of cancer(s)	Country				
Sandberg <i>et al.</i> (2014) <sup>39</sup>	Qualitative Breast cancer	Fourteen female US participants who were working at diagnosis, during and post treatment for breast cancer.  All participants had returned to work.  US	Fatigue, cognitive changes	Changes in the work environment, minimal changes to workstations.	None	A number of strategies were identified including reducing the number of work tasks, using cognitive prompts and pre-emptively making work tasks manageable.
Sesto <i>et al.</i> (2011) <sup>40</sup>	Tool development Breast cancer	US		Organisational methods to reduce physical or cognitive load, alternative technology, work tasks, equipment and environmental modifications.		The study highlights the importance of fitting the work system to the work capacity for cancer survivors. The tool asks about symptoms currently occurring, screening questions about work activity including computer use, prolonged standing, repetitive gripping, frequent lifting or carrying and fatiguing activities. The tool also includes a symptom management component.

<b>Reference</b>	<b>Type of study</b>	<b>Description of population</b>	<b>Implications of suffering from cancer and cancer treatments mentioned?</b>	<b>What evidence is provided on workplace changes, adjustments and OSH to support RTW?</b>	<b>What evidence is provided on best practice of supporting cancer survivors' RTW in context of OSH?</b>	<b>Study outcomes – what were the outcomes from the publication, eg a summary of findings and outcomes?</b>
	<b>Type of cancer(s)</b>	<b>Country</b>				
Short & Vargo (2006) <sup>27</sup>	Review All	Not applicable US	Difficulties in performing physical work, difficulty in handling heavy loads, stooping, kneeling or crouching, difficulties with prolonged mental concentration, keeping pace with others and learning new things.	WHO/International Classification of Functioning, assistive devices for mobility, Disability and Health (ICF), rehabilitation interventions – levels of impairment, activity impairment, or participation restriction.	Access to rehabilitation therapies.	The importance of rehabilitation therapies, including vocational rehabilitation in returning cancer survivors to work.

Reference	Type of study	Description of population	Implications of suffering from cancer and cancer treatments mentioned?	What evidence is provided on workplace changes, adjustments and OSH to support RTW?	What evidence is provided on best practice of supporting cancer survivors' RTW in context of OSH?	Study outcomes – what were the outcomes from the publication, eg a summary of findings and outcomes?
	Type of cancer(s)	Country				
Tamminga <i>et al.</i> (2012) <sup>23</sup>	Qualitative interview study  Breast cancer	Female Dutch participants with a mean age of 42 years. Different patterns of RTW were observed, including diagnosis and initial treatment, sick-listed some of the time but working flexibly and after treatment.  Netherlands	Fatigue, impact on concentration, lymphoedema.	None	None	The study identified that there were a number of barriers and facilitators in relation to RTW. Barriers included job content, both physical and mental; lack of support from HR, medical consultants or colleagues and not having control over the working situation. Facilitators identified included having a job that was not physically demanding.



Reference	Type of study	Description of population	Implications of suffering from cancer and cancer treatments mentioned?	What evidence is provided on workplace changes, adjustments and OSH to support RTW?	What evidence is provided on best practice of supporting cancer survivors' RTW in context of OSH?	Study outcomes – what were the outcomes from the publication, eg a summary of findings and outcomes?
	Type of cancer(s)	Country				
Torp <i>et al.</i> (2012) <sup>22</sup>	Retrospective cohort study  Colon Rectal Lung Skin Breast Cervical Uterine Ovarian Prostate Testicular Bladder Central nervous system Thyroid Non-Hodgkin's lymphoma Leukaemia	Study included 441 women and 205 men, average age 52 years, who had not changed their jobs. All returned to work following cancer.  Norway	Reduced physical work ability, reduction in mental work ability.	Adjustments at work – reduce/change the number of work hours per week, work tasks, reduce physical strain, mental strain.		This study identified that the most common adjustments were to reduce and change the number of working hours and change tasks to reduce physical and mental strains. With 31% of the employed cancer survivors reporting a reduction in physical work ability due to cancer, with 23% reporting a reduction in mental work ability, more women reported reduced mental work ability. Employed cancer survivors who had received a high level of cancer-related support from their colleagues reported significantly higher work ability than workers who did not. Having a comorbidity and chemotherapy was significantly associated with reduced work ability as was being self-employed or working part time.

Reference	Type of study	Description of population	Implications of suffering from cancer and cancer treatments mentioned?	What evidence is provided on workplace changes, adjustments and OSH to support RTW?	What evidence is provided on best practice of supporting cancer survivors' RTW in context of OSH?	Study outcomes – what were the outcomes from the publication, eg a summary of findings and outcomes?
	Type of cancer(s)	Country				
Van Muijen <i>et al.</i> (2013) <sup>24</sup>	Systematic review  All cancers	131 participants who on assessment of a work disability at the Dutch Social Security Agency at 24 months of sick leave were registered with a diagnosis of cancer.  Netherlands	Yes but not in relation to occupational safety and health.		Heavy lifting, job demands.	Prognostic factors associated with RTW. More prospective studies required more uniformity in design.

## **RTW policies**

A survey of organisations identified that 75% of the 252 organisations that responded had an RTW policy.<sup>35</sup> However, only 2% of the participants reported that this was a cancer-specific policy. The lack of written workplace policies was also identified in a study of gynaecological patients.<sup>30</sup> This latter research on 104 cancer survivors identified that 29% of those who had returned to work were aware of a written policy within their organisations. It is apparent that not every organisation has an RTW policy specifically for those returning to work after cancer. Having such a policy and good practice in place, as well as involving other relevant groups such as occupational health, human resources and occupational safety and health staff in developing modifications to fit the individual worker, can aid the individual.

## **Work ability**

The concept of work ability has been well covered in ageing research, including the use of the Work Ability Index developed by the Finnish Institute of Occupational Health. Three studies examined work ability in those returning to work after cancer treatment. The impact of cancer and cancer treatment was associated with a reduction in work ability.<sup>38</sup> This varied by treatment (chemotherapy having a greater impact), and this can take time to improve. The paper also highlights the importance of employer support during the RTW process and identifies that most employees are able to resume normal work tasks within 18–24 months after diagnosis.

In a study of 1,525 cancer survivors, it was identified that functional impairment was a stronger predictor of ability to work than other health variables such as fatigue, cognitive issues or health and wellbeing issues (including co-morbidities).<sup>37</sup> This paper identified the importance of being able to assess functional capabilities in relation to the demands of the work; this is a vital component of RTW.

A survey identified that 26% of participants had; made adjustments, identified what sort of adjustments were made and examined work ability.<sup>22</sup> Work ability was assessed using specific questions from the Work Ability Index, formulated as statements to assess whether work ability had been reduced as a result of the cancer and whether the employees had coped with the physical and mental work demands placed upon them. Lower work ability scores were associated with being self-employed and working part time at the time of diagnosis; whereas higher work ability scores were associated with a positive psychosocial work environment. Those with lower scores made more work-site adjustments and had more contact with occupational health professionals.

The impact on work ability during RTW after cancer highlights the need to be able to modify the work or work processes during the RTW phase and beyond. Using such tools as the Work Ability Index can allow identification of the risks that individuals are exposed to, such as heavy physical demands or mental demands, and how such risks can be reduced.

### **2.3.4 Themes emerging from a set of studies that did not meet the inclusion criteria, but provided valuable insights**

This section includes studies where there were no direct links to safety and health management but where potential issues in relation to RTW and OSH were identified by the reviewers. Those issues have been synthesised into the following sections together with their link to occupational safety and health. A summary of the information is presented in Table 2 below.

**Table 2 Reference sources with some relevant information**

<b>Reference</b>	<b>What research question(s) does the study address</b>
Allen (2008) <sup>41</sup>	Protecting and supporting employees with serious medical conditions in this case cancer
Bains <i>et al.</i> (2011) <sup>42</sup>	RTW guidance and support
Bains <i>et al.</i> (2009) <sup>43</sup>	To examine the RTW intentions, work ability and employment outcomes of colorectal cancer patients over six months
Böttcher <i>et al.</i> (2013) <sup>44</sup>	To look at stress and RTW
Boykoff <i>et al.</i> (2009) <sup>45</sup>	Effect of 'chemo brain' on work
Calvio <i>et al.</i> (2010) <sup>46</sup>	Investigate performance-based and patient-reported cognitive limitations on work output
Cancer and Careers (2014) <sup>47</sup>	Guidance for individuals returning to work
Carlsen <i>et al.</i> (2013) <sup>48</sup>	To determine whether the ability to work of long-term breast cancer survivors was different from that of a cancer-free control group and investigated whether socioeconomic factors, health-related factors and workplace factors were associated with work ability
Cunningham <i>et al.</i> (2009) <sup>49</sup>	Narrative summary of employment and cancer literature
de Boer <i>et al.</i> (2009) <sup>50</sup>	Overview of the outcomes of recent European research on RTW of cancer survivors and discuss the future research directions to explore and improve the RTW experience for cancer survivors
Desiron <i>et al.</i> (2013) <sup>51</sup>	To identify a theoretical framework for occupational therapy (OT) intervention by questioning how OT models can be used in RTW of breast cancer patients
Feuerstein <i>et al.</i> (2010) <sup>52</sup>	To create a model of factors to provide a framework for conceptualising problems related to work for cancer survivors
Frazier <i>et al.</i> (2009) <sup>53</sup>	Research into ways to assist patients with cancer in avoiding or managing common job problems. A comparison of findings with existing recommendations and professional standards for occupational rehabilitation

Griffiths (2011) <sup>54</sup>	How much support organisations should offer breast cancer sufferers
Hakanen <i>et al.</i> (2008) <sup>55</sup>	To investigate personal resources (optimism and pessimism) and job-related resource (organisational climate, social support and avoidance behaviour) as antecedents of work engagement among female breast cancer survivors and their referents
Johnsson (2008) <sup>56</sup>	Study of the rehabilitation process following breast cancer diagnosis for women of working age by examining factors related to type of treatment, tumour stage, socio-demographic status, health status, working condition, life satisfaction and coping skills and their association with RTW
Lavigne <i>et al.</i> (2008) <sup>57</sup>	Relationship between various symptoms and work productivity
Macmillan (2013) <sup>58</sup>	Report to Government on the need for more vocational rehabilitation for cancer sufferers
Mak (2011) <sup>59</sup>	A review of occupational health literature for cancer survivors relevant to Singapore
Munir <i>et al.</i> (2010) <sup>60</sup>	To investigate women's awareness of chemotherapy-induced cognitive changes, their perception of cognitive limitations in carrying out daily tasks and subsequent RTW decisions and perceptions of work ability
Munir <i>et al.</i> (2013) <sup>7</sup>	Describes the systematic development and content of the tool using Intervention Mapping Protocol
Nieuwenhuijsen <i>et al.</i> (2009) <sup>61</sup>	To investigate the relationship between neuropsychological function and ability to work in cancer survivors
Nilsson <i>et al.</i> (2013) <sup>62</sup>	To investigate the importance of social support at work and work adjustment
Obers, <i>et al.</i> (2010) <sup>63</sup>	To describe work-related physical and cognitive disability estimates 12 and 18 months after diagnosis and treatment in breast and prostate cancer patients

Ottati <i>et al.</i> (2013) <sup>64</sup>	To develop a brief, reliable self-report measure of work-related cognitive limitations in occupationally active breast cancer survivors
Pryce <i>et al.</i> (2007) <sup>65</sup>	To identify symptoms, disclosure and work adjustments associated with working during treatment and with RTW
RS Consulting (2011) <sup>66</sup>	To understand how health and social care professionals currently discuss work with cancer patients and the barriers to those conversations. To identify what tools and resources professionals think would best help them overcome the barriers and challenges they face
Sesto <i>et al.</i> (2007) <sup>67</sup>	The need for system solutions to improve employment outcomes of cancer survivors
Silver <i>et al.</i> (2011) <sup>16</sup>	Discusses the role of physical and occupational therapy in helping cancer patients improve pain and musculoskeletal issues, deconditioning and endurance effects, fatigue, balance and falls, and lymphoedema and psychosocial problems
Steiner <i>et al.</i> (2010) <sup>9</sup>	RTW after cancer
Tamminga <i>et al.</i> (2010) <sup>68</sup>	To review the literature on the content of interventions focusing on RTW, employment status, or work retention in patients with cancer. The effect of the interventions on RTW assessed in studies reporting RTW
Tan <i>et al.</i> (2012) <sup>69</sup>	Exploring the barriers and facilitators encountered during the RTW process in the area of cancer survivorship
Taskila (2007) <sup>11</sup>	To examine the impact of cancer on employment
Taskila <i>et al.</i> (2007) <sup>70</sup>	To give overview of factors affecting cancer survivors' employment and work ability
Taskila <i>et al.</i> (2006) <sup>15</sup>	Examined the amount of emotional and practical support that cancer survivors needed and had actually received from their co-workers, supervisors and the occupational health personnel. The paper also examined whether disease-related or socio-demographic background variables were associated with needed or received support and whether there were differences between various sources in received or needed support

Tate (2011) <sup>71</sup>	An update from the National Cancer Survivorship Initiative (NCSI) work and cancer project group
The Work Foundation (2013) <sup>72</sup>	Cancer survivors and the Health and Work Assessment and Advisory Service
Tiedtke <i>et al.</i> (2010) <sup>73</sup>	To explore how female breast cancer patients experience work incapacity during the treatment and RTW phases and how interactions between patients and stakeholders affect this experience
Torp <i>et al.</i> (2011) <sup>74</sup>	To investigate how cancer survivors (CSs) experience the cancer-related support they get at the workplace, the proportion of CSs who change work due to cancer and the socio-demographic and work-related factors associated with CSs' work changes
Yarker <i>et al.</i> (2010) <sup>75</sup>	To extend previous work in two ways: first, through exploring the way in which communication and support at work affect cancer survivors on their RTW and during the post-return period; and second, by drawing on a research sample working in the United Kingdom

### **Need for information and training for professionals and patients**

Several papers indicated that certain factors that can impede RTW may actually be due to health and safety risks; for example, a physically demanding job role. It was reported through interviews and focus groups with health and social care professionals that there is a need for information and training for both professionals and cancer survivors in the RTW process.<sup>66,52</sup>

The area in which this is needed depends on both the cancer survivor and the nature of the job they are returning to or are starting post treatment. The attributes of the job directly influence the likelihood of RTW.<sup>9</sup> For example, those with a physically demanding job role may face challenges in the RTW process after having treatment for cancer and may find it more difficult to maintain or resume their tasks.<sup>43</sup> Having a physical workload after returning to work after cancer has been found to be associated with an impaired workability.<sup>11</sup>

The employment outcome of an individual appeared to be impacted on by the type of work. Work tasks that were associated with limitations were:<sup>67</sup>

- physical tasks
- lifting heavy loads
- concentrating for long periods of time
- keeping pace
- learning new things.

Although both physical and cognitive tasks feature in this list, research has suggested that physical tasks appeared to be more problematic for cancer survivors than cognitive tasks.<sup>63</sup>

As cancer treatment can weaken the body's immune system by affecting the blood cells that protect against infection, those with a job role that involves a great deal of contact with a range of people (eg teachers) may require information on how to reduce their risk and prevent infection.<sup>66</sup> This is important, as a cancer survivor's body may not be able to fight infection in the same way as a healthy body.

Work plays a vital role in an individual's economic, social and psychological health and this therefore presents a need for cancer survivors to receive information on the effects of treatment on their working life.<sup>60</sup> Research suggests that cancer survivors who receive less help and support from supervisors had significantly reduced work ability. This is because having help and support from both supervisors and co-workers in the short and long term can act as a coping strategy and help with work ability.<sup>48</sup>

### **Modifications as part of vocational rehabilitation**

The cancer support charity, Macmillan, produced a report on providing specialist work support which highlights the importance of helping people RTW, thereby benefiting the cancer survivor as well as the economy.<sup>58</sup> As part of this work, Macmillan reported that the National Cancer Survivorship Initiative (NCSI) had piloted a new model for vocational rehabilitation. This involved three levels: open access to information, active support for self-management and specialist vocational rehabilitation. Included in vocational rehabilitation are: assessments of capacity to work; rehabilitation and phased RTW; psychological support; and modifications in the workplace. The Christie Hospital and Shaw Trust worked together to run a pilot vocational rehabilitation service in Greater Manchester. In total, 260 patients received an intervention from the service. Of these patients, 11% went from 'not working to working' and 32% went from 'sick leave to full work or modified work'.<sup>58</sup> Lower vocational functioning has been linked to impaired neuropsychological functioning.<sup>61</sup>

One of the important issues for a line manager to consider when a cancer patient or survivor would like to RTW is the workplace adjustments that might help facilitate their return.<sup>50</sup> When work adjustments are tailored to meet the needs of those with cancer, they are more likely to continue working or RTW.<sup>65,73</sup> This highlights the importance for employers and employees in finding a balance in what is meant by 'accommodating work' and what can be applied in their current role. Research has suggested that consideration should be given to the physical workstation of the cancer patient or survivor, asking questions such as whether it needs to be redesigned or fitted with additional equipment, eg a back support or other devices, to make it more comfortable to use.<sup>47</sup>

Research from Norway found that more than one-third of those in employment made changes in the workplace after being diagnosed with cancer.<sup>74</sup> These changes were more prevalent in manual roles and those roles with high psychological demands. It has also been reported that more than half of cancer survivors who RTW alter their work schedule by at least four hours per week as a means of successful return.<sup>63</sup>

Although many cancer survivors opt for change in the workplace and work tasks, it has also been reported that cancer survivors sometimes encounter unwanted changes in work tasks or work-related issues.<sup>69</sup> In some cases this could be due to making changes to workload because of impaired work ability, such as either changing jobs or reducing the number of hours at work, which can result in a reduced wage for the cancer survivor.<sup>48</sup>

It has been suggested that there are not enough guidelines available to help employers deal with issues to retain employees affected by cancer and implement workplace accommodations.<sup>59</sup> It has also been suggested that occupational physicians are the best-placed professionals to implement workplace accommodations, especially in relation to physical workload issues.<sup>68</sup> Ergonomics specialists also have the knowledge and methods to minimise work disability for cancer survivors through organisational, workplace, technical and task design.<sup>67</sup> Cancer care teams could also assist by finding solutions to cancer-related job issues.<sup>53</sup>



## More practical support

Taskila *et al.* (2006) suggest that within a sample of patients that had good prognoses, the type of cancer treatment being given is related to the received and needed level of emotional and practical support.<sup>15</sup> For example, in comparison with those that had other modes of treatment, it was found that those who had chemotherapy in their treatment needed more support, especially from occupational health personnel rather than from co-workers or supervisors. Nearly 30% of men and 40% of women indicated that they needed more practical support from occupational health services.

It has been recommended that in order to prevent discrimination and minimise the effects of cancer on work, cancer survivors should be supported with any disabilities that may impact on their work in both the short and long term.<sup>16</sup> Raising employment issues in the early stages of treatment could identify the most suitable time to deliver an RTW intervention and support.<sup>43</sup> Research has suggested that job stress was higher for cancer survivors three years post treatment, therefore reinforcing the need for longer-term support.<sup>46</sup>

As well as receiving practical support, it is also suggested that for an RTW to be successful cancer survivors also need emotional support from those in their working environment.<sup>56</sup> As part of this, social and employer support can act as a key facilitator in the RTW process.<sup>69</sup> When these are addressed early in the process, it is beneficial to the cancer survivor.<sup>62</sup> This will therefore impact on both the RTW success and the cancer survivor's work-related well-being.<sup>55</sup> The willingness of the employer to provide social support and accommodate the cancer survivor's illness and treatment needs is important in the RTW process.<sup>11</sup>

## Having a critical illness policy

The development of a critical illness policy for cancer; a workplace cancer policy is important.<sup>41</sup> Although policies are bound to vary due to the nature of different companies and employee, it was suggested by Allen that they should be based on the following key elements:

- respect the employee's dignity and privacy
- maintain employee involvement and engagement
- ensure the employee suffers no financial detriment
- continue to provide employee benefits
- adopt a flexible approach
- continue to provide access to development opportunities
- provide information and support
- support the rest of the team.

As part of the development of such a policy it has been suggested that HR, health and safety and line managers should be involved. When an employee is diagnosed with cancer they should be reassured about adjustments that might be available to them, such as; reduced work hours, home working, flexible working and occupational health services. Through collating this information into a workplace cancer policy it has been suggested that fewer employers will have to make up the policy as they go along.<sup>41</sup> This will therefore provide more consistency and transparency in a company's policy on cancer, allowing practice to be tailored to the individuals' needs. As cancer survivors experience a unique set of issues a specific cancer policy outlining these is needed.<sup>71</sup>

The development of a work-related guidance tool using intervention mapping has been implemented by Macmillan Cancer Support.<sup>7</sup> The tool itself is divided into four categories:

- Initial work issues and absence from work
- Preparing to RTW
- Returning to work
- Not returning to work

Each of the questions in these categories is then broken down by who should be asked the question, for example: the oncology team; the general practitioner; or occupational health. Having a tool like this can ensure the right questions are asked at the right time and by the right people to ensure a structured, successful and safe RTW.

### **Individual risk assessments**

It has been suggested that companies could use individual risk assessments for cancer survivors to establish what individuals can or cannot do in their role, so that a plan can be put in place to make any necessary adjustments.<sup>41</sup>

In addition to this, there has been a call for the use of different methods to identify issues that the cancer survivor may have in the RTW process. Tools such as the 'safety assessment of function and environment for rehabilitation' (SAFER) can be used as an assessment alongside occupational therapy models.<sup>51</sup> Additionally, a self-report measure for assessing work-related cognitive problems such as job stress, anxiety and depressive symptoms can contribute to identifying and resolving work-related cognitive limitations for cancer survivors.<sup>64</sup> One of the recommendations from research is that workplaces should conduct needs assessments for cancer survivors that cover disease-related, person-related and work-related factors.<sup>54</sup>

Individual risk assessments could also identify other issues that cancer survivors are having, such as hot flushes. These should be given serious consideration for those experiencing work limitations.<sup>57</sup>

### **Reducing risks of early retirement**

An investigation examined occupational stress and its association with early retirement and the subjective need for occupational rehabilitation in cancer patients.<sup>44</sup> It was reported that 19% of participants reported occupational stress, 26% reported a need for occupational rehabilitation and 23% of patients were classified as having a high risk of early retirement.

Successful re-entry into the workplace after cancer may be hampered by occupational stress. Therefore, cancer survivors should be given the opportunity to address occupational stress issues before they RTW.<sup>44</sup> Screening for occupational stress could help physicians to identify patients who are at risk of experiencing problematic re-entries. Experiencing occupational stress in the workplace has been reported as being associated with a higher risk of early retirement, therefore both patients and physicians should take work-related problems seriously.<sup>44</sup> Additionally, those who have had chemotherapy treatment may experience stress as a result of memory problems from what is referred to as 'chemo brain'.<sup>44,45</sup>

Similar to other chronic conditions, cancer survivors are at a higher risk of unemployment or leaving the workforce early.<sup>72</sup> To support the recovery and RTW process, the UK government has introduced the Health and Work Assessment and Advisory Service (HWAAS). This service will provide advice and support to help individuals. Most people with cancer will attempt to RTW, however if they don't receive the right support they may have difficulty remaining in work.<sup>72</sup>

### **Communication between line managers, employees and co-workers**

Communication between line managers, employees and co-workers has been highlighted as being highly important in RTW after cancer.<sup>75</sup> In research which presented tasks that a cancer care team could undertake to assist a cancer patient in their RTW process, two of the tasks highlighted were about communication.<sup>53</sup> It was suggested that the cancer care team should communicate with the employer about work restrictions, as well as communicate with the supervisor and co-workers of the cancer survivor.

The importance of communication in the RTW process has been highlighted both in the long and short term, as RTW is not a singular event but a long-term process in which communication is vital throughout.<sup>75</sup>

### **2.3.5 Discussion and conclusions**

This review has highlighted that there is a lack of research evidence in relation to the safety considerations for those returning to work after cancer. There is a large amount of research that examines the health impact during this process but the occupational health support needed by those returning to work is outside the scope of this review. Each of the research questions is discussed in turn below.

The use of a systematic review methodology allows identification of relevant research within the field. It is not without its drawbacks and this is demonstrated in the review by the inclusion of papers that have some influence on the outcomes rather than just those that fitted the inclusion criteria. However, the systematic searches carried out allow some confidence in the identification of relevant research material, which in this case included both quantitative and qualitative research. Other methods, such as rapid or realist reviews, may have given a quicker outcome to the review but much of the data obtained from the included papers had to be teased out of the research in some cases.

The research reviewed was based on international research studies, not only those carried out in the UK. This does bring some drawbacks in relation to the context of such research against the background of national regulatory and social security systems. At the current time there are a number of changes occurring within the UK in relation to universal benefits. These may have an impact on numbers returning to work and the social influences around this. Although this is important, it was felt that it was beyond the scope of the current project.

#### **What factors influence return to work after cancer in relation to safety and health?**

When we consider some of the issues identified within the review, these relate to the demands of work, as well as the physiological and psychological changes that cancer survivors may bring into the workplace.

The research reviewed highlights the importance of the physical demands that work make on an individual during RTW. However, there is currently limited research evidence on how work demands can be reduced to aid in the RTW of cancer survivors. This includes having a basic understanding that their physical capacity may have changed and the work demands may outstrip this capacity. Thus, understanding the need to assess the risks and take risk reduction measures is essential.

In addition to this, tailored workplace or work-site adjustments are seen as essential in the RTW process. The review has suggested that individualised risk assessments should be carried out to enable a tailored approach to be taken. This also raises the question as to who has the expertise and authority to make workplace changes; this can include those with expertise in ergonomics, occupational medicine, psychosocial risks and occupational therapy. Each can bring different expertise to bear on understanding the limitations of the individual, assessing the risks imposed by the work and workplace, and making adjustments to remove or reduce these risks.

The impacts of treatment and ongoing health symptoms, including fatigue and lymphoedema, are well documented. However, fatigue is most often managed by a phased RTW. There is little evidence available in relation to the safety of individuals who report fatigue and how any potential risks, such as those relating to driving, can be managed.

Psychological changes have also been identified within the body of research, including the impact of treatment on concentration and memory. Again, there is the potential for increased risk for those workers who are affected by this. To deal with these psychological issues, other

support mechanisms can also be put in place, eg using cognitive reminders such as lists, electronic diaries or via support from co-workers.

In relation to psychosocial risks from the workplace, support from co-workers, line managers and other health providers is an important component of the RTW process. Control over work was also seen as an important issue. Again, these have not been examined within the framework of managing risks within the workplace at the current time.

#### **What data are available on return to work after cancer in relation to short-term and longer-term outcomes for health and safety concerns?**

One of the main issues in relation to RTW after cancer treatment is that different treatments have different impacts on the individual. In addition, there are long-term health conditions which can occur up to five years after diagnosis that have the potential to impact on health and safety in the workplace. With increasing numbers of people surviving cancer for longer periods, the number of people returning to work and staying in work for substantial periods following cancer is therefore likely to increase.

Even where initial assessments are made in relation to risks on immediate RTW, it must be recognised that the health status of the cancer survivor can change over time. Thus, having a process of risk assessment at regular intervals or when there are specific changes to the individual is an essential part of maintaining the safety and health of that person and of those affected by their work.

#### **What implications do suffering from cancer and cancer treatments have for managing the health and safety of cancer survivors when they return to work?**

Although the need for workplace and work modifications is understood for those returning to work after cancer, there is very little evidence currently available about how this should be managed within the context of health and safety. The review suggests that taking an individualised risk assessment approach to RTW is the most appropriate solution and that this should include the assessment of both physiological and psychological aspects of the individual in relation to the work and workplace. However, there is no evidence of an effective method that can be used to do this.

#### **What evidence is available on workplace changes, adjustments and other mechanisms to support return to work after cancer in relation to safety?**

Although the need to make workplace and work modifications and to increase work flexibility are recognised within the research reviewed, there is little information about how such changes can be implemented within the workplace from the safety perspective. The RTW process needs a multidisciplinary approach involving medical personnel, human resources and, where workplace changes are required, those involved in job design, ergonomics and safety. There is little current evidence to identify how best to manage this process during RTW after cancer, however literature on rehabilitation may be able to inform this process better.

#### **What evidence is available about best practice in supporting cancer survivors' return to work within the context of safety and health?**

The quality of the evidence reviewed as part of this systematic review was too low and not extensive enough to make evidence statements regarding best practice. However, the research reviewed did highlight a number of areas where the potential to develop best practice exists. These are discussed below.

Having a critical illness policy and process that involves line managers, human resources and occupational health and safety personnel is essential to ensuring that those with relevant

expertise are able to input into the RTW process. In some cases, all parties may not need to be involved, but where a risk to personnel is identified, this has to be managed.

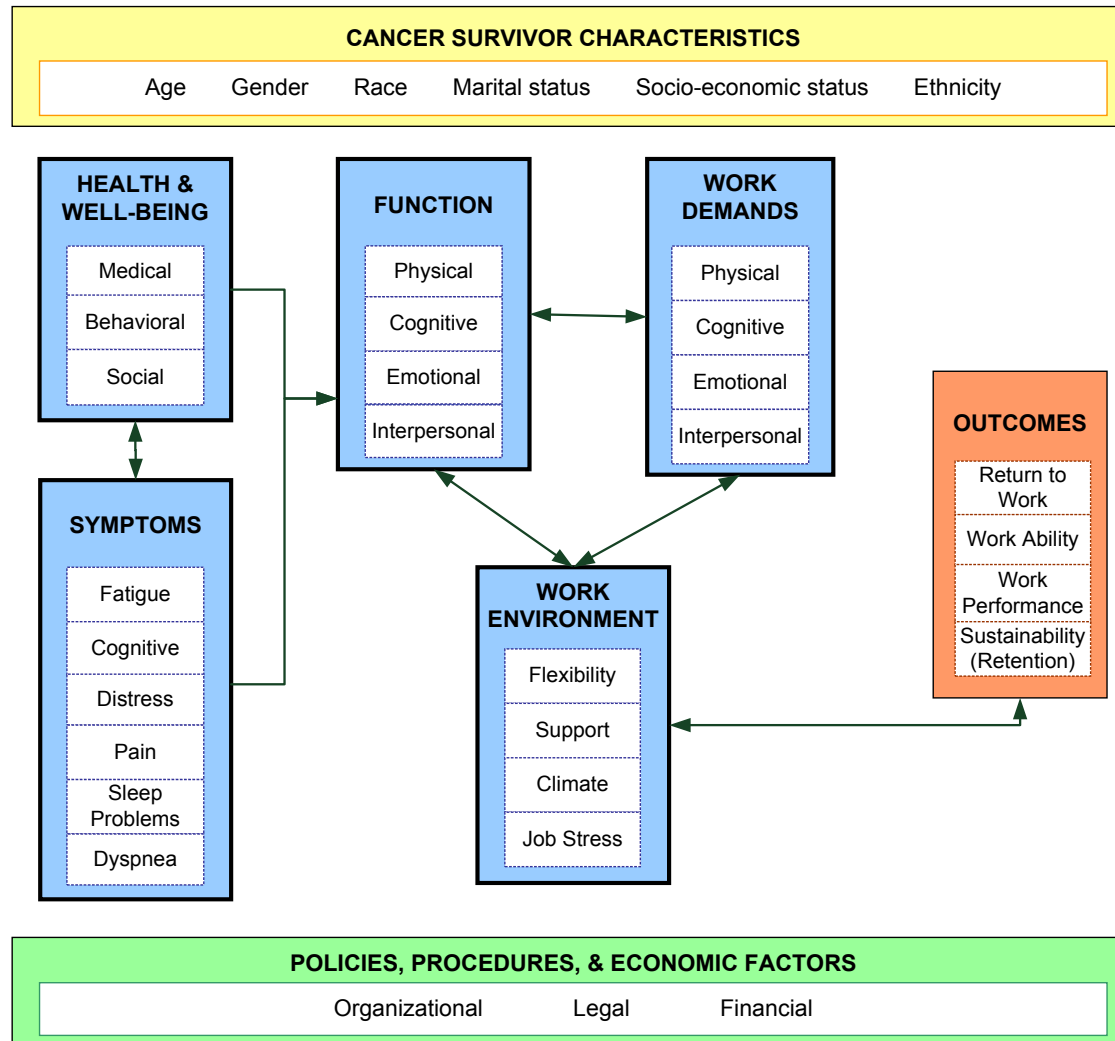
The use of individual risk assessments is vital to ensure that the needs and capabilities of the individual are matched to the needs of the job, and that risks identified are reduced or removed. However, following RTW after cancer, the risk assessment process is likely to be required more than once due to changes in needs and capabilities during the recovery period. Having a risk assessment process that can allow this flexibility and be accessible to both the professional and employee when a change occurs is important.

Improving communication between the employer, occupational safety, health care providers and employee during the RTW process is vital. This includes information about work restrictions and how the work can be changed to fit the individual worker. Communication must be maintained during the RTW process, as returning to work is not a singular event but occurs over a period of time.

### **Suggested models**

When we examine the RTW process, Feuerstein *et al.* (2010) suggested the model described in Figure 3.<sup>52</sup> This model examines a number of different characteristics in relation to the individual, the workplace and the factors that have an influence on health, function and outcomes. It is evident from the model that a multidisciplinary approach is needed to enable successful RTW. In relation to safety and health management, this includes understanding the risks to the worker from the workplace and from the worker themselves. At the current time this role is not evident within the model but should be considered as part of the interface between function, work environment and work demands.

Figure 3 Cancer and work model<sup>52</sup>



### 2.3.6 Evidence gaps

The review has identified a general lack of evidence on the OSH aspects of returning to work after cancer and the role of OSH issues in facilitating or impeding the RTW process for cancer survivors. A lot of data has been provided from human resources and occupational health, but the management of risks to the individual returning to work has only been indirectly addressed within the body of research.

Although work-site adjustments and flexibility in work have both been recommended as ways of improving the RTW process for cancer survivors, there is little detail and information in relation to best practice in this process. There is a need to identify within organisations how this is approached and where information on best practice is drawn from.

It is understood that a multi-disciplinary approach is needed. This approach also needs to encompass risk assessment and risk reduction measures, including how to make workplace accommodations to aid RTW. It is not evident at the current time that this is undertaken within the workplace.

## 3. Case studies

### 3.1 Case study aims

In order to gain further information about the process of returning to work after cancer from employers, employees and stakeholders (those involved in the RTW process), the second stage of the project aimed to carry out organisational-based case studies. Within these case studies the objective was to identify what employers can do to facilitate RTW and what is good practice in dealing with OSH issues for cancer survivors returning to the workplace.

#### 3.1.1 Case study recruitment

At the outset, it was aimed to identify 10 organisations as this was agreed at the proposal stage with IOSH, within the breakdown shown in Table 3. This was to try and allow for comparisons between specific job demands (manual, sedentary) or size of organisation.

**Table 3 Breakdown of aim of spread of companies for organisational-based case studies**

Sector	Large	Medium	Small
	> 500 employees	50–499 employees	< 50 employees
Public	1	1	–
Private	1	1	–
Manual	1	1	1
Sedentary	1	1	1

For the completion of a case study, the participating companies were required to have an employee that had returned to the workplace after cancer in the last 12 months and who was willing to take part. In addition to the employee participating, agreement was sought from others involved in their RTW process, such as their employer, occupational health professionals, HR and/or line managers.

Recruitment was done via a variety of channels: existing contacts of the project team in employer and employee organisations; online through social media; and the websites for IOM, Affinity Health at Work and Loughborough University. In addition to this, as funders of the work, IOSH helped in the recruitment through a press release from its Media team. Emails asking for project recruitment

information to be distributed were also sent to: the UK Safety Groups; regional offices of the Federation of Small Businesses; and cancer support groups. The study was also publicised at the Affinity Health at Work research consortium master-class meetings and on the 'cancer-active' Facebook page.

### **3.1.2 Case study methods**

The development of the case study methods was informed by the results of the literature review in stage one of the research project, as well as the experience and knowledge of the project team.

The methods used included in-depth, semi-structured interviews (Appendix 6) with employees and others involved in the management of the RTW process, including: line managers; human resources; and occupational safety and health professionals. In addition to these, a pre-interview questionnaire was developed for the individual that had returned to the workplace. Each of these is described below. Informed consent was obtained for all those that were interviewed and they were provided with information on the case study aims, anonymisation of data and their right to withdraw (Appendix 6). To follow the interviews, a debriefing sheet was developed by the project team which, as with the consent form, identified the project and how the information was going to be used. In addition, it identified sources that individuals could use if they wanted more information on the topic of RTW after cancer (Appendix 6).

#### **Interviews**

The interviews with the employee and stakeholders were designed to obtain detailed information about organisational practice regarding RTW after cancer, particularly around health and safety. This coverage included the following topics:

- Aspects of RTW, work adjustment management, the roles of those involved and when they become involved
- Awareness of health and safety issues associated with cancer and cancer treatment
- Details of any health and safety risks identified
- Details of the processes undertaken
- Perceived cost to the organisation
- Work adjustments offered to employees in relation to job role, potential ongoing health problems and health and safety risks
- Perceived ease/difficulty and effectiveness of implementing advice and obtaining information on the topic of RTW after cancer

The interview schedules for the different stakeholders were tailored to their role in the RTW process. Separate interviews lasting between 45 minutes and one hour were conducted with each stakeholder by an IOM researcher.

#### **Pre-interview questionnaire**

Before the interview, the pre-interview questionnaire for the employee was completed and returned to the researcher, to collect demographic and health information which interviewees may have preferred to disclose in private rather than in an interview setting.

Ethical clearance for the case study work was obtained from Loughborough University's Research Ethics Committee. All data (both paper and electronic) were stored securely and anonymously before, during and after the data collation and analysis in accordance with the Data Protection Act 1984.

Once the interviews, pre-interview questionnaires, information sheet, consent form and debrief sheet were developed, they were piloted internally within IOM and Loughborough University, where one individual in each organisation who had returned to work after cancer was interviewed, as well as those involved in their RTW process. In case studies where further information was relevant, this was also collected from the organisation in relation to policies for RTW, risk assessments or other relevant documents.



## Case study analysis

Qualitative analysis was completed on the data from the pre-interview questionnaire and semi-structured interviews. After each case study visit was completed, the results from the interviews with the individual and the stakeholders were collated into a case study report. The structure of this report followed that of the case study interviews:

- Demographic and company information
  - Demographic information
  - Company information
  - Previous RTW and cancer
- What happened before the RTW
  - Contact
  - Discussions about returning
  - Plan for returning
- What happened during the RTW
  - Meetings
  - RTW policy
  - Risk assessment
- What happened after the RTW
  - Since RTW
  - Information
  - Long-term process

This allowed for the identification of what had happened in relation to the RTW for each individual case study from the perspective of each stakeholder. Collating this information allowed the researchers to identify good practice from the case studies in relation to health and safety, and to extract important key themes.

These good practice points were identified from the collated interview responses and presented in a second section of the case study reports. From the identification of the good practice, the next stage of the project of building guidance on RTW after cancer in relation to OSH could be developed. In the following sections, the good practice from the review that has been highlighted in the case studies is identified in 'good practice' text boxes.

## 3.2 Results

### 3.2.1 Recruitment

There was a great deal of interest in the project, with over 23 companies/individuals either making contact to take part or simply to share their cancer and work stories. Of those that were contacting the project team to take part, eight were successfully recruited to the study within the timescale of the project. The remaining potential participants were excluded from the study either for not meeting the study inclusion criteria or because they were no longer able or willing to take part.

### 3.2.2 Completed case studies

The eight case studies were completed between April and September 2015; a breakdown of the type of case studies is presented in Table 4. As can be seen from this table, the majority of participants recruited in the case studies were female and working in sedentary roles. As females were predominantly recruited in the early stages of the study, we tried to target recruitment materials at males by contacting prostate cancer support groups. This did not result in any further case studies. The case studies that were successfully recruited provided a range of different sized organisations that took part, as well as seven individuals who had returned to work post-treatment and one individual who had continued working during their treatment process.

**Table 4 Organisations involved in the case studies**

	<b>Large, &gt; 500 employees</b>	<b>Medium, 50–499 employees</b>	<b>Small, &lt; 50 employees</b>
<b>Case study</b>	<b>A</b>	<b>B</b>	<b>G</b>
<b>Type</b>	Nuclear industry	Funding body	Finance
<b>Employee role</b>	Planning engineer	Secretary	Tax assistant
<b>Manual/sedentary</b>	Sedentary	Sedentary	Sedentary
<b>Sector</b>	Private	Public	Private
<b>M/F</b>	Female	Female	Female
<b>RTW</b>	Phased return	Phased return	Continued to work
<b>Cancer type</b>	Non-Hodgkin's Lymphoma	Breast, Cervical, Liver	Colorectal
<b>Age</b>	47	52	52
<b>Case study</b>	<b>C</b>	<b>D</b>	
<b>Type</b>	Utilities company	Research	
<b>Employee role</b>	Client manager	Software developer	
<b>Manual/sedentary</b>	Sedentary	Sedentary	
<b>Sector</b>	Private	Public	
<b>M/F</b>	Female	Female	
<b>RTW</b>	Continued to work	Phased return	
<b>Cancer type</b>	Breast	Breast	
<b>Age</b>	39	56	
<b>Case study</b>	<b>E</b>	<b>F</b>	
<b>Type</b>	Manufacturer	Healthcare	
<b>Employee role</b>	Operative	House manager	
<b>Manual/sedentary</b>	Manual	Sedentary	
<b>Sector</b>	Private	Private	
<b>M/F</b>	Male	Female	
<b>RTW</b>	Phased return	Phased return	
<b>Cancer type</b>	Colorectal	Breast	
<b>Age</b>	63	58	
<b>Case study</b>	<b>H</b>		
<b>Type</b>	Higher Education Institute		
<b>Employee role</b>	Administrative assistant		
<b>Manual/sedentary</b>	Sedentary		
<b>Sector</b>	Private		
<b>M/F</b>	Female		
<b>RTW</b>	Phased return		
<b>Cancer type</b>	Cell Lymphoma		
<b>Age</b>	49		

As can be seen in the table below, 26 interviews were undertaken (identified with X) within the 8 completed case studies. These involved: employees (n=8); line managers (n=8); occupational safety and health professionals (n=4); and HR (n=6).

**Table 5 The 26 interviews completed in the 8 case studies**

	Interviews conducted with in each case study			
	The employee	Line manager	OSH	HR
A	X	X	X	
B	X	X		X
C	X	X	X	X
D	X	X		X
E	X	X	X	X
F	X	X	X	X
G	X	X		
H	X	X		X

The pre-interview questionnaire asked employees to identify any workplace accommodations or supports they required following treatment, in relation both to requirement and whether or not accommodations or supports were received. The results from all employees are presented in Table 6. This demonstrates that individuals require different supports, thereby reinforcing the case for individualised approaches to RTW. It is positive to see from this table that in the majority of cases where accommodations or supports were required, they were subsequently received (apart from for Case Study B, where a gradual increase in workload wasn't required but was received).

**Table 6 Workplace accommodations or supports following treatment (from employee perspective)**

		Whether or not the workplace accommodations or supports were required and/or received by case studies a to h																
		required	received	required	received	required	received	required	received	required	received	required	received	required	received	required	received	
		A	A	B	B	C	C	D	D	E	E	F	F	G	G	H	H	
Workplace accommodations or supports following treatment	Paid time off for medical appointments	x	x	x	x	x	x	x	x	x	x	x	x			x	x	
	Reduced physical tasks											x	x	x	x			
	Ability to work from home					x	x	x	x			x	x	x	x			
	Modified work tasks	x	x					x	x			x	x					
	Gradual increase in workload	x	x		x			x	x	x	x	x	x			x	x	
	Reduced or part-time hours	x	x	x	x			x	x	x	x	x	x					
	Redesign or adjustment to workspace												x	x				
	Gradual increase in work schedule	x	x	x	x			x	x	x	x	x	x					
	Assistive devices																	
	Retraining to perform different work																	
	Support from co-workers	x	x	x	x	x	x	x	x			x	x	x	x			
	Additional breaks or rest periods										x	x	x	x				
	Unpaid time off			x	x								x	x				
	Return-to-work meeting with supervisor/employer	x	x	x	x						x	x	x	x			x	x
	Flexible scheduling of work hours	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x		
	Modified start and finish times	x	x	x	x						x	x	x	x				
	Support with travel to and from work																	
	Support from supervisor and/or employer	x	x	x	x	x	x	x	x	x	x	x	x	x				
	Workplace modifications																	
	Other																	

The pre-interview questionnaire also asked employees to identify whether they had cancer or health-related problems following treatment, and if these resulted in work-related concerns or challenges. The results from this are shown in Table 7. As can be seen, both the physical (eg hot flushes) and psychological (eg anxiety) problems that impact on the employees both after treatment and in the workplace. This identifies a need for RTW processes to consider both the physical and psychological needs of individuals returning to work or continuing to work after cancer. There are mixed results in relation to those problems that follow treatment and those which then become a work-related concern.

**Table 7 Cancer or health-related problems following treatment**

Whether or not the employee had cancer or health-related problems following treatment and whether or not these resulted in work-related concerns or challenges for case studies																
	present following treatment	work-related concern	present following treatment	work-related concern	present following treatment	work-related concern	present following treatment	work-related concern	present following treatment	work-related concern	present following treatment	work-related concern	present following treatment	work-related concern	present following treatment	work-related concern
	A	A	B	B	C	C	D	D	E	E	F	F	G	G	H	H
Anxiety	x	x			x						x	x				
Body image and appearance	x	x			x						x	x	x			
Bowel or urinary incontinence													x			
Cellulitis																
Concern about infection	x	x									x		x	x	x	x
Depression											x					
Fatigue	x	x			x				x	x	x		x		x	x
Hot flushes					x						x		x		x	x
Loss of appetite																
Lymphoedema				x												
Nausea	x	x			x								x			
Pain					x						x	x	x		x	x
Peripheral neuropathy																
Personal stress											x	x	x		x	x
Reduced cognitive ability to manage work demands (eg poor memory, concentration)	x	x									x	x			x	x
Reduced energy	x	x	x		x				x	x	x	x	x		x	x
Reduced physical ability	x	x									x	x	x		x	x
Shortness of breath	x	x									x	x				
Sleep problems	x	x			x						x	x			x	x
Other																

### 3.2.3 Good practice findings from the case studies

A number of themes have been identified from the qualitative analysis of the case studies as being important for good practice in RTW. Each of these is discussed below.

#### Risk assessment

One of the key cornerstones in relation to safety and health at work is the process of risk assessment and taking risk reduction measures for any hazards identified. In the context of continuing to work or returning to work after cancer, this process is essential in identifying the measures that can be put in

place to aid the RTW process. In the case studies, the role of the individuals who managed the risk assessment process varied along with the level of formality and detail.

The issues considered in relation to risk assessments in the case studies were varied. This was to be expected, due to the different types and sizes of workplace, tasks and the impacts of different cancers.

With regard to physical issues, formal DSE assessment were completed in two of the case studies, whereas in others more informal checks were completed of the desk space that the employee was working in. Other ergonomic issues considered in these case studies included the lifting and bending that was involved in the employee's previous role and how these tasks could be approached following their treatment. This is also similar to another two case studies where, although the employees' main roles were not physical, they occasionally had to move furniture or lift boxes. Both of these tasks had been agreed in the risk assessment process as being tasks that in the short term should not be done.

Another physical consideration for two of the case studies was walking around the workplace. For one of the employees, this related to reducing working on multiple floors in the workplace to avoid the use of stairs (due to physical pain and fatigue). For the other, for whom walking around the workplace was considered, this was also in relation to fatigue, so that where possible they were to avoid walking to areas of the workplace that were not in their immediate work area.

Driving was considered for three of the case studies, one due to discomfort from a stoma bag when driving and the other two due to fatigue. Another consideration for fatigue meant that during one of the employee's phased returns to work they were not permitted to work any overtime.

In the majority of the case studies, there was an understanding that there can be an increased risk of infection due to cancer treatments. This was dealt with in the case studies in different ways. One avoided site visits that they previously carried out, two worked from home to avoid exposure in the office, another had an agreement with fellow workers that if they were ill they would keep their distance from the individual. One of the employees who worked from home was required to visit the office occasionally to collect work files. When they did this, other staff ensured that the employee's desk was freshly cleaned.

In all case studies, fatigue was mentioned as having an impact on the employee. This was managed in various ways, including; task planning, days and hours being worked, and the ability to take breaks as and when needed. For one of the employees who now works from home full time, they know that their most productive time of the day to work is the morning, so this is when they complete their work tasks. In relation to specific tasks and the stress that these can bring, one of the employees had previously helped to manage large-scale projects. However, due to the stress that this could entail, it was agreed that in the short term they would only work on smaller-scale projects.

One of the case studies included a Personal Emergency Evacuation Plan (PEEP) in their risk assessment. This referred to the employee requiring car parking arrangements and fire escape routes that took into account their physical condition.

**Risk assessment – good practice from case studies and review:**

- Individualised approach to risk assessment
- Inclusion of multidisciplinary team
- Consideration of both physiological and psychological aspects
- Completion of a DSE assessment

**Examples from the case studies:**

- Due to physical changes working on a single floor of the workplace
- Completion of a PEEP
- Provision of disability parking
- Consideration of fatigue
- Consideration of psychological and cognitive factors through adapting job tasks, content and timescales
- Prohibition of overtime during a phased RTW
- Consideration of lowered immune system due to treatment
- Consideration of ergonomics for lifting tasks
- Limiting the driving for work during the phased RTW period
- For standing job, provide chair for resting feet (where relevant)
- Allowing the employee to take breaks as and when they needed
- For manager returning, consideration of their role as manager and expectations of their staff

### **Maintaining contact when away from work**

In all of the case studies there was two-way contact between the employee and others in the workplace. This included formal contact with line managers, HR and occupational health through a variety of routes, such as formal meetings, emails and telephone calls. Less formal contact was also made with line managers such as meetings at neutral places including coffee shops.

Contact with colleagues was also an important factor, where the case studies identified that this was carried out it was through both formal and informal meetings. There were a few occasions when employees visited the workplace either to formally meet about the RTW, or to informally catch up with colleagues. In one of the case studies, this was for a social event. One participant identified that seeing colleagues before coming back to work had made the process easier.

In one of the case studies, keeping the employee informed about workplace developments was also identified as important. This was done by ensuring newsletters were sent out whilst the employee was away from the workplace. Post was also used in another case study, as pay slips were posted out to the employee.

**Maintaining contact when away from work – good practice from case studies and review:**

- Formal two-way contact with multidisciplinary team
- Informal contact with managers and colleagues
- Formal and informal meetings with those involved in the RTW process
- Keeping the employee informed about workplace developments

**Examples from the case studies:**

- Consistency in who contacts the employee
- When a new occupational health physician joined one of the companies during the time an employee was off sick, they made contact with the employee to introduce themselves
- Staff bulletin being sent through the post
- The employee keeping their line manager informed about treatments and appointments (where relevant)
- An occupational health centre calling the employee and offering mental health support
- Where appropriate, visiting the employee to offer informal support

### **Discussions about returning to work**

In all of the case studies, there were discussions about work. For seven case studies, this was about the RTW, however for one case study this was the continuation to work as they remained in work during treatment. The discussions about RTW were with line managers, HR and/or occupational health. Where occupational health was available, they were the main resource in aspects of health and safety management in the RTW process. Formal discussions in the case studies took place in the

workplace and often occurred through RTW interviews. These allowed for discussions on how the employee was feeling physically and emotionally and if, how and when they wanted to RTW in relation to working patterns, follow-up appointments and where accommodations could be offered in the workplace. For the employee who remained in work, the discussion took place at their home, considering the same topics as the RTW interviews, including whether they would continue to work and how this would be implemented. From that point, it was agreed that they would work from home.

**Discussions about returning to work – good practice from case studies and review:**

- Consider the employee's physical and psychological needs
- Include discussions about a phased RTW (where relevant)
- Ensure a multidisciplinary team is present

**Examples:**

- Asking the employee how they feel, and when, and if, they would like to RTW
- Include any advice given by medical professionals
- Seeing a couple of colleagues while they were on sick leave made returning easier
- Discussions around locations and timings of ongoing treatment and how these could be worked around in a phased RTW
- Keeping the date of starting a phased RTW flexible, as may change due to treatment plans or how the employee is feeling
- In most cases, the employee contacted their manager to begin discussions about returning

### **Planning the return to work**

All of the case studies identified that having an RTW plan was essential. They also identified that the flexibility of the plans was also important to account for the individual in the process. For all case studies, this included aspects of having a phased RTW, allowing time to discuss entitlements such as pay and benefits, but also being able to discuss hours and workload with the line. In one case, the line manager managed the workload to ensure the employee was not over-burdened. Planning also allowed for discussions on journey to work times and the use of flexible hours and working at home, which in some cases eased the pressure of ongoing treatment appointments and travel to them. There were various stakeholders involved in the planning processes, including the returning employee, line managers, HR and occupational health.

**Planning the return to work – good practice from case studies and review:**

- Implementation of an individualised RTW plan (either formal or informal)
- Flexibility in the RTW plan
- Involvement of a multidisciplinary team in developing the plan

**Examples:**

- Informing the plan with advice from occupational health (where relevant)
- During an employee's time off sick/during phased return, their plan to RTW is monitored by occupational health and HR
- Documentation of the plan, which would be reviewed by the employee before being sent to HR
- Individualised approach to the length of the phased RTW plan

### **Meetings**

The continuance of meetings with line managers, HR and OH were also highlighted within the case studies. These included planned meetings (weekly or monthly) to allow the employee the opportunity to identify positive and negative aspects of their work. Planned meetings also gave the opportunity to review the RTW process and identify if further changes were needed. In several cases, the occupational physician and line manager were involved to ensure that workplace changes were being enacted.

Informal conversations about how things were going were also perceived as helpful, as was having a supportive work group around the employee. This identifies the importance of the skills of the line manager and other colleagues in aiding people back to work.



**Meetings – good practice from case studies and review:**

- Regular review meetings (informal and formal)
- Involving multidisciplinary team

**Examples:**

- RTW process reviewed every week or couple of weeks
- Discussion at the meetings, re-visiting accommodations and supports in place
- Employees knowing who they can contact informally or formally about issues they may be having either in the short term or long term
- After each review meeting, an update report is written and shared in the multidisciplinary RTW team
- At review meetings, it's useful for the employee to share any external appointments or advice they have received

## **Policies**

From the case studies, most companies have an RTW policy in place, but few actually have one related specifically to cancer. This is important, as with other fluctuating illnesses, because the policy can help to inform the workforce about the nature of the health issues potentially involved and can make them aware that the RTW process may take longer than for other health or injury issues.

**Policies – good practice from case studies and review:**

- Having a policy for cancer and all illnesses of a fluctuating nature
- Having an RTW policy in place that is applicable to cancer (for both returning and continuing to work)

**Examples:**

- Manager applying the policy to the individual, ensuring an individualised approach

## **Post return to work**

A number of factors were identified in relation to after the onset of the RTW process. These include the fact that, at times, due to the fluctuating health of respondents, a full RTW had to be delayed. The importance of being able to be flexible in approach was highlighted.

Information flow within the case studies often included HR and occupational health providing advice to the line manager and the employee. However, the employee also provided information to those in the workplace from consultants and medical professionals. Other information sources identified by the stakeholders and employees included: general internet searches; Macmillan (the UK cancer support charity); Unum, a UK financial protection insurer; Marie Curie; local cancer charities and support groups; therapists; and HSE, IOSH, FOM websites. In general, the information and advice was highlighted as being easy to access. However, one of the employees identified that although there was information available on RTW, there wasn't as much on continuing to work through treatment. Other employees identified that they didn't want to start searching for information; they relied instead on information from the consultants and medical professionals.

The RTW process for those who have cancer or have undergone treatment for cancer can be a long-term process. Although someone may be back working full time, there may still be a need to understand the impact of fatigue on this individual. It was perceived with the case studies that when the RTW process was over, everything was fine and normal service had resumed. This may not be the case and the need to assess ability to work and any workplace hazards should be continuous.

**Post return to work – good practice from case studies and review:**

- Availability of information and advice
- Flexibility in approach in the long term

**Examples:**

- Although signed off a phased RTW, it was clear that the employees could return to the RTW team if they had any issues or concerns at any point
- Continued support from the workplace
- Discussions about potential long-term issues or concerns
- Employee's decision on how many days to return to working
- Employee in control of their own RTW

## Summary of the good practice identified

- Maintaining both formal and informal contact between employer, employee and work colleagues before the RTW
- Maintaining contact with line manager before the RTW
- Having a plan for returning to work
- Following guidance in relation to a graduated RTW
- Having an RTW policy in place for all illnesses, including cancer, and ensuring occupational safety and health are involved in policy development
- Ensuring a risk assessment is carried out for work tasks and is re-assessed when necessary
- Identification of risk reduction measures, including the journey to work, work tasks and interactions with the public (or infection sources)
- Managing workload to reduce any pressure points

## Perceived cost to the organisation

In the case studies, the costs to the organisations of the RTW and continuation of work for cancer survivors were identified in the interviews with the line managers. These highlighted costs included, both costs incurred whilst the employee was away from the workplace, such as pay, and covering workload and costs incurred when the employee had returned, including a reduction in hours during a phased return, work adaptations, where required, and time off for doctor appointments. There were also costs identified throughout the process, including occupational health service provision, the time spent by the stakeholders working on the RTW and slight delays in work.

### 3.3 Discussion of the case studies

This research aimed to examine different work sectors to identify any patterns in facilitating RTW for cancer survivors. The scale planned meant that it was not expected to be a totally representative sample. However, the final sample was mostly female and involved only one small business. The reasons for difficulties in recruiting males can only be speculated on. It may indicate a lack of willingness for men to take part in the work or could reflect a lack of willingness to talk about illness, or organisations that unwilling to give their time. The late withdrawal of two of the 10 case studies could relate to changes in health of the participants or, in one case, the change in occupation due to the physical demands of their previous work. This can be seen as an alternative 'accommodation', although changing jobs completely may not be an option open to many.

The work was focused on occupational safety aspects of RTW, but acknowledgement has to be made of the potential health impacts that can occur from working. These include the fact that individuals returning to work may be exposed to other carcinogens, such as chemicals or other types of exposure. There is also a need to examine the impact of continuing drug treatments on ability to work and the potential interactions between medication use and work. These have not been addressed by this research project but comprehensive risk assessment of workplace hazards should allow identification of risks to enable control measures to be put in place. Against this, RTW can be regarded as a positive aspect of the overall recovery process, with psychosocial and social benefits to the individual.

The case studies were limited to individuals who had experienced a positive RTW. In engaging companies in case study research, often there is a positive bias to the outcomes as organisations doing well are more likely to share information. With this borne in mind, it is clear that a number of those trying to RTW after cancer are unsuccessful for a variety of reasons. Further research should aim to discover some of those reasons and the barriers to RTW and staying in work.

There was no consistency in whether organisations used risk assessment as part of the RTW process. It was evident that where occupational health had been involved in the process, any risks to those returning to work had been considered. However, with most of the case studies involving sedentary work, it may be perceived that the risks are minimal and do not need to be assessed. However, the impact of co-morbidities such as lymphoedema can also have an effect on those involved in office-based tasks. There is a need to ensure that risk assessments of work tasks are included as part of the process, as the case studies identified that although participants were office-

based, their role had included manual handling, moving between different floors or buildings or being exposed to potential infection risks.

It is clear that the RTW process for the participants in the case studies required an individualised approach due to the impacts of different treatments. Additionally, the fluctuating nature of health within this group emphasises the importance of revisiting the risk assessment on a regular basis or when health changes. This should be a part of OSH management in the process.

A flexible approach during the RTW process was shown by all the case studies. Flexibility included factors such as: extending the period of shortened hours; changing work start and finish times; working from home, where possible. Such changes may be difficult for some organisations, but a clear benefit was reported within this work.

There was a perception among employees that when the RTW process or the phased RTW was completed, this was the end of the matter. This is something that could be managed better within the workplace should a policy exist to manage RTW after cancer. Often there are no visible signs of change in relation to the individual after RTW, but the impact of fatigue or poor health may still be felt. To be able to report such continuing problems requires a supportive work environment and thus the need for continued engagement between the employee, line manager and other support systems including OSH, occupational health and human resources.

#### **4. Over-arching findings of the review and case studies**

At the current time there is limited evidence in relation to the safety aspects of RTW after cancer. However, there is an understanding of the impact that cancer and cancer treatments have on physical and psychological health. This research project aimed to examine these factors in relation to safety and health and current workplace practice.

##### **4.1 Risk assessment**

The literature review and case studies identified a number of key themes that should be considered in relation to risk assessment for those returning to work after cancer. These include:

- the need for a risk assessment on RTW, which needs to be regularly followed up due to the fluctuating nature of some of the symptoms
- the risk assessment needs to be individualised, as the nature of the symptoms are individual and personal.

It was perceived in three of the case studies that when a full RTW is achieved that is the end of the process of a phased RTW. However, both the review and case studies identified that it is important to update the risk assessment in relation to any personal or work changes on a continuing basis.

There also a number of essential areas that should be covered by the risk assessment, including:

- the physical aspects of the work
  - physical demands and limitations
  - ergonomic or job design changes due to back or joint pain or lymphoedema
- the impact of fatigue on work tasks
- the psychological demands of the work
- risks of infection
- the journey to work
- driving for work
- breaks in the working day
- inclusion of emergency planning if necessary
- if working at home, ensuring the environment is safe and ergonomically sound.

## 4.2 Physical demands

In relation to safety aspects of RTW, the research evidence highlights the impact of physical demands at work, psychological demands at work and the impact of fatigue. These all have safety implications but it was not apparent that these were being fully addressed within the case studies. Several of the companies had not carried out a risk assessment. However, where occupational health support was available, this support was likely to have addressed such issues in relation to fitness for work and workplace accommodations.

The issue of co-morbidities such as lymphoedema or sun sensitivity is also likely to be addressed via medical support. These can be raised as part of the risk assessment process to ensure that individuals with co-morbidities can discuss them either with medical professionals or other relevant safety professionals to ensure their continued protection.

The ongoing issue of fatigue after RTW has again been identified as a risk factor in several studies. Within the review and case studies, this has been managed by allowing flexibility over when to come to work and through taking breaks when at work. However, the issue of driving for work may need to be considered within the risk assessment process in relation to fatigue.

## 4.3 Psychological demands

In relation to psychological demands, the review and some of the participants in the case studies reported changes in cognitive function, including poor concentration and memory deficits. This is a recognised consequence for those having undergone certain treatments. In relation to managing such issues, good job design with suitable breaks could be helpful. For memory changes, using lists or using technology, such as task reminders, may provide a solution.

In the general working population, the impacts of psychosocial risks are well recognised and guidance is available from the HSE Management Standards.\* As part of this, having control over work is recognised as an important part of management. The line manager's role in this can be essential to ensure that an individual is not overloaded on their RTW. There was a good example within one case study, where the line manager set the tasks and managed the workload to ensure overload did not occur.

The long-term effects of treatment for those returning to work are only now being recognised. This perhaps relates to the perceptions that once RTW or a graduated return has been completed then that individual is back to full function. This may not be the case and emphasises the need for a continued monitoring of the situation and the individual.

## 4.4 Accidents

The risk of having an accident at home or work was also identified by the work of Lawrence.<sup>31</sup> Accidents were attributed to fatigue, neuropathy, weakness in the legs and lymphoedema. This research does need further investigation in relation to the workplace and how relevant risks can be managed as research evidence is very limited.

## 4.5 Other issues

A number of key factors were evident in that, when occupational health was available to the employee, they supported the worker for both occupational health and safety aspects. However, what is unclear is how much information in relation to safety and health is available for non-medical staff, including safety practitioners and HR or employees tasked with OSH in smaller businesses.

Both the review and case studies identified a lack of supporting research evidence. This is a reflection of the improvements in treatment and extension of life expectancy post-cancer, where a recent development target is to have work as an outcome. The lack of evidence highlights the need for a more comprehensive research strategy.

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\* <http://www.hse.gov.uk/stress/standards/>

The use of the terms 'best practice' and 'good practice' in the context of this work are differentiated between best practice as having an evidence base, versus good practice where some interventions or methods are perceived to work by those involved. In the case of this work, the term good practice must be used because of the lack of supporting research evidence. This work has broadened the evidence base by considering the OSH implications in the RTW process.

The work also highlights the need to ensure that different professions are able to work together in managing the RTW process. Examples include the importance of involving HR, occupational health and safety professionals in the development of critical illness or fluctuating illness policies. This will allow a better understanding and sharing of knowledge between groups and potentially provide better risk management for those returning to work.

## **5. Guidance development**

The guidance developed as part of this work can be defined as good practice. The use of the term best practice requires an evidence base to be available to compare the practice with. Positively, the numbers of people returning to work after cancer is increasing and with it the evidence base should expand.

The structure of the guidance is based on the structure of the OH Toolkit which is available on the IOSH website at <http://www.iosh.co.uk/Books-and-resources/Our-OH-toolkit.aspx>.

## **6. Conclusions and further research**

This project has identified good practice in relation to return to work after cancer. Although there is a large amount of useful information available from other sources, there is very limited information available for those involved in the safety professions to support a successful return to the workplace. Evidence gaps include a lack of:

- knowledge in relation to manual workers and their outcomes in the RTW process
- information on those who have had to change jobs because of their health or their future employability
- evidence in relation to safety or ergonomic aspects of work and how they can contribute to the success or failure of a return to work
- evidence in relation to accident risk during treatment and when returned to work.

There's a need for more research, including the development of a cohort of individuals who can be followed up for at least five years to identify the barriers and facilitators in staying in work or changing the work they do.

## **Appendix 1. Search strategy**

### **Population**

Adults  
Employ\*  
Work\*  
At work  
Economically active  
Labor/Labour  
Cancer sufferer  
Cancer survivor  
People living with and beyond cancer  
People affected by cancer

### **Intervention**

A broad definition of the term intervention was used and included large-scale intervention studies, experimental studies and observational studies to smaller-scale workplace design changes, such as management training course or safety and health considerations.

### **Workplace adjustments**

Ergonomic\*  
Health promotion  
Occupational safety  
Occupational health and safety  
Occupational health  
Occupational medicine  
Occupational hygiene  
Worker protection  
Risk control  
Risk reduction  
Learning, training and development for employees  
Learning, training and development for managers  
Age management  
Rehabilitation  
Return to work  
Work disability  
Education  
Coaching and mentoring  
Support groups

### **Outcomes and influences**

Each study with a relevant population meeting the search criteria was searched for the following outcome measures or influences:

Return to work  
Absenteeism  
Sickness absence  
Time off for appointments  
Sick leave  
Presenteeism  
Early retirement/retirement

Severity and type of cancer  
Prognosis

Accommodations  
Modifications  
Impairment  
Interventions

Limitations  
Loss  
Performance

Anger  
Anxiety  
Distress  
Depression  
Emotional  
Fear  
Psychological problems  
Loss of confidence  
Self-esteem  
Stress  
Isolation  
Vulnerability

Cognitive  
Concentration  
Memory  
Problem solving  
Short attention span  
Chemo brain  
Brain fog  
Mental limitations

Fatigue  
Side effects  
Sleep problems  
Insomnia  
Hormone treatment  
Lymphoedema  
Numbness  
Tingling  
Peripheral neuropathy  
Proprioception  
Pain  
Physical limitations  
Physical stamina  
Physical demands of the job  
Psychological demands of the job  
Flexibility

Disability  
Discrimination  
Co-morbidity  
Disease status

Cardiac  
Chronic illness  
Health problems  
Conditions  
Infection susceptibility

Post-treatment  
Late effects  
Recurrence  
Rehabilitation



**Publication types**

Systematic Reviews  
Reviews  
Guidance  
Guidelines  
Reports  
Articles  
Case studies

**Inclusion criteria**

Employed  
Employed but not working  
Cancer Survivor  
Voluntary work  
Published post 2000  
Publication in English

**Exclusion criteria**

Economically inactive  
Published pre 2000

**Search databases**

For academic research, the following databases were used to identify published research papers:

Embase  
Medline  
PsychINFO  
Scisearch  
Sociological Abstracts  
Social Science Citation Index  
Social Policy and Practice  
Social Scisearch

Grey literature searches were carried out using databases such as:

Google Scholar  
Open Grey  
BL Ethos

Further websites searched for grey literature included:

ILO  
WHO  
NIOSH  
IOSH  
Mental Health Europe  
European Social Network  
European Agency for Safety and Health at Work  
EuroHealthNet  
The Age and Employment Network  
ENWHP  
Adis Clinical Trials Insight  
BIOSIS Previews  
British Nursing Index  
Current Contents Search  
DH-Data  
EMcare  
Gale Group Health Periodicals Database  
HSE  
Pascal

British Safety Council  
Macmillan Cancer Support  
Cancer Research UK

Reference lists in (key) identified papers were scanned in order to identify further publications. Databases such as Web of Knowledge and SCOPUS were also used to search for publications citing the identified papers.

## Appendix 2. Data extraction method

Options for responding to these questions included various open fields and drop-down options, including 'not applicable' where the questions were not relevant to the paper being reviewed at the time.

<b>Paper information</b>	<b>ID Number (RefWorks Number)</b>
	<b>Reference</b>
	<b>Reviewer</b>
	<b>Type of study</b>
	<b>What research question(s) does the study address?</b>
	<b>Does the publication cover safety/health/risk management?</b>
<b>Screening</b>	<b>Include or exclude</b>
	<b>Reasons for rejection</b>
<b>Research Questions</b>	<b>Type of cancer(s)?</b>
	<b>Description of population (including occupation if mentioned)</b>
	<b>What data is provided on return to work?</b>
	<b>Implications of suffering from cancer and cancer treatments mentioned?</b>
	<b>What evidence is provided on workplace changes, adjustments and OSH to support return to work?</b>
	<b>What evidence is provided on best practice of supporting cancer sufferers' return to work in context of OSH?</b>
	<b>Outcome measures, eg successful return to work, health and safety measures</b>
<b>Data collection methods</b>	<b>What data collection tools were used, eg questionnaire, interview, sickness absence rates?</b>
	<b>Were data collection tools shown to be valid? For example, validated questionnaires or other tools</b>
	<b>Were data collection tools shown to be reliable?</b>
	<b>Data collection methods rating</b>
	<b>Study outcomes – what were the outcomes from the publication, eg a summary of findings and outcomes?</b>
<b>Selection bias</b>	<b>Are the individuals selected to participate in the study likely to be representative of the target population?</b>
	<b>What percentage of selected individuals agreed to participate?</b>

	Selection bias rating
Study design	Was the study described as randomized? If no, go to confounders section
	If randomized, was the method of randomization described?
	If yes, was the method appropriate?
	Study design rating
Confounders	Were there important differences between groups prior to the intervention? If none listed, go to blinding
	If yes, indicate the percentage of relevant confounders that were controlled, either in the design – eg stratification, matching – or analysis)?
	Confounders rating
Blinding	Was (were) the outcome assessor(s) aware of the intervention or exposure status of participants? If no, go to withdrawals and drop-outs
	Were the study participants aware of the research question?
	Blinding rating
Withdrawals and drop-outs	Were withdrawals and drop-outs reported in terms of numbers and/or reasons per group? If no, go to intervention integrity
	Indicate the percentage of participants completing the study
	Withdrawals and drop-out rating
Intervention integrity	What percentage of participants received the allocated intervention or exposure of interest? If no intervention, go to analyses
	Was the consistency of the intervention measured?
	Is it likely that subjects received an unintended intervention (contamination or co-intervention) that may influence the results?
Analyses	Indicate the unit of allocation
	Are the statistical methods appropriate for the study design?
	Is the analysis performed by intervention allocation status (ie intention to treat) rather than the actual intervention received?
Additional notes	Additional notes and comments
	Tools mentioned
	Background info



## **Return to Work after Cancer Project**

### **IOM case study**

#### **Pre-interview questionnaire**

The Institute of Occupational Medicine (IOM) is an independent research organisation, currently carrying out a research project funded by the Institution of Occupational Safety and Health (IOSH) to examine occupational safety and health issues surrounding return to work for people who have been treated for cancer.

The research is being undertaken in three stages: a systematic review, case studies and the development of guidance material. At the current stage (until May 2015) we are completing the case studies, for which you and your company have identified interest in taking part.

As part of this case study we are asking individuals to complete a short pre-interview questionnaire. The aim of this is to gather information about your cancer experience and work before we complete an interview with you about your experience of returning to work after cancer.

The results of the case studies will be collated into examples of best practice in managing return to work after cancer and how to manage the hazards associated with returning to work.

**No individual will be identifiable in the case study examples of best practice and the information collected will be used solely for the purposes of this research study. The IOM is a signatory to the Data Protection Act.**

We would be grateful if you could complete the attached pre-interview questionnaire. It should take only a few minutes and then return it directly to the project team using a pre-paid envelope provided. If there are any questions you would prefer not to answer then please feel free to leave them blank.

As mentioned in the consent form you do not have to complete the questionnaire and are free to withdraw from the research project at any time.

### General information

1. How old are you?  
\_\_\_\_\_years
2. Are you male or female? (please tick)
  - Male
  - Female

### Cancer experience

3. What type of cancer(s) were you diagnosed with? (please tick all that apply)
  - Bladder
  - Brain
  - Breast
  - Colorectal
  - Head and neck
  - Kidney
  - Leukaemia
  - Lung
  - Melanoma
  - Non-Hodgkin's Lymphoma
  - Prostate
  - Thyroid
  - Other (please specify) \_\_\_\_\_
4. What type of treatment(s) did you have? (please tick all that apply)
  - Surgery
  - Radiation
  - Chemotherapy
  - Medication (eg prescribed pain medication)
  - Cancer medication (eg tamoxifen)
  - No treatment
  - Other (please specify) \_\_\_\_\_
5. Are you still receiving treatment? (please tick)
  - Yes, please specify \_\_\_\_\_
  - No

### Your company/work information

6. What size is the site that you work at? (please tick)
  - Large, > 500 employees
  - Medium, 50–499 employees
  - Small, < 50 employees
7. What is your current job title/position?  
\_\_\_\_\_

Please give a brief description of your current position:

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8. What is the nature of your current work/tasks? (please tick all that apply)

- Full-time
- Part-time
- Shift work
- Night work
- Manual/physical
- Non-manual/office based/sitting most of the day

9. How long have you worked for the company?

\_\_\_\_\_ years \_\_\_\_\_ months

10. Is this job a permanent job? (please tick)

- Yes
- No – when does your contract end? \_\_\_\_\_

11. Is there a HR department in the company? (please tick)

- Yes
- No
- Don't know

12. Is there an occupational health department in the company? (please tick)

- Yes
- No
- Don't know

13. How do you currently travel to work? (please tick all that apply)

- Car, as driver
- Car, as passenger
- Train
- Walk
- Bus
- Bicycle
- Motorbike/Scooter
- Other, please specify \_\_\_\_\_

14. How long does your journey to work usually take?

\_\_\_\_\_ hours \_\_\_\_\_ minutes

15. How did you travel to work before your cancer diagnosis? (please tick all that apply)

- Car, as driver
- Car, as passenger
- Train



- Walk
- Bus
- Bicycle
- Motorbike/Scooter
- Other, please specify \_\_\_\_\_

16. Did you have any of the following cancer or health-related problems following your treatment? If yes to any, did they result in work-related concerns or challenges? (please tick all that apply)

<b>Cancer or health-related problems</b>	<b>Tick if you had this cancer or health-related problem following treatment</b>	<b>Tick if it resulted in work-related concerns or challenges</b>	<b>Comments</b>
Anxiety			
Body image and appearance			
Bowel or urinary incontinence			
Cellulitis			
Concern about infection			
Depression			
Fatigue			
Hot flushes			
Loss of appetite			
Lymphoedema			
Nausea			
Pain			
Peripheral neuropathy			
Personal stress			
Reduced cognitive ability to manage work demands (eg poor memory, concentration)			
Reduced energy			
Reduced physical ability			
Shortness of breath			

Sleep problems			
Other			

17. Which of the following workplace accommodations or supports did you require following your cancer treatment? (please tick all that apply)

<b>Workplace accommodations and supports</b>	<b>Please tick if you required this accommodation and support</b>	<b>Please tick if you received this accommodation and support</b>	<b>Comments</b>
Paid time off for medical appointments			
Reduced physical tasks			
Ability to work from home			
Modified work tasks			
Gradual increase in workload			
Reduced or part-time hours			
Redesign or adjustment to workspace			
Gradual increase in work schedule			
Assistive devices			
Retraining to perform different work			
Support from co-workers			
Additional breaks or rest periods			
Unpaid time off			
Return to work meeting with supervisor/employer			
Flexible scheduling of work hours			
Modified start and finish times			
Support with travel to and from work			
Support from supervisor and/or employer			
Workplace modifications			
Other			



## Individual interview

Interviewer:

Date:

Company:

Interview content:

While you were away from work

Return to work

Risk assessment

Absence

Workplace accommodations

Information

Long-term process

Evaluation

If during the interview process there are any questions you would prefer not to answer or are unaware of the answer to, please indicate this to the interviewer and they will move on to the next question.

### While you were away from work

18. Were you away from work, or did you continue to work during treatment?
  - Away from work – What was the total amount of time you were away from work following your cancer diagnosis? \_\_\_\_\_years \_\_\_\_\_ months
  - Continued to work – If you continued to work, please describe the work hours, tasks etc.
  
19. What was your reason for returning to work? (financial, normality)
  
20. Was there contact with you whilst you were off work? If yes:
  - Email
  - Phone
  - Letter
  - Visit
  - Other
  
21. Who was this contact with and who initiated it?
  
22. When did the discussion with your employer and changes happen in relation to your return to work?
  - Who was involved?
  - What topics were discussed?
  - Where did the discussions take place?

23. Was a plan put in place for the return to work after cancer process?

- Formally or informally?
- What was included in this?

### **Return to work**

24. How long have you been back at work?

25. What was your return to work schedule like?

- I immediately went back to my normal working hours.
- I immediately returned to work on a part-time basis
- I gradually returned to work in terms of the numbers of hours worked or the number of days worked per week
- I had flexible scheduling of hours worked each day or the location of work (eg work from home)
- Other (please specify) \_\_\_\_\_

26. Which of the following best describes the type of employment you had following your cancer treatment?

- Old job with previous employer
- Different job with previous employer
- Other (please specify) \_\_\_\_\_

27. During the return to work process if information or circumstances change who acts on this and manages the process?

28. Are there meetings about the return to work process? If yes:

- Are these formal or informal?
- Are notes taken?
- Are actions distributed and acted upon?
- How frequently are these?

29. What advice/support did you receive on return to work and who from?

### **Risk assessment**

30. Was a risk assessment carried out during the RTW process?

If yes, what did the risk assessment cover for example physical hazards or psychosocial risks? Who undertook this risk assessment?

31. Was consideration made of any health and safety risks identified?

32. Has the risk assessment been up-dated since you returned to work?

33. In relation to the cancer or health-related problems following your treatment that were identified in your questionnaire were these discussed in relation to health and safety risks and side effects that might pose or have posed in your job and how?

### **Absence**

34. Have you taken sickness absence since returning to work?

- Was the reason for the absences (number/number of days) directly related to the cancer (in your opinion) or not?
- How many spells of sick leave have you taken in the past 6 months?
- How many days in total have you had off in the past 6 months or since you returned to work?

### **Workplace accommodations**

35. In relation to the workplace accommodations and supports identified in your pre-interview questionnaire were the decisions on these based on health and safety or disability law? Or both?
36. How did you know you needed these changes?
37. Who did you speak to for authorisation of these changes?
- Online information
  - Immediate work supervisor
  - Union representative
  - Human resources
  - Occupational nurse
  - Oncology nurse
  - Health and safety manager
  - Occupational therapist
  - GP
  - Oncologist
  - Counsellor
  - Cancer support group
  - Other (please specify) \_\_\_\_\_
38. In detail, can you describe the process that was undertaken to aid you in RTW
- job assessment
  - discussion with you or others
39. How difficult was it to implement any changes from your viewpoint (prompt: any risk taken into consideration?)

### **Information**

40. Did you seek information independently about the RTW after cancer process? If yes, where from:
- Online information
  - Immediate work supervisor
  - Union representative
  - Human resources
  - Occupational nurse
  - Oncology nurse
  - Health and safety manager
  - Occupational therapist
  - GP
  - Oncologist
  - Counsellor
  - Cancer support group
  - Other (please specify) \_\_\_\_\_

41. How easy was it to obtain the information on return to work after cancer?

### **Long-term process**

42. Was consideration made of the potential for ongoing health problems? (In relation to workplace accommodations, working hours etc.)

43. Has an end to the return to work after cancer process been identified?

### **Evaluation**

44. In your opinion was the return to work process on this occasion appropriate?

45. Is there anything you have learnt from the current return to work after cancer process?

46. Are you aware of any external sources of information on return to work after cancer? – if so which?

### **Line manager interview**

Interviewer:

Date:

Company:

Interview content:

Background

Before the employee returned to work

Return to work process

Risk assessment

Workplace adjustments

Information and advice

The organisation

Evaluation

The interview is aimed to examine the process of return to work after cancer for one of your employees. We are trying to find out the process that was undertaken in the organisation and the roles that different individuals had in managing workplace changes, risk assessments and risk management.

If during the interview process there are any questions you would prefer not to answer or are unaware of the answer to, please indicate this to the interviewer and they will move on to the next question.

### **Background**

1. Have you managed a return to work process in relation to cancer before?

- If so when?

### **Before the employee returned to work**

2. Was a plan put in place for the return to work after cancer process?
  - Formally or informally?
  - What was included in this?
3. Was there contact whilst the employee was off work? If yes:
  - Email
  - Phone
  - Letter
  - Visit
  - Other
4. Was there an interview with the individual before they returned to work? If yes:
  - Who was involved?
  - What topics were discussed?
  - Where did the interview take place?

### **Return to work process**

5. Does the organisation have a policy in relation to RTW after illness and/or cancer?
6. Who was involved in managing the return to work process in this case?
  - What roles did they have?
  - When did they become involved in the process?
7. What did the return to work after cancer process involve?
8. During the return to work process if information or circumstances change who acts on this and manages the process?
9. Are there meetings about the return to work process? If yes:
  - Are these formal or informal?
  - Are notes taken?
  - Are actions distributed and acted upon?
  - How frequently are these?

### **Risk assessment**

10. Was a risk assessment carried out as part of the process?
  - If yes did it cover physical risks and psychosocial risks?
  - Who undertook the risk assessment?
11. What did you take into consideration when doing the risk assessment? (eg permanent change in participants' physical function as a result of cancer (eg colostomy bag) or treatment of side effects)

### **Workplace adjustments**

12. What type of work adjustments were offered to the employee in relation to their job role?



- Did these consider the potential for ongoing health problems?
- Did these consider health and safety risks to the employee?
- How long are the work adjustments in place for?
  - o Temporary – how long?
  - o Permanent

13. Will a risk assessment be carried out regularly to review any adjustments?

#### **Information and advice**

14. How easy or difficult was it to implement advice from internal and external sources in this process?

15. How easy or difficult was it to obtain information either internally or externally on the topic of return to work after cancer?

16. Were you aware of any health and safety issues associated with cancer and cancer treatments?

#### **The organisation**

17. Are you aware of the perceived costs of this to the organisation?

18. Has an end to the return to work after cancer process been identified?

#### **Evaluation**

19. In your opinion was the return to work process on this occasion appropriate?

20. Is there anything you have learnt from the current return to work after cancer process?

21. Are you aware of any external sources of information on return to work after cancer? – if so which?

## **Human resources interview**

Interviewer:

Date:

Company:

Interview content:

Background

Before the employee returned to work

Return to work after cancer

Risk assessment

Workplace adjustments

Information and advice

Long-term process

Evaluation

We are carrying out these interviews to examine the process of return to work after cancer within the organisation. We would like to talk with you about different aspects of the return to work process, managing workplace changes, risk assessment, risk management and the roles of the different individuals involved.

If during the interview process there are any questions you would prefer not to answer or are unaware of the answer to, please indicate this to the interviewer and they will move on to the next question.

### **Background**

1. Have you managed a return to work process in relation to cancer before this occasion?
  - If so when?

### **Before the employee returned to work**

2. Was a plan put in place for the return to work after cancer process?
  - Formally or informally?
  - What was included in this?
3. Was there contact whilst the employee was off work? If yes:
  - Email
  - Phone
  - Letter
  - Visit
  - Other
4. Was there an interview with the individual before they returned to work? If yes:
  - Who was involved?
  - What topics were discussed?

- Where did the interview take place?

### **Return to work after cancer**

5. Is there a policy in place within your organisation in relation to RTW after cancer or other chronic problems? – if yes, was this in place when the employee in the current process returned to work?
6. Could you describe the process that occurs in your organisation in relation to return to work after cancer?
  - The people/sections involved and when they become involved.
7. During the return to work process if information or circumstances change who acts on this and manages the process?
8. Are there meetings about the return to work process? If yes:
  - Are these formal or informal?
  - Are notes taken?
  - Are actions distributed and acted upon?
  - How frequently are these?

### **Risk assessment**

9. Is a risk assessment carried out as part of the return to work process?
  - If yes, does this cover physical and psychosocial risks?
  - Who undertakes the risk assessment?
10. What did you take in to consideration when doing the risk assessment? (eg permanent change in participants' physical function as a result of cancer (eg colostomy bag) or treatment of side effects?)
11. Are you aware of any health and safety issues associated with cancer and cancer treatment?
12. Can you describe any health and safety risks identified within the return to work process?
  - Who assessed this?
  - Were risks reduced?
  - Can you describe the process of risk assessment used?

### **Workplace adjustments**

13. Were any work adjustments made in relation to the employee's job role?
  - Who provided this information?
  - Was consideration made of any potential ongoing health problems?
  - Was consideration made of any health and safety risks?
  - How long are the work adjustments in place for?
    - Temporary – how long?
    - Permanent
14. Will a risk assessment be carried out regularly to review any adjustments?

### **Information and advice**

15. How easy was it to implement any advice received internally or externally?

16. How easy was it to obtain information on return to work after cancer?

**Long-term process**

17. Are there measures that are ongoing in relation to return to work after cancer for the employee?

**Evaluation**

18. In your opinion was the return to work process on this occasion appropriate?

19. Is there anything you have learnt from the current return to work after cancer process?

20. Are you aware of any external sources of information on return to work after cancer? – if so which?

## **Occupational safety and health interview**

Occupational health provider/safety professional

Interviewer:

Date:

Company:

Interview content:

Background

Before the employee returned to work

Return to work process

Risk assessment

Workplace adjustments

Information and advice

Long-term process

Evaluation

We are carrying out these interviews to examine the process of return to work after cancer within the organisation. We would like to talk with you about different aspects of the return to work process, managing workplace changes, risk assessment, risk management and the roles of the different individuals involved.

If during the interview process there are any questions you would prefer not to answer or are unaware of the answer to, please indicate this to the interviewer and they will move on to the next question.

### **Background**

1. Have you managed or been involved in a return to work process in relation to cancer before?
  - If so when?

### **Before the employee returned to work**

2. Was a plan put in place for the return to work after cancer process?
  - Formally or informally?
  - What was included in this?
3. Was there contact whilst the employee was off work? If yes:
  - Email
  - Phone
  - Letter
  - Visit
  - Other

4. Was there an interview with the individual before they returned to work? If yes:
  - Who was involved?
  - What topics were discussed?
  - Where did the interview take place?

### **Return to work process**

5. During the return to work process if information or circumstances change who acts on this and manages the process?
6. Are there meetings about the return to work process? If yes:
  - Are these formal or informal?
  - Are notes taken?
  - Are actions distributed and acted upon?
  - How frequently are these?
7. Is there a policy in place within your organisation in relation to RTW after cancer or other chronic problems?
8. Please describe the process that occurs in your organisation in relation to return to work after cancer?
  - Internally – The people/sections involved and when they became involved
  - Externally – for example occupational health and when they became involved

### **Risk assessments**

9. Is a risk assessment carried out as part of the return to work process?
  - If yes does this cover physical and psychosocial risks?
  - Who undertakes the risk assessment?
10. Are you aware of any health and safety issues associated with cancer and cancer treatment?
11. Can you describe any health and safety risks identified within the return to work?
  - Who assessed this?
  - Were risks reduced? – how?
  - Can you describe the process of risk assessment used?

### **Workplace adjustments**

12. Were any work adjustments made in relation to the employee's job role?
  - Who provided this information?
  - Was consideration made of any potential ongoing health problems?
  - Was consideration made of any health and safety risks?
  - Did the employee have input in this?
  - How long are the work adjustments in place for?
    - Temporary – how long?
    - Permanent
13. Will a risk assessment be reviewed regularly to review any adjustments?

### **Information and advice**

14. Where did you obtain information on return to work after cancer in relation to health risks or safety risks?
15. How easy was it to obtain information on return to work after cancer in relation to health risks or safety risks?
16. How easy was it to implement the advice received internally or externally?

### **Long-term process**

17. Are there measures that are ongoing in relation to return to work after cancer for the employee?
  - are these formal/informal?
  - who is involved?
  - frequency?
18. Is there an end to the return to work process?

### **Evaluation**

19. In your opinion was the return to work process on this occasion appropriate?
20. Is there anything you have learnt from the current return to work after cancer process?
21. Are you aware of any external sources of information on return to work after cancer? – if so which?

#### Appendix 4. Papers excluded from the review

Reference	Type of study	What research question(s) does the study address	Reasons for rejection
Abdel Fattah, H., Zaghloul, A. Pre-prosthetic surgical alterations in maxillectomy to enhance the prosthetic prognoses as part of rehabilitation of oral cancer patient 2010	Journal article	Evaluate the importance of pre-prosthetic surgical alterations at the time maxillectomy on the enhancement of the prosthetic prognoses as part of the rehabilitation of oral cancer patients	Not health and safety
Ahn, E., Cho, J., Shin, D. W., <i>et al.</i> Impact of breast cancer diagnosis and treatment on work-related life and factors affecting them 2009	Cross-sectional survey	Impacts of breast cancer diagnosis and treatment on employment status and ability to perform occupational and housekeeping tasks	No health and safety or workplace factors
Amir, Z., Brocky, J. Cancer survivorship and employment: epidemiology 2009	Review	An overview of the published literature examining the (i) rate of return to work for cancer survivors, (ii) models for understanding return to work after cancer survivorship and (iii) factors associated with RTW rates	Not health and safety
Amir, Z., Moran, T., Walsh, L., Iddenden, R. and Luker, K. Return to paid work after cancer: a British experience 2007	Postal questionnaire survey of cancer patients	RTW after cancer	No health and safety or workplace factors
Amir, Z., Wynn, P., Chan, F., Strauser, D., Whitaker, S. and Luker, K. Return to work after cancer in the UK: attitudes and experiences of line managers 2010	Cross-sectional survey - questionnaire	Attitudes of line managers towards employees with cancer diagnosis	No health and safety or workplace factors



Amir, Z., Wynn, P., Whitaker, S. and Luker, K. Cancer survivorship and return to work: UK occupational physician experience 2009	Questionnaire survey	To survey UK occupational health physicians regarding their role/views/experiences in rehabilitation of employed survivors of cancer	No useful data
Amir, Z., Neary, D. and Luker, K. Cancer survivors' views of work 3 years post diagnosis: a UK perspective 2008	Qualitative interview	Impact of cancer on working life	Not health and safety
Anonymous Arm Morbidity in Relation to Sickness Absence and Return to Work Short After Breast Cancer Surgery 2011	Abstract from conference proceedings	To determine if arm morbidity was related to sick leave after breast cancer surgery	No health and safety or workplace factors
Anonymous DEPRESSION FOLLOWS ILLNESS TO WORK 2009	Other	Magazine article about RTW reporting on a research report and providing a case study. However, the case study relates to RTW following knee injury	RTW case is about knee injury not cancer
Anonymous Employment pathways in a large cohort of adult cancer survivors 2005			Repeat of ID 69
Anonymous Prevalence and Predictors of Self-Reported Neuropsychological Impairment in Patients Undergoing Hematopoietic Cell Transplantation (HCT) - Impact On Return to Work After HCT 2009	Conference abstract	Assess the longitudinal trajectory of self-reported neuropsychological impairment from pre-HCT to 1 year post-HCT	Not health and safety

Anonymous Return to work after adjuvant treatment for breast cancer 2007-03-14	Poster abstract	RTW after treatment for breast cancer	Only a poster abstract
Anonymous Return to work after primary treatment for cancer; occupational stress in the job situation 2005-10-30	Cross sectional	To explore occupational stress among Norwegian cancer survivors	Does not cover safety/health/risk management
Anonymous Return to Work after Treatment for Breast Cancer: Single Center Experience in a Cohort of 273 Patients 2009-12-09	Cohort study	To assess time to return to work in a single centre	Does not cover safety/health/risk management
Anonymous The meaning of work and working life after cancer: An interview study 2008	Observation and interview	To analyse the meaning of work and working life for cancer survivors over time	Not health and safety
Antao, L., Shaw, L., Ollson, K., <i>et al.</i> Chronic pain in episodic illness and its influence on work occupations: a scoping review 2013	Review	Influence of chronic pain on work	Not cancer specific, no health and safety
Baili, P., Hoekstra-Weebers, J., Van Hoof, E., <i>et al.</i> Cancer rehabilitation indicators for Europe 2013	Journal article	1. To describe the candidate indicators evaluated by an expert panel; 2. To present the final list of indicators proposed by the panel; 3. A literature review	Not health and safety
Bains, M., Yarker, J., Amir, Z., Wynn, P. and Munir, F. Helping cancer survivors return to work: what providers tell us about the challenges in assisting cancer patients with work questions 2012	Interview study	Exploration of the extent to which health professionals involved with colorectal cancer patients address work matters during active treatment	Not evidence based

Balak, F., Roelen, C.A., Koopmans, P.C., Elike, E. and Groothoff, J.W. Return to work after early-stage breast cancer: a cohort study into the effects of treatment and cancer-related symptoms 2008	Cohort study	What is the RTW rate following early-stage breast cancer? What is the effect of the type of treatment and cancer-related symptoms on return to work?	Focuses on duration of absence and type of treatment
Banning, M. Employment and breast cancer: a meta-ethnography 2011	Review of studies	Experience of breast cancer survivors' return to work	Not health and safety
Blinder, V. S., Murphy, M. M., Vahdat, L. T., <i>et al.</i> Employment after a breast cancer diagnosis: a qualitative study of ethnically diverse urban women 2012	Qualitative study	To describe the employment experiences of urban breast cancer survivors from six different ethnic groups, including immigrants and minorities, who were working at the time of their diagnosis	Not health and safety
Blinder, V. S., Patil, S., Thind, A., <i>et al.</i> Return to work in low-income Latina and non-Latina white breast cancer survivors: a 3-year longitudinal study 2012	Longitudinal study	To identify differences in the employment trajectories of Latina and non-Latina white women treated for breast cancer and to understand the factors that might influence such differences	Not health and safety
Blinder, V., Patil, S., Eberle, C., Griggs, J. and Maly, R. C. Early predictors of not returning to work in low-income breast cancer survivors: a 5-year longitudinal study 2013	Longitudinal study	Early predictors of not returning to work in low-income breast cancer survivors; a 5-year longitudinal study	Predictors of not returning to work not health and safety
BOHRF. Manager support for return to work following long-term sickness absence June 2010	Guidance	Returning to work after long-term sickness absence	Not health and safety
Böttcher, H. M., Steimann, M., Koch, U. and Bergelt, C. Return to work – experiences and expectations of cancer patients during inpatient rehabilitation 2012		Article not accessible	

Böttcher, H. M., Steimann, M., Ullrich, A., <i>et al.</i> Evaluation of a Vocationally Oriented Concept within Inpatient Oncological Rehabilitation 2013			Only available in German
Böttcher, H. M., Steimann, M., Ullrich, A., <i>et al.</i> Work-related predictors of not returning to work after inpatient rehabilitation in cancer patients 2013	Cohort study	To explore the association between work-related factors and not returning to work in cancer patients - focused on aspects that may be influenced by patients with the help of counselling (eg handling occupational stress)	No health and safety or workplace factors
Bouknight, R. R., Bradley, C. J. and Luo, Z. Correlates of return to work for breast cancer survivors 2006	Cohort, longitudinal, interview	To identify factors that correlate with RTW	No health and safety or workplace factors
Bradley, C.J., Bednarek, H.L. and Neumark, D. Breast cancer survival, work, and earnings 2002	Cross sectional	Do employers discriminate against cancer survivors?	Does not cover safety/health/risk management
Bradley, C.J., Bednarek, H.L. Employment patterns of long-term cancer survivors 2002	Cross-sectional study	To study the employment patterns of 253 long-term cancer survivors	Not about health/safety in the workplace
Bradley, C.J., Neumark, D., Luo, Z. and Schenk, M. Employment and cancer: findings from a longitudinal study of breast and prostate cancer survivors 2007	Longitudinal, including control group	How cancer affected employment of employed patients	No health and safety or workplace factors
Bradley, C., Oberst, K. and Schenk, M. Absenteeism from work: the experience of employed breast and prostate cancer patients in the months following diagnosis 2006	Interview	Number of days employed patients undergoing treatment absent from work	Not health and safety

Brady, S., O'Connell, T. Review of Irish Civil Service sickness absence referrals 2008-10 2013	Retrospective review of long-term sickness absence cases	Investigate long-term sickness absence - not cancer specific	No health and safety or workplace factors
Brown, R. F., Owens, M. and Bradley, C. Employee to employer communication skills: balancing cancer treatment and employment 2013	Qualitative study	Aimed to assess the feasibility and utility of applying methods to facilitate physician-patient communication to educate patients about their workplace rights and provide them with communication skills training to aid their conversations with their employers	The paper covers during treatment not return to work after treatment
Campbell, K. L., Pusic, A. L., Zucker, D. S., <i>et al.</i> A prospective model of care for breast cancer rehabilitation: function 2012	Journal article	Review literature on the prevalence of functional changes encountered by breast cancer survivors, review evidence on functional measurements applicable to these functional changes and recommend a prospective surveillance model using these measurement tools in order to prevent the occurrence of enduring functional limitations	Not return to work
Cancer Journey Survivorship Expert Panel, Howell, D., Hack, T. F., <i>et al.</i> Survivorship services for adult cancer populations: a pan-Canadian guideline 2011	Systematic review	To determine the optimal organisation and care delivery structure for cancer survivorship services, and the specific clinical practices and interventions that would improve or maximise the psychosocial health and overall well-being of adult cancer survivors - in order to produce guidance	Not about health/safety in the workplace
Cancer Society. Long-term and late effects of cancer treatment 2012	Guidance	Long-term and late effects of cancer and cancer treatment	Not health and safety
Carlsen, K., Ewertz, M., Dalton, S. O., Badsberg, J. H. and Osler, M. Unemployment among breast cancer survivors 2014	Cohort study, Observational study	To analyse the risk for unemployment in the years following diagnosis and treatment of breast cancer	Does not cover safety/health/risk management

Carlsen, K., Harling, H., Pedersen, J., Christensen, K. B. and Osler, M. The transition between work, sickness absence and pension in a cohort of Danish colorectal cancer survivors 2013	Register-based cohort study, 10-year follow up	Evaluates impact of socioeconomic and clinical factors on transitions between work, sickness absence and retirement	Not health and safety
Carter, B. J. Surviving breast cancer: a problematic work re-entry 1994	Case study on problematic work re-entry surviving breast cancer	Presents a paradigm case of a problematic work re-entry experience of a breast cancer survivor	Not health and safety
Cavanna, L., Ambroggi, M., Stroppa, E., Di Nunzio, C., Dallanegra, L. and Monfredo, M. Return to work after treatment for breast cancer 2011	Letter to the editor	Return to work after treatment for breast cancer	Letter to the editor
Chan, F., Strauser, D., da Silva Cardoso, E., Zheng, L.X., Chan, J.Y. and Feuerstein, M. State vocational services and employment in cancer survivors 2008	Cross sectional	To investigate the association of state vocational rehabilitation services in the USA and work outcomes of cancer survivors	Does not cover safety/health/risk management
Choi, K.S., Kim, E.J., Lim, J.H., <i>et al.</i> Job loss and reemployment after a cancer diagnosis in Koreans a prospective cohort study 2007	Prospective cohort study	Investigate the impact of a cancer diagnosis on employment status	Not health and safety
CIPD. Cancer and working - guidelines for employers, HR and line managers 2006	Guidance	Guidelines about working and cancer	Not research but interesting information
Clark, J. C., Landis, L. L. Reintegration and maintenance of employees with breast cancer in the workplace 1989	Not available		Too old, 1989

Cole, R.P., Scialla, S.J. and Bednarz, L. Functional recovery in cancer rehabilitation 2000	Retrospective case studies	To assess the impact of inpatient rehabilitation on motor and cognitive functions of cancer patients	Not health and safety
Cooper, A. F., Hankins, M., Rixon, L., Eaton, E. and Grunfeld, E. A. Distinct work-related, clinical and psychological factors predict return to work following treatment in four different cancer types 2013	Cohort study	To examine the role of clinical, sociodemographic, work and psychological factors in RTW following treatment for breast, gynaecological, head and neck, and urological cancer	Not about health/safety in the workplace
Corner, J. Addressing the needs of cancer survivors: issues and challenges 2008	Review	Reviews the consequences of improving cancer survival rates for health services and for future research	Not work
Crom, D.B., Lensing, S.Y., Rai, S.N., Snider, M.A., Cash, D.K. and Hudson, M.M. Marriage, employment, and health insurance in adult survivors of childhood cancer 2007	Cohort	Aim to identify factors associated with survivors attainment of marriage, employment and health insurance	Not health and safety
Dahl, S., Steinsvik, E. A., Dahl, A. A., Loge, J. H., Cvancarova, M. and Fossa, S. D. Return to work and sick leave after radical prostatectomy: A prospective clinical study 2013	Cohort study	To evaluate work status at three months after radical prostatectomy in patients with prostate cancer in relation to socio-demographics, urinary incontinence and bother, medical complications health-related quality of life (HRQOL) and surgical methods	Not health and safety
De Blasi, G., Bouteyre, E., Bretteville, J., Boucher, L. and Rollin, L. Multidisciplinary department of 'Return to Work After a Cancer': a French experience of support groups for vocational rehabilitation 2014	Qualitative study	To assess the benefit of support groups for vocational rehabilitation after cancer according to the participants' point of view	Purely about support groups not about workplace

de Boer, A. G. E. M., Taskila, T., Tamminga, S. J., Frings-Dresen, M. H. W., Feuerstein, M. and Verbeek, J. H. Interventions to enhance return-to-work for cancer patients (review) 2011	Systematic review	To evaluate the effectiveness of interventions aimed at enhancing RTW in cancer patients	No vocational interventions retrieved
de Boer, A. G. E. M., Verbeek, JHAM, Spelten, ER, <i>et al.</i> Work ability and return-to-work in cancer patients 2008	Prospective cohort study	To look at how self-assessed work ability predicts RTW	Not health and safety
de Boer, A. G., Taskila, T., Ojajarvi, A., van Dijk, F. J. and Verbeek, J. H. Cancer survivors and unemployment: a meta-analysis and meta-regression 2009	Systematic review	To assess the association of cancer survivorship with unemployment compared with healthy controls	Not in employment
de Nazelle, S. Returning to work after cancer 2006		Not accessible, article in French	
Department of Health. Improving outcomes: a strategy for cancer - assessment of the impact on equalities 2011	Review	Assessment of the Impact of strategy on equalities	Not health and safety
Department of Health. Improving outcomes: a strategy for cancer - second annual report 2012	Report	Reports on progress on helping NHS deliver cancer outcomes	Not health and safety
Department of Health. Improving outcomes: a strategy for cancer - third annual report 2013	Report	Government report on cancer strategy	Not health and safety
Department of Health. Improving outcomes: a strategy for cancer 2011	Guidance	To put the patient or service user at the heart of the public services	Covers safety and risk assessment in relation to diagnosis, treatment only Refers to workplace risk on causes of cancer



Department of Health. National Cancer Survivorship Initiative Work and Finance Work stream 2011	Report	Evaluates model of rehabilitation for people with cancer	Not health and safety
Donaldson-Feilder, E., Munir, F. Work and Cancer: Getting the message out 2010	Report	Getting the message out about work and cancer	Focuses on getting the message out about resources that are available on return to work and cancer not health and safety
Drolet, M., Maunsell, E., Brisson, J., Brisson, C., Mâsse, B. and Deschênes, L. Not working 3 years after breast cancer: predictors in a population-based study 2005	Retrospective cohort study	Aimed to describe work experience, over the three-year period after diagnosis compared with that of women of a similar age who had never had cancer	Not health and safety
Drolet, M., Maunsell, E., Mondor, M., <i>et al.</i> Work absence after breast cancer diagnosis: a population-based study 2005	Cohort study, Observational study	To examine work absences of 4 weeks or more among women who had breast cancer during the 3 years after diagnosis and compared their absences with those of women who had never had cancer	Does not cover safety/health/risk management
DWP. Work Capability Assessment - An informal consultation on accounting for the effects of cancer treatments 2011	Consultation report	This consultation seeks to gather evidence and views about proposed improvements to the way the Work Capability Assessment assesses individuals who are suffering from cancer	No information on health and safety or the management of the same
DWP. Work Capability - Government response to informal consultation on accounting for the effects of cancer treatments 2012	Report	Government response to informal consultation on accounting for the effect of cancer treatments	Not health and safety
Earle, C. C., Chretien, Y., Morris, C., <i>et al.</i> Employment among survivors of lung cancer and colorectal cancer 2010	Prospective cohort study	To identify the frequency of and factors associated with changes in employment among cancer survivors	Not health and safety

Egan, M. Y., McEwen, S., Sikora, L., Chasen, M., Fitch, M. and Eldred, S. Rehabilitation following cancer treatment 2013	Review	Summarise current evidence regarding rehabilitation interventions to address problems during survivorship	Not return to work
Ellis, J., Brearley, S. G., Craven, O. and Molassiotis, A. Understanding the symptom experience of patients with gastrointestinal cancers in the first year following diagnosis: findings from a qualitative longitudinal study 2013	Qualitative longitudinal study	Explore the experiences of people with GI cancer within 1 year of diagnosis	No health and safety or workplace factors
Fantoni, S. Q., Peugniez, C., Duhamel, A., Skrzypczak, J., Frimat, P. and Leroyer, A. Factors related to return to work by women with breast cancer in northern France 2010	Cohort study	To explore the objective and subjective factors that affect whether and when women with breast cancer return to work	Not health and safety
Feuerstein, M., Hansen, J. A., Calvio, L. C., Johnson, L. and Ronquillo, J. G. Work productivity in brain tumour survivors 2007	Cross-sectional study	To determine the association of symptom burden with work limitation among working survivors of malignant brain tumours	Not health and safety
Feuerstein, M., Harrington, C. B. Recommendations for the U.S. National Occupational Research Agenda: research on cancer survivorship and musculoskeletal disorders and work disability 2006	Other	Testimony given to the National Occupational Research Agenda	Not health and safety
Feuerstein, M., Luff, G.M., Harrington, C.B. and Olsen, C.H. Pattern of workplace disputes in cancer survivors: a population study of ADA claims 2007	Other	To investigate the pattern of ADA disputes among cancer survivors and non-cancer related impairments	Does not cover safety/health/risk management

Fialka-Moser, V., Crevenna, R., Korpan, M. and Quittan, M. Cancer Rehabilitation 2003	Review	Review on cancer rehabilitation focusing on impairment and activity limitation	Rehabilitation but not work
Fong, C.J., Murphy, K.M., Westbrook, J.D. and Markle, M. Protocol for a Systematic Review: Behavioral, Psychological, Educational, and Vocational Interventions to Facilitate Employment Outcomes for Cancer Survivors 2013	Systematic review - protocol		Protocol for systematic review not results from review
Ganz, P. A., Moinpour, C. M., Pauler, D. K., <i>et al.</i> Health status and quality of life in patients with early-stage Hodgkin's disease treated on Southwest Oncology Group Study 9133 2003	Randomised clinical trial	Examines short and intermediate-term quality of life outcomes in patients treated on a randomised clinical trial in early-stage Hodgkin's disease comparing subtotal lymphoid irradiation with combined-modality treatment	Not return to work and health and safety
Gordon, L.G., Lynch, B.M., Beesley, V.L., <i>et al.</i> The Working After Cancer Study (WACS): a population-based study of middle-aged workers diagnosed with colorectal cancer and their return to work experiences 2011	Cohort study	Description of a planned study to examine the changes to work participation in the 12 months following a diagnosis of primary colorectal cancer and to identify barriers to work resumption, describe limitations on workforce participation, and evaluate the influence of these factors on health-related quality of life	Not health and safety
Gordon, L., Lynch, B.M. and Newman, B. Transitions in work participation after a diagnosis of colorectal cancer 2008	Cohort	To explore how cancer adversely affects an individual's work role	Does not cover safety/health/risk management
Groeneveld, I. F., de Boer, A. G. and Frings-Dresen, M. H. A multidisciplinary intervention to facilitate return to work in cancer patients: intervention protocol and design of a feasibility study 2012	Other	To describe protocol of an intervention aimed at RTW of cancer patients comprising of counselling and physical activity exercise in a clinical setting	Does not cover safety/health/risk management

Groeneveld, I. F., de Boer, A. G. and Frings-Dresen, M. H. Physical exercise and return to work: cancer survivors' experiences 2013	Qualitative interview study	The study aimed to explore cancer survivor's experiences of RTW and work performance. In addition, the study examined exercise and the link between exercise and work	Not health and safety
Grunfeld, E. A., Cooper, A. F. A longitudinal qualitative study of the experience of working following treatment for gynaecological cancer 2012	Qualitative	To explore gynaecological cancer survivors' experience of work over a 1-year period post treatment	Does not cover safety/health/risk management
Grunfeld, E. A., Low, E. and Cooper, A. F. Cancer survivors' and employers' perceptions of working following cancer treatment 2010	Cross-sectional study	To determine patient and employers' beliefs about the impact of cancer on returning to work and to identify differences in the beliefs held by patients and employers	Purely about perceptions not about what can be done in the workplace
Gudbergsson, S.B., Fossay, S.D. and Dahl, A.A. A study of work changes due to cancer in tumour-free primary-treated cancer patients. A NOCWO study 2008	Questionnaire	To explore the characteristics of tumour free cancer survivors	Not health and safety
Gudbergsson, S.B., Fossay, S. D. and Dahl, A.A. Is cancer survivorship associated with reduced work engagement? A NOCWO Study 2008	Cross-sectional study	To explore work engagement in employed tumour-free cancer survivors compared to matched controls from the general population	Not health and safety
Gudbergsson, S.B., Fossay, S.D., Borgeraas, E. and Dahl, A.A. A comparative study of living conditions in cancer patients who have returned to work after curative treatment 2006	Questionnaire study - The Collaborative Nordic Study of Cancer and Work Life	To explore living conditions among disease-free cancer survivors participating in the labour force after successful primary treatment	Not health and safety

Gzell, C., Wheeler, H., Guo, L., Kastelan, M. and Back, M. Employment following chemoradiotherapy in glioblastoma: a prospective case series 2014	Longitudinal study	Aims to determine the rate of patients returning to previous employment following treatment	Not health and safety
Handschel, J., Gellrich, N. C., Bremerich, A. and Kruskemper, G. Return to work and quality of life after therapy and rehabilitation in oral cancer 2013	Cohort study	Investigate the differences between professional groups in RTW following oral cancer	Not health and safety
Hassett, M.J., O'Malley, A.J. and Keating, N.L. Factors influencing changes in employment among women with newly diagnosed breast cancer 2009	Secondary data analysis	To assess whether chemotherapy or radiation therapy was associated with a disruption in employment during the year after a breast cancer diagnosis	No focus on health and safety or the management of the same. Concluded that chemotherapy impacts on work but the exact mechanism by which chemotherapy affects employment is not known.
Hauglann, B., Benth, J., Fossay, S.D. and Dahl, A.A. A cohort study of permanently reduced work ability in breast cancer patients 2012	Cohort study	To explore various longitudinal aspects of employment and disability pension due to permanently reduced work ability among women with breast cancer and to investigate the impact of breast cancer on income	Not health and safety
Hedayati, E., Johnsson, A., Alinaghizadeh, H., Schedin, A., Nyman, H. and Albertsson, M. Cognitive, psychosocial, somatic and treatment factors predicting return to work after breast cancer treatment 2013	Cohort	Identify any associations between cognitive, psychosocial, somatic and treatment factors with time to return to work among women treated for breast cancer	Treatment factors
Hoang, C. D., Osborne, M. C. and Maddaus, M. A. Return to work after thoracic surgery: an overlooked outcome measure in quality-of-life studies 2004	Review	Review of studies that investigated quality of life after thoracic surgery and included at least partial return to work data	Not health and safety

Hoffman, B. Cancer survivors at work: a generation of progress 2005	Review	Review of law in US return to work employment discrimination	Not health and safety
Horsboel, T. A., Nielsen, C. V., Nielsen, B., Jensen, C., Andersen, N. T. and de Thurah, A. Type of hematological malignancy is crucial for the return to work prognosis: a register-based cohort study 2013	Cohort study, Observational study	Determine the proportion of RTW among sick-listed patients diagnosed with one of eight subtypes of haematological malignancies	Does not cover safety/health/risk management
Hoving, J. L., Broekhuizen, M. L. A. and Frings-Dresen, M. H. W. Return to work of breast cancer survivors: a systematic review of intervention studies 2009	Review	Review of intervention studies on returning to work after breast cancer	Not health and safety
Hubbard, G., Gray, N. M., Ayansina, D., Evans, J. M. and Kyle, R. G. Case management vocational rehabilitation for women with breast cancer after surgery: a feasibility study incorporating a pilot randomised controlled trial 2013	Randomised controlled trial	To assess the feasibility and acceptability of a vocational rehabilitation trial of women with breast cancer to inform the development of a larger intervention study	Does not cover safety/health/risk management
Johnsson, A., Fornander, T., Olsson, M., Nystedt, M., Johansson, H. and Rutqvist, L. E. Factors associated with return to work after breast cancer treatment 2007	Cohort	To investigate whether socio-economic and treatment-related factors were associated with problems of returning to work among pre-menopausal women	Does not cover safety/health/risk management
Johnsson, A., Fornander, T., Rutqvist, L. E. and Olsson, M. Factors influencing return to work: a narrative study of women treated for breast cancer 2010	Narrative study	To identify factors contributing to a successful return to the labour market after treatment for breast cancer from women's perspective	Not health and safety

Johnsson, A., Fornander, T., Rutqvist, L. E. and Olsson, M. Work status and life changes in the first year after breast cancer diagnosis 2011	Journal article	Generate new knowledge about factors predicting RTW among women treated for early stage breast cancer and about changes in life satisfaction, and coping and to examine the association between these concepts and return to work	Not health and safety
Johnsson, A., Fornander, T., Rutqvist, L. E., Vaez, M., Alexanderson, K. and Olsson, M. Predictors of return to work ten months after primary breast cancer surgery 2009	Cohort, questionnaire, medical records	Predictors of RTW after breast cancer	No health and safety or workplace factors
Kennedy F, Haslam C, Munir F, Pryce J. (2006). Returning to work following cancer: a qualitative exploratory study into the experience of returning to work following cancer. European Journal of Cancer Care	Qualitative	Experience of RTW after cancer	Not health and safety
Kirchhoff, A. C., Leisenring, W. and Syrjala, K. L. Prospective predictors of return to work in the 5 years after hematopoietic cell transplantation 2010	Cohort	To investigate whether demographics, medical and functional factors predicated full-time return to work following hematopoietic cell transplantation (HCT)	Does not cover safety/health/risk management
Kirchhoff, A.C. Late-term effects and employment outcomes for cancer survivors 2010	Cohort	Investigated two groups of cancer survivors to assess employment and occupational status following cancer treatment	Does not cover safety/health/risk management
Kyle, R. G., Culbard, B., Evans, J., Gray, N. M., Ayansina, D. and Hubbard, G. Vocational rehabilitation services for patients with cancer: design of a feasibility study incorporating a pilot randomised controlled trial among women with breast cancer following surgery 2011	Interventional, two-arm, randomised controlled trial (RCT)	Examines the feasibility of a vocational rehabilitation intervention for women who are post-surgery with breast cancer	No health and safety, does not look at workplace factors

Lee, K., Lee, M., Bae, J., <i>et al.</i> Work situation and work-related difficulties in stomach cancer survivors compared with the general population 2007	Meeting abstract	Investigate the work situation and work-related difficulties among stomach cancer survivors compared to the general population	Not health and safety, meeting abstract
Lemieux, J., Maunsell, E. and Provencher, L. Chemotherapy-induced alopecia and effects on quality of life among women with breast cancer: a literature review 2008	Review	The aim of this review is to describe the effects of alopecia on quality of life (QOL)	Not health and safety
Lilliehorn, S., Hamberg, K., Kero, A. and Salander, P. Meaning of work and the returning process after breast cancer: a longitudinal study of 56 women 2013	Cohort study	To describe the sick-leave pattern of a group of Swedish women with primary breast cancer but foremost to explore their ideas about what motivates and discourages their return to work	Not health and safety
Lindbohm, M. L., Viikari-Juntura, E. Cancer survivors' return to work: importance of work accommodations and collaboration between stakeholders 2010	Commentary	Commentary related to Tamminga et al, 2010	No health and safety or workplace factors
Lindbohm, M-L, Taskila, T., Kuosma, E., <i>et al.</i> Work ability of survivors of breast, prostate, and testicular cancer in Nordic countries: a NOCWO study 2012	Cross sectional	To compare the self-assessed work ability of breast, testicular and prostate cancer to that of people without cancer	Does not cover safety/health/risk management
Luker, K., Campbell, M., Amir, Z. and Davies, L. A UK survey of the impact of cancer on employment 2013	Cross-sectional survey	Looks at the impact of cancer on work activities	No health and safety or workplace factors
Lundh, M. H., Lampic, C., Nordin, K., <i>et al.</i> Changes in health-related quality of life by occupational status among women diagnosed with breast cancer-a population-based cohort study 2013	Cohort study	To investigate whether longitudinal changes in health-related quality of life (HRQoL) among breast cancer patients vary by prediagnosis occupational status or post diagnosis changes in working time	Not health and safety



Macmillan. (2013). Working while coping with the symptoms and side effects of cancer. 2013:	Guidance	Working while coping with symptoms and side effects of cancer	Not health and safety
Macmillan. Going back to work after cancer treatment 2013	Webpage	Information on going back to work after cancer	Not research or health and safety
Macmillan. How supporting people to work after cancer is good for business	Guidance	How supporting people to work after cancer is good for business	Not health and safety
Macmillan. Returning to work - cancer and vocational rehabilitation 2008	Report	Scoping study done to identify the points during the patient journey when information, advice and services relating to vocational rehabilitation are provided to people with cancer, as well as who provides this service and how it is provided. As well as how the system could be improved to ensure that the right information and support is provided at the time when people need it	Not evidence based
Macmillan. Work after treatment for cancer	Webpage	Working after treatment for cancer – guidance	Not health and safety
Macmillan. Work Support Route Guide - England. A resource for health professionals to guide people living with cancer 2012	Guidance	A resource for health professionals to guide people living with cancer who are in employment or on long-term sick leave, self-employed or out of work and want to discuss work options – England	Not research
Macmillan. Work Support Route Guide - Northern Ireland. A resource for health professionals to guide people living with cancer 2012	Guidance	A resource for health professionals to guide people living with cancer who are in employment or on long-term sick leave, self-employed or out of work and want to discuss work options – Northern Ireland	Not research
Macmillan. Work Support Route Guide - Scotland. 2012	Guidance	To help health and social care professionals to support cancer patients RTW work	Not health and safety

Macmillan. Work, finance and travel after cancer treatment 2012	Guidance	Work, finance and travel after cancer treatment (extract from booklet on life after cancer treatment)	Guidance
Macmillan. Your rights at work when you're affected by cancer 2013	Leaflet	Cancer survivors' rights at work	Not health and safety
Maggie's Centres and Unum. Creating a graduated return to work plan	Advice document	Advice only	Not health and safety
Maggie's Centres and Unum. Working after cancer	Webpage	To provide guidance to employers	Does not directly address safety/health/risk management
Main, D.S., Nowels, C.T., Cavender, T.A., Etschmaier, M. and Steiner, J.F. A qualitative study of work and work return in cancer survivors 2005	Journal article	Describe the work experiences among a diverse group of cancer survivors and to explore factors influencing decisions about work after cancer diagnosis and treatment	Not health and safety
Mak, A. K., Chaidaroon, S., Fan, G. and Thalib, F. Unintended consequences: the social context of cancer survivors and work 2014	Focus group interviews	Return to work experiences post cancer	No health and safety or workplace factors
Mak, A. K., Ho, S. S. and Kim, H. J. Factors Related to Employers' Intent to Hire, Retain and Accommodate Cancer Survivors: The Singapore Perspective 2014	Online web survey	Factors related to employers hiring, retaining and accommodating cancer survivors	Not health and safety
Marino, P., Luis Sagaon, T., Laetitia, M. and Anne-Gaelle le, C. S. Sex differences in the return-to-work process of cancer survivors 2 years after diagnosis: results from a large French population-based sample 2013	Cross-sectional survey	Investigate effects of clinical, sociodemographical and occupational factors on RTW and gender differences	Focus is on gender difference in RTW, no workplace factors

Maunsell, E., Drolet, M., Brisson, J., Brisson, C., Mâsse, B. and Deschênes, L. Work Situation After Breast Cancer: Results from a Population-Based Study 2004	Retrospective cohort study	Evidence of discrimination at work	Not health and safety
McKay, G., Knott, V. and Delfabbro, P. Return to work and cancer: the Australian experience 2013	Qualitative	To explore the perspective of Australian cancer survivors, manager and Employee assistance programme professionals to gain an understanding of the RTW process	Does not specifically cover safety/health/risk management, although does mention work adjustments for physical limitations
Mehnert, A. Employment and work-related issues in cancer survivors 2011	Review	Examines some of the challenges for cancer survivors when going back to work	No health and safety or workplace factors
Mehnert, A., de Boer, A. and Feuerstein, M. Employment challenges for cancer survivors 2013	Review	Overview of the current state of scientific research in cancer survivorship and work and provide a model that integrates significant individual cancer-related, treatment-related, and work-related factors and outcomes	References to work environment are very broad and non-specific and don't focus on health and safety
Mehnert, A., Koch, U. Predictors of employment among cancer survivors after medical rehabilitation - A prospective study 2013	Cohort study	(i) Investigate cancer survivors' employment status one year after the completion of a medical rehabilitation program and (ii) Identify demographic, cancer, and psychosocial, treatment-, and work-related predictors of return to work (RTW) and time until RTW	Does look at work situation at follow up, but only through a 10 item job requirements scale + job satisfaction, so don't think it has enough about health/safety issues
Mehnert, A., Koch, U. Work satisfaction and quality of life in cancer survivors in the first year after oncological rehabilitation 2013	Longitudinal study	Work satisfaction and quality of life	No health and safety or workplace factors
Molina V.R., Feliu B. J., Villalba Y. A., <i>et al.</i> Employment in a cohort of breast cancer patients 2008	Cross-sectional, questionnaire	Employment in breast cancer survivors	No health and safety or workplace factors

Molina, R., Feliu, J. The return to work of cancer survivors: the experience in Spain 2013	Literature review	Review of literature on RTW in Spain and design and methodologies of interventions	No health and safety or workplace factors
Mols, F., Thong, M. S., Vreugdenhil, G. and van de Poll-Franse, L. V. Long-term cancer survivors experience work changes after diagnosis: results of a population-based study 2009	Journal article	To explore the prevalence of employment problems in long-term cancer survivors	Not health and safety
Moran, J.R., Short, P.F. and Hollenbeak, C.S. Long-term employment effects of surviving cancer 2011	Cross sectional	To compare employment and usual hours of work for prime-age cancer survivors to a comparison group	Does not cover safety/health/risk management
Morrison, T., Thomas, R. 'Bored out of my gourd': a cancer survivor's return-to-work experience 2014	Journal article	Photo voice qualitative exploratory study	No focus on health, safety or management of the same
Moskowitz, M.C., Todd, B.L. and Feuerstein, M. Cancer Survivors and Work 2012	Book chapter	Chapter examining epidemiology of this group, a model of work and cancer and some potential interventions	Not health and safety
Munir, F., Burrows, J., Yarker, J., Kalawsky, K. and Bains, M. Women's perceptions of chemotherapy-induced cognitive side effects on work ability: a focus group study 2010	Qualitative study	To investigate women's awareness of chemotherapy-induced cognitive changes, their perception of cognitive limitations in carrying out daily tasks and subsequent return to work decisions and perceptions of work ability	Might have useful content about cognitive limitations and their impact
Munir, F., Haslam, C. Back but not better 2009	Cross-sectional study	Journal article version of Munir, MacKay, Yarker, Haslam, Kazi and Cooper report for MHF	Not directly about health/safety in the workplace, but does provide useful info on co-morbidity with depression - probably better accessed through original report

Munir, F. Working for longer: self-management of chronic health problems in the workplace 2011	Book chapter	Self-management of chronic health problems in the workplace	Not health and safety
Murphy, K., Westbrook, J. and Markle, M. registration for a review proposal: Employment Interventions to Facilitate Labor Force Participation for Cancer Survivors 2012	Proposal	Employment interventions to help cancer survivors work	Proposal
Nachreiner, N. M., Ghebre, R. G., Virnig, B. A. and Shanley, R. Early work patterns for gynaecological cancer survivors in the USA 2012	Cross-sectional survey	To describe changes in work status for gynaecological cancer survivors during the first 6 months following diagnosis and their experience with their employers' programmes and policies	Work patterns at diagnosis not returning to work after treatment
Nieuwenhuijsen, K., Bos-Ransdorp, B., Uitterhoeve, L.L., Sprangers, M.A. and Verbeek, J.H. Enhanced provider communication and patient education regarding return to work in cancer survivors following curative treatment: a pilot study 2006	Journal article - intervention	Attempting to enhance the communication of information between the attending and the occupational physician and the primary care giver	Not health and safety
Nilsson, M. I., Olsson, M., Wennman-Larsen, A., Petersson, L. M. and Alexanderson, K. Women's reflections and actions regarding working after breast cancer surgery - a focus group study 2013	Focus group interviews	To understand processes affecting RTW after breast cancer	No health and safety or workplace factors
Nilsson, M., Olsson, M., Wennman-Larsen, A., Petersson, L. M. and Alexanderson, K. Return to work after breast cancer: women's experiences of encounters with different stakeholders 2011	Focus group interviews	Factors influencing RTW	No health and safety or workplace factors

Noeres, D., Park-Simon, T. W., Grabow, J., <i>et al.</i> Return to work after treatment for primary breast cancer over a 6-year period: results from a prospective study comparing patients with the general population 2013	Cohort study	1. Does breast cancer lead do an increased drop-out from paid work? And 2. Do other factors, apart from their illness, help explain breast cancer survivors' (temporary) retirement from work?	Not about health/safety in the workplace
Oxford Economics. Can work, will work. Valuing the contribution and understanding the needs of people living with cancer in the workforce.		Economic contribution of cancer survivors in the workplace	Not health and safety
Paraponaris, A., Teyssier, L.S. and Ventelou, B. Job tenure and self-reported workplace discrimination for cancer survivors 2 years after diagnosis: Does employment legislation matter? 2010	Cohort	To assess the risk of leaving employment for cancer survivors 2 years after diagnosis and the role of workplace discrimination in this risk	Not health and safety
Parsons, H. M., Harlan, L. C., Lynch, C. F., <i>et al.</i> Impact of cancer on work and education among adolescent and young adult cancer survivors 2012	Cohort study	To examine the impact of cancer on work and education in a sample of adolescent and young adult (AYA) patients with cancer	Not health and safety
Parsons, J.A., Eakin, J.M., Bell, R.S., Franche, Renae L. and Davis, A.M. Aeoso, are you back to work yet? Re-conceptualizing work and return to work in the context of primary bone cancer 2008	Qualitative	To examine the relationship between experiences of osteosarcoma illness and experiences of vocation using qualitative methods	Focuses on identity
Pauwels, E. E., Charlier, C., De Bourdeaudhuij, I., Lechner, L. and Van Hoof, E. Care needs after primary breast cancer treatment. Survivors' associated sociodemographic and medical characteristics 2013	Cross-sectional study	Examine the care needs of rehabilitating breast cancer survivors and determines what sociodemographic and medical characteristics are associated with these care needs	Not health and safety

Petersson, L., Nilsson, M.I., Alexanderson, K., Olsson, M. and Wennman-Larsen, A. How do women value work shortly after breast cancer surgery and are their valuations associated with being on sick leave? 2013	Cross-sectional	To investigate how working women value work	Not health and safety
Peugniez, C., Fantoni, S., Leroyer, A., Skrzypczak, J., Duprey, M. and Bonnetterre, J. Return to work after treatment for breast cancer: single center experience in a cohort of 273 patients 2011	Cohort	The aim of this study was to assess factors impacting return to work and time to return to work after treatment	Return-to-work rates; no health and safety at work
Peugniez, C., Fantoni, S., Leroyer, A., Skrzypczak, J., Duprey, M. and Bonnetterre, J. Return to work after treatment for breast cancer: single-center experience in a cohort of 273 patients 2010	Letter to the editor	Return to work after treatment for breast cancer	Letter to the editor
Peugniez, C., Peugniez, C., Fantoni, S., <i>et al.</i> Return to Work after Treatment for Breast Cancer: Single Center Experience in a Cohort of 273 Patients. 2009	Cross-sectional study	To assess medical as well as socio-professional factors impacting on the likelihood of patients to return to work after treatment	Not health and safety
Picard, C., Agretelis, J. and DeMarco, R. F. Nurse experiences as cancer survivors: part II--professional 2004	Qualitative study	To uncover dimensions of nurses' professional experiences of cancer survivorship	Not health and safety
Porru, S., Scotto di Carlo, A., Carta, A. and Placidi, D. Bladder cancer and occupational activity 2003	Journal article		Not in English
Printz, C. Long-term cancer survivors take more sick leave 2012	Commentary	Commentary	No focus on health and safety or the management of the same

Pritchard, S., Cuvelier, G., Harlos, M. and Barr, R. Palliative care in adolescents and young adults with cancer 2011	Workshop report	Report on workshop discussions	Palliative Care only - no real focus on work
Rasmussen, D. M., Elverdam, B. The meaning of work and working life after cancer: an interview study 2008	Qualitative	To analyse the meaning of work and working life for cancer survivors over time	Does not cover safety/health/risk management
Richardson, L.C., Wingo, P.A., Zack, M.M., Zahran, H.S. and King, J.B. Health related quality of life in cancer survivors between ages 20 and 64 years 2008	Cross-sectional study	To examine the health-related quality of life of cancer survivors aged 20-64 using a survey of individuals who had activity limitations caused by cancer	Not health and safety
Rick, O., Kalusche, E. M., Dauelsberg, T., Konig, V., Korsukewitz, C. and Seifart, U. Reintegrating cancer patients into the workplace 2012	Review article	Reviewing data on reintegrating cancer patients in to the workplace	Not health and safety
Roelen, C. A., Koopmans, P. C., Groothoff, J. W., van der Klink, J. J. and Bultmann, U. Sickness absence and full return to work after cancer: 2-year follow-up of register data for different cancer sites 2011	Cohort study	To analyse RTW after cancer	Purely about rates of RTW
Roelen, C. A., Koopmans, P. C., Schellart, A. J. and van der Beek, A. J. Resuming work after cancer: a prospective study of occupational register data 2011	Cohort	To investigate RTW within two years after the diagnosis of different types of cancers	Does not cover safety/health/risk management
Roelen, C. A., Koopmans, P. C., van Rhenen, W., Groothoff, J. W., van der Klink, J. J. and Bultmann, U. Trends in return to work of breast cancer survivors 2011	Used occupational health records	Trends in RTW after breast cancer	No health and safety or workplace factors



Roelen, Corn A., Koopmans, Petra C., De Graaf, Jan H., Balak, Fulya and Groothoff, Johan W. Sickness absence and return to work rates in women with breast cancer 2009	Analysis of OHS db records	Looks at length of sickness absence and RTW rates	No health and safety or workplace factors
Ross, L., Petersen, M. A., Johnsen, A. T., Lundstroem, L. H., Carlsen, K. and Groenvold, M. Factors associated with Danish cancer patients' return to work. A report from the population-based study 'The Cancer Patient's World' 2012	Journal article	To identify demographic and clinical factors associated with future employment status and being able to work among Danish cancer patients who were employed at the time of diagnosis and still affiliated with the hospitals to some extent	Employment and unemployment rates not safety/health or risk management
Sanchez, K. M., Richardson, J. L. and Mason, H. R. The return to work experiences of colorectal cancer survivors 2004	Cross-sectional study	Explore the RTW experiences of 250 colorectal cancer survivors	Not about health/safety in the workplace - though does include heavy lifting and job stress in the variables measured
Schultz, P. N., Beck, M. L., Stava, C. and Sellin, R. V. Cancer survivors. Work-related issues 2002	Postal questionnaire survey of cancer patients	Survey of work-related issues in long-term cancer survivors	No health and safety or workplace factors
Sesto, M.E. Role of Human Factors Engineering in Improving Employment Outcomes among Cancer Survivors 2006	Meeting proceedings	Role of human factors engineering in improving employment outcomes among cancer survivors	Not research
Sharp, L., Timmons, A. Social welfare and legal constraints associated with work among breast and prostate cancer survivors: experiences from Ireland 2011	Cross-sectional study	To investigate employment outcomes among cancer survivors in Ireland (where sick leave and sick pay are at the employer's discretion and the law affords no protection against dismissal following extended absences)	Not health and safety
Short, P.F., Vasey, J.J. and BeLue, R. Work disability associated with cancer survivorship	Prospective national study	To quantify the increase in work disability attributable to cancer in a cohort of adult survivors who were an average of 46 months post-diagnosis	No focus on health and safety or the management of the same

and other chronic conditions 2008		and (2) to compare disability rates in cancer survivors to individuals with other chronic conditions	
Short, P.F., Vasey, J.J. and Moran, J.R. Long-Term Effects of Cancer Survivorship on the Employment of Older Workers 2008	Cohort study	To estimate the long-term effects of cancer survivorship on the employment of older workers	Not health and safety
Short, P.F., Vasey, J.J. and Tunceli, K. Employment pathways in a large cohort of adult cancer survivors 2005	Interview	Employment and work-related disability in cancer survivors	No useful data
Sjovall, K., Attner, B., Englund, M., <i>et al.</i> Sickness absence among cancer patients in the pre-diagnostic and the post-diagnostic phases of five common forms of cancer 2012	Cohort study	Observing sickness absence before and after cancer diagnosis	No health and safety or workplace factors
Sowden, M., Vacek, P. and Geller, B. M. The impact of cancer diagnosis on employment: is there a difference between rural and urban populations? 2013	Survey	The aim of the study was to determine if living in a rural or urban area influences the impact of cancer diagnosis on employment	Comparing urban and rural cancer diagnosis; not health and safety at work
Spelten, ER, Verbeek, JHAM, Uitterhoeve, ALJ, <i>et al.</i> Cancer, fatigue and the return of patients to work a prospective cohort study 2003	Cohort study	Assess the impact of fatigue and other cancer-related symptoms on return to work of cancer survivors	Purely looking at impact on return to work not health/safety in the workplace
Spelten, E.R., Sprangers, M.A. and Verbeek, J.H. Factors reported to influence the return to work of cancer survivors: a literature review 2002	Review, Other	What is the rate of return to work for cancer patients? Which factors are related to return to work?	Does not specifically address safety/health/risk management
Steiner, J.F., Cavender, T.A., Main, D.S. and Bradley, C.J. Assessing the impact of cancer on work outcomes 2004	Other	To identify six methodological attributes that provide solid scientific knowledge to inform interventions	No mention of safety/health/risk management but does mention impact of fatigue on work

Stoltenberg, C. D., Skov, P. G. Determinants of return to work after long-term sickness absence in six Danish municipalities 2010	Cohort	To describe RTW process in long-term sick	No health and safety or workplace factors
Strauser, D., Feuerstein, M., Chan, F., Arango, J., da Silva Cardoso, E. and Chiu, C. Vocational services associated with competitive employment in 18 to 25 year old cancer survivors 2010	Cross-sectional study	To investigate the association of vocational services with work in young cancer survivors unemployed prior to receipt of services	Not about health/safety in the workplace – focus is on vocational rehab
Stroppa, E. M., Cavanna, L., Ambroggi, M., di Nunzio, C., Dallanegra, L. and Monfredo, M. Returning to work after treatment for breast cancer. 2011	Review	Association between cancer survivorship, unemployment and RTW	Does not cover safety/health/risk management
Sultan, R., Slova, D., Thiel, B. and Lepor, H. Time to return to work and physical activity following open radical retropubic prostatectomy 2006	Cohort study	Identify factors that predict return to part-time and full-time work and resumption of unlimited physical activity following open radical retropubic prostatectomy	Not about health/safety in the workplace
Suzuki-Tsunoda, Y., Kawamura, S., Tsushima, K., <i>et al.</i> Long-term survivors with adult acute leukemia in complete remission: complications and return to work 2002	Journal article	The complications and impact on returning to work in a cohort of long-term survivors to improve their quality of life and to eventually be able to predict and prevent such complications	Complications of remission, not health and safety at work
Syse, Astri, Tretli, Steinar and Kravdal, Åystein. Cancer, the impact on employment and earnings a population-based study from Norway 2008	Cohort	Explore the extent to which Norwegian cancer survivors stay affiliated to working life compared to a cancer-free population, and quantify cancer-associated earning declines	Cancer impact on employment rates and earnings not health and safety at work
Tamminga, S. J., de Boer, A. G., Bos, M. M., <i>et al.</i> A hospital-based work support intervention to enhance the return to work of cancer patients: a process evaluation 2012	Other	To perform a process evaluation of a hospital-based work support intervention for cancer patients aimed at enhancing return to work and quality of life	Does not cover safety/health/risk management

Tamminga, S. J., de Boer, A. G., Verbeek, J. H., Taskila, T. and Frings-Dresen, M. H. Enhancing return-to-work in cancer patients, development of an intervention and design of a trial 2010	Other	To describe the development and content of a work-directed intervention to enhance RTW in cancer patients and explain the evaluation	Intervention design provided only, not evaluation itself, and intervention not about health and safety in the workplace
Tamminga, S. J., Verbeek, J. H., Bos, M. M., <i>et al.</i> Effectiveness of a hospital-based work support intervention for female cancer patients - a multi-centre randomised controlled trial 2013	Randomised controlled trial	Hospital-based work support intervention aimed to enhance RTW	Not health and safety
Tamminga, S. J., Verbeek, J. H., de Boer, A. G., van der Bij, R. M. and Frings-Dresen, M. H. A work-directed intervention to enhance the return to work of employees with cancer: a case study 2013	Case study	To describe how the RTW process evolved in an employee with cancer in the Netherlands and how a hospital-based work support intervention supported this process	Hospital-based work support not health and safety
Taskila, T., Martikainen, R., Hietanen, P. and Lindbohm, M. Comparative study of work ability between cancer survivors and their referents 2007	Questionnaire	Comparison of work ability between cancer survivors and their referents	Not health and safety

Taskila, T., Martikainen, R., Virtanen, S.V., Pukkala, E., Hietanen, P. and Lindbohm, M. The impact of education and occupation on the employment status of cancer survivors 2004	Cohort study	To investigate in a whole population setting whether diagnosis of cancer has an impact on employment by comparing the employment of cancer survivors with that of the cancer-free population - and to examine whether this impact varies by education, occupation, cancer type, calendar time, hospital district (21 regions), age, gender or mother tongue (Swedish or Finnish)	Not health and safety
Tate, S. Cancer and Work 2011	A feature in <i>Occ health at work</i>	An update from the NCSI work and cancer project group	Not health and safety
Tevaarwerk, AJ, Lee, JW, Sesto, ME, <i>et al.</i> Employment outcomes among survivors of common cancers: the Symptom Outcomes and Practice Patterns (SOAPP) study 2013	Cohort study	Investigate employment outcomes among survivors of cancer	Employment as an outcome, not health and safety at work
This, K.M., de Boer, A.G., Vreugdenhil, G., van de Wouw, A.J., Houterman, S. and Schep, G. Rehabilitation using high-intensity physical training and long-term return-to-work in cancer survivors 2012	Intervention	Examine the relation between a high-intensity physical rehabilitation programme and return to work in cancer survivors who had received chemotherapy	Return to work rates not health and safety at work
Thorsen, L., Gjerset, G.M., Loge, J.H., <i>et al.</i> Cancer patients' needs for rehabilitation services 2011	Cross-sectional study	To examine cancer patients' needs for rehabilitation services and factors associated with such needs, and secondly identify unmet needs for rehabilitation services and related factors	Not health and safety
Tiedtke, C., de Rijk, A., Donceel, P., Christiaens, M. R. and de Casterle, B. D. Survived but feeling vulnerable and insecure: a qualitative study of the mental preparation for RTW after breast cancer treatment 2012	Qualitative design based on grounded theory approach	Consideration of RTW factors after breast cancer	No health and safety or workplace factors

Tiedtke, C., Donceel, P., de Rijk, A. and Dierckx de Casterle, B. Return to Work Following Breast Cancer Treatment: The Employers' Side 2013	Qualitative design based on grounded theory approach	Looks at employers' experience of RTW of breast cancer employees	No health and safety or workplace factors
Tiedtke, C., Donceel, P., Knops, L., Desiron, H., Dierckx de Casterle, B. and de Rijk, A. Supporting return-to-work in the face of legislation: stakeholders' experiences with return-to-work after breast cancer in Belgium 2012	Qualitative study	To elucidate bottlenecks and contributing factors, and the relationship between policy and practice regarding RTW of employees with breast cancer as perceived by Belgian (Flemish) stakeholders	Not health and safety
Tighe, M., Molassiotis, A., Morris, J. and Richardson, J. Coping, meaning and symptom experience: a narrative approach to the overwhelming impacts of breast cancer in the first year following diagnosis 2011	Qualitative study	To explore and present the issues and means through which women survivors of breast cancer relate their symptoms, treatments and effects	Not health and safety
Torp, S., Nielsen, R.A., Gudbergsson, S.B., Foss, S.D. and Dahl, A.A. Sick leave patterns among 5-year cancer survivors: a registry-based retrospective cohort study 2012	Registry study	To observe sick leave rates of cancer survivors for five consecutive years following a first lifetime diagnosis of invasive cancer to identify socio-demographic and clinic predictors of sick leave taken in the fifth year after diagnosis	Sick leave rates not health and safety in the workplace
UHN Patient Information. Returning to work after cancer treatment 2013	Report	Information for cancer survivors on returning to work after cancer treatment	Leaflet with guidance information
Ullrich, A., Böttcher, H. M. and Bergelt, C. Gender-related aspects of returning to work in cancer survivors. A systematic review 2012			In German

van Muijen, P., Duijts, S. F., van der Beek, A. J. and Anema, J. R. Prognostic factors of work disability in sick-listed cancer survivors 2013	Cohort study	To identify prognostic factors of work disability in sick listed cancer survivors	Does not cover safety/health/risk management
van Muijen, P., Duijts, SFA, Weevers, NLEC, Bruinvels, DJ, Snels, IAK and van der Beek, A. Predictors of work participation in cancer survivors: a systematic review 2011	Systematic literature review	A systematic review to assess prognostic factors and work participation	Not health and safety
Verbeek, J., Spelten, E., Kammeijer, M. and Sprangers, M. Return to work of cancer survivors: a prospective cohort study into the quality of rehabilitation by occupational physicians 2003	Cohort study	Assess impact of quality of care from occupational physicians on return to work of cancer sufferers	Looks at physician performance rather than workplace health and safety issues
Verbeek, J.H. How can doctors help their patients to return to work? 2006	Review	Review of theories involved in RTW and evidence of effectiveness of interventions	Not cancer specific, no health and safety
Verdonck-de Leeuw, I.M., van Bleek, W., Rene Leemans, C. and de Bree, R. Employment and return to work in head and neck cancer survivors 2010	Cohort study	Investigate employment in working-age head and neck cancer (HNC) survivors before and after treatment in relation to sociodemographic and clinical factors, health-related quality of life, and emotional distress	Only looks at RTW not workplace health/safety
Vicente-Herrero, M. T., Terradillos Garcia, M. J., Ramirez Iniguez de la Torre, M.V., Capdevila Garcia, L. M. and Lopez-Gonzalez, A. A. Work disability criteria in breast cancer 2013	Review	Review guidelines that could be useful in the daily practice for occupational medicine professionals, General practitioners and other specialists, always in collaboration with the medical teams from the National Health Service in charge of the evaluation of disabilities	Only abstract in English

Wynn, P. Employment and the common cancers: overview 2009	Review	To demonstrate that appropriate occupational health management and support for workers with 'common' cancers do present some relatively specific challenges to OPs and employers in achieving the most appropriate employment outcome for employees developing these conditions. An evidence base for the prognosis for return to work and workability is available with which practising OPs should be familiar. Occupational medicine practice in the UK, by means of improved specialist and continuous professional training, can be further developed to help	Not health and safety
Yonemoto, T., Ishii, T., Takeuchi, Y., Kimura, K., Hagiwara, Y. and Tatezaki, S. Education and employment in long-term survivors of high-grade osteosarcoma: a Japanese single-center experience 2007	Cohort study	Investigate the status of education and employment of long-term survivors who became physically handicapped after the treatment for high-grade osteosarcoma	Not health and safety
Yu, M., Ferrucci, L.M., McCorkle, R., <i>et al.</i> Employment experience of cancer survivors 2 years' post-diagnosis in the Study of Cancer Survivors-I 2012	Cohort study	Evaluate the prevalence of negative work-related experiences of cancer survivors at both 1 and 2 years' post-diagnosis and examine a wide range of socio-demographic, clinical, and psychosocial measures as potential predictors of having at least one negative employment-related experience 2 years' post-diagnosis. Also evaluated correlates of reporting a reduced workload at 2 years' post-diagnosis compared to 1 year post-diagnosis to help identify which cancer survivors reduce their work- load as they progress through this later (1 to 2 years' post-diagnosis) survivorship phase or period	Not health and safety



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Zhang, X., Zhou, L. Cochrane review summary for cancer nursing: interventions to enhance return to work for cancer patients 2013	Cochrane review	To assess the effectiveness of interventions for enhancing return to work in cancer patients compared with usual care	Not health and safety
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## Appendix 5. Documents unable to be retrieved during review period

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### Reference

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Anonymous. *Long-term survivors with adult acute leukaemia in complete remission: complications and return to work* 2002

Blinder, V. S., Mahadeo, M., Vahdat, L. T., et al. *Ethnicity and return to work in breast cancer survivors: An exploratory qualitative study* 2008

Cancerbackup. *Work and cancer* 2006

Crist, P. *Functional challenges among late effects cancer survivors: a preliminary report on work engagement issues* 2013

*Health status and quality of life in patients with early-stage Hodgkin's disease treated on Southwest Oncology Group Study 9133*

MacDonald, K. *Managing cancer at work* 2011

Murphy, K. M., Markle, M. M., Nguyen, V. and Wilkinson, W. *Addressing the employment-related needs of cancer survivors* 2013 (Incomplete reference)

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## Appendix 6. Case study methods documents

This document is a development document for use by the research team.

Aim of the case studies: to identify and show best practice in return to work.

The second stage of the research process will involve detailed case studies within 10 organisations, which will be undertaken after ethical clearance has been obtained for the work. The organisations will be selected on the basis of having had experience of managing employee return to work after cancer treatment. This was in the original proposal as 6 organisations made up of two large organisations (one public sector and one private sector) and four medium to small organisations. Since acceptance of the work by IOSH, a request was made that we increase the number of case studies to 10. We will aim to recruit organisations on the basis of the grid below.

<b>Sector</b>	<b>Large &gt; 500 employees</b>	<b>Medium 50–499 employees</b>	<b>Small &lt; 50 employees</b>
<b>Public</b>	1	1	
<b>Private</b>	1	1	
<b>Manual</b>	1	1	1
<b>Non-manual</b>	1	1	1

This will allow comparison between different industries where specific job demands (eg manual versus non-manual) may lead to differential experiences of the return to work process (physical versus psychological health). Organisation recruitment will be via existing contacts in employer organisations and online through advertising recruitment to the study. In the initial stages of recruitment, we will ensure that the employee that has returned to work and the employers are happy to take part. Consent will be obtained from both parties before data collection will go ahead.

In-depth, semi-structured interviews will be conducted with stakeholders responsible for the management of employee return to work and workplace health and safety considerations. In some cases, this will involve obtaining multiple perspectives from employees, employers, occupational health professionals, human resource staff and line managers. In others, this will involve employers and people who provided the employee with support/advice. The interviews will obtain detailed information about organisational practice regarding return to work after cancer, particularly around health and safety and will include:

- Aspects of return to work, work adjustment management, the roles of those involved and when they become involved
- Awareness of health and safety issues associated with cancer and cancer treatment
- Details of any health and safety risks identified
- Details of the processes undertaken
- Perceived cost to the organisation
- Work adjustments offered to employees in relation to job role, potential ongoing health problems and health and safety risks
- Perceived ease/difficulty and effectiveness of implementing advice and obtaining information on the topic of return to work after cancer.

Interview schedules will be prepared to ensure that the interviews obtain the information required to inform the project. The schedules will be developed by the research team bringing together the experience and knowledge of the group in relation to data collection and the context of return to work after cancer. The interviews will be piloted internally within IOM and Loughborough University where relevant staff have been through the process of managing return to work after cancer. Before completing the interview with the employee there will be a pre-interview questionnaire for them to complete asking about demographic information.

Each participating organisation will be asked to identify at least one case of an employee who is has returned to work either in cancer remission or while undergoing continuing treatment. After obtaining informed consent, we will interview the employee to obtain information about their experiences.

Other relevant information will also be collected from the company in relation to policies for RTW processes, risk assessment documents or other relevant information.

The case studies will be collated into examples of good practice as in practices identified within the review and practices that should be avoided in managing return to work and how to manage the hazards associated with return to work in the specific organisations studied.

### **Who are the stakeholders in the return to work process after cancer?**

Who we interview may vary with different case studies depending on what happened in the company, it could be:

- Individual employee who has suffered or is suffering from cancer
- Line manager
- Colleagues
- HR
- OSH professionals (including occupational health, safety, ergonomics, hygiene)
- Trade unions

Others

- Medical professionals (GP, Macmillan)
- Family and friends
- Support groups

# Individual

## Pre-interview questionnaire

### General information

1. How old are you?  
\_\_\_\_\_ years \_\_\_\_\_ months
2. Are you male or female? (please tick)
  - Male
  - Female

### Cancer experience

3. What type of cancer(s) were you diagnosed with? (please tick all that apply)
  - Bladder
  - Brain
  - Breast
  - Colorectal
  - Head and neck
  - Kidney
  - Leukaemia
  - Lung
  - Melanoma
  - Non-Hodgkin's Lymphoma
  - Prostate
  - Thyroid
  - Other (please specify) \_\_\_\_\_
4. What type of treatment(s) did you have? (please tick all that apply)
  - Surgery
  - Radiation
  - Chemotherapy
  - Medication (eg prescribed pain medication)
  - Cancer medication (eg tamoxifen)
  - No treatment
  - Other (please specify) \_\_\_\_\_
5. Are you still receiving treatment? (please tick)
  - Yes, please specify \_\_\_\_\_
  - No

### Your company/work information

6. What size is the site that you work at? (please tick)
  - Large, > 500 employees
  - Medium, 50–499 employees
  - Small, < 50 employees
7. What is your current job title/position?  
\_\_\_\_\_

8. How long have you worked for the company?

\_\_\_\_\_ years \_\_\_\_\_ months

9. Is this job a permanent job? (please tick)

- Yes
- No – when does your contract end? \_\_\_\_\_

10. Is there an HR department in the company? (please tick)

- Yes
- No
- Don't know

11. Is there an occupational health department in the company? (please tick)

- Yes
- No
- Don't know

12. What is the nature of your current work/tasks? (please tick all that apply)

- Full-time
- Part-time
- Shift work
- Night work
  
- Manual/physical
- Non-manual/sedentary/office based

13. How do you travel to work? (please tick all that apply)

- Car, as driver
- Car, as passenger
- Train
- Walk
- Bus
- Bicycle
- Motorbike/Scooter

14. How long does your journey to work usually take?

\_\_\_\_\_ hours \_\_\_\_\_ minutes

15. Did you have any of the following cancer or health-related problems following your treatment? If yes to any, did they result in work-related concerns or challenges? (please tick all that apply)

<b>Cancer or health-related problems</b>	<b>Tick if you had this cancer or health-related problem following treatment</b>	<b>Tick if it resulted in work-related concerns or challenges</b>
Fatigue		
Nausea		
Depression		
Pain		
Reduced cognitive ability to manage work demands (eg poor memory, concentration)		

Concern about infection		
Reduced energy		
Bowel or urinary incontinence		
Body image and appearance		
Anxiety		
Reduced physical ability		
Personal stress		
Sleep problems		
Loss of appetite		
Lymphoedema		
Cellulitis		
Hot flushes		
Peripheral neuropathy		
Shortness of breath		
Other _____		

16. Which of the following workplace accommodations or supports did you require following your cancer treatment? (please tick all that apply)

<b>Workplace accommodations and supports</b>	<b>Please tick if you required this accommodation and support</b>	<b>Please tick if you received this accommodation and support</b>
Paid time off for medical appointments		
Reduced physical tasks		
Ability to work from home		
Modified work tasks		
Gradual increase in workload		
Reduced or part-time hours		
Redesign or adjustment to workspace		
Gradual increase in work schedule		
Assistive devices		
Retraining to perform different work		
Support from co-workers		
Additional breaks or rest periods		
Unpaid time off		
Return to work meeting with supervisor/employer		
Flexible scheduling of work hours		
Modified start and finish times		
Support with travel to and from work		
Support from supervisor and/or employer		
Workplace modifications		
Other		

## Employee interview

### While you were away from work

1. Were you away from work, or did you continue to work during treatment?
  - Away from work – What was the total amount of time you were away from work following your cancer diagnosis? \_\_\_\_\_years \_\_\_\_\_ months
  - Continued to work – If you continued to work, please describe the work hours, tasks etc
2. What was your reason for returning to work? (financial, normality)
3. Did you keep in touch with colleagues, line manager, HR when you were away from work?
  - How?
  - Who initiated keeping in touch?
4. When did the discussion with your employer and changes happen in relation to your return to work?

### Return to work

5. How long have you been back at work?
6. What advice/support did you receive on return to work and who from?
7. What was your return to work schedule like?
  - I immediately went back to my normal working hours.
  - I immediately returned to work on a part-time basis
  - I gradually returned to work in terms of the numbers of hours worked or the number of days worked per week
  - I had flexible scheduling of hours worked each day or the location of work (eg work from home)
  - Other (please specify) \_\_\_\_\_
8. Which of the following best describes the type of employment you had following your cancer treatment?
  - Old job with previous employer
  - Different job with previous employer
  - Other (please specify) \_\_\_\_\_
9. Was a risk assessment carried out during the RTW process?  
If yes, what did the risk assessment cover for example physical hazards or psychosocial risks? Who undertook this risk assessment?
10. Was consideration made of any health and safety risks identified?
11. Has the risk assessment been up-dated since you returned to work?
12. In relation to the cancer or health-related problems following your treatment that were identified in your questionnaire were these discussed in relation to health and safety risks and side effects that might pose or have posed in your job and how?
13. Have you taken sickness absence?
  - How many spells of sick leave have you taken in the past 6 months?



- How many days in total have you had off in the past 6 months or since you returned to work?
14. In relation to the workplace accommodations and supports identified in your questionnaire were the decisions on these based on health and safety or disability law? Or both?
15. How did you know you needed these changes?
16. Who did you speak to authorise these changes?
- Online information
  - Immediate work supervisor
  - Union representative
  - Human resources
  - Occupational nurse
  - Oncology nurse
  - Health and safety manager
  - Occupational therapist
  - GP
  - Oncologist
  - Counsellor
  - Cancer support group
  - Other (please specify) \_\_\_\_\_
17. In detail, can you describe the process that was undertaken to aid you in RTW
- job assessment
  - discussion with you or others
18. Did you seek information independently about the RTW after cancer process?
- How easy was it to obtain the information on return to work after cancer?
19. Was consideration made of the potential for ongoing health problems?
20. How difficult was it to implement any changes from your viewpoint (prompt: any risk taken into consideration?)

## Line manager interview schedule

The interview is aimed to examine the process of return to work after cancer for one of your employees. We are trying to find out the process that was undertaken in the organisation and the roles that different individual had in that process including managing workplace changes, risk assessment and risk management.

### Background

1. Have you managed a return to work process in relation to cancer before?
  - If so when?

### Return to work process

2. Who was involved in managing the return to work process?
3. What did this process involve?
4. In relation to the above mentioned people:
  - What roles did they have?
  - When did they become involved in the process?
5. Was a risk assessment carried out as part of the process?
  - If yes did it cover physical risks and psychosocial risks?
  - Who undertook the risk assessment?
6. What did you take in to consideration when doing the risk assessment? (eg permanent change in participants' physical function as a result of cancer (eg colostomy bag) or treatment of side effects?)
7. What type of work adjustments were offered to the employee in relation to their job role?
  - Did these consider the potential for ongoing health problems?
  - Did these consider health and safety risks to the employee?
  - How long are the work adjustments in place for?
    - o Temporary – how long?
    - o Permanent
8. Will a risk assessment be carried out regularly to review any adjustments?
9. How easy or difficult was it to implement advice from others in this process?
10. How easy or difficult was it to obtain information either internally or externally on the topic of return to work after cancer?
11. Were you aware of any health and safety issues associated with cancer and cancer treatments?
12. Does the organisation have a policy in relation to RTW after illness and/or cancer?
13. Are you aware of the perceived costs of this to the organisation?

## Human resources

We are carrying out these interviews to examine the process of return to work after cancer within the organisation. We would like to talk with you about different aspects of the return to work process, managing workplace changes, risk assessment, risk management and the roles of the different individuals involved.

### Background

1. Have you managed a return to work process in relation to cancer before?
  - If so when?

### Return to work after cancer

2. Is there a policy in place within your organisation in relation to RTW after cancer or other chronic problems?
3. Could you describe the process that occurs in your organisation in relation to return to work after cancer?
  - Workplace adjustments
  - The people/sections involved and when they become involved.
4. Is a risk assessment carried out as part of the return to work process?
  - If yes does this cover physical and psychosocial risks?
  - Who undertakes the risk assessment?
5. What did you take in to consideration when doing the risk assessment? (eg permanent change in participants' physical function as a result of cancer (eg colostomy bag) or treatment of side effects?)
6. Are you aware of any health and safety issues associated with cancer and cancer treatment?
7. Can you describe any health and safety risks identified within the process?
  - Who assessed this?
  - Were risks reduced?
  - Can you describe the process of risk assessment used?
8. Were any work adjustments made in relation to the employee's job role?
  - Who provided this information?
  - Was consideration made of any potential ongoing health problems?
  - Was consideration made of any health and safety risks?
  - How long are the work adjustments in place for?
    - Temporary – how long?
    - Permanent
9. Will a risk assessment be carried out regularly to review any adjustments?
10. How easy was it to implement the advice received?
11. How easy was it to obtain information on return to work after cancer?
12. Are there measures that are ongoing in relation to return to work after cancer for the employee?

## **Occupational safety and health**

This interview could be used with the occupational health provider, the safety professional or both

We are carrying out these interviews to examine the process of return to work after cancer within the organisation. We would like to talk with you about different aspects of the return to work process, managing workplace changes, risk assessment, risk management and the roles of the different individuals involved.

### **Background**

1. Have you managed been involved in a return to work process in relation to cancer before?
  - If so when?

### **Return to work after cancer**

2. Is there a policy in place within your organisation in relation to RTW after cancer or other chronic problems?
3. Could you describe the process that occurs in your organisation in relation to return to work after cancer?
  - Workplace adjustments
  - The people/sections involved and when they become involved.
4. Is a risk assessment carried out as part of the return to work process?
  - If yes does this cover physical and psychosocial risks?
  - Who undertakes the risk assessment?
5. Are you aware of any health and safety issues associated with cancer and cancer treatment?
6. Can you describe any health and safety risks identified within the process?
  - Who assessed this?
  - Were risks reduced? – how?
  - Can you describe the process of risk assessment used?
7. Were any work adjustments made in relation to the employee's job role?
  - Who provided this information?
  - Was consideration made of any potential ongoing health problems?
  - Was consideration made of any health and safety risks?
  - How long are the work adjustments in place for?
    - Temporary – how long?
    - Permanent
8. Will a risk assessment be carried out regularly to review any adjustments?
9. How easy was it to implement the advice received?
10. How easy was it to obtain information on return to work after cancer in relation to health risks or safety risks?
11. Are there measures that are ongoing in relation to return to work after cancer for the employee?

**Return to Work after Cancer Project  
IOM case studies  
Consent form**

I understand that the study aims to identify occupational safety and health issues surrounding return to work for people who have been treated for cancer.

I have read the information sheet, which provides an outline of this study. I have had the opportunity to raise and discuss any questions.

I understand that the anonymised interview results will be used to produce a case study and be collated in to examples of best practice in managing return to work after cancer and how to manage the hazards associated with returning to work.

I understand that any identifiable information collected about an individual or company will only be available to the project team and will be anonymised in the results of the study.

I understand that I am completely free to withdraw myself from the study, or any part of the study, at any time and without giving reason.

I agree to volunteer as an interviewee for the study described in the information sheet. I give my full consent to my participation in this study.

I have read the interview questions and give my full consent to my participation in this study.

I hereby fully and freely consent to participate in the study.

Name (please print): .....

Signature: .....

Date: .....

I confirm that I have explained to the participant named above, the nature and purpose of the interview.

Signature of researcher: .....

Date: .....

**Return to Work after Cancer Project**  
**IOM case studies**  
**Debriefing sheet**

The project:

This project is concerned with occupational safety and health issues surrounding return to work for people who have been treated for cancer.

How information will be used?

The anonymised interview results will be used to produce a case study and be collated in to examples of best practice in managing return to work after cancer and how to manage the hazards associated with returning to work. Within this case study any identifiable information collected about an individual or company will only be available to the project team and will be anonymised in the results of the study.

What if I want to know more?

If you are interested in learning more about issues surrounding return to work for people who have been treated for cancer, you may wish to consult:

- The Macmillan 'Work and Cancer' webpages:  
(<http://www.macmillan.org.uk/Cancerinformation/Livingwithandaftercancer/Workandcancer/Workandcancer.aspx>)
- The UNUM 'Working after cancer' webpages:  
<http://unum.co.uk/media/partnerships/>
- Contact the project team:  
Dr Joanne Crawford  
Tel 0131 449 8037  
Email [Joanne.crawford@iom-world.org](mailto:Joanne.crawford@iom-world.org)
- Alice Davis  
Tel 0131 449 8042  
Email [Alice.davis@iom-world.org](mailto:Alice.davis@iom-world.org)

If you have any medical concerns please contact your GP.

Thank you again for your participation.

The project is due to run until November 2015, if you would like to be contacted after this in relation to the results of the research then please provide a member of the research team with your email address, mailing address or phone number.

## **Appendix 7. Case studies**

### **Case Study A**

#### **Demographic and company information**

##### **Demographic**

The employee in Case Study A was diagnosed with Non-Hodgkin's Lymphoma in 2012. Following this they received surgery, chemotherapy, medication and cancer medication. The employee was away from work for 10 months (until February 2013).

The employee has worked at the company for 15 years in various different roles and departments. Six months before being diagnosed, the employee had moved into a new role – a full-time, permanent, non-manual, office-based role.

At the time of the interview the employee was 47 years old.

##### **Company information**

The company is a large private company with 10,001+ employees. Within the company there is an HR department and an internal occupational health department.

##### **Previous experience of return to work and cancer**

The occupational health department has managed RTW after cancer numerous times before; this includes the RTW process but also goes further than this in relation to support during attendance at a hospice. The hospice support is done more as an ethical responsibility as it isn't the company's ethos to sign people off as they enter a hospice.

Whilst the employee was away from the workplace there were changes in the company. Thus, someone new was employed as their line manager. However, the previous line manager wanted to offer consistent support and so continued to support the employee during their RTW. They hadn't managed an RTW process before; in addition to managing the employee who was returning to work after cancer, they were also simultaneously supporting the RTW of an MS sufferer.

##### **What happened before the RTW**

The employee was away from work for 10 months, receiving treatment over this period. The reasons they gave for returning to the workplace were financial and having friends at work. The employee identified that once they knew the cancer was curable, it wasn't an option not to RTW.

The employee identified the cancer or health-related problems they had following treatment – see Table 8 below. Where these are identified, it has also been noted if they resulted in work-related concerns or challenges.

**Table 8 Cancer or health-related problems following treatment**

<b>Cancer or health-related problems</b>	<b>Tick if you had this cancer or health-related problem following treatment</b>	<b>Tick if it resulted in work-related concerns or challenges</b>	<b>Comments</b>
Anxiety	x	x	A big loss of confidence led to anxiety which was out of the norm for me
Body image and appearance	x	x	I put on 3 stone due to treatment and being off and struggled with the 'new look'
Bowel or urinary incontinence			
Cellulitis			
Concern about infection	x	x	My cancer reduced my immune system and I was nervous about getting the illness again
Depression			
Fatigue	x	x	Tiredness was a big problem in the beginning of my return to work
Hot flushes			
Loss of appetite			
Lymphoedema			
Nausea	x	x	One symptom of my illness was nausea due to medication and treatment
Pain			
Peripheral neuropathy			
Personal stress			
Reduced cognitive ability to manage work demands (eg poor memory, concentration)	x	x	I was very embarrassed as I couldn't remember the basic of tasks and words or people's names.
Reduced energy	x	x	I was very tired due to lack of exercise and medication during treatment
Reduced physical ability	x	x	As above
Shortness of breath	x	x	My illness originated in my chest and my breathing was very restricted and continued for a while after I returned to work
Sleep problems	x	x	Had sleep issues due to medication and worry
Other			



In Table 9, the employee identified workplace accommodations or supports that they required following their cancer treatment.

**Table 9 Workplace accommodations or supports required following treatment**

<b>Workplace accommodations and supports</b>	<b>Please tick if you required this accommodation and support</b>	<b>Please tick if you received this accommodation and support</b>	<b>Comments</b>
Paid time off for medical appointments	x	x	I continue to get paid time off for my 3 monthly medical appointments and any others
Reduced physical tasks			
Ability to work from home			
Modified work tasks	x	x	
Gradual increase in workload	x	x	Workload and pressure was steadily increased as I became more confident with my tasks and abilities
Reduced or part-time hours	x	x	
Redesign or adjustment to workspace			
Gradual increase in work schedule	x	x	
Assistive devices			
Retraining to perform different work			
Support from co-workers	x	x	Great support from co-workers which I needed
Additional breaks or rest periods			
Unpaid time off			
Return to work meeting with supervisor/employer	x	x	
Flexible scheduling of work hours	x	x	
Modified start and finish times	x	x	
Support with travel to and from work			
Support from supervisor and/or employer	x	x	Continued support and help from manager and company as a whole
Workplace modifications			
Other			

### **Contact**

Whilst the employee was away from work there was contact with their line manager by email, phone and visits. The contact with the line manager was initiated by the employee but then maintained by the line manager. Nearer to the end of the time away from work, the line manager would go out for coffee with the employee to catch up, somewhere away from home and to help in getting out and about.

There were also official phone calls with HR and occupational health and informal contact with other colleagues including gifts sent to the employee. The current occupational health physician joined the company during the time that the employee was away from the workplace, so when joining they contacted the employee by telephone to see how their physical and mental health was.

A relative of the employee also works at the company and let them know when colleagues were sending their regards.

### **Discussions about returning**

The employee finished chemotherapy in the August and then contacted the company in the November (three months later), when they had been told they were in remission. The following January (two months later), the employee sent a letter about RTW. Following this, the employee met with the occupational health physician at the company site, for this appointment they purposely went in the occupational health door at the side of the site and not through the office entrance in order to avoid seeing colleagues. However the employee bumped into a colleague in the occupational health department and they went upstairs to the offices together. The employee noted that in hindsight seeing colleagues that day made the RTW process easier as they had already seen some people.

During the RTW meetings the topics discussed were how the employee was feeling physically, emotionally and how these could be married to the work and be accommodated. The employee highlighted that they thought they were better than they really were.

### **Plan for returning**

A plan for the RTW was put in place formally with adaptations made, if and when needed; this included a phased RTW which started at four hours a week for three months, taking in to account physiological work restriction and mentally in relation to how they were coping. The employee found this tough at first both physically and emotionally. Following the initial three months the hours were increased to six hours for six weeks, with this gradually increasing to fully time over a 12-month period from February 2013 to February 2014. At the time of the interview the employee had been back at work working full time for 12.

Whilst the employee was away from work, the company employed someone to cover the employee's role until they returned. Due to increasing demands in the section, the new employee's employment was continued. This also offered the employee that was returning after cancer more support and reduce the level of pressure they were previously experiencing in the workplace. Due to the employee only being in the role for 6 months before being diagnosed on returning to the workplace they had to re-train in their tasks.

Before returning to the workplace, the employee was worried that they would be told to come back to the workplace before they were ready, this didn't happen.

### **What happened during the RTW process**

#### **Meetings**

During the RTW process there were formal or informal monthly meetings between the employee and occupational health. The first seven or eight meetings tended to be more formal. If during the RTW process the employee needed advice or support then they would have asked occupational health or their line manager.

The RTW process was reviewed every couple of weeks in relation to day structures, hours and work activities to see what was working and what wasn't; so that modifications could be made to ensure that work wasn't too pressured.

The occupational health physician and the previous line manager were involved in the process throughout the employee's RTW. The new line manager was involved in relation to hours and tasks to be undertaken.

## **RTW policy**

There isn't a specific RTW after cancer policy, as the policy covers any illness. Employees at the company are referred to occupational health for RTW and managers can refer them to this service.

At the company there is a notification of absence on sick notes that highlights if it is cancer. HR are also aware as they can see sick notes including that absence is due to a disease. Once occupational health is aware they would call HR to let them know that it has been taken on by occupational health. HR is involved in the process in relation to benefits and any pay-related issues in RTW after cancer/illness.

The line manager identified that through working with the employee during their RTW, they learnt a lot about both RTW processes and cancer. It was noted that there is a consistent approach from occupational health, but then it is up to the line managers how they apply this.

## **Risk assessment**

There was a risk assessment carried out during the RTW process, this covered security, personal, physical and emotional issues. The company in general is health and safety conscious. When the employee returned to the workplace, it was identified in the risk assessment that they should work on one floor where possible and not use the lift not the stairs. In addition to this, a formal DSE assessment was carried out on the employee's return to work.

Processes related to a risk assessment were carried out for the employee RTW. This included a Personal Emergency Evacuation Plan (PEEP), taking into account a need for disabled parking and to identify suitable escape routes. During the risk assessment process the line manager also involves a safety advisor, and occupational health can advise on individual specifics; in this case not using stairs and the tasks to work or not work on.

Due to the employee's memory being adversely impacted by the cancer and cancer treatment, consideration was needed of tasks being undertaken in the short and long term, such as avoiding multitasking and focusing on low-pressure tasks. In response to this, no time limits were put on the work adjustments – any adjustments would be done at the discretion of the occupational health physician. There were always explanations about why adjustments were being made and how they could help in the RTW process. Due to having to follow what the occupational health physician had suggested, there needed to be some reigning in of the employee by the line manager, such as reminding the employee that it was time to leave and not to stay to complete a task that could be done the following day.

Considerations were made in relation to the time and days to be worked during the RTW process as the individuals stamina level needed to be considered, as the employee experienced fatigue, especially on initial RTW. There was a need for the occupational health physician to discuss with the employee and dislodge the idea of cancer being inevitably linked to death.

It was noted that the company can't tell employees that another employee is away from work due to cancer. During the employee's phased return there were a couple of incidences where people asked 'when are you back full time' and 'people thought you were off with stress', the employee noted these experiences as being difficult as they weren't prepared.

In relation to the workplace accommodations identified in Table 9, the employee knew they needed these due to their advice from occupational health and from listening to their own body. For authorisation of any changes the employee spoke with their line manager. There is an informal understanding that when the employee has an appointment or check-up due they may call in and say they need a day's annual leave at short notice as they are feeling down about the appointment they have coming up. The line manager understands this and allows the employee to take a day's leave at short notice.

In relation to changes that have been made, it was identified that physical changes were easy but emotional changes were not so easy.

### **What happened after the RTW**

#### **Since**

After six months of returning to the workplace the employee was asked to do a presentation in front of 200 people. Presenting isn't something they had done before. Although they were nervous about this, in hindsight they were pleased they had done it. As they were having issues with their self-esteem after returning to work doing the presentation helped to improve this.

Since returning to the workplace the employee has taken two days of sick leave, however these were not cancer related.

The RTW process included agreed times and dates to come in to the office, these avoided traffic where possible, such as working 10–12 instead of 9–11. Where days were being worked in the phased RTW, days off were arranged to be in between days that were worked, to offer time to recover. The sections the employee was working in were aware and would take time and be supportive.

#### **Information**

The employee sought information from their line manager, union representative, HR, occupational health department, GP, Macmillan Counsellor, Cancer support group, massage services, volunteer therapists and Macmillan. Information from these sources was easy to access, the employee stated that they didn't 'google it' as they didn't feel that they were mentally in a position to do so.

The occupational health physician obtained information from asking occupational health nurses in the on-site department, the Macmillan website and nurses from Macmillan and Marie Curie. It was noted that information was easy to access and the employee helped with this through links to people. In relation to implementing advice, there weren't any problems with this. External sources of information mentioned by the occupational health physician included Macmillan, FOM website and generic cancers information.

The line manager wasn't aware of any health and safety issues associated with cancer and cancer treatments. They were aware that for the employee who was returning to work they had issues with their immune system, with line manager learning about this from the employee returning to work.

#### **Long-term process**

The end of the RTW process was highlighted as being the stage at which the employee finished their 12-month gradual RTW and came to the workplace full time. Around three to four months after this stage, the employee met with occupational health and was signed off, with the option to return or drop in anytime. Within the RTW process there has been consideration for the future and longer-term process, with services being available from counselling, HR and occupational health and within reason any changes that are needed being immediately put in place.

The occupational health physician identified that risk assessments were completed at regular intervals. Once the employee had returned to full-time work and been discharged from occupational health, there were no longer any restrictions in place as the employee didn't require any full-time adjustments in the long term.

In the opinion of the employee the RTW process was appropriate and well put together. The only failing that the employee identified that the company could improve on is when the employee called the company about sickness benefits, all the forms that were provided were out of date. Therefore, when the employee was trying to fill these in and claim, it caused a lot of pressure as the forms were incorrect.

Occupational health felt that there has been the appropriate level of engagement and where things weren't working they were adapted. The importance of two-way communication in the RTW was highlighted by the occupational health physician, including the employee notifying them about their treatment plan and providing useful contacts.

In discussing the key to a successful RTW, the occupational health physician mentioned the following: building a relationship with the employee, understanding their expectations and their manager's expectations, early intervention, understanding if they need other sources of support and signposting if needed, and active engagement throughout the process.

In relation to costs, the line manager was aware of the cost of a wage for the 10 months that the individual was away from work, and the 12 months that they were on a phased RTW. The line manager mentioned that the key to a successful RTW is to have a key contact throughout the process, as the employee needs someone that they can have as support and just because positions may change whilst they are away contact shouldn't be lost. Also, it is important not to rush people back to work.

### **Best practice from Case Study A**

In relation to each of the sections above, the best practice examples have been extracted for Case Study A and are presented below.

#### **Contact – Best practice**

- Whilst the employee was away from work, there was contact with their line manager by email, phone and visits, including coffee shop visits when the employee was well enough
- Contact with the line manager was initiated by the employee but then maintained by the line manager
- There were phone calls with HR and occupational health and contact with other colleagues
- When the occupational health physician joined the company they called the employee to see how the illness, mental health and physical health was going

#### **Discussions about returning – Best practice**

- Seeing colleagues before RTW made returning easier
- Topics discussed during meetings included; how the employee was feeling physically, emotionally and how these could be married to the work and be accommodated

#### **Plan for returning – Best practice**

- A plan for the RTW was put in place formally, through a phased return
- The company continued to employ the new employee that had come in to cover the employee whilst they were away, ensuring reduced pressure

#### **Meetings – Best practice**

- During the RTW process there were formal and informal monthly meetings between the employee and occupational health
- The RTW process was reviewed every couple of weeks to see what was working and what wasn't so that modifications could be made, including day structures, hours and work activities not being too complex or pressured

- The occupational health physician and line manager were involved in the process throughout the employee's RTW, the new line manager was involved in relation to hours and tasks to be worked

### **RTW policy – Best practice**

- RTW policy includes all illness including cancer
- The company has an internal occupational health department
- Consistent approach from occupational health

### **Risk assessment – Best practice**

- Risk assessment carried out during the RTW process, this covered security, personal, physical and emotional issues
- Working on one floor where possible and not using the stairs to access other floors, use the lift instead
- DSE assessment carried out
- Inclusion of a Personal Emergency Evacuation Plan (PEEP) taking in to account a need to disability parking and escape routes
- Consideration for memory problems in relation to tasks to be undertaken in the short and long term, taking account of avoiding multitasking and focusing on low pressure tasks
- Any adjustments being done at the discretion of the occupational health physician; there were always explanations about why adjustments were being made and how they could help in the RTW process
- Considerations made in relation to the time and days to be worked during the RTW process as the individual's stamina level needed to be considered as the employee experienced fatigue, especially on initial RTW
- Occupational health physician discussing with the employee and dislodging the idea of cancer being inevitably linked to death
- The line manager understands that the employee might sometimes ask for annual leave at short notice

### **Since – Best practice**

- Doing the presentation in front of 200 people helped with self-esteem
- The RTW process included agreed times and dates to come in to the office, these avoided traffic where possible such as working 10–12 instead of 9–11
- Where days were being worked in the phased RTW days off were arranged to be in between days that were worked, to offer time to recover

### **Information – Best practice**

- The employee sought information from their line manager, union representative, HR, occupational health department, GP, Macmillan counsellor, cancer support group, massage services, volunteer therapists and Macmillan
- The occupational health physician obtained information from Macmillan website, the on-site occupational health department, asking colleagues and nurses from Macmillan and Marie Curie

### **Long-term process – Best practice**

- Around 3 to 4 months after this stage the employee met with occupational health and was signed off, with the option to return or drop in anytime
- Within the RTW process there has been consideration for the future and longer-term process, with services being available from counselling, HR and occupational health and within reason any changes that are needed being immediately put in place
- Once the employee had returned to full-time work and discharged from occupational health there were no longer any restrictions in place as the employee didn't require any full-time adjustments in the long term

## Case Study B

### Demographic and company information

#### Demographic

The employee was first diagnosed with cervical cancer. During their stay in hospital for this they were also diagnosed with breast cancer. After these two diagnoses and treatment, the individual returned to work in 2012. A year after returning to work in July 2013, the employee was diagnosed with liver cancer. This case study focuses on the employee's most recent RTW process after being diagnosed with liver cancer. The treatment they received for this included; surgery, radiation and chemotherapy. Following this treatment they returned to work in April 2014.

The employee's job role before and after diagnosis was a part-time (4 days a week for 6 hours) permanent position as a 'group secretary'. This is a desk-based non-manual role.

At the time of the interview the employee was 52 years old.

#### Company information

The company is medium in size (50–499 employees). Within the company there is a HR department and although there isn't an occupational health department within the company, there is access to an external one that is located locally.

#### Previous experience of return to work and cancer

The line manager had previously managed employees' return to work after cancer, including the employee in this case study, when they returned to work after cancer in 2012. The HR manager interviewed hadn't previously managed a cancer RTW process.

#### What happened before the RTW

The employee was away from work during their treatment and their reason for returning to the workplace was to reach normality and see friends and colleagues again.

The employee identified the cancer or health-related problems they had following treatment – see Table 10 below. Where these are identified, it has also been noted if they resulted in work-related concerns or challenges.



**Table 10 Cancer or health-related problems following treatment**

<b>Cancer or health-related problems</b>	<b>Tick if you had this cancer or health-related problem following treatment</b>	<b>Tick if it resulted in work-related concerns or challenges</b>	<b>Comments</b>
Anxiety			
Body image and appearance			
Bowel or urinary incontinence			
Cellulitis			
Concern about infection			
Depression			
Fatigue			
Hot flushes			
Loss of appetite			
Lymphoedema	x		
Nausea			
Pain			
Peripheral neuropathy			
Personal stress			
Reduced cognitive ability to manage work demands (eg poor memory, concentration)			
Reduced energy	x		Phased RTW programme, really helped
Reduced physical ability			
Shortness of breath			
Sleep problems			
Other			

In Table 11, the employee identified workplace accommodations or supports that they required following their cancer treatment.

**Table 11 Workplace accommodations or supports required following treatment**

<b>Workplace accommodations and supports</b>	<b>Please tick if you required this accommodation and support</b>	<b>Please tick if you received this accommodation and support</b>	<b>Comments</b>
Paid time off for medical appointments	x	x	
Reduced physical tasks			
Ability to work from home			
Modified work tasks			
Gradual increase in workload		x	Phased return, reduced hours
Reduced or part-time hours	x	x	Phased return, reduced hours
Redesign or adjustment to workspace			
Gradual increase in work schedule	x	x	
Assistive devices			
Retraining to perform different work			
Support from co-workers	x	x	
Additional breaks or rest periods			Line manager offered breaks if needed
Unpaid time off	x	x	Yes towards the end of sick
RTW meeting with supervisor/employer	x	x	
Flexible scheduling of work hours	x	x	Reduced hours, flexible
Modified start and finish times	x	x	Very flexible and ad hoc as needed
Support with travel to and from work			
Support from supervisor and/or employer	x	x	
Workplace modifications			
Other			

### **Contact**

Whilst the employee was off work, there was contact between them and the workplace. This was through emails, letters being sent, including a paper copy of the staff bulletin that is usually distributed to all employees every week by email. Also, the employee received pay slips and pay rewards information from HR through the post. Colleagues visited the employee whilst they were off work, including their line manager and HR. It was noted in the interview that these were more social visits than work focused. The line manager had the employee's personal email address, which was used for contact. This was as a friend first and line manager second. The contact was two-way – many colleagues were friends, as the employee has worked with the company for 17 years.

### **Discussions about returning**

The company had its 20-year anniversary in 2014 and this provided an opportunity for the employee to meet with their line manager in the workplace. At this time, the employee identified that they felt ready to return. Following this meeting, HR put the employee in touch with the workplace occupational health physician, after which the employee had an appointment with them. During the appointment,

they discussed a phased RTW schedule. This schedule was then relayed back to the line manager to discuss dates and the days that the employee would work.

There was an interview about returning with the employee, line manager and HR. Whilst the employee was away from the office, the workplace was re-fitted so they were coming back to a new desk and workspace. This was discussed at the RTW interview.

### **Plan for returning**

A formal phased return schedule was in place over a period of four weeks, in the first week the employee worked three hours for four days; in week two this was increased to four hours; in week three this was five hours; and in the fourth week it was for the six hours on four days that the employee was working before being diagnosed. This was put in place through prescriptive recommendations and structures informed by the occupational health physician.

There were discussions with the line manager about hours and workload. This also included the journey to work and consideration of concentration and ongoing appointments (for which there is paid leave). HR was involved in relation to entitlements such as pay, benefits and sick pay.

### **What happened during the RTW**

#### **Meetings**

During the RTW process, meetings occurred formally and informally to see how things were going. The line manager also sits near the employee so they would often chat informally when the employee was in the office. During the process the employee received advice and support from their line manager, HR and colleagues due to the company having a close community where employees know each other and are supportive of each other.

#### **RTW policy**

The company's workplace employment code has an RTW policy that includes cancer.

#### **Risk assessment**

In the company, DSE assessments are carried out using an online system, therefore when the employee returned to the workplace they completed this and adjusted their chair as required. The employee noted that they are aware that systems and people are in place that could help with health and safety considerations after cancer however, they didn't personally need this. The employee mentioned that this could be because they came back to the workplace when they were as well as they could be. Due to one of the earlier cancer diagnoses, the employee suffers with lymphoedema. In summer, this sometimes means that one of their legs swells slightly. It was noted that there isn't anything extra needed at work for this.

A job assessment wasn't done in relation to the RTW process, as it was noted that they were returning to a job that they knew. If there were excessive amounts of work then the line manager could pick up anything that needed to be done.

### **What happened after the RTW**

#### **Since**

Since returning to the workplace the employee has taken one day off work. This was due to tonsillitis and not cancer related.

Decisions on workplace accommodations were based on both health and safety and disability law. The occupational health physician suggested changes in relation to the phased return. In addition to this, the employee had discussions with their oncologist.

## **Information**

The employee didn't seek information independently about the RTW after cancer process and the line manager noted that they didn't have to look for information as the occupational health physician and HR provided it.

## **Long-term process**

The RTW process was identified as being at the end of the four-week phased return process. In the longer term, the employee has checks with their oncologist.

## **Evaluation**

The employee knew what was on offer as they had previously returned to work after cancer.

## **Best practice from Case Study B**

In relation to each of the sections above the best practice examples have been extracted for Case Study B and presented below.

### **Contact – Best practice**

- Contact through various methods by line manager, HR and other colleagues through emails, letters, visits
- Sending out a paper copy of the weekly staff bulletin
- Line manager making informal contact using employee's personal email address
- HR sending pay slips and pay rewards information through post

### **Discussions about returning – Best practice**

- Occupational health physician contacted by HR
- Employee had appointment with occupational health physician
- Occupational health physician prescriptively recommended accommodations for a phased RTW specifically for the employee
- Interview about returning with the employee, line manager and HR. This included discussions about the new desk
- Line manager offered the employee breaks if and when needed on their RTW
- Flexible start and finish times were planned for the phased return, with consideration to avoid congested traffic times

### **Plan for returning – Best practice**

- Phased return over a four-week period, increasing hours from 3 hours on 4 days to 6 hours on 4 days
- Planned a gradual increase in workload through phased return
- HR were involved in relation to entitlements such as pay, benefits and sick pay

- Discussions with the line manager about hours and workload, this also included the journey to work and consideration of concentration and ongoing appointments (for which there is paid leave). Where there are excessive amounts of work the line manager could pick these up

#### **Meetings – Best practice**

- During the RTW process meetings would occur formally and informally to see how things were going

#### **RTW policy – Best practice**

- The company's workplace employment code has an RTW policy which includes cancer

#### **Risk assessment – Best practice**

- Online DSE assessment completed on the return to the workplace; the employee adjusted their chair themselves as required

#### **Since – Best practice**

- Decisions on workplace accommodations were based on both health and safety and disability law

#### **Info – Best practice**

- The occupational health physician and HR provided information and advice to the line manager and the employee

#### **Long-term process – Best practice**

- The RTW process was identified as being the end of the four-week phased return process. In the longer term, the employee has checks with their oncologist

## Case Study C

### Demographic and company information

#### Demographic

The employee was diagnosed with breast cancer in May 2014. Treatment has included surgery, chemotherapy, radiotherapy, Herceptin and Tamoxifen. Treatment with Herceptin occurs at three weekly intervals and will be completed in October 2015. Treatment with Tamoxifen is ongoing. The employee continued to work full time throughout treatment.

The employee's role is client manager for a utilities company. She is responsible for the delivery of programmes of work and achieving corporate measures of success through capital investment. She leads a team of engineers and technicians, who act in the 'client role' for delivery of schemes. It is a non-manual role and is mostly an office-based desk job.

At the time of the interview the employee was 39 years old.

#### Company information

The company is large in size (> 500 employees). Within the company there is an HR department and a health and safety department. Although there is no occupational health department within the company, there is access to an external occupational health provider.

#### Previous experience of return to work and cancer

The line manager had not previously managed a return to work after cancer or an employee working with cancer. The HR business partner interviewed had not been involved in this particular case and provided general information. This individual had not previously managed a return to work after cancer. The health and safety manager had only been in her current post for five weeks, although in her previous post in the last 12 months she had managed a return to work after cancer.

#### What happened before the RTW

The employee continued to work throughout treatment with minimal time off. She had four days off for surgery, two days off with a blood clot following cycle 2 of chemotherapy and three days off with influenza during cycle 4 of chemotherapy.

The employee's reason for continuing to work was to maintain normality and have some control. Another factor was a recent promotion.

The cancer or health-related problems experienced by the employee are recorded in Table 12.

**Table 12 Cancer or health-related problems following treatment**

<b>Cancer or health-related problems</b>	<b>Tick if you had this cancer or health-related problem following treatment</b>	<b>Tick if it resulted in work-related concerns or challenges</b>	<b>Comments</b>
Anxiety	x		
Body image and appearance	x		
Bowel or urinary incontinence			
Cellulitis			
Concern about infection			
Depression			
Fatigue	x		
Hot flushes	x		
Loss of appetite			
Lymphoedema			
Nausea	x		
Pain	x		
Peripheral neuropathy			
Personal stress			
Reduced cognitive ability to manage work demands (eg poor memory, concentration)			
Reduced energy	x		
Reduced physical ability			
Shortness of breath			
Sleep problems	x		
Other			

Table 13 shows the workplace accommodations or supports that they received during treatment.

**Table 13 Workplace accommodations or supports required following treatment**

<b>Workplace accommodations and supports</b>	<b>Please tick if you required this accommodation and support</b>	<b>Please tick if you received this accommodation and support</b>	<b>Comments</b>
Paid time off for medical appointments	x	x	Regular treatment, clinic appointments, 3 hospital stays during treatment
Reduced physical tasks			
Ability to work from home	x	x	Was able to choose when I came to work which helped conserve energy and manage pain
Modified work tasks			Didn't need modified work tasks but did slow the pace of work when needed
Gradual increase in workload			
Reduced or part-time hours			
Redesign or adjustment to workspace			
Gradual increase in work schedule			
Assistive devices			
Retraining to perform different work			
Support from co-workers	x	x	Personal and professional support always available
Additional breaks or rest periods			
Unpaid time off			
RTW meeting with supervisor/employer			
Flexible scheduling of work hours	x	x	
Modified start and finish times			
Support with travel to and from work			
Support from supervisor and/or employer	x	x	Personal and professional support always available
Workplace modifications			
Other			

**Contact**

The employee kept her line manager fully informed about all treatments and appointments starting on the day of diagnosis. Contact was by emails, phone calls and texts.

**Discussions about returning**

Not relevant as the employee continued in work.



## **Plan for continuing in work**

As a senior manager, the employee manages her own time. The line manager offered support to the employee as to how she wished to manage her work. There was no fixed plan or formal agreement; they agreed between themselves how the work should be managed. The line manager encouraged the employee to work at home as much as possible and to rest. He wanted to ensure that the employee was happy, but didn't work too hard or had too much pressure. He was guided by the employee, unless he thought she was doing too much. The employee was able to choose when to come to work, to be flexible about when to start and hours worked. The employee was able to manage her own work; she knew the deadlines and worked around them. The employee managed to achieve everything that had to be done.

Although there were other sources of support (eg HR) neither the employee nor line manager felt the need to make use of them.

The line manager kept his director and HR fully informed. Colleagues, both within her team and in the wider business, were very supportive.

## **What happened during the RTW**

### **Meetings**

There was constant contact between the employee and line manager, both when in the office and when working at home.

The line manager kept HR informed. Although there is a formal procedure to be followed when ill, involving phoning in and completing an RTW form, the line manager did not feel this was appropriate, he didn't ask the employee to follow this procedure every time she was ill. They managed the process between themselves and his director supported this approach.

### **RTW policy**

The company has an RTW policy, but it wasn't necessary to consider it since the employee continued in work. The employee and line manager managed the work between them and did not feel the need to involve HR.

### **Risk assessment**

There was no formal risk assessment, though the assessment of any risks was ongoing. No site visits were carried out due to the risk of exposure to raw sewage. The employee carried out daily risk assessments about her fitness to drive to work.

Although there is a health and safety department, they did not need to consult them.

## **What happened after the RTW**

### **Since**

Following surgery, the employee has only had two short absences from work due to a blood clot and influenza.

There is little discussion about health issues, only if there is a hospital appointment or the employee is not feeling well.

### **Information**

The employee found that although there was not any information about RTW, there was wasn't any information on continuing to work through cancer treatment. Their main source of information was

leaflets from the hospital. Breast Cancer Care Wales had no relevant information. They did not wish to carry out internet searches.

### **Long-term process**

As treatment is still ongoing, no end to the process has been identified. There is continued support from line manager and colleagues.

### **Evaluation**

The employee has received and continues to receive support described as 'amazing and more than appropriate'. They comment that it is possible to continue to work through cancer treatment with the right support. There is a need to educate people that it is possible to function during treatment for cancer. The line manager commented that the employee was well disciplined and driven and did a fantastic job.

### **Best practice from Case Study C**

In relation to each of the sections above, the best practice examples have been extracted for Case Study C and presented below.

#### **Contact – Best practice**

- Frequent contact, primarily with line manager, through emails, phone calls and texts

#### **Discussions about returning – Best practice**

- Not relevant as the employee continued in work

#### **Plan for continuing in work – Best practice**

- Flexible working hours
- Able to and encouraged to work from home
- Discussions with line manager about hours and workload, which also included the journey to work and ongoing treatment (for which there is paid leave)
- Flexibility in managing absence reporting

#### **Meetings – Best practice**

- Informal meetings and conversations to assess how things are going

#### **RTW policy – Best practice**

- Not applicable

#### **Risk assessment – Best practice**

- No site visits due to risk of infection

#### **Since – Best practice**

- Discussion and decisions as necessary
- Continuing support from colleagues

#### **Information – Best practice**

- There isn't a best practice, it was lacking

### **Long-term process – Best practice**

- No end to the process has yet been identified. Treatment as an outpatient at hospital with Herceptin at three weekly intervals will continue until October. Treatment with tamoxifen will continue for 10 years. There will also be regular checks with oncology

## Case Study D

### Demographic and company information

#### Demographic

The employee in Case Study D is a female that was diagnosed with breast cancer in 2014. Following diagnosis, they underwent three operations and treatment of radiotherapy, chemotherapy, medication and cancer specific medication.

After the first of the three operations, the employee was away from the office for three weeks. Following this, the employee worked as and when they could through and around the remaining two operations and treatments. The employee returned to their pre-diagnosis, full-time working hours on 2 February 2015. Since this time, the employee has been receiving treatment in the form of Anastrozole tablets.

The employee has worked for the company for three years in a desk-based role as a software developer. Before diagnosis, the employee worked full time with one day per week being unofficially worked from home.

At the time of the interview the employee was 56 years old.

#### Company information

The company is a large public company with around 650 employees based at numerous locations in the UK. The case study was completed at the head office. At this location there is the company HR department and an occupational health clinic on site once a month.

For the RTW after cancer case study, the employee, their line manager and a company HR advisor were interviewed.

#### Previous experience of return to work and cancer

The line manager and the HR advisor hadn't previously managed a case of an employee returning to work after cancer, however as an organisation they have had employees RTW after cancer.

#### What happened before the RTW

As soon as the employee was diagnosed with cancer they informed their line manager. During the period of time away from the office for the first operation, the employee wanted to return to the workplace so as to get back to normal; also, they were aware that the company sick leave policy provides six months full pay over a three-year period. In light of this, and being aware of the potential recurrence of cancer and potentially needing more time off in the future, the employee wanted to get back as soon as possible to avoid using excessive amounts of sick leave.

The employee identified the cancer or health-related problems they had following treatment – see Table 14 below. Where these are identified, it has also been noted if they resulted in work-related concerns or challenges.

**Table 14 Cancer or health-related problems following treatment**

<b>Cancer or health-related problems</b>	<b>Tick if you had this cancer or health-related problem following treatment</b>	<b>Tick if it resulted in work-related concerns or challenges</b>	<b>Comments</b>
Anxiety	x		
Body image and appearance	x	x	Loss of hair has been a personal challenge
Bowel or urinary incontinence			
Cellulitis			
Concern about infection	x	x	During chemotherapy, I did not come into work at my most 'at risk' period, but when I did come in, I asked people with infections to keep away from me
Depression			
Fatigue	x		
Hot flushes	x		
Loss of appetite	x		
Lymphoedema			This has not occurred yet, but is a long-term possibility
Nausea			
Pain			
Peripheral neuropathy			
Personal stress			
Reduced cognitive ability to manage work demands (eg poor memory, concentration)	x		
Reduced energy	x		
Reduced physical ability	x		
Shortness of breath			
Sleep problems	x		
Other			

In Table 15 the employee identified workplace accommodations or supports that they required following their cancer treatment.

**Table 15 Workplace accommodations or supports required following treatment**

<b>Workplace accommodations and supports</b>	<b>Please tick if you required this accommodation and support</b>	<b>Please tick if you received this accommodation and support</b>	<b>Comments</b>
Paid time off for medical appointments	x	x	
Reduced physical tasks			
Ability to work from home	x	x	
Modified work tasks	x	x	
Gradual increase in workload	x	x	
Reduced or part-time hours	x	x	
Redesign or adjustment to workspace			
Gradual increase in work schedule	x	x	
Assistive devices			
Retraining to perform different work			
Support from co-workers	x	x	
Additional breaks or rest periods			
Unpaid time off			
Return to work meeting with supervisor/employer			
Flexible scheduling of work hours	x	x	
Modified start and finish times			
Support with travel to and from work			
Support from supervisor and/or employer	x	x	
Workplace modifications			
Other			

### **Contact**

There was contact with the employee whilst they were away from work; this was noted as being discussions with the employee asking how they were feeling and not a work-related pressure. The contact with their line manager and colleagues was two-way and included a few visits, which again were social rather than work-related. The line manager noted that the visits broke up the sick leave period. In addition to this there were also weekly emails with their line manager. The boss of the employee's line manager's also called the employee to see how they were feeling.

During the time that the employee was receiving chemotherapy and radiotherapy, they were working from home as and when they felt that they could. During this time there was a lot of email contact with the line manager. Throughout the RTW, the only contact the employee had with HR was if the employee had a query.

### **Discussions about returning**

An RTW interview took place in the workplace with the employee, their line manager and HR to discuss how the working patterns could work around the planned operations and treatments. This included the location and transport times of getting to these treatments and the impact this could have

on work, with home working where the locations were near to home and not the office to avoid excessive travel.

### **Plan for returning**

To ensure that the employee could continue to work through the time that they were having operations and treatment, a plan was put in place. This was an informal plan to allow the employee flexibility in how this was applied. This process was managed by the line manager and the employee, with input from HR as and when needed. In this process, there was a clear understanding that this was a flexible approach with no pressure or timescales that could cause stress to the employee.

During this process the employee had a promotion interview they attended on 16 December, just two weeks after finishing their chemotherapy treatment.

The line manager managed the employee's workload by giving the employee an assortment of tasks. This allowed the employee to pick and choose which tasks to do depending on how they were feeling at the time. The job role usually involves a lot of work where there are multiple employees working simultaneously on tasks which can add pressure, therefore at the time the employee was given a few more autonomous tasks to prevent these time pressures. To accommodate the employee working at home more, this was considered in the tasks the employee was given by their line manager, as when the tasks were more complex the employee would have more questions. Therefore, these tasks would be done in the office, while more straightforward tasks could be completed at home.

### **What happened during the RTW**

#### **Meetings**

There have been meetings throughout the process from the employee being diagnosed to the employee returning to their full-time hours in the workplace. As the process has progressed, these meetings are less frequent. However, there is an understanding that meetings can be arranged as and when needed.

These meetings have allowed for the discussion of working at home, issues of fatigue, work tasks and the impact of the commute to and from work (30 minutes) and to and from treatment locations (one hour).

#### **RTW policy**

A policy wasn't used in the RTW process; the approach was to let the line manager manage it. In this case study, this was jointly managed by the line manager and the employee unless there was a problem, at which stage HR would have been consulted.

#### **Risk assessment**

A formal risk assessment wasn't completed in relation to the employee's RTW after cancer. The health and safety department were aware of the employee being off, but on this occasion, they weren't needed due to it being a desk-based role. If something came up that required their expertise, then they would be contacted.

Although a formal risk assessment wasn't completed, various factors were considered by the line manager, including; risk of infection, fatigue, working from home.

To manage the infection risk, the advice from the employee's doctor was adopted. This included the individual either not coming in to the office and for other employees who are unwell to avoid the employee at times soon after chemotherapy sessions.

To manage fatigue there were the options of flexibility with regards to tasks, locations of work and the days worked or not worked.

When the line manager visited the employee whilst they were off sick, as they knew the employee was considering working from home more during treatment, the manager checked their desk space was acceptable. There are standard documents at the company to complete when an employee is working from home, these were completed in the past for the employee but haven't been revisited during the RTW process.

### **What happened after the RTW**

#### **Since**

On 2 February 2015, the employee returned to their normal working hours, with options of flexibility in relation to hours worked and the location of where work was completed. If during this time circumstances changed then the first point of contact would be the employee's line manager, who may seek information from HR. Since the initial RTW period, the employee hasn't taken any sickness absence.

The RTW process included flexibility as the employee knew they would feel ill after having chemotherapy, the radiotherapy was a one hour journey away from the employee's home so to ensure enough hours were available to work the employee would work from home on these days. For authorisation of these changes the employee spoke to their line manager.

The whole team of six or seven people that the employee works in were supportive and helped in managing the RTW process. The line manager and employee discussed the pressure and risks and considered health issues, team issues and risk of infection.

Using a calendar the line manager could plan ahead; this avoided worrying the employee about time off. The team worked together to take account of the work tasks that needed to be done. The employee that has returned is given tasks that are less critical but are still legitimate tasks to feel valued. There was a research and development project at the time that the employee wasn't working in the office. Working on this therefore provided an autonomous task that the employee could work on at home. At the time of the interview there was a commercial project that the team were working on, the line manager was managing this to shield the employee from the pressure of this and balancing what needs to be done with what was realistic. To manage the psychological aspect, the line manager ensured that the tasks completed meant that the employee was and felt valued within the team and ensured that there was contact whilst the employee was working at home. The line manager let the employee decide how they wanted to manage the RTW, and then managed the impact on the team and the employee.

At the company the 'flexi' working system involves individuals 'clocking in' when they start work and 'clocking out' when they finish, with a form to fill if the worked hours don't reach the total for the employee. This was introduced during the time when the employee was working flexibly through treatment. However, this was causing worry and stress totalling the hours when they didn't feel up to working. Therefore, they were taken off the 'flexi' system and instead worked as and when they could.

#### **Information**

The employee didn't seek information independently on the topic of RTW after cancer; they didn't feel that they needed to. However, it was mentioned that if they did need to find out information on the topic they would go to a reputable website such as Macmillan Cancer Support.

#### **Long-term process**

Considerations for the potential of ongoing health problems haven't been discussed. The employee mentioned that this is due to them having an assumption that they are well and staying that way.

An end to the RTW after cancer process hasn't been identified. In June 2015, there is a new working at home policy being introduced that is stricter than the current process. Therefore, once the new policy is in place there will be more of a pressure to conform to a formal arrangement than the current flexible approach to working at home. There is an understanding that if the employee is feeling excessively tired then they would stay at home.



## **Evaluation**

Those interviewed noted that the RTW process on this occasion was appropriate.

In evaluating the process, it was identified that things learnt from this RTW process included; risks of infection, being open with people about what was going on, importance to make sure the employee although perhaps completing adapted tasks feels part of the team.

Learning from this process the employee is now speaking to another employee that is currently in the earlier stages of their RTW and the line manager is now talking to and supporting another manager in the same situation.

## **Key to successful RTW**

- Flexible approach to hours
- Individualised approach to RTW process
- Can't just deal with policy, it's about people
- Feel connection to work throughout the process
- The employee not sidelined and no impact on progress in career

## **Best practice from Case Study D**

### **Contact – Best practice**

- Two-way contact with the employee whilst they were away from work
- Support from line manager

### **Discussions about returning – Best practice**

- RTW interview took place in the workplace with the employee, their line manager and HR
- Discussions on working patterns around operations and treatments
- Discussions around working at home and minimising travel

### **Plan for returning – Best practice**

- An informal plan was put in place to allow the employee flexibility in how this was applied
- Line manager managed the employee's workload to minimise stress and pressure and allow for them to work from home

### **Meetings – Best practice**

- Meetings have been convened throughout the process
- Although the meetings are less frequent as the RTW process has progressed the employee can arrange these as and when they feel appropriate
- These meetings have allowed for the discussion of working at home, issues of fatigue, work tasks and the impact of the commute to and from work and treatment

### **RTW policy – Best practice**

- Approach to let the line manager and employee manage the RTW

### **Risk assessment – Best practice**

- Risk of infection considered
- Fatigue considered

- Working from home and the flexible approach to this
- Desk space at home informally checked

#### **Since – Best practice**

- Options of flexibility in relation to hours and locations
- Supportive team around the employee
- Line manager planning ahead considering the employee and the other members of the team
- Shielding the employee for pressure and stress
- Tasks to ensure employee felt valued
- Taken off 'flexi' system as caused stress

#### **Information – Best practice**

- If information was needed it would be sought from a reputable website

#### **Long-term process – Best practice**

- An understanding that if the employee is feeling excessively tired then they would stay at home

## Case Study E

### Demographic and company information

#### Demographic

The male employee in case study E was 63 years old (at the time of the interview) and works in material stores in a full-time, permanent, physical role for a company they have worked in for nearly 43 years.

The employee began to feel unwell on 20 July 2014. Following this he went for a series of tests. During this time he remained in his full-time employment role. After diagnosis of colon cancer the employee was away from work between 25 September 2014 and 13 May 2015.

#### Company information

The company is a large company with over 500 employees. Those involved in the employee's RTW included; HR, occupational health and the employee's line manager. The HR advisor in this case study has managed several RTW after cancer cases in the company, as has the occupational health nurse. The line manager in the case study hadn't previously managed a return to work after cancer, although they have managed RTW after musculoskeletal disorders. They have been the employee's line manager for 18 months.

#### What happened before the RTW

When the employee initially felt unwell and was having tests, they spoke with their supervisor. When these test results came back as the cancer they notified their line manager.

After having the time off work for cancer treatment the employee wanted to RTW to get structure back in their life through the routine and pattern of employment. They also identified that as they started to work this had a positive impact on their mental health, as it was good for them to know they could still do tasks and regain structure in their life. The employee also wanted to get back to work to socialise again, as during treatment and due to infection this didn't occur as often.

**Table 16 Cancer or health-related problems following treatment**

<b>Cancer or health-related problems</b>	<b>Tick if you had this cancer or health-related problem following treatment</b>	<b>Tick if it resulted in work-related concerns or challenges</b>	<b>Comments</b>
Anxiety			
Body image and appearance			
Bowel or urinary incontinence			
Cellulitis			
Concern about infection			
Depression			
Fatigue	x	x	
Hot flushes			
Loss of appetite			
Lymphoedema			
Nausea			
Pain			
Peripheral neuropathy			
Personal stress			
Reduced cognitive ability to manage work demands (eg poor memory, concentration)			
Reduced energy	x	x	
Reduced physical ability			
Shortness of breath			
Sleep problems			
Other			

**Table 17 Workplace accommodations or supports required following treatment**

<b>Workplace accommodations and supports</b>	<b>Please tick if you required this accommodation and support</b>	<b>Please tick if you received this accommodation and support</b>	<b>Comments</b>
Paid time off for medical appointments	x	x	
Reduced physical tasks			
Ability to work from home			
Modified work tasks			
Gradual increase in workload	x	x	
Reduced or part-time hours	x	x	
Redesign or adjustment to workspace			
Gradual increase in work schedule	x	x	
Assistive devices			
Retraining to perform different work			
Support from co-workers			
Additional breaks or rest periods	x	x	Only if needed
Unpaid time off			
RTW meeting with supervisor/employer	x	x	
Flexible scheduling of work hours	x	x	
Modified start and finish times	x	x	
Support with travel to and from work			
Support from supervisor and/or employer	x	x	
Workplace modifications			
Other			

### **Contact**

When the employee was diagnosed with cancer, occupational health called to offer support. During this telephone call, mental health support is always offered.

Whilst the employee was away from work there was initially quite a lot of contact as part of the sickness absence process the company offers. From this point onwards, the employee was contacted periodically. This contact was mostly by phone call to ask the employee how they were getting on. This contact was initiated by HR and occupational health. As occupational health was in touch with the employee they were aware of the treatment in place and planned. Through knowing this, they could organise both the planned RTW and the time whilst the employee was off, including work task cover.

In addition to this a few previous employees that have retired and current employees visited the employee in their home whilst they were off, as well as text messages being sent. During the sickness absence period, the employee on a couple of occasions briefly visited the workplace to see their colleagues and to see occupational health and their line manager.

The employee found that everyone was extremely supportive.

If an employee has worked for the company for two years, then they get 52 weeks on full sick pay.

## **Discussions about returning**

When the employee only had two chemotherapy sessions remaining they discussed with occupational health and their line manager about coming back to work on 20 April. However due to their blood count levels not being optimum for the remaining chemotherapy sessions the RTW date was moved to the later date of 13 May.

Prior to the employee's RTW starting, there was a Multi-Disciplinary Team (MDT) meeting with the employee, occupational health nurse, line manager and HR a week before their initial return day. The meeting initially asked the employee whether they felt comfortable to RTW. Then it covered the employee's treatment, how they were feeling in relation to tiredness, their job tasks and their physical strength to complete these tasks (including lifting). From the perspective of occupational health, they discussed the physical and medical aspects of the cancer treatment and RTW. For the line manager, this focused on what the employee wanted and could do in the department and where work tasks could be accommodated where needed.

The result of discussions was that the employee could do their previous job in the department, initially starting their phased RTW during the mornings as this was the time that the employee felt least tired.

## **Plan for returning**

A plan was put in place for the employee's RTW; this was prepared because of the MDT meeting. This is a formal process, which is continued through weekly absence meetings between occupational health and HR which are in place to discuss and monitor those that are currently absent and in phased RTW's.

The employee initially returned by working mornings, which were built up to full days, before additional days were added. As the employee hadn't worked for a few months and their role was physical, it was important to build this up gradually as their stamina increased.

The line manager trusted the employee in relation to knowing that if they felt unwell or unable to do a task they would come forward and express this. In the area in which they work there is a break room and office, which provide places that the employee can take a break from their machine-based work.

## **What happened during the RTW process**

### **Meetings**

The employee meets with occupational health at the end of each week during their phased RTW to discuss work tasks and how the employee is feeling. During this process, tiredness has been the biggest issue.

If circumstances change the employee would initially go to the line manager. On returning to the workplace they told the employee that if there is anything they want to talk about then it's fine to do so anytime. In addition to this, it was explained that if the employee ever needed to go to occupational health either for an arranged appointment or due to feeling ill then they could do so immediately. One day during the phased RTW the employee sat down and closed their eyes for a brief moment due to feeling tired, this was seen and the employee was advised to go home as they were too tired.

### **RTW policy**

There is an RTW policy in place at the company for sickness and illness; however, this isn't specific to RTW after cancer.

It was identified that Macmillan encourages companies to have a policy in place, however as a company they don't feel a policy is needed for RTW after cancer as they take an individualised approach.

## **Risk assessment**

A formal risk assessment wasn't undertaken, however aspects of risk assessments were considered, including the following:

- Occupational health monitored the employee's blood pressure and how they were physically coping during their RTW process
- The line manager kept an eye on the employee within the workplace to ensure they didn't do too much too soon
- The line manager was clear that the employee could take breaks when they choose to, ensuring that someone else could step in to cover tasks if needed
- The employee has experienced numb fingers and toes since cancer treatment; this is monitored by occupational health. For the numb toes, the employee has a chair in their work area to rest their feet from standing
- The employee's suitability for their previous job role was assessed. From this assessment, temporary changes were implemented, such as lighter duties and fewer hours
- If there are any changes or issues in the RTW, the employee would speak with their line manager
- The employee has meetings with occupational health that allow for monitoring of the RTW process to make sure it isn't detrimental to the employee's health
- Ergonomics factors were considered in relation to lifting, bending and what the employee could do
- The employee often felt cold when they first returned; this was helped with it being summer time instead of winter time
- Whilst the employee was on lighter duties, they weren't required to drive to other sites (as they previously would have done)
- Whilst the employee was on their RTW, they were not allowed to work overtime

## **What happened after the RTW**

### **Since**

Since the employee has been on their phased RTW, they have had weekly meetings with occupational health.

### **Information**

The employee approached Macmillan staff in the hospital to ask about cancer treatment. Whilst in hospital they also sought information from the cancer care support nurses, pharmacist and the sister on the chemotherapy ward. The employee highlighted that they met so many people throughout the process that if they had any questions there was always someone to ask.

The stakeholders within this case study identified that they didn't need to seek out much information as they had consultant reports that had sufficient detail. Where information was sought internally this was sourced from the occupational health department, including the occupational health doctor. External sources of information identified by occupational health were Macmillan, Penny Brohn Cancer Care charity and Campbell's Reach charity.

### **Long-term process**

Formal considerations weren't made for the potential for ongoing health problems for the employee. The long-term plans are flexible and informal in approach, with a mutual understanding between the employee and line manager.

An end to the phased RTW has been identified as when the employee returns to working full-time hours, as they did before diagnosis (this was planned to be the week following the case study interviews). Following a period after this, the employee will be discharged from occupational health, with an agreement that they can come back as and when they feel they need or want to.

## **Evaluation**

The RTW process on this occasion was identified as being appropriate by all those involved in the case study interviews. In asking those interviewed what they learnt from the current process this included: putting things in perspective, someone that wants to return will recover faster due to determination, considerations for the employee's physical health, importance of listening skills and that everyone is different.

As part of the RTW process, occupational health provides employees with an evaluation questionnaire after they have been discharged; this allows for feedback on the service and process.

The costs identified to the company for the current RTW include the employee being on sick leave, reducing their time temporarily from full-time to part-time hours, occupational health services being used, the line manager's time spent working on the RTW, and covering the employee's work whilst they were off sick and during their part-time working.

## **Key to successful RTW**

- Importance of communication during sick leave and before the RTW
- Important not to underestimate the physical and mental effect of cancer and cancer treatment  
Ensure that both are considered throughout the sick leave and RTW process
- Need to be flexible and individualised in approach as everyone is different
- Acknowledge and understand the seriousness of cancer-related operations and treatment, and the physical injury these treatments may cause
- Understand that different treatments impact people differently, and that different rounds of treatment can impact on the same individual differently
- Be patient with the employee returning to work
- The employee has to want to come back
- Understand the employee's needs
- The importance of knowing about the company's policies and procedures

## **Best practice from Case Study E**

### **Contact – Best practice**

- Occupational health called to offer help at the time of diagnosis, with mental health support being offered
- A lot of two-way communication whilst the employee was off work

### **Discussions about returning – Best practice**

- Prior to returning to work there was an MDT meeting
- The MDT meeting considered the individual and how they were feeling physically, mentally and how they felt about returning

### **Plan for returning – Best practice**

- A formal plan was put in place for the RTW
- The employee returned on reduced hours
- The employee's stamina was considered
- The line manager trusted the employee to be honest if they couldn't do a task or felt tired



### **Meetings – Best practice**

- The employee meets with occupational health at the end of each week to discuss work tasks and how the employee is feeling
- It was agreed that the employee could visit occupational health as and when they needed to, either planned or non-planned visits

### **RTW policy – Best practice**

- There is an RTW policy, but not especially on RTW after cancer

### **Risk assessment – Best practice**

- Occupational health monitored different health symptoms, including cardiovascular, the numbing of fingers and toes and their physical ability
- To manage fatigue, the employee was able to control when they took breaks
- To aid with physical symptoms and fatigue, the employee was put on lighter duties and given the opportunity to sit when required
- The employee has meetings with occupational health, which allow for monitoring of the RTW process to make sure it isn't detrimental to the employee's health
- Ergonomic task changes were made to reduce lifting and bending
- The employee felt cold quite a lot when they first returned; this was helped by it being summer time instead with warmer temperatures
- When the employee initially returned to work, they were not allowed to do any overtime

### **Since – Best practice**

- Since the employee has been on their phased RTW, they have weekly meetings with occupational health

### **Information – Best practice**

- The employee approached staff in the hospital to ask about cancer treatment
- The stakeholders within this case study identified that the medical reports received had sufficient detail to help with the return to work
- Where information was sought internally, this was sourced from the occupational health department, including the occupational health doctor

### **Long-term process – Best practice**

- The long-term plans are flexible and informal in approach
- An end to the phased RTW has been identified as being when the employee returns to working full-time hours
- Following a period after this, the employee will be discharged from occupational health, with an agreement that they can come back as and when they feel they need or want to

### **Evaluation – Best practice**

- As part of an RTW process, occupational health provides employees with an evaluation questionnaire after they have been discharged; this allows for feedback on the service and process

## Case Study F

### Demographic and company information

#### Demographic

The female employee in Case Study F was diagnosed with breast cancer in mid-September 2014. Following this, they took six months off work, returning on 23 March 2015.

At the time of the interview the employee was 58 years old.

#### Company information

The company is a private medium-sized company with approximately 130 employees. Internally at the company there is a HR department.

For this RTW after cancer case study, there were interviews with the employee, their line manager, HR and the Services and EHS Manager.

#### Previous experience of return to work and cancer

The line manager hadn't previously managed a cancer RTW process. However, the Services and EHS Manager and HR had. This included, in recent years, two cases of breast cancer, one of bowel cancer and one of leukaemia.

#### What happened before the RTW

The employee always intended to return to work when they felt well enough to do so. The period of time off work was longer than initially anticipated due to being poorly from the radiotherapy.

The employee identified the cancer or health-related problems they had following treatment – see Table 18 below. Where these are identified, it has also been noted if they resulted in work-related concerns or challenges.

**Table 18 Cancer or health-related problems following treatment**

<b>Cancer or health-related problems</b>	<b>Tick if you had this cancer or health-related problem following treatment</b>	<b>Tick if it resulted in work-related concerns or challenges</b>	<b>Comments</b>
Anxiety	x	x	
Body image and appearance	x	x	
Bowel or urinary incontinence			
Cellulitis			
Concern about infection	x		
Depression	x		
Fatigue	x		
Hot flushes	x		
Loss of appetite			
Lymphoedema			
Nausea			
Pain	x	x	
Peripheral neuropathy			
Personal stress	x	x	
Reduced cognitive ability to manage work demands (eg poor memory, concentration)	x	x	
Reduced energy	x	x	
Reduced physical ability	x	x	
Shortness of breath	x	x	
Sleep problems	x	x	
Other			

In Table 19, the employee identified workplace accommodations or supports that they required following their cancer treatment.

**Table 19 Workplace accommodations or supports required following treatment**

<b>Workplace accommodations and supports</b>	<b>Please tick if you required this accommodation and support</b>	<b>Please tick if you received this accommodation and support</b>	<b>Comments</b>
Paid time off for medical appointments	x	x	
Reduced physical tasks	x	x	
Ability to work from home	x	x	
Modified work tasks	x	x	
Gradual increase in workload	x	x	
Reduced or part-time hours	x	x	
Redesign or adjustment to workspace	x	x	
Gradual increase in work schedule	x	x	
Assistive devices			
Retraining to perform different work			
Support from co-workers	x	x	
Additional breaks or rest periods	x	x	
Unpaid time off	x	x	
RTW meeting with supervisor/employer	x	x	
Flexible scheduling of work hours	x	x	
Modified start and finish times	x	x	
Support with travel to and from work			
Support from supervisor and/or employer	x	x	
Workplace modifications			
Other			

### **Contact**

There was two-way contact with the employee whilst they were away from work through email, phone calls and visits. This was with the employee's staff who report to them, the employee's line manager, HR and the Services and EHS Manager. The visits were made to find out how the employee was feeling in relation to wellbeing and coping; the visits were informal, at the level of friends rather than colleagues.

During their time off, the employee came into the workplace a couple of times. This wasn't for meetings, but whilst they were there they had informal chats with the Services and EHS Manager.

### **Discussions about returning**

There was a social event shortly before the employee was planning to RTW; the employee took this opportunity whilst they were in the office to meet with the Services and EHS Manager to discuss coming back to work. This discussion included possible dates to RTW and the process of a phased RTW.

The RTW interview occurred at 9.30am on the employee's first day back in the office. This involved the employee, Service and EHS Manager and HR to discuss the specifics of the employee's phased return, as these hadn't been prescribed by the employee's doctor. There wouldn't usually be anyone else apart from the Service and EHS Manager and the employee in the interview. However, on this

occasion HR was present, as the HR representative is a friend of the employee's and they were asked by the employee to attend to provide support.

During this interview, the following issues were discussed: how treatment was going, how the employee was feeling physically and mentally and how they felt about returning to the workplace. In relation to how the employee was feeling, it was identified that they were feeling depressed, low, tearful and not in control of their emotions. Also, the employee was having trouble sleeping and experiencing pain in their breast due to burns from their radiotherapy treatment. There were also discussions around any advice given by the doctors and nurses and the medication that the employee was taking and how this was making them feel as there had been a change in medication as the previous prescription was making the employee feel worse. The interview also included when and where any follow-up appointments would be and an agreement that where appropriate recommendations and certificates from the doctor would be passed on to the workplace.

### **Plan for returning**

A formal plan was put in place for the RTW process. Through discussions and documented in the plan, the Services and EHS Manager suggested for the phased RTW that the employee started work from 9.00–13.00 for three days per week before building this up to the usual hours of 8.00–15.00 for four days per week, taking Fridays off. During the period of working three days per week, it was discussed and decided the second day off would be on a Wednesday to break up the working week. The employee mentioned in the case study that they were surprised how few hours there were at first, they thought they would continue to work four days but perhaps just finish one hour earlier.

Once the RTW plan had been discussed, the Services and EHS Manager documented it before sending it to the employee for review and to ensure it was an accurate reflection of discussions. This was then sent on to HR and the employee's line manager.

In the plans, there wasn't a temp employed to cover the tasks of the employee whilst they were away from the workplace.

### **What happened during the RTW process**

#### **Meetings**

There are weekly review meetings with the employee, Services and EHS Manager and HR. In these review meetings, the following are discussed: the employee, their situation, hours worked, illness, and following this conclusions and recommendations would be made, where applicable doctor and consultant recommendations would be implemented, this included the advised phased RTW.

After each review meeting, a review report is written by the Services and EHS Manager and emailed to the individual to check they are happy or have any errors or omissions. Once agreed a copy of this goes to the line manager and HR.

In addition to this, if there had been a physiotherapy appointment or consultation, then the weekly review would co-ordinate with this to be after so that any results or advice from the experts could be accommodated in the workplace review.

#### **RTW policy**

There is an RTW policy in the company; however, this doesn't specifically cover RTW after cancer.

The process in the company that takes place for RTW involves HR informing the Services and EHS Manager when an employee is off work sick. In this case study, the employee told the Services and EHS Manager about their diagnosis.

In implementing the RTW policy, it can be a challenge for the line manager to enforce it at times. Therefore, they sometimes rely on the Services and EHS Manager and HR to advise on specific issues.

## **Risk assessment**

A risk assessment was completed with the employee on their RTW for their desk-based role; this considered how they were feeling physically and emotionally and what could be done to facilitate their RTW.

Actions taken in response to a risk assessment and discussions about RTW included:

- Agreement that the employee could take breaks as and when they felt they needed to
- Before diagnosis they used to move bits of furniture round in the rooms, there are other people that now do this task
- On returning the employee had large amount of emails in their inbox, ICT sorted these to avoid stress on the employee
- Before diagnosis, the employee used to walk around the workplace to different areas/sections, however now they have been advised to stay in the one area as much as possible to avoid excessive tiredness
- The employee knew they couldn't cope with amount of work they had previously coped with, so accommodations were made. For example, on returning it was appraisal time, the employee has seven staff members they needed to complete this process with. Therefore, HR extended the deadline for the employee to complete these appraisals, so that they could be managed one per week
- Flexibility was also offered in relation to work tasks and how and when these were completed. The line manager asked the employee to complete 'quick win' work such as branding tasks to boost confidence rather than longer-term projects
- The employee would usually manage the refurbishment projects for new and existing clinics however the Services and EHS Manager has now taken on this role to avoid the employee having too much to do and becoming stressed
- There has been consideration for the medication that the employee is on and any side effects that they may be experiencing or expecting to experience
- There were discussions and consideration for the future appointments with doctors, consultants and physiotherapists that the employee has, with support and flexibility being offered for these
- The employee was concerned about their staff's expectations of them when they returned to the workplace. Therefore, time was allocated when the employee returned for them to speak to their staff to explain the situation and how things would be moving forward with the phased return
- Through discussions, the changes were suggested and then, where appropriate, authorisation was granted by Services and EHS Manager and HR
- Due to burns from radiotherapy, the employee was having trouble sleeping from pains in their breast, causing them to feel tired during the day. Flexibility with tasks and reduced hours helped with this tiredness
- Discussions around the nature of the job and the work environment, as it's a care environment, which can be emotional

## **What happened after the RTW**

### **Since**

At the time of the case study interviews the employee had been back at work for 10 weeks.

Although in the RTW plan the employee was due to increase their hours after one week, on having the weekly review at the start of week two it was agreed that as the employee didn't feel up to it as they felt very tired, this was then increased at week three. It was suggested that this could be due to getting used to being back at work and perhaps due to the medication needing time to start working.

If there are changes in how the employee is feeling or the way they are working, then these would be managed by the Services and EHS manager. This would either be communicated through the weekly review meetings or as and when needed during the week.

### **Information**

The employee didn't seek information on RTW after cancer independently. It was identified that it wasn't necessary, as there is a procedure in the workplace that provides support and advice from previous employees who have returned to work after cancer.

The line manager was aware of various health and safety issues that they would then apply when managing the RTW, including tiredness, treatment types, survey, mobility, avoidance of pressure, medication side effects, importance of breaks, drinking plenty, physical and mental issues. In relation to the mental health issues, they also noted that after diagnosis there is an operation and/or treatment. However, after this there is a tendency for cancer survivors to feel 'left out in the open', therefore the workplace needs to provide support.

The Services and EHS Manager uses various websites to obtain information on RTW after cancer, including those of the HSE and IOSH. Before meeting with an employee who has been diagnosed with cancer, if they have information on the type of cancer and what it involves, then the Services and EHS Manager will read up on it to offer support to the individual and help them to relax.

### **Long-term process**

The end of the RTW process is considered to be once the phased return has been completed and there aren't any more follow-up consultations or weekly review meetings. There will be a note in the file as to when the employee has their future hospital check-up/appointments, at which time there may be a meeting with the Services and EHS Manager. Contact will still remain with the employee; it's a small company so it's easy to stay in touch informally and formally.

At the end of the RTW process, it was identified that the employee has the decision to make a permanent change to their work, such as continuing with the three days and not returning to the four days they previously worked.

As part of the appraisal process, the employee's RTW progress will be discussed. Discussions take place twice a year, providing the employee with an opportunity to discuss any issues they may have.

In relation to the cost of the employee being away from the workplace, it was mentioned that this was due to a reduction in time and no temporary employee being brought in. Although it was also noted that cost is not a factor in the company, when it comes to circumstances such as in this case study, support to the employee is the most important thing.

### **Evaluation**

The employee couldn't speak highly enough of the support they had received in the RTW process.

Things that have been learnt in the current case study of RTW after cancer are: take one day at a time, let people help and support, it's a two-way process, to have a structure to guide a flexible process, it's an individualised process and has reinforced the issue of tiredness. Specifically, in relation to the employee managing a team of staff, it was important for the employee to speak to them

about the process for two reasons: so that they knew what to expect of the employee during their phased return, and what the staff expected of the employee.

External sources of information that those working on the RTW process were aware of included; HSE, NHS and IOSH websites, as well as Goggle as a search engine.

### **Key to successful RTW**

Being supportive

Listening

Contact before RTW to help ease back in

Quick-win tasks, not heavy longer-duration tasks

Words of encouragement/positive

Doctor visits – listen to their advice

Understand the character of the employee

Honesty

Reassurance it's for their benefit and the company benefit

Discuss that you want them to get better and get back to normality

Don't give opinion on their health if not qualified to do so

Let the employee know it's ok to want to do something different in relation to job role, tasks and hours worked

Can't have one size fits all, needs to be tailored, individual approach

### **Best practice from Case Study F**

#### **Contact – Best practice**

- Two-way contact with the employee whilst they were away from work through email, phone calls and social visits
- Contact was with the employee's staff that report to them, the employee's line manager, HR and the Services and EHS Manager

#### **Discussions about returning – Best practice**

- Visited the workplace for social event before returning, provided time to discuss possible dates to return
- RTW interview to discuss the specifics of the employee's phased return as these hadn't been prescribed by the employee's doctor
- During the interview the following issues were discussed: how treatment was going, how the employee was feeling physically and mentally and how they felt about returning to the workplace
- The interview also considered how the employee was feeling emotionally
- Discussions around any advice given by the doctors and nurses and the medication



- Considerations for follow-up appointments

#### **Plan for returning – Best practice**

- A formal plan was put in place for the RTW
- Discussions documented
- Reduced hours and days
- RTW plan sent to employee for review before being sent to HR and line manager

#### **Meetings – Best practice**

- Weekly review meetings with the employee, Services and EHS Manager and HR
- These meetings cover how the employee is feeling, any updates from appointments, how work is going and a reflection on the RTW plan
- After each review meeting, a review report is written by Services and EHS Manager and emailed to the individual to check they are happy or have any errors or omissions. Once agreed, a copy of this goes to the line manager and HR
- Weekly review meetings co-ordinated with external medical appointments so that advice can be implemented as soon as possible

#### **RTW policy – Best practice**

- HR informing Services and EHS Manager when an employee is off work sick
- Services and EHS Manager and HR support line manager to implement RTW policy

#### **Risk assessment – Best practice**

- A risk assessment was completed with the employee
- Agreement that the employee could take breaks as and when they felt they needed to
- No longer moving furniture
- ICT helping with emails
- No longer walking around the different areas and clinic
- Accommodations to workload
- Flexibility in relation to work tasks and how and when these were completed
- Employee no longer working on refurbishment projects to avoid stress
- Consideration for the medication that the employee is on and any side effects that they may already be or expecting to experience
- Consideration for future medical appointments
- Consideration of the expectations of staff that the employee currently manages when the employee returned to work
- Discussions around the nature of the job and the work environment, as it's a care environment, which can be an emotional one

#### **Since – Best practice**

- Flexibility with the plans; didn't increase hours as initially planned as the employee didn't feel up to it
- If there were changes these would be managed by Services and EHS Manager

**Info – Best practice**

- Understanding of the impacts of cancer on the employee in relation to health and safety
- The Services and EHS Manager preparing for meetings with the employee by researching the type of cancer, treatments and medications

**Long-term process – Best practice**

- End to RTW process identified
- Notes of future medical appointments so that a review meeting can be scheduled with the Services and EHS Manager
- Contact will still remain
- Flexibility for the employee to make permanent changes to their working hours
- Appraisal process will provide opportunity to see how the employee is doing

## Case Study G

### Demographic and company information

#### Demographic

The female employee in Case Study G is 52 years old (at time of interview) and works as a tax assistant in a part-time, permanent, office-based role that they have been in for 3 years 8 months.

In April 2013, they were diagnosed with colorectal cancer. Following this diagnosis the employee continued to work (from home) through treatment in their part-time role with their current employer. Whilst the employee was having continued treatment for their first diagnosis of cancer, they were diagnosed for a second time in July 2014 with secondary cancer in their lung tissue. After this second diagnosis, the employee remained in their continued part-time work.

In addition to the part-time role that is the focus of this case study (the employee's main employer), the employee also works one day a week for another employer. During cancer treatment, due to tiredness, the employee didn't frequently work this extra day for the other employer.

#### Company information

The company is a private micro company with six employees. There isn't a HR department within the company; however, an external advisor is consulted as and when needed by the company director.

For this case study, there were interviews with the employee who has continued to work during cancer treatment and their line manager, who is also the company director (referred to as line manager within this report).

#### Previous experience of return to work and cancer

The line manager hadn't previously managed an RTW after cancer process. However, while with a previous employer, the line manager had returned to work after cancer and they are currently managing their own return to work after a second diagnosis in their current role, as managing director.

#### What happened before the continuation of work

The employee was admitted to an Accident and Emergency Department at hospital because they were feeling unwell. At this time they were diagnosed with cancer. The employee's partner phoned the line manager to inform them of the cancer diagnosis.

**Table 20 Cancer or health-related problems following treatment**

<b>Cancer or health-related problems</b>	<b>Tick if you had this cancer or health-related problem following treatment</b>	<b>Tick if it resulted in work-related concerns or challenges</b>	<b>Comments</b>
Anxiety			
Body image and appearance	x		
Bowel or urinary incontinence	x		
Cellulitis			
Concern about infection	x	x	
Depression			
Fatigue	x		
Hot flushes	x		
Loss of appetite			
Lymphoedema			
Nausea	x		
Pain	x		
Peripheral neuropathy			
Personal stress	x		
Reduced cognitive ability to manage work demands (eg poor memory, concentration)			
Reduced energy	x		
Reduced physical ability	x		
Shortness of breath			
Sleep problems			
Other			

**Table 21 Workplace accommodations or supports required following treatment**

<b>Workplace accommodations and supports</b>	<b>Please tick if you required this accommodation and support</b>	<b>Please tick if you received this accommodation and support</b>	<b>Comments</b>
Paid time off for medical appointments			
Reduced physical tasks	x	x	
Ability to work from home	x	x	
Modified work tasks			
Gradual increase in workload			
Reduced or part-time hours			
Redesign or adjustment to workspace			
Gradual increase in work schedule			
Assistive devices			
Retraining to perform different work			
Support from co-workers	x	x	
Additional breaks or rest periods			
Unpaid time off			
RTW meeting with supervisor/employer			
Flexible scheduling of work hours	x	x	
Modified start and finish times			
Support with travel to and from work			
Support from supervisor and/or employer			
Workplace modifications			
Other			

## **Contact**

Whilst the employee was having cancer treatment, there was two-way contact with their colleagues and line manager through email, phone and text messages. The line manager also visited the employee when possible, although they themselves are currently returning to work after cancer so needed to consider their own tiredness and susceptibility to infections.

## **Discussions about returning**

It was agreed that the employee would then call their line manager when they were out of hospital after their initial diagnosis. At this time, the employee was in hospital for a period of 2 weeks, as previously agreed when the employee was back home, they called their line manager. Following on from this call, the line manager visited the employee in their home in May 2013. It was during this visit that work was discussed and the line manager asked the employee if they wanted to work and if so in what way they wanted to do this. At this point the employee identified that they would prefer to continue to work through treatment where possible, to keep focused and distract them from the cancer and cancer treatment.

## **Plan for returning/continuing to work**

Plans that were put in place for the continuation of work were flexible with no formal paperwork being signed as it was more of a verbal agreement and understanding. The HR advisor had suggested keeping things informal as formalities can sometimes get in the way.

As the employee was working through their treatment, there needed to be consideration for the employee requiring work breaks due to side effects, fatigue and a need for time to travel to and from appointments. The appointment locations were varied with travel times up to 1.5 hours away, sometimes five days a week, with different durations of appointments. To offer this flexibility it was decided that the employee would work from home. Due to having a bad winter the year before, during which time working from home was the only option, the employee was set up on the system to work remotely, and therefore this could be used in the continuation to work during cancer treatment.

The system, which allows employees to work remotely, requires the company to pay for each individual licence, of which there are four. These need to be shared by employees and those working on contract. Therefore, managing who is online and when licences are available can be problematic.

The office tasks that the employee previously did included both chargeable client work and non-chargeable work. It was identified that client chargeable work was easier to do when working remotely. However, the work still needed printing in the office and signing off by a colleague. This work also requires working from physical client files rather than electronic media.

To reduce the risk of infection during treatment, the line manager offered to deliver the client files to the employee. Initially this worked well, but the line manager could only deliver files in the evening, which resulted in extending the working day. To adapt this process, the employee's partner started to pick up the client files to bring them home to the employee.

The line manager identified that the employee isn't judged on hours worked but rather on output. As the employee has worked for the company for a number of years there is a degree of trust that has built up.

## **What happened during the continuation of work**

### **Meetings**

There were no formal meetings about the continuation to work; it was described more as a mutual understanding that if things weren't going well, then either the employee or line manager would start a discussion on this. Similarly, if the employee doesn't have enough work to do, then they notify the line manager who then actions this accordingly. During working times, it was identified that there are often numerous emails to and from the employee and line manager, so they are often in touch whilst

working. In relation to the continuation of work and any potential changes, this would be managed by the line manager.

### **RTW policy**

There isn't a formal RTW policy in the company.

### **Risk assessment**

A risk assessment wasn't formally carried out in relation to the employee's continuation to work. The line manager discussed this with the HR advisor. As the employee was due to work from home on their own, it was identified that it was more that the employee needed to ensure their workspace was sufficient and to be aware of issues such as discomfort. In light of this, the employee highlighted that the chair they were using was causing discomfort, therefore they changed this for an office style desk chair (already in the house).

In relation to cancer or health-related problems following and during treatment, the employee identified that they sometimes feel nauseous and also can't focus for as long as they could before diagnosis. At these times it was mentioned that they would take a 20-minute break from work before returning. As they work from home with flexible hours, these short breaks aren't an issue. Throughout the treatment process, the employee has found that they work better in the mornings than the afternoons, so they now try to use this time to do their work. In relation to work timescales, there isn't any pressure from the line manager or colleagues to get work done; if something is urgent and it can't be finished by the employee then they would work jointly with others to get it finished.

A side effect that the employee has experienced from having chemotherapy is carpal tunnel syndrome, for which they have been seeing a specialist. When their wrist is painful, the employee wears a wrist support and takes painkillers.

Due to the position of the employee's stoma bag, they prefer not to drive. Therefore, if travelling to the office for any reason, they would be driven by their partner. The employee identified their main problem is the risk of infection. If they employee was visiting the office, then one of the support staff would clean and wipe down the employee's desk for them.

Whilst in the office, the employee would have previously lifted boxes of files. However, this is now something they wouldn't be expected to do.

### **What happened after the RTW**

#### **Since**

This is a continuous process.

#### **Information**

The employee has searched online for information on issues such as inflammation of the bowel and the causes and treatments for this. They would usually do this through an online Google search. However, they are aware that online information is not always accurate or true. The employee has also been conducting their own online research into Nano technology and a treatment that involves killing cancer cells using an electrical charge, as this could be an option for the nodules the employee has on their lungs.

It was identified that there was great information and advice from doctors and nurses in relation to cancer, however it was mentioned that they hadn't provided any information on the psychological impact of cancer or cancer treatment.

The line manager didn't look for information as they had open communications with the employee and between them they managed to resolve issues with a common sense approach.

## **Long-term process**

In relation to the continuation of work, this is an ongoing and long-term process. The employee sends around an update to friends and family whenever they receive more information from specialists on any operations they are due to have, treatments planned and results received. This is also used to keep their line manager informed throughout the process.

There is a shared online calendar that the employee and line manager use to identify when they have hospital appointments, to allow work planning.

As this wasn't a typical RTW, the employee mentioned there is an agreement on the informal nature of the process, including a large degree of flexibility in the long term.

## **Evaluation**

The employee identified they thought the process for them has been appropriate. They identified that they knew the line manager wouldn't be difficult about it as they themselves have had cancer before so therefore understand.

In relation to the costs to the organisation, this includes needing an additional licence on the remote working system. There was also the additional time as a cost of the employee's line manager in relation to travelling to the employee's home and back with prepared files for them to work on.

When considering what had been learned from the current process, the line manager mentioned the importance of valuing staff. It was also identified that there is a balance in relation to work, for example if the line manager has lots on, then the employee will work more hours to help. For these extra hours, the employee can claim them as time in lieu.

## **Key to successful RTW**

- Understand from their perspective, their restrictions, thinking outside the box of how this can be accommodated
- Understand due to number of hospital appointments, illness downtime that clock-watching is not a sensible way to manage the process
- Flexibility within the process
- Trust between employee, line manager and colleagues

## **Best practice from Case Study G**

### **Contact – Best practice**

- Two-way contact with their colleagues and line manager through email, phone and text messages
- The line manager visited the employee when possible

### **Discussions about returning – Best practice**

- There were discussions about work post-diagnosis
- The employee had a choice to continue to work

### **Plan for returning/continuing to work – Best practice**

- Flexible plans
- HR advisor consulted
- Agreement that the employee would work from home
- Consideration for work breaks, travel time, appointments

- Use of remote working system
- Planning of the tasks the employee could do at home
- Line manager offering to bring these to the employee where possible, following this the employee's partner collected these
- Not judged on hours, judged on output

### **Meetings – Best practice**

- Shared understanding that will contact or start discussions if there is an issue
- Continued email support

### **RTW policy – Best practice**

There isn't a formal RTW policy in the company.

### **Risk assessment – Best practice**

- Risk assessment needs discussed with HR advisor
- Employee aware of discomfort from chair so changed it
- Flexibility to take breaks if feeling fatigued or nauseous
- Flexibility to work more in mornings
- No pressure from line manager or colleagues on timescales
- For carpal tunnel syndrome a support is worn when needed
- Avoiding driving with stoma bag whilst uncomfortable
- If the employee visits the office their desk is cleaned before they arrive
- The employee is no longer required to lift boxes of files

### **Since – Best practice**

This is a continuous process.

### **Information – Best practice**

- Employee searches for information specific to their cancer
- Employee aware of not everything online being true or accurate
- Open communication about information between line manager and employee

### **Long-term process – Best practice**

- Employee sends round an update
- Shared calendar between line manager and employee
- Agreement on flexible long-term process



## Case Study H

### Demographic and company information

#### Demographic

The female employee in Case Study H is 49 years old. She was diagnosed with Diffused Large B Cell Lymphoma in April 2014 and had been away from work from September 2014 to July 2015. The employee works as an administration assistant, which is largely a computer-based role, but also involves setting up workshops and transporting material and equipment to the workshops.

#### Company information

The company is a higher education institute with 2,000 employees. The institute has a human resources department and access to an occupational physician.

For this case study, there were interviews with the employee, their line manager and with human resources, who take a case management report for individual RTW processes.

#### Previous experience of return to work and cancer

The line manager hadn't previously managed an RTW after cancer process, however the HR manager had; this included, at the current time, an RTW after breast cancer.

#### What happened before the RTW

The employee always intended to return to work when they felt well enough to do so. The period of time off work was longer than initially anticipated due to being poorly from the radiotherapy.

The employee identified the cancer or health-related problems they had following treatment – see Table 22 below. Where these are identified, it has also been noted if they resulted in work-related concerns or challenges.

**Table 22 Cancer or health-related problems following treatment**

<b>Cancer or health-related problems</b>	<b>Tick if you had this cancer or health-related problem following treatment</b>	<b>Tick if it resulted in work-related concerns or challenges</b>	<b>Comments</b>
Anxiety			
Body image and appearance			
Bowel or urinary incontinence			
Cellulitis			
Concern about infection	x	x	
Depression			
Fatigue	x	x	
Hot flushes	x	x	
Loss of appetite			
Lymphoedema			
Nausea			
Pain	x	x	
Peripheral neuropathy			
Personal stress	x	x	
Reduced cognitive ability to manage work demands (eg poor memory, concentration)	x	x	
Reduced energy	x	x	
Reduced physical ability	x	x	
Shortness of breath			
Sleep problems	x	x	
Other			

In Table 23 the employee identified workplace accommodations or supports that they required following their cancer treatment.

**Table 23 Workplace accommodations or supports required following treatment**

<b>Workplace accommodations and supports</b>	<b>Please tick if you required this accommodation and support</b>	<b>Please tick if you received this accommodation and support</b>	<b>Comments</b>
Paid time off for medical appointments	x	x	No problem getting time off for those
Reduced physical tasks			
Ability to work from home			
Modified work tasks			
Gradual increase in workload	x	x	A six-week phased return to work
Reduced or part-time hours			
Redesign or adjustment to workspace			
Gradual increase in work schedule			
Assistive devices			
Retraining to perform different work			
Support from co-workers			
Additional breaks or rest periods			
Unpaid time off			
RTW meeting with supervisor/employer	x	x	
Flexible scheduling of work hours			
Modified start and finish times			
Support with travel to and from work			
Support from supervisor and/or employer			
Workplace modifications			
Other			

### **Contact**

There was two-way contact with the employee whilst they were away from work through email, phone calls and texts. This was between the employee's line manager and the employee as well as more formal contact with HR in relation to pay slips.

The more formal contact was via human resources manager in relation to the continuance of the sick note.

### **Discussions about returning**

A meeting was held between the employee and HR about returning to work. The line manager was not involved as the head of department took control of the process. A meeting was held before the RTW date to ensure that the employee was able to make the journey to work.

### **Plan for returning**

A formal plan was put in place after discussion with the employee. This included agreement on how the graduated return to work was to be structured. The employee had also been seen by the occupational health physician and his comments were included as part of this process.

Work tasks were also evaluated to ensure that the tasks could be completed by the employee to give her ownership of particular work tasks on her return. It was clear that the tasks could be carried out by the employee.

The plan also examined the impact of accrued leave, which is now being used as a means of reducing fatigue while not having to reduce salary.

## **What happened during the RTW**

### **Meetings**

The employee's line manager was not involved (not by choice) in the meetings preceding the return to work; instead, this was handled by the Head of Department. Since the employee's return to work, there have been regular meetings with her current line manager to ensure that the employee is coping with work.

### **RTW policy**

The organisation does not have a policy on returning to work after cancer; it does have a policy on returning to work after chronic illness. This has been used as a means of directing the current process.

Other changes have been suggested with other cases of return to work within the organisation, including enabling people to work at home rather than commuting to the office.

### **Risk assessment**

To the knowledge of the interviewees a risk assessment was not carried out as part of this return to work but would have been if the job had been more physical in nature. It was felt that the occupational physician would have identified any requirements in this area.

Although no risk assessment process was carried out, the interviewees were aware of the issue of fatigue in return to work after cancer.

## **What happened after the RTW**

### **Since**

Since returning to work the employee has stayed on the graduated return but is now using annual leave to take one day off per week. This is to ensure that her salary is not affected by lost time.

### **Information**

The employee looked for information and found the Macmillan toolkit, which has been helpful. No others in the process looked for further information.

### **Long-term process**

It was perceived by those involved that the RTW process would be complete when the employee is back full time. However, it is admitted in this case that there still needs to be continuing support for the employee, including using annual leave to allow for fatigue during the working week.

### **Evaluation**

Participants within this case study did not feel that this had been an appropriate return to work. Reasons for this included 6 weeks not being long enough to return to work, and coming back to work too early. This may be due to financial constraints put on the individual coming back to work.

In addition to this, the line manager had not been involved with the employee and felt that they should have been. However, the head of department did take the lead and enable access to the correct sources of support and help.

One comment in relation to learning from this is that because it is a rare event, it is important that the organisation learns to manage the process better.

### **Best practice from Case Study H**

#### **Contact – Best practice**

- Two-way contact with the employee whilst they were away from work through email, phone calls and texts
- Contact was with the employee's staff that report to them, the employee's head of department, HR and the occupational physician

#### **Discussions about returning – Best practice**

- Visited the workplace before actually returning to work
- RTW interview to discuss the specifics of the employee's phased return as these hadn't been prescribed by the employee's doctor

#### **Plan for returning – Best practice**

- A formal plan was put in place for the RTW
- Discussions documented
- Reduced hours and days
- RTW plan sent to employee for review before being sent to HR and line manager

#### **Meetings – Best practice**

- Regular meetings with line manager

#### **RTW policy – Best practice**

- HR support line manager to implement RTW policy

#### **Since – Best practice**

- Using annual leave to manage fatigue to ensure no financial detriment to employee

#### **Long-term process – Best practice**

- End to RTW process identified

## 7. References

1. Cancer Research UK. *Cancer incidence in the UK in 2011*. Cancer Statistics Report. UK: Cancer Research UK; 2014.
2. Cancer Research UK. *Cancer survival*. London: Cancer Research UK; 2014.
3. Maddams J, Utley M, Møller H. Projections of cancer prevalence in the United Kingdom, 2010-2040. *British Journal of Cancer* 2012; 107; 1195–202.
4. Crepaldi C, Barbera M, Ravelli F. *Cancer and in general long-term illnesses at the workplace*. Brussels, Belgium: Policy Department Economic and Scientific Policy. European Parliament; 2008.
5. Rowland JH, Aziz N, Tesouro G, Feuer EJ: The changing face of cancer survivorship. *Seminars in Oncology Nursing* 2001; 17 (4); 226–40.
6. Online survey of 2,142 UK adults living with cancer. Fieldwork conducted 26 November to 14 December 2012. Survey results are unweighted. Figures presented in this report are based on 168 respondents who had completed treatment within the past five years. Available at: [http://www.macmillan.org.uk/Aboutus/News/Latest\\_News/Riseincancerpatientsfacingdiscriminationatwork.aspx](http://www.macmillan.org.uk/Aboutus/News/Latest_News/Riseincancerpatientsfacingdiscriminationatwork.aspx). Accessed December 2016.
7. YouGov online survey of 1,740 UK adults living with cancer. 2014.
8. Kesler SR, Bennett FC, Mahaffey ML, Speigel D. Regional brain activation during verbal declarative memory in metastatic breast cancer. *Clinical Cancer Research* 2009; 15 (21); 6665–73.
9. Steiner JF, Nowels CT, Main DS. Returning to work after cancer: quantitative studies and prototypical narratives. *Psycho-Oncology* 2010; 19 (2); 115–24.
10. Bains M, Yarker J, Amir Z, Wynn P, Munir F. Helping cancer survivors return to work: what providers tell us about the challenges in assisting cancer patients with work questions. *Journal of Occupational Rehabilitation* 2012; 22 (1); 71–7.
11. Taskila T, Lindbohm ML. Factors affecting cancer survivors' employment and work ability. *Acta Oncology* 2007; 46 (4); 446–51.
12. Taskila T. *Cancer survivors at work: work-related problems and factors associated with their employment, work ability and social support from the work community*. People at Work Research Reports 80, Helsinki Finland, Finnish Institute of Occupational Health, 2007.
13. Menhert A, Koch U. Predictors of employment among cancer survivors after medical rehabilitation – a prospective study. *Scandinavian Journal of Work Environment and Health* 2013; 39 (1); 76–87.

14. Taskila T, de Boer AGEM, Van Dijk FJH, Verbeek JHAM. Fatigue and its correlates in cancer patients who had returned to work – a cohort study. *Psycho-Oncology* 2011; 20 (11); 1236–41.
15. Taskila T, Lindbohm M, Martikainen R, Lehto U, Hakanen J, Hietanen P. Cancer survivors' received and needed social support from their work place and the occupational health services. *Supportive Care in Cancer* 2006; 14 (5); 427–35.
16. Silver JK, Gilchrist LS. Cancer rehabilitation with a focus on evidence-based outpatient physical and occupational therapy interventions. *American Journal of Physical Medical Rehabilitation* 2011; 90 (5 Suppl 1); S5–15.
17. Main DS, Nowels CT, Cavender TA, Etschmaier M, Steiner JF. A qualitative study of work and work return in cancer survivors. *Psycho-Oncology* 2005; 14 (11); 992–1004.
18. Lauzier S, Maunsell E, Drolet M, Coyle D, Hebert-Croteau N, Brisson J, *et al.* Wage losses in the year after breast cancer: extent and determinants among Canadian women. *Journal of the National Cancer Institute* 2008; 100 (5); 321–32.
19. Peteet JR. Cancer and the meaning of work. *General Hospital Psychiatry* 2000; 22; 200–205.
20. Centre for Reviews and Dissemination University of York. *Systematic reviews: CRD's guidance for undertaking reviews in healthcare*. York, UK: University of York; 2009.
21. Moher D, Liberati A, Tetzlaff J, Altman DG. Preferred reporting systems for systematic reviews and meta-analyses: the PRISMA statement. *British Medical Journal* 2009; 339; b2535.
22. Torp S, Nielsen RA, Gudbergsson SB, Dahl AA. Worksite adjustments and work ability among employed cancer survivors. *Support Care Cancer* 2012; 20 (9); 2149–56.
23. Tamminga SJ, de Boer, AGEM, Verbeek JHAM, Frings-Dresen M. Breast cancer survivors' views of factors that influence the return to work process – A qualitative study. *Scandinavian Journal of Work Environment and Health* 2012; 38 (2); 144–154.
24. van Muijen P, Weevers NL, Snels IA, Duijts SF, Bruinvels DJ, Schellart AJ, *et al.* Predictors of return to work and employment in cancer survivors: a systematic review. *European Journal of Cancer Care* 2013; 22 (2); 144–60.
25. Duijts SF, van Egmond MP, Spelten E, van Muijen P, Anema JR, van der Beek AJ. Physical and psychosocial problems in cancer survivors beyond return to work: a systematic review. *Psycho-Oncology* 2013; 23; 481–492.

26. Hansen JA, Feuerstein M, Calvio LC, Olsen CH. Breast cancer survivors at work. *Journal of Occupational and Environmental Medicine* 2008; 50 (7); 777–84.
27. Short PF, Vargo MM. Responding to employment concerns of cancer survivors. *Journal of Clinical Oncology* 2006; 24 (32); 5138–41.
28. McGrath PD, Hartigan B, Holewa H, Skarparis M. Returning to work after treatment for haematological cancer: findings from Australia. *Support Care Cancer* 2012; 20 (9); 1957–64.
29. Nachreiner NM, Dagher RK, McGovern PM, Baker BA, Alexander BH, Gerberich SG. Successful return to work for cancer survivors. *American Association of Occupational Health Nurses Journal* 2007; 55 (7); 290–5.
30. Nachreiner NM, Shanley R, Ghebre RG. Cancer and treatment effects on job task performance for gynecological cancer survivors. *Work* 2013; 46 (4); 433–8.
31. Lawrence CL. The impact of chemotherapy for breast cancer on managing daily tasks: a longitudinal study of cognitive, psychosocial and safety outcomes in the home and workplace [dissertation]. Loughborough University; 2012.
32. Short PF, Vasey JJ, Tunceli K. Employment pathways in a large cohort of adult cancer survivors. *Cancer* 2005; 103 (6); 1292–301.
33. Ohguri T, Narai R, Funahashi A, Nishiura C, Yamashita T, Yarita K, *et al.* Limitations on work and attendance rates after employees with cancer returned to work at a single manufacturing company in Japan. *Journal of Occupational Health* 2009; 51 (3); 267–72.
34. Improving employment outcomes of breast cancer survivors: development of a web-based educational and decision support tool. *Proceedings of the Human Factors and Ergonomics Society Annual Meeting*; 2011; SAGE Publications; 2011: 1333–7.
35. Grunfeld EA, Rixon L, Eaton E, Cooper AF. The organisational perspective on the return to work of employees following treatment for cancer. *Journal of Occupational Rehabilitation* 2008; 18 (4); 381–8.
36. Maggie's and Unum. *Returning to work after cancer – an employer's guide*. Maggie's and Unum; 2011.
37. Moskowitz MC, Todd BL, Chen R, Feuerstein M. Function and friction at work: a multidimensional analysis of work outcomes in cancer survivors. *Journal of Cancer Survivorship* 2014; 8 (2); 173–82.



38. Munir F, Yarker J, McDermott H. Employment and the common cancers: correlates of work ability during or following cancer treatment. *Occupational Medicine* 2009; 59 (6); 381–389.
39. Sandberg JC, Strom C, Arcury TA. Strategies used by breast cancer survivors to address work-related limitations during and after treatment. *Women's Health Issues* 2014; 24 (2); e197–204.
40. Improving employment outcomes of breast cancer survivors: development of a web-based educational and decision support tool. *Proceedings of the Human Factors and Ergonomics Society Annual Meeting* 2011; SAGE Publications; 2011; 1333–7.
41. Allen B. Working with cancer. *Health and Safety at Work* 2008; 30 (7); 25–26.
42. Bains M, Munir F, Yarker J, Steward W, Thomas A. Return to work guidance and support for colorectal cancer patients: a feasibility study. *Cancer Nursing* 2011; 34 (6); E1-12.
43. Bains M. The impact of colorectal cancer, self-efficacy and social support on work ability and employment status [electronic resource] : a longitudinal study [dissertation]. Loughborough University; 2009.
44. Böttcher HM, Steimann M, Rotsch M, Zurborn KH, Koch U, Bergelt C. Occupational stress and its association with early retirement and subjective need for occupational rehabilitation in cancer patients. *Psycho-Oncology* 2013; Aug; 22 (8): 1807–14.
45. Boykoff N, Moieni M, Subramanian SK. Confronting chemobrain: an in-depth look at survivors' reports of impact on work, social networks, and health care response. *Journal of Cancer Survivorship* 2009; 3 (4); 223–32.
46. Calvio L, Peugeot M, Bruns GL, Todd BL, Feuerstein M. Measures of cognitive function and work in occupationally active breast cancer survivors. *Journal of Occupational and Environmental Medicine* 2010; 52 (2); 219–27.
47. Cancer Careers. *Back to work after cancer*. Available at: <http://www.cancerandcareers.org/en/at-work/Back-to-Work-After-Cancer>. Accessed April 2015.
48. Carlsen K, Jensen AJ, Rugulies R, Christensen J, Bidstrup PE, Johansen C, *et al*. Self-reported work ability in long-term breast cancer survivors. A population-based questionnaire study in Denmark. *Acta-Oncologica* 2013; 52 (2); 423–9.
49. Cunningham N, Hubbard G, Stoddart K. *Employment following cancer diagnosis: a narrative summary of the evidence*. Scottish Centre for Healthy Working Lives (SCHWL). Cancer Care Research Centre/University of Stirling, 2009.

50. de Boer AG, Frings-Dresen MH. Employment and the common cancers: return to work of cancer survivors. *Occupational Medicine (London)* 2009; 59 (6); 378–80.
51. Desiron HA, Donceel P, de Rijk A, Van Hoof E. A conceptual-practice model for occupational therapy to facilitate return to work in breast cancer patients. *Journal of Occupational Rehabilitation* 2013; 23 (4); 516–26.
52. Feuerstein M, Todd BL, Moskowitz MC, Bruns GL, Stoler MR, Nassif T, *et al.* Work in cancer survivors: a model for practice and research. *Journal of Cancer Survivorship* 2010; 4 (4); 415–37.
53. Frazier LM, Miller VA, Miller BE, Horbelt DV, Delmore JE, Ahlers-Schmidt CR. Cancer-related tasks involving employment: opportunities for clinical assistance. *Journal of Supportive Oncology* 2009; 7 (6); 229–36.
54. Griffiths E. Focus on breast cancer and the workplace. *Occupational Health* 2011; 63 (7); 18–19.
55. Hakanen JJ, Lindbohm M. Work engagement among breast cancer survivors and the referents: the importance of optimism and social resources at work. *Journal of Cancer Survivorship* 2008; 2 (4); 283–95.
56. Johnsson A. *The rehabilitation process after breast cancer diagnosis: factors of importance for return to work*. Institutionen för onkologi-patologi/Department of Oncology-Pathology; 2008.
57. Lavigne JE, Griggs JJ, Tu XM, Lerner DJ. Hot flashes, fatigue, treatment exposures and work productivity in breast cancer survivors. *Journal of Cancer Survivorship* 2008; 2 (4); 296–302.
58. Macmillan. *Making the shift – providing specialist work support to people with cancer*. London: Macmillan Cancer Support, 2013.
59. Mak AK. Toward an occupational rehabilitation policy community for cancer survivors in Singapore: a stakeholder perspective from the SME employers. *Journal of Occupational Rehabilitation* 2011; 21 Suppl 1; S77–85.
60. Munir F, Burrows J, Yarker J, Kalawsky K, Bains M. Women’s perceptions of chemotherapy-induced cognitive side effects on work ability: a focus group study. *Journal of Clinical Nursing* 2010; 19 (9–10); 1362–70.
61. Nieuwenhuijsen K, de Boer A, Spelten E, Sprangers MA, Verbeek JH. The role of neuropsychological functioning in cancer survivors’ return to work one year after diagnosis. *Psycho-Oncology* 2009; 18 (6); 589–97.

62. Nilsson MI, Petersson LM, Wennman-Larsen A, Olsson M, Vaez M, Alexanderson K. Adjustment and social support at work early after breast cancer surgery and its associations with sickness absence. *Psycho-Oncology* 2013; 22 (12); 2755–62.
63. Oberst K, Bradley CJ, Gardiner JC, Schenk M, Given CW. Work task disability in employed breast and prostate cancer patients. *Journal of Cancer Survivorship* 2010; 4 (4); 322–30.
64. Ottati A, Feuerstein M. Brief self-report measure of work-related cognitive limitations in breast cancer survivors. *Journal of Cancer Survivorship* 2013; 7 (2); 262–73.
65. Pryce J, Munir F, Haslam C. Cancer survivorship and work: symptoms, supervisor response, co-worker disclosure and work adjustment. *Journal of Occupational Rehabilitation* 2007; 17 (1); 83–92.
66. RS Consulting. *Can we talk about work? Encouraging health and social care professionals to talk positively about work to people affected by cancer*. London, UK: National Cancer Survivorship Initiative, 2011.
67. Sesto ME, Yabroff PPKR, Bradley CJ, Feuerstein M, Vanderheiden GC. Panel: the need for system solutions to improve employment outcomes of cancer survivors. *Reviews of Human Factors and Ergonomics* 2007; 51 (16); 986–90.
68. Tamminga SJ, de Boer AG, Verbeek JH, Frings-Dresen MH. Return to work interventions integrated into cancer care: a systematic review. *Occupational and Environmental Medicine* 2010; 67 (9); 639–48.
69. Tan FL, Loh SY, Su TT, Veloo VW, Ng LL. Return to work in multi-ethnic breast cancer survivors – a qualitative inquiry. *Asian Pacific Journal of Cancer Prevention* 2012;13 (11); 5791–7.
70. Taskila T, Martikainen R, Hietanen P, Lindbohm M. Comparative study of work ability between cancer survivors and their referents. *European Journal of Cancer* 2007; 43 (5); 914–20.
71. Tate S. Cancer and work. *Occupational Health at Work* 2011; 8 (3); 22–26.
72. The Work Foundation. *Returning to work – cancer survivors and the health and work assessment and advisory service*. Lancaster: The Work Foundation, 2013.
73. Tiedtke C, de Rijk A, Dierckx de Casterle B, Christiaens MR, Donceel P. Experiences and concerns about ‘returning to work’ for women breast cancer survivors: a literature review. *Psycho-Oncology* 2010; 19 (7); 677–83.

74. Torp S, Gudbergsson SB, Dahl AA, Fossa SD, Flotten T. Social support at work and work changes among cancer survivors in Norway. *Scandinavian Journal of Public Health* 2011: 39 (6\_suppl); 33–42.
75. Yarker J, Munir F, Bains M, Kalawsky K, Haslam C. The role of communication and support in return to work following cancer-related absence. *Psycho-Oncology* 2010: 19 (10); 1078–85.

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