# Best Practices for Return-to-Work/ Stay-at-Work Interventions for Workers with Mental Health Conditions

FINAL REPORT

May 2010


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## About OHSAH

The Occupational Health and Safety Agency for Healthcare in BC (OHSAH), initiated in an accord between healthcare employers and union representatives, was incorporated on July 5, 1999. OHSAH's board of directors consists of representatives from union and employer organizations.

OHSAH's mission is to:

- Work with all members of the healthcare community to develop guidelines and programs designed to promote better health and safety practices and safe early return to work;
- Promote pilot programs and facilitate the sharing of best practices; and
- Develop new measures to assess the effectiveness of health and safety programs and innovations in healthcare.

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## Acknowledgements

OHSAH gratefully acknowledges the assistance of and input from:

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Julie Prescott, Manager, Communications
Fariba Kaboli, Occupational physician

**Participating employer groups:**

- Vancouver Coastal Health Authority
- Fraser Health Authority
- Vancouver Island Health Authority
- Interior Health Authority
- Northern Health Authority
- Providence Health Care
- Healthcare Employers Association of BC

**Participating union groups:**

- Health Sciences Association
- Hospital Employees Union

Representatives of the healthcare provider and healthcare worker communities

Suggested reference: Pomaki, G., Franche, R.-L., Khushrushahi, N., Murray, E., Lampinen, T., Mah, P. (2010). *Best Practices for Return-to-work/Stay-at-work Interventions for Workers with Mental Health Conditions.* Vancouver, BC: Occupational Health and Safety Agency for Healthcare in BC (OHSAH).

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# Executive Summary

## *I. Background*

Common mental health conditions in the workforce are not rare. Approximately 8% of Canadian workers struggle with a mental health condition[1], with a particularly high proportion of these workers in the healthcare sector[2]. Indeed, one in seven healthcare workers in British Columbia has a mental health condition[2]. Mental health conditions lead to decreases in work productivity and quality of life, and represent a significant economic strain on society. Total direct and indirect costs of mental health conditions in Canada, including loss in health-related quality of life, are estimated at $52 billion for 2006[3]. Furthermore, mental health conditions severely impact the emotional and financial stability of affected Canadians and their families. Despite the prevalence and detrimental effects of these conditions, there is surprisingly limited systematic information about how to successfully help workers with mental health conditions return to work or stay at work[4].

In response to this need, the Disability Prevention Team at the Occupational Health and Safety Agency for Healthcare (OHSAH) in British Columbia (BC) and participating stakeholders have developed five evidence-based workplace Best Practices principles to help workers with mental health conditions return to work and stay at work.

## *II. Objectives*

*Best Practices for Return-to-work/Stay-at-work Interventions for Workers with Mental Health Conditions* is a joint initiative by the OHSAH Disability Prevention Team and participating stakeholders from the BC healthcare sector, including unions, employers, healthcare providers, and workers' representatives. The Best Practices are based on a systematic literature review, incorporate stakeholder input, and seek to answer three main questions:

1. Are workplace-based interventions effective in improving return-to-work or stay-at-work outcomes for workers with mental health conditions?
2. What are key elements of effective interventions?
3. Are any interventions specific to the healthcare sector?

The Best Practices also aim to:

- ***Synthesize*** knowledge from quantitative evidence about which interventions have been found to be effective in improving return-to-work and/or stay-at-work outcomes in workers with mental health conditions.
- ***Complement*** this knowledge with evidence from reviews (both narrative and systematic), qualitative studies*, and established guidelines and reports, in order to cast as wide a net as possible to capture the context in which workplace-based interventions occur.

*A glossary including definitions for important concepts and technical terms is included on page 69 of this document. Each term included in the glossary is marked by an asterisk when it first appears in the document.

- ***Document*** the experiences of a wide array of stakeholders involved in disability management*, including worker representatives.

**Several considerations need to inform the reading and potential applications flowing from the Best Practices:**

1. The Best Practices are not intended to be a prescriptive tool, but rather a point of reference for implementation of strategies taking into consideration local context, priorities, interests and capacities;
2. The evidence base of the Best Practices originates from international settings that differ in culture, disability management policies, compensation systems and healthcare services. Those differences need to be carefully considered when implementing initiatives included in the evidence base; and
3. The Best Practices are based on *available* evidence and future evidence may complement, extend, or overturn current suggestions.

## *III. Methods and Evidence Base*

In developing the Best Practices, we adapted the process developed by the National Institute for Health and Clinical Excellence[5], which specifies stages and standards for guideline development. The international Appraisal of Guidelines for Research and Evaluation[6] criteria, which provide a systematic framework for assessing guideline quality, also guided the development of the Best Practices. We identified, assessed and reviewed the evidence using the systematic literature review method[7], a rigorous, standardized approach to gathering and evaluating published knowledge. In addition to considering quantitative studies, which are commonly part of systematic literature reviews, these Best Practices also considered a more comprehensive set of documents, which includes systematic and narrative reviews, qualitative studies, guidelines, and reports. Furthermore, stakeholder feedback and input was also gathered during three collective discussions that focused on the planning, development, and dissemination of the Best Practices and ensured that the Best Practices are applicable and relevant to stakeholders' needs. As such, the Best Practices are based on the best available evidence and stakeholder consensus; account for the views and concerns of those who might be affected by the Best Practices; and are advisory, rather than prescriptive, in nature.

### III.a. Systematic review

- **Search:** Six electronic databases were systematically searched for peer-reviewed systematic and narrative reviews, primary quantitative studies, and primary qualitative studies of return-to-work or stay-at-work workplace-based interventions for workers with mental health conditions, facilitated by the employer or the insurer, and published in English, French, Dutch, or German, between 2004 and 2009. A systematic search was also conducted for reports and guidelines on the same topic, published between 1999 and 2009, in English, French, Dutch, or German.
- **Identification of relevant documents:** Titles and abstracts of documents, and in some cases full documents, were reviewed to assess whether they met the eligibility criteria. Reviews and primary studies had to focus on workplace-based return-to-work or stay-at-work interventions for workers with mental health conditions and include work absence duration, work limitations, or worker or provider experiences, as outcomes or themes.

Eligible guidelines and reports had to be developed for workers with common mental health conditions, contain a significant section on work absence duration or work limitations, be evidence-based, and have been created in collaboration with stakeholders.

- **Quality assessment:** Methodological quality assessment was conducted by pairs of reviewers, using established quality assessment instruments. Of over 2000 relevant references identified by the searches, 29 documents met both our eligibility and quality criteria. These consisted of seven reviews, eight primary quantitative studies, six primary qualitative studies, four guidelines, and four reports.
- **Data extraction and synthesis:** Data extraction was conducted by pairs of reviewers, and evidence was synthesized according to the system developed by Harbour, Miller and the Scottish Intercollegiate Guidelines Network Grading Review Group[8]. This system allowed us to rank the documents based on quality, and to assign greater weight to higher quality documents when developing the Best Practices principles.

### III.b. Stakeholder feedback

Stakeholders first helped determine the scope of the Best Practices and then provided input on the methodology, the evidence, and the Best Practices principles during three collective discussions:

- **First collective discussion:** We discussed the proposed process for developing Best Practices and established a network of union and employer representatives to form the Best Practices Development Group;
- **Second collective discussion:** Stakeholders were updated about the systematic review of the evidence and its findings; discussed the relevance, applicability, and structure of the Best Practices; and began planning the dissemination of the Best Practices; and
- **Third collective discussion:** Stakeholders provided feedback on the draft Best Practices, and discussed strategies to finalize the document. A dissemination plan for the Best Practices, tailored to the needs of the British Columbia healthcare sector, was also developed.

This method of incorporating stakeholder feedback through structured collective discussions facilitated informed decision-making and consensus building among all stakeholders. Feedback was incorporated into the Best Practices and informed the relevance, acceptability, usability, and feasibility of the Best Practices for healthcare workers in BC.

## *IV. Best Practices Principles*

Based on our comprehensive synthesis of the evidence, the Best Practices principles were developed and classified according to the following levels of interventions:

- **Organizational-level;**
- **Disability management practice-level; and**
- **Individual-level.**

*Organizational-level interventions*

**PRINCIPLE #1: Clear, detailed, and well-communicated organizational workplace mental health policy supports the return-to-work/stay-at-work process**

- Clear and well-communicated organizational workplace mental health policy is essential to minimize fragmentation, confusion, and inaction regarding the return-to-work/stay-at-work process.
- Fostering a people-oriented organizational culture through supportive management can aid in the prevention, early identification, and management of mental health conditions in the workplace.
- Stigma around mental health conditions is a clearly identified barrier to the implementation of effective return-to-work initiatives.
- Early identification and intervention for depression, through increased awareness and skills training at the workplace, can reduce the severity, duration, and cost of depressive illness.

*Disability management practice-level interventions*

**PRINCIPLE #2: Return-to-work coordination and structured, planned, close communication between workers, employers, unions, healthcare providers, and other disability management stakeholders are required to optimize return-to-work and stay-at-work outcomes**

- Return-to-work coordination and negotiation amongst stakeholders are required to accomplish individualized return-to-work strategies. To be successful, these activities may need to be coordinated by a trained return-to-work coordinator.
- Structured and planned close communication between the worker, supervisor, healthcare provider(s), union representatives and other disability management stakeholders is essential to improve return-to-work/stay-at-work outcomes – this includes in-person/telephone contacts and written information for workers with mental health conditions on current policies and benefits.

*Disability management practice-level interventions*

**PRINCIPLE #3: Application of systematic, structured and coordinated return-to-work practices improves return-to-work outcomes**

- Return-to-work practices that activate the worker and help keep the worker engaged in the return-to-work process are effective in improving return-to-work outcomes.
- Adapted implementation of established guidelines currently available for occupational physicians can improve disability management practice and return-to-work outcomes.
- Check-ins at distinct times, to assess progress in the return-to-work process and the worker's needs, are important return-to-work practices. These can include:
    - Initial intake,
    - Detailed assessment,
    - Continuous check-ins during intervention,
    - Follow-up check-in, and
    - Relapse prevention.
- Return-to-work practices should be specific, goal-oriented, and, notably, maintain a focus on work function, workplace behaviour, and return-to-work outcomes.

*Disability management practice-level interventions*

**PRINCIPLE #4: Work accommodations are an integral part of the return-to-work process and the context of their implementation determines their effectiveness**

- Work accommodations as part of the return-to-work process are recommended. However, the specification of appropriate work accommodations and their implementation need to take into account the circumstances of the worker and the workplace.
- Although work accommodations can be beneficial to workers and workplaces, they can also create unforeseen obstacles to the return-to-work process if unsuitably conceived or implemented. For that reason, evidence supports several considerations in the implementation of work accommodations:
  - Work accommodations should include a sensible redistribution or reduction of work demands on the worker and his/her co-workers;
  - Making transitions to less stressful environments may be beneficial for workers who are unable to change or cope with the fast-paced, high-pressure nature of their working conditions;
  - Senior management support for work accommodation may have a notable impact on return-to-work rates for workers with mental health conditions; and
  - Support by co-workers is essential for the success of work accommodations, but stigma and co-workers' unclear understanding of the worker's strengths and limitations can hinder that success.

*Individual-level interventions:*

**PRINCIPLE #5: Facilitation of access to evidence-based treatment reduces work absence**

- Workplace-based and work-focused cognitive behavioural interventions can reduce work absence duration.
- To achieve improvement in clinical symptoms, the intervention needs to be symptom-focused and delivered by mental health professionals.
- For optimal results, cognitive behavioural therapy-based interventions should be combined with work accommodations and/or counselling about return to work.

# *V. Conclusions*

## V.a. Are workplace-based interventions effective in improving return-to-work or stay-at-work outcomes for workers with mental health conditions?

Based on our review, we conclude that workplace-based interventions for workers with mental health conditions can be effective in reducing work absence duration, in improving quality of work for workers and workers' overall quality of life, and in reducing costs associated with workplace mental health. Examples of the effects of effective workplace-based interventions include:

- **Work absence duration:** One Canadian study found that workplace-based collaborative mental health care was successful in helping workers return to work 16 days sooner than usual care over a 12-month period and reduced the proportion of workers who transitioned

to long-term disability over the same period by over three-quarters[9]. Workers with less severe symptoms seem to derive the most benefit from workplace-based and work-focused individual-level interventions[10];

- **Quality of work:** For workers who are still at work, but struggling, workplace-based interventions can improve worker productivity, worker retention, and a worker's sense of self. One workplace-based and symptom-focused individual-level intervention (structured telephone-based cognitive behavioural therapy* and care management* by insurer-based trained mental health professionals) resulted in an average 3.5-hour per week increase in effective hours worked by each worker; participating workers were also 70% more likely to be employed one year later than workers who received usual care[11];
- **Workers' quality of life:** The same workplace-based and symptom-focused intervention also resulted in symptom improvement: 50% of workers who participated in the intervention were clinically recovered by 12 months[11]; and
- **Economic outcomes:** Workplace-based interventions can reduce costs. One Canadian study demonstrated that for every 100 workers on short-term disability due to a mental health condition, employers would save $50,000 per year by implementing a collaborative mental health care program[9].

## V.b. What are key elements of effective interventions?

Based on stakeholder feedback, organizational-level changes may be needed to support the effectiveness of the interventions described in the Best Practices. Several *organizational-level* interventions are recommended, and focus on clear and well-communicated workplace mental health policies that encourage the supportive management of workers with mental health conditions. Examples of such policies include:

- Promotion of a people-oriented organizational culture;
- Recognition that workers have mental health needs and identification of the factors that impact worker mental health and well-being in the workplace; and
- Training supervisors on workplace mental health, which can improve awareness of the occupational implications of mental health conditions, while presenting supervisors with opportunities for identifying and facilitating early intervention for mental health conditions.

Elements of effective *disability management-level* interventions are communication, coordination and strengthening relationships among return-to-work stakeholders, including:

- Collaborative and effective return-to-work coordination;
- Keeping the worker activated and informed, and fostering the worker-supervisor relationship;
- Having regular check-ins with the worker during the return-to-work and stay-at-work process; and
- Well-designed and planned work accommodations*.

The majority of *individual-level* interventions that aim to help workers manage their symptoms or address work-related problems are based on cognitive behavioural therapy principles. Workplace-based and work-focused interventions are effective in reducing work absence duration. Workplace-

based and symptom-focused interventions reduce symptoms and increase work productivity. Elements of individual-level interventions include:

- A workplace-based and work-focused activating intervention* based on the principles of cognitive behavioural therapy and provided by trained occupational physicians;
- Care management and over-the-phone cognitive behavioural therapy provided by insurer-based trained and supported mental health professionals; and
- Access to treatment and extended health benefit plans to cover evidence-based individual clinical treatments.

### V.c. Are any interventions specific to the healthcare sector?

The majority of the evidence included a mixed group of occupations and did not focus on a single sector. However, elements of effective interventions can be adapted to the unique needs of the healthcare sector. The dissemination plan, developed with stakeholders, took into account existing interests, practices, capacities, and resources of the healthcare sector. Stakeholder input helped identify several initiatives that can be implemented in the healthcare sector, including:

- Strengthening communication among disability management stakeholders by developing resources for supervisors and healthcare providers, and creating standardized modes for communication specific to mental health;
- Creating training and education tools for return-to-work coordinators*, healthcare providers, and supervisors to improve knowledge and expertise and to build confidence when assisting workers with mental health conditions;
- Creating tools and forms specific to healthcare workers with mental health conditions to perform job demands analysis or functional capacities assessment to provide better work accommodations;
- Developing resources for supervisors who are assisting workers with a mental health condition, such as: Information about the available services, points of contact to assist with return to work, and knowledge about potential workplace risk factors and stressors;
- Creating a business case addressing the benefits, for all stakeholders, of disability management initiatives for workers with mental health conditions to provide impetus for top management support for such initiatives, and to ensure their sustainability; and
- Developing internal communication campaigns to raise awareness of mental health conditions in the workplace and to combat stigma and distrust associated with mental health.

## *VI. Future work*

Based on the findings of the *Best Practices for Return-to-work/Stay-at-work Interventions for Workers with Mental Health Conditions*, we identified several areas where more work is required if we are to optimize return-to-work and stay-at-work interventions offered to workers with mental health conditions:

- **Stigma and discrimination:** Although the evidence recommends the implementation of clear and well-communicated organizational workplace mental health policies, participating

stakeholder groups were concerned about the potential of such a policy to increase stigma and discrimination. More work in this area is needed to resolve this dilemma and to identify the optimal way to address stigma and discrimination in the workplace;

- **Organizational policies:** There is a need for more knowledge about the effectiveness of organizational-level interventions, such as those that aim to increase supervisor and co-worker awareness and support;
- **Workplace-focused versus individual-focused interventions:** The majority of currently offered interventions for workers with mental health conditions are clinical interventions which focus on the individual worker, and not on the workplace. More applied study of workplace-based and work-focused interventions is needed. Areas of interest include interventions for workers who are struggling at work, interventions facilitating the worker-supervisor relationship within the return-to-work process, and interventions facilitating optimal work accommodations;
- **Range of outcomes:** Work to date has focused on reducing work absence duration. We know little about other important endpoints, such as stay-at-work, quality of life, and economic costs. We need to know which workplace-based interventions are effective for improvements in these important areas; and
- **Role of union representatives in the process:** Although the importance of union representative involvement is implicit in the majority of the evidence, there is a lack of evidence specifying tasks and stage of union involvement.

The *Best Practices for Return-to-work/Stay-at-work Interventions for Workers with Mental Health Conditions* are unique due to the wide and comprehensive range of documents included in the evidence base. The Best Practices represent a solid reference point in the emerging area of disability management for workers with mental health conditions due to their methodological rigour and to the richness of stakeholder input. The Best Practices were developed in a constant interplay between emerging evidence and stakeholder input. By doing so, we hoped to bridge the gap between research and practice. In creating this document, OHSAH and participating stakeholders hope to provide a solid and contextualized evidence base, and support future development of effective workplace-based return-to-work and stay-at-work interventions for workers with mental health conditions.

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# A. Background

Common mental health conditions in the workforce are not rare. Approximately 8% of Canadian workers struggle with a mental health condition (Dewa, Lesage, Goering, & Caveen, 2004), with a particularly high proportion of these workers in the healthcare sector (Cole et al., 2009). Indeed, approximately one in 7 healthcare workers in British Columbia has a diagnosed mental health condition in a given 12 month period (Cole et al.). Such conditions lead to decreases in work productivity and quality of life, and represent a significant economic strain. Total direct and indirect costs of mental health conditions in Canada, including health-related quality of life loss, are estimated at $52 billion for 2006 (Lim, Jacobs, & Dewa, 2008). Furthermore, mental health conditions severely impact the emotional and financial stability of affected Canadians and their families, exerting a major impact on relationships and overall quality of life.

Despite the importance of addressing the work issues of workers with mental health conditions, return-to-work practices have been predominantly focused on workers with musculoskeletal injuries (Goldner et al., 2004). Only recently has attention been paid to developing workplace-based interventions to facilitate return to work and stay at work for workers with mental health conditions. For affected workers, common mental health conditions have been found to be more strongly associated with performance-related outcomes (such as work limitations or presenteeism) than with work absence (Sanderson & Andrews, 2006). Since performance-related issues often go hand in hand with mental health conditions, acquiring comprehensive data about mental health conditions in the workplace is especially difficult. As a result of this dearth of information and due to the substantial impact of mental health conditions on the healthcare workforce, stakeholders from British Columbia's healthcare sector highlighted the need to develop systematic, evidence-based Best Practices to assist workers with mental health conditions return to work and stay at work.

In response to this need, the OHSAH Disability Prevention Team and participating stakeholders have developed five evidence-based workplace Best Practices to help those workers with mental health conditions return to work and stay at work. These Best Practices are based on a systematic review of the literature, contextualized by input from stakeholders from the British Columbia healthcare sector.

## *A.1. Considerations Underpinning the Best Practices*

The following considerations, identified in the evidence reviewed and in stakeholder input, inform the reading of the Best Practices:

### A.1.1. International evidence versus local context

The evidence that forms the basis for the Best Practices consists of reviews, primary studies (quantitative* and qualitative*), guidelines and reports produced internationally, in settings which differ markedly in their provision of physical and mental healthcare services, employee health

*A glossary including definitions for important concepts and technical terms is included on page 69 of this document. Each term included in the glossary is marked by an asterisk when it first appears in the document.

benefits, reimbursement, supporting resources, disability management* policies, and insurance practices. Such international differences can affect outcomes of specific interventions. The local and social context of the evidence needs to be carefully considered when applying the Best Practices to the healthcare sector in British Columbia.

The Best Practices are intended to help guide future action to support workers with mental health conditions by providing stakeholders with information about the current evidence on the effectiveness of practices for return to work and stay at work for workers with mental health conditions. The content of the Best Practices depends on *available* evidence and future evidence may complement, extend, or overturn current suggestions. For example, many practices that were not considered here may prove to be effective in future work. In this vein, the Best Practices are not intended to be a prescriptive tool, but rather a point of reference for implementation of strategies that can be useful in the local context and given existing priorities, interests and capacities.

### A.1.2. Role of the organizational-level

The principles comprising the Best Practices are organized in three sections: organizational-, disability management practice- and individual-level interventions. For optimal results, organizational-level initiatives, such as the creation of organizational policies, multi-stakeholder committees for issues around workplace mental health, and policies around management support may need to be in place to facilitate the success of initiatives at the disability management practice- and individual-level.

### A.1.3. Structure and flexibility

Return-to-work and stay-at-work initiatives need to reach a balance between structure and flexibility, to ensure the creation of clear, consistent and individualized plans. Stakeholders involved in this process need to reach agreement about the level of structure and flexibility in those initiatives.

### A.1.4. Worker consent

The worker needs to be appropriately informed about issues around consent. Worker consent should be appropriately sought before any information is shared among relevant stakeholders. Consent should be sought for specific information and for specific stakeholders allowed to have access to this information.

## *A.2. Theoretical Framework*

The conceptualization of the Best Practices has been guided by the integrated disability management framework suggested by Loisel and colleagues (2001). This framework was initially developed for the management of musculoskeletal injuries, but has been recently reviewed as being relevant to the management of mental health conditions (Briand et al., 2007). According to this framework, disability is multifactorial and arises from both individual and environmental factors. Individual factors take into account the worker's physical, cognitive and affective characteristics as well as the worker's social network. Environmental factors include the workplace, the healthcare system, the compensation system and the interactions among all relevant stakeholders.

Work disability prevention, according to this framework, should be seen from an integrated perspective rather than a disease treatment perspective. Workplaces, healthcare providers,

compensation systems and other relevant stakeholders should be open to interprofessional communication and focus on facilitating return to work and stay at work.

In contrast with musculoskeletal injuries, to date, in the area of mental health conditions much attention has been devoted to interventions geared towards the individual only. However, the workplace can play a significant role in the recovery of workers with mental health conditions. Return-to-work and stay-at-work practices need to consider a multitude of factors pertaining to both the worker and his/her environment involved in the rehabilitation process. More attention also needs to be paid to specifying the roles of stakeholders, and to which actions have to be taken at which stage in the return-to-work process and under what conditions (Briand et al., 2007). The Best Practices are seeking to provide some more specific information around those issues.

Interventions discussed in the Best Practices are organized around three levels: organizational-, disability management practice- and individual-level interventions. We based our model on concepts from both the integrated disability management framework (Loisel et al., 2001), as well as the intervention framework developed by DeFrank and Cooper (1987) to arrive to this organization.

| | |
|---|---|
| **A. Organizational-level interventions** | These interventions are directed towards the whole organization to improve the physical or psychosocial environment within which the worker functions. The goal is to improve worker outcomes by making positive changes to the organization as a whole. Examples of organizational-level interventions relevant here are changing organizational policies, or creating a people-oriented culture through supportive management practices. |

| | |
|---|---|
| **B. Disability management practice-level interventions** | These interventions are directed towards the practice of disability management and can either aim to improve existing practices or introduce new return-to-work practices. Examples of disability management practices interventions that are relevant here are improving communication among return-to-work stakeholders, or providing information to the worker about the return-to-work process. |

| | |
|---|---|
| **C. Individual-level interventions** | These interventions focus on the individual worker and try to improve worker care, access to care, or help the worker better adapt to his/her environment. Examples of relevant individual-level interventions are cognitive behavioural therapy, occupational therapy, or care management. |

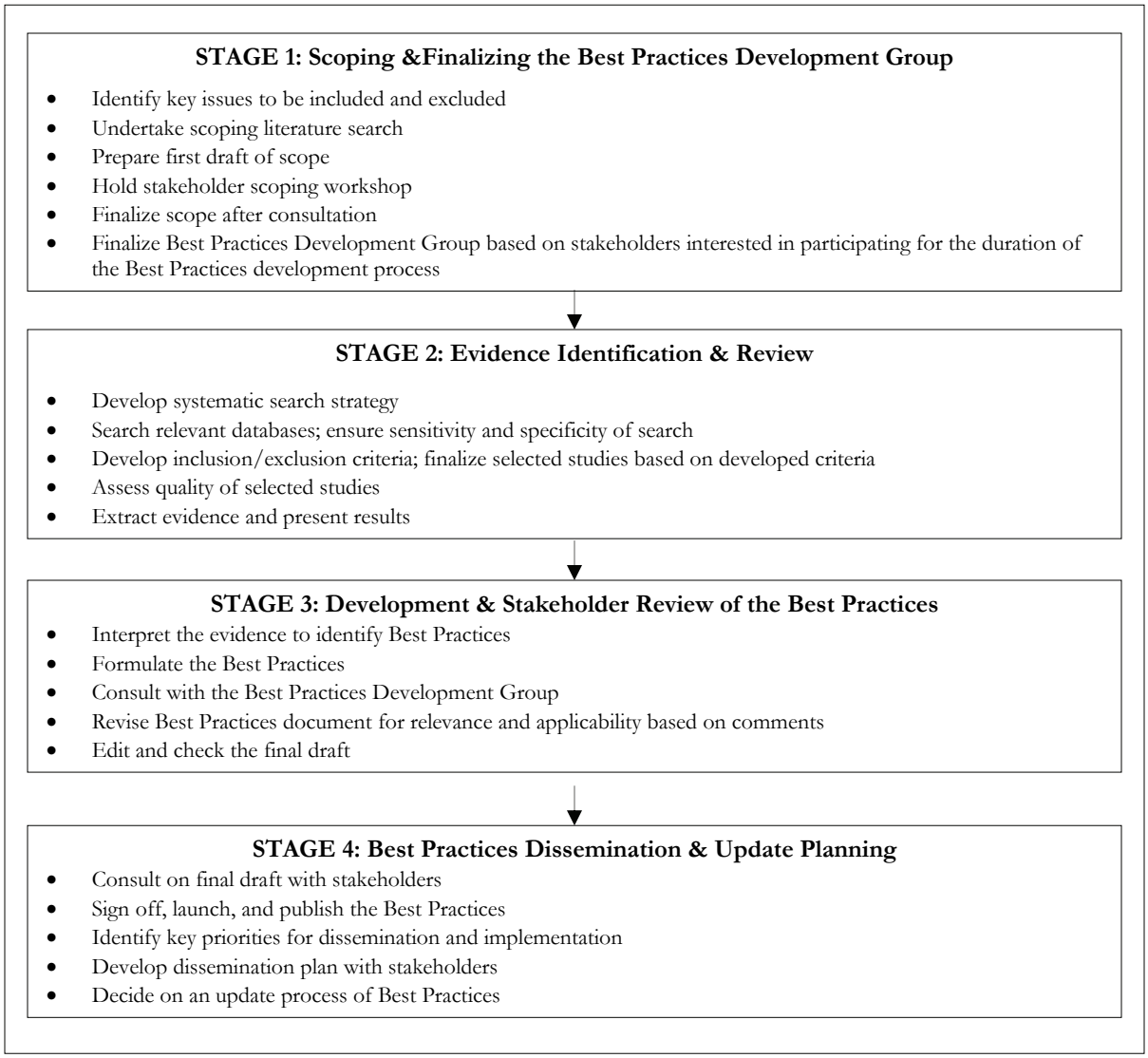
## *A.3. Development Process of the Best Practices*

The development process of the Best Practices is based on an adaptation of the National Institute for Health and Clinical Excellence (NICE) guidelines manual (2009a). The manual provides guidance regarding the technical aspects and process of clinical guideline development. It draws on established international guideline development methodology and on the expertise of the clinical guidelines team in the Centre for Clinical Practice at NICE. It is also based on internationally

acceptable criteria of quality as detailed in the Appraisal of Guidelines Research and Evaluation (AGREE) instrument (2003).

Specifically, the methods and processes used to develop the guidance ensures that the recommendations provided are based on the best available evidence and expert consensus, take into account the views and concerns of those who might be affected by the recommendations, and are advisory rather than compulsory in nature (see Appendix 1 for a summary of the Best Practices development process). The key stages in the development of the Best Practices that are summarized in Figure 1 are an adaptation of the NICE clinical guidelines manual (2009a). The adaptation was necessitated by both the nature of the project as well as available resources.

**Figure 1. Summary of the adapted NICE clinical guideline development process**



## A.4. Objectives

The Best Practices synthesize existing evidence and stakeholder experiences to help create a better understanding of which workplace-based practices may best help workers with mental health conditions who have been absent from work return to work and stay at work. The Best Practices are focusing on three main questions:

1. Are workplace-based interventions effective in improving return-to-work or stay-at-work outcomes for workers with mental health conditions?
2. What are the key elements of effective interventions?
3. Are any interventions specific for the healthcare sector?

The Best Practices have three secondary objectives:

First, to synthesize knowledge from quantitative evidence about which interventions are effective in improving return-to-work and/or stay-at-work outcomes in workers with mental health conditions.

Second, to complement this knowledge with evidence from reviews (narrative and systematic), qualitative studies, established guidelines and reports and to better capture the context in which workplace-based interventions take place.

Third, to take into account the experiences of a wide array of stakeholders from the British Columbia healthcare sector, including unions, employers, worker representatives, and representatives from healthcare providers, involved in managing workers with mental health conditions.

## A.5. Methods and Evidence Base

The Best Practices are evidence-based and have utilized the systematic literature review methodology to identify and assess relevant evidence. In this section, a brief summary of the review methods and of methodological issues is provided. A more detailed description of the review and findings can be found in the accompanying *Methodology and Methodological Findings* document.

We conducted a systematic review to identify, assess and synthesize the evidence (Khan, Kunz, Kleijnen, & Antes, 2003) (Appendix 2 provides a schematic summary of the systematic review process and its findings).

### A.5.1. Literature search

#### A.5.1.1. Search strategy

*Reviews, primary quantitative and qualitative studies:* The literature search for reviews, primary quantitative and qualitative studies included a systematic review of six electronic bibliographic databases (MEDLINE, EMBASE, CINAHL, PsychINFO, Web of Science), a handsearch strategy and contact with electronic mailing lists. The search strategy combined three groups of terms ('worker', 'mental health', 'intervention') using an "AND" strategy. The search included peer-reviewed articles published in English, French, Dutch or German, from January 2004 to November 2009. With regard to primary quantitative studies, we searched for articles published between November 2007

and November 2009, as November 2007 marked the end of the literature search conducted by the most recent relevant published review (van Oostrom et al., 2009).

*Guidelines and reports:* The literature search for guidelines and reports, published between January 1999 and November 2009, followed a systematic, three-phase approach:

- *Phase one:* We searched the online archives of well-known clinical guideline development centers;
- *Phase two:* We conducted a literature search using MEDLINE;
- *Phase three:* We searched the online databases of the organizations and groups that were identified during Phase two.

**A.5.1.2. Study selection**

Study selection was completed in two steps. First, inclusion/exclusion criteria were developed separately for reviews and primary quantitative and qualitative studies (Appendix 3), and for guidelines and reports (Appendix 4). Second, all titles and abstracts were screened for eligibility, based on these criteria.

For reviews and primary studies, the criteria for document inclusion were the following:

- Participants were workers with common mental health conditions;
- The interventions were workplace-based (i.e., strongly facilitated by either the employer or the insurer), and;
- Interventions had to include the following primary outcomes: work absence duration, work limitations or quality of work, worker or provider experiences of the return-to-work process.

For guidelines and reports, the criteria for document inclusion were the following:

- Participants were workers with common mental health conditions;
- The document contained a significant section on work absence duration, or work limitations or quality of work;
- The document was created in collaboration with stakeholders.

Documents were excluded if participants were diagnosed with severe mental illness, or the study was published as a non-peer reviewed book chapter or as a dissertation. Documents were also excluded if interventions were not facilitated by the employer or the insurance company, or did not have a return-to-work focus.

Our search strategy helped us identify more than 2,000 relevant references. One hundred and four documents were retrieved: of those, 36 were deemed eligible based on the described inclusion/exclusion criteria consisting of seven reviews, eight quantitative studies, seven qualitative studies, five guidelines, and nine reports.

### A.5.2. Quality assessment

All 36 documents were assessed for methodological quality by two independent reviewers using established quality assessment instruments (Appraisal of Guidelines Research & Evaluation, 2003; Critical Appraisal Skills Program, 2006; Downs & Black, 1998; Effective Public Health Practice Project, 2008; Greenhalgh, 1997; MacEachen, Clarke, Franche, & Irvin, 2006; Spencer, Ritchie, Lewis, & Dillon, 2003). Twenty nine documents met our quality criteria (seven reviews, eight quantitative studies, six qualitative studies, four guidelines and four reports; see Appendix 5 for the list of references) and were then assigned a relative quality level based on their methodological design and rigour:

- *High quality document:* High quality systematic review, or primary quantitative study with very low risk of bias
- *Medium quality document:* Guideline, high quality narrative review, primary quantitative study with low risk of bias, or high quality primary qualitative study
- *Low quality document:* Low quality narrative review, primary quantitative study with some risk of bias, medium or low quality primary qualitative study, or report

### A.5.3. Characteristics of the documents

The locations of the 29 documents are as follows: Canada (10 documents); The Netherlands (6); USA (4); UK (4); Denmark (2); Norway (1); Sweden (1); WHO (1). Most documents did not focus on a single mental health condition or occupational group. Most quantitative studies focused on work absence duration as outcome with less attention paid to quality of work, clinical symptoms, or economic outcomes. Reviews provided more information on the latter three outcomes; qualitative studies, reports and guidelines did not focus on specific outcomes (for definitions of outcomes, see Appendix 6).

### A.5.4. Data extraction and synthesis

Data extraction for all studies was conducted by two reviewers by creating and completing detailed tables for results, conclusions and methodological aspects of each document. When additional information was needed, we contacted study authors to request necessary information and a copy of the study protocol.

To synthesize the information included in the 29 documents and develop corresponding Best Practices principles, we followed the synthesis method for developing guidelines proposed by Harbour, Miller and the Scottish Intercollegiate Guidelines Network Grading Review Group (2001). According to this method, the evidence supporting each principle is organized in four categories: strong, moderate, conflicting and limited level of evidence. The level of the evidence depends on three factors (see Table 1):

- Consistency in findings across documents
- Methodological quality of each document
- Number of supporting documents

**Table 1. Evidence synthesis**

| Document quality / Evidence level | High quality documents | Medium quality documents | Low quality documents |
|---|---|---|---|
| **Strong evidence** | Two or more with consistent conclusions, with or without additional lower quality documents. | Insufficient. | Insufficient. |
| **Moderate evidence** | Only one, with or without additional lower quality documents. | Two or more with consistent results, with or without additional lower quality documents. | Three or more with consistent results. |
| **Conflicting evidence** | When evidence conflicts, more weight given to stronger documents. | When evidence conflicts, more weight given to stronger documents. | Insufficient. |
| **Limited evidence** | Several, with conflicting results that do not allow for a conclusion. | Several, with conflicting results that do not allow for a conclusion; or<br><br>One or two, only. | One or two, only. |

Based on this process, five principles were developed, and form the framework of the Best Practices (see Appendix 7 for the level of evidence for each Best Practices principle). In the following sections, we introduce the Best Practices principles and elaborate on those principles in our Conclusions.

# B. Best Practices Principles

Our systematic literature review resulted in the development of five Best Practices principles:

| | |
|---|---|
| *Organizational-level interventions* | |
| *Principle 1:* | Clear, detailed, and well-communicated organizational workplace mental health policy supports the return-to-work/stay-at-work process |
| *Disability management practice-level interventions* | |
| *Principle 2:* | Return-to-work coordination and structured, planned, close communication between workers, employers, unions, healthcare providers and other disability management stakeholders are required to optimize return to work and stay at work |
| *Principle 3:* | Application of systematic, structured and coordinated return-to-work practices improves return-to-work outcomes |
| *Principle 4:* | Work accommodations are an integral part of the return-to-work process and the context of their implementation determines their effectiveness |
| *Individual-level interventions* | |
| *Principle 5:* | Facilitating access to evidence-based treatment reduces work absence |

In the following sections, we first discuss the role of return-to-work coordinators*, since their role is closely linked to many of the Best Practices principles. We then present the five Best Practices principles, derived from the evidence synthesis. For each principle, we provide key points that convey core information about the principle and complement this information with practice-oriented actions and strategies. We also discuss finer points around each principle and provide the literature references that support each principle and key point. Finally, we present key information from stakeholder consultations for each principle (boxes with *'Stakeholder Input'*) that highlights how the evidence relates to stakeholder experiences and practices.

## *B.1. Who should take action?*

The principle-related actions and strategies can be undertaken by several key stakeholders involved in the return-to-work and stay-at-work process: Workers, union representatives, employers (return-to-work coordinators, disability managers, occupational health and safety directors, human resources professionals, senior management), or healthcare providers.

In the principles we often refer to a "return-to-work coordinator". The role of the return-to-work coordinator is not associated with a specific discipline and can have different professional designations. Return-to-work coordinators focus primarily on management and coordination of the return-to-work and stay-at-work process.

According to Shaw, Hong, Pransky and Loisel (2008), the return-to-work coordinator's activities can include:

- Assessing workplace factors
- Developing plans for work accommodations*
- Facilitating communication and agreement among stakeholders
- Providing training and instruction to the workplace
- Facilitating access to healthcare providers or treatments

Shaw and colleagues (2008) also outlined some of the core competencies required for the return-to-work coordinator's role:

- Ergonomic and workplace assessment
- Clinical interviewing
- Social problem solving
- Workplace mediation
- Knowledge of business and legal aspects
- Knowledge of medical conditions

The return-to-work coordinator and other key stakeholders, including the absent worker, are responsible for the implementation of all the steps that need to be taken for a successful return-to-work and stay-at-work process. Since their training is not discipline-specific, their role is not directly mentioned when roles of various stakeholders are outlined in the Best Practices principles. The sections below outline key principles that can guide their initiatives.

Principle

**1**

**Clear, detailed, and well-communicated organizational workplace mental health policy supports the return-to-work/stay-at-work process**

## *B.2. Principle 1: Organizational-level interventions*

### B.2.1. Key points

#### B.2.1.1. Moderate evidence:

Clear and well-communicated organizational workplace mental health policy is essential to minimize fragmentation, confusion and inaction regarding the return to work/stay at work of workers with mental health conditions (Bilsker, Gilbert, Myette, & Stewart-Patterson, 2004; Caveen, Dewa, & Goering, 2006; Bergerman, Corabian & Harstall, 2009; Michalak, Yatham, Maxwell, Hale, & Lam, 2007; Mizzoni & Kirsh, 2006; National Institute for Health and Clinical Excellence [NICE], 2009b; Verdonk, de Rijk, Klinge, & de Vries, 2008; World Health Organization [WHO], 2005).

Fostering a people-oriented organizational culture through supportive management can aid in the prevention, early identification, and management of mental health conditions in the workplace (Bilsker et al., 2004; Caveen et al., 2006; Saint-Arnaud, Saint-Jean, & Damasse, 2006; Verdonk et al., 2008).

**STAKEHOLDER INPUT ON PRINCIPLE 1**

**Clear and consistent return-to-work/stay-at-work policy for all conditions is greatly needed and can strengthen the development of flexible, creative, and efficient disability management practice**

*"…the key piece here that is important is around the organization, the policy, getting workers and others involved to know what [mental health conditions are]. Then making sure that there is support, education…so [we need to see] this piece consistently, and then [return to work/stay at work] falls into place" (union representative)*

**Return-to-work stakeholders with direct worker contact need to be involved in the development and communication of policies and mandates**

*"Part of my role is to communicate to the CEO and VPs that keeping people in the workplace is cost-effective. They need to see why this is a good idea, even during an economic downturn. This has to come from the CEO down to the [vice presidents], down to managers so that managers know they have permission to invest in [return to work/stay at work] for their employees" (disability management consultant)*

**Common collective agreements are needed to limit inconsistencies in managing workers with mental health conditions who are absent from work**

*"…need consistent policy – if we're fractured, we've got to have a common policy" (disability manager)*

*"Any policies or procedures that the employer introduces must be consistent with the Provincial Collective Agreement" (union representative)*

Stigma around mental health conditions is a clearly identified barrier to the implementation of effective return-to-work initiatives. Organizational investment in developing and implementing educational programs for staff about workplace mental health can raise the visibility of and reduce

the stigma around mental health conditions, helping supervisors and co-workers in the early identification of workers with mental health conditions and assisting absent workers in returning to work (Bilsker et al., 2004; British Occupational Health Research Foundation [BOHRF], 2005; Caveen et al., 2006; Michalak et al., 2007; Mizzoni & Kirsh, 2006; Saint-Arnaud et al., 2006; WHO, 2005).

#### B.2.1.2. Limited evidence:

Early identification and intervention for depression through increased awareness and skills training at the workplace can reduce the severity, duration, and cost of depression (Bilsker et al., 2004).

### B.2.2. Strategies and actions

Employers and relevant stakeholders should look into creating a more open and supportive organizational structure and climate by developing and implementing a clear and comprehensive workplace mental health strategy together with workers and union representatives. Such policy can consist of the following five stages:

- **Create an organizational health profile:** Establish a coordinating body, such as a steering committee or working group, to build an organizational health profile. This profile should help determine the specific workplace stressors impacting workers' mental health and identify priorities for intervention. An organizational health profile will help in developing a compelling business case showing the link between poor mental health, reduced productivity, and increased costs. This steering committee should include employer, worker and union representatives, supervisors, and ideally, pertinent medical and disability providers.
- **Develop the policy:** A vision statement presenting a general image of the future of mental health in the workplace should be created after comprehensive consultations between members of the steering committee or working group. Once stakeholder agreement has been reached on the vision statement, it is imperative to specify values and principles based on people-centered human resource policies and practices. Achievable organizational objectives should be defined to increase awareness about mental health conditions and provide interventions for affected, work absent workers.
- **Develop strategies to implement the policy:** Organizational needs and available resources will help guide the strategies to be implemented around increasing awareness of mental health issues, supporting workers at risk, facilitating access to appropriate evidence-based interventions for workers with a mental health condition, changing the organization of work, and reintegrating workers with a mental health condition into the workplace.
- **Disseminate and implement the policy:** Support and collaboration between employers, workers, supervisors, and union representatives are key to leading the implementation process. The established policies and mandates must be disseminated and well-communicated throughout the organization, either through regular communiqués, company circulars, brochures, posters, or newsletters. Clear mandates about benefit plans for mental health conditions should be available to workers. Supervisors and workers must be properly trained to understand the issues associated with mental health in the workplace.

- **Develop and implement an evaluation policy:** Ideally, an evaluation should be planned when the policy is being developed in order to assess its effect on workers and on the organization. It can also assist in building an evidence base on effective mental health interventions in the workplace.

### B.2.3. Finer points

No formal evaluation of organizational workplace strategies is available. However, a review of the evidence suggests that the maintenance and success of workplace mental health policies depends on:

- Clear orientation programs for new workers regarding mental health in the workplace
- Regular evaluations of the organizational environment to assess and reassess worker needs in the organization
- Collaborative commitment to target gaps to ensure that organizational needs are met in both financial and human terms

A review of the evidence also suggests that investment in early identification education and skills training, when combined with effective treatment, can positively influence the course of depression in the workplace by:

- Informing workers about how to recognize depressive symptoms and choose self-care or seek help from healthcare professionals in the workplace or in the community;
- Enabling astute supervisors, disability managers and/or occupational health staff to help identify depressive symptoms in less knowledgeable workers who may be experiencing performance issues;
- Facilitating access to appropriate clinical assessment, diagnosis and treatment for those identified as being depressed (Bilsker et al., 2004).

## B.2.4. Supporting evidence

### B.2.4.1. Medium quality

British Occupational Health Research Foundation. (2005). *Workplace interventions for people with common mental health problems: Evidence review and recommendations*. London, UK: British Occupational Health Research Foundation (BOHRF).

Caveen, M., Dewa, C. S., & Goering, P. (2006). The influence of organizational factors on return-to-work outcomes. *Canadian Journal of Community Mental Health*, 25(2), 121-142.

Michalak, E. E., Yatham, L. N., Maxwell, V., Hale, S., & Lam, R. W. (2007). The impact of bipolar disorder upon work functioning: A qualitative analysis. *Bipolar Disorders*, 9(1), 126-143.

Mizzoni, C., & Kirsh, B. (2006). Employer perspectives on supervising individuals with mental health problems. *Canadian Journal of Community Mental Health*, 25(2), 193-206.

National Institute for Health and Clinical Excellence. (2009). *Managing long-term sickness absence and incapacity for work*. London, UK: National Institute for Health and Clinical Excellence (NICE).

Saint-Arnaud, L., Saint-Jean, M., & Damasse, J. (2006). Towards an enhanced understanding of factors involved in the return-to-work process of employees absent due to mental health problems. *Canadian Journal of Community Mental Health*, 25(2), 303-315.

### B.2.4.2. Low quality

Bergerman, L., Corabian, P., & Harstall, C. (2009). *Effectiveness of organizational interventions for the prevention of workplace stress*. Edmonton, AB: Institute of Health Economics (IHE).

Bilsker, D., Gilbert, M., Myette, L., & Stewart-Patterson, C. (2005). *Depression and work function: bridging the gap between mental health care and the workplace*. Vancouver, BC: University of British Columbia: Mental Health Evaluation and Community Consultation Unit. Partnership for Workplace Mental Health.

Verdonk, P., de Rijk, A., Klinge, I., & de Vries, A. (2008). Sickness absence as an interactive process: Gendered experiences of young, highly educated women with mental health problems. *Patient Education and Counseling*, 73(2), 300-306.

World Health Organization. (2005). *Mental health policies and programmes in the workplace (Mental Health Policy and Service Guidance Package)*. Geneva, Switzerland: World Health Organization (WHO).

Principle

**2**

**Return-to-work coordination and structured, planned, close communication between workers, employers, unions, healthcare providers and other disability management stakeholders are required to optimize return to work and stay at work**

## *B.3. Principle 2: Disability Management Practice Interventions*

### B.3.1. Key points

#### B.3.1.1. Strong evidence:

Both return-to-work coordination and negotiation among stakeholders are required to accomplish individualized return-to-work strategies. To be successful, these return-to-work strategies may need to be coordinated by a trained return-to-work coordinator (BOHRF, 2005; Caveen et al., 2006; Corbière & Shen, 2006; NICE, 2009b; van der Klink et al., 2007; Rebergen, Bruinvels, Bezemer, van der Beek, & van Mechelen, 2009; Rebergen, Bruinvels, van Tulder, van der Beek, & van Mechelen, 2009; Steffick, Fortney, Smith, & Pyne, 2006; Verdonk et al.; Wald & Alvaro, 2004).

#### B.3.1.2. Moderate evidence:

In-person or telephone contacts can result in earlier return to work and higher rates of return to work (Dewa, Hoch, Carmen, Guscott, & Anderson, 2009; Rebergen, Bruinvels, Bezemer, et al., 2009) and can also be cost-effective modes of structured and planned close communication between the worker, supervisor, healthcare provider(s), union representative and other

**STAKEHOLDER INPUT ON PRINCIPLE 2**

**Relationship building among all return-to-work/stay-at-work stakeholders is critical, but can also be time-consuming**

*"…In my experience, being in touch with the healthcare practitioners is integral to patient [disability] management…this is very time consuming. The work up-front – building relationships – is really important, however" (return-to-work coordinator)*

**In-person meetings are ideal for building trust and maintaining flexibility in return-to-work/stay-at-work plans, but are not always feasible due to geographical constraints and requirements for written communication about return to work/stay at work**

*"There's no substitute for in-person meetings…to read body language, to establish trust and rapport with the worker, to facilitate consent for release of medical information, and later, to permit communication of information between team members" (disability manager)*

**Workers with a mental health condition who are absent from work need information about available services; unions can be a source of tailored information**

*"The idea is that we work with the unions up front and talk about it on a unit-basis; here's a menu of work that is available, and we, the employer and the union bless this – bless that up front so that we go ahead and make sure that the person is not left to sit out there" (disability manage)*

**Communication with the worker must be maintained to prevent worker isolation, build trusting relationships between the worker, manager, and return-to-work stakeholders**

*"Workers with a mental health issue – they are isolated" (disability manager)*

**Worker consent needs to be appropriate obtained**

*"Any consent forms or method of obtaining worker consent need to be approved by the Bargaining Unit" (union representative)*

return-to-work stakeholders (Dewa et al., 2009; Rebergen, Bruinvels, van Tulder, et al. 2009; Steffick et al., 2006).

Maintaining a connection between the absent worker and the workplace through appropriate communication has a positive influence on the worker's return-to-work experience (BOHRF, 2005; Corbière & Shen, 2006; NICE, 2009b).

Mailing information to workers who are absent from work due to mental health conditions regarding disability management processes (policies, return-to-work options, and other information relevant to the development of an individualized return-to-work strategy) hastens return to work during the first year of follow-up and reduces the likelihood of receiving sickness benefits at subsequent time points (Caveen et al., 2006; Fleten & Johnsen, 2006).

## B.3.2. Strategies and actions

### B.3.2.1. Employer representatives:

- Create an information letter that provides contact information and describes the benefits available, utility of mental healthcare, and the return-to-work process
- Distribute information letter to work absent workers with mental health conditions at the start of the work absence
- Provide coordination of activities among return-to-work stakeholders so that workers feel supported throughout their return to work
- Coordinate in-person or by telephone with and between return-to-work stakeholders, with worker consent
- Encourage healthcare providers to communicate with each other about functional capacities of the worker and potential treatment options, with worker consent

### B.3.2.2. Union representatives and employer representatives

- Ensure worker consent is ethically and appropriately obtained when exchanging information with healthcare providers
- Sustain worker contact with the workplace through appropriate communication that conveys concern, empathy and willingness to help

### B.3.2.3. Mental health professionals, general practice physicians and other care providers:

- Communicate with other care providers and/or return-to-work stakeholders in person or by telephone, with worker consent, in order to prevent fragmentation of care

## B.3.3. Finer points

Disability management commonly involves "silos" of individuals who have a stake in workers' healthcare, administration of disability benefits, and successful return to work. Structured, close communication ensures that independent healthcare providers, the return-to-work coordinator and union representatives establish a connection with each other, have a common goal, maintain their

focus on a return-to-work outcome, and involve the worker in formulating the return-to-work strategy.

Individualized return-to-work strategies/plans are advantageous to reintegration of the worker in the workplace. These plans are most effective when they are developed collaboratively by the return-to-work coordinator, union representative, healthcare providers, and the worker.

## B.3.4. Supporting evidence

### B.3.4.1. High quality


Corbière, M., & Shen, J. (2006). A systematic review of psychological return-to-work interventions for people with mental health problems and/or physical injuries. *Canadian Journal of Community Mental Health*; 25(2), 261-288.

Fleten, N., & Johnsen, R. (2006). Reducing sick leave by minimal postal intervention: a randomised, controlled intervention study. *Occupational and Environmental Medicine*, 63(10), 676-682.

Steffick, D. E., Fortney, J. C., Smith, J. L., & Pyne, J. M. (2006). Worksite disease management programs for depression - Potential employer benefits. *Disease Management & Health Outcomes* 14(1), 13-26.

Rebergen, D. S., Bruinvels, D. J., Bezemer, P. D., van der Beek, A. J., & van Mechelen, W. (2009). Guideline-based care of common mental disorders by occupational physicians (CO-OP study): a randomized controlled trial. *Journal of Occupational & Environmental Medicine*, 51(3), 305-312.

Rebergen, D. S., Bruinvels, D. J., van Tulder, M. W., van der Beek, A. J., & van Mechelen, W. (2009). Cost-effectiveness of guideline-based care for workers with mental health problems. *Journal of Occupational & Environmental Medicine*, 51(3), 313-322.


### B.3.4.2. Medium quality


British Occupational Health Research Foundation. (2005). *Workplace interventions for people with common mental health problems: Evidence review and recommendations*. London, UK: British Occupational Health Research Foundation (BOHRF).

Caveen, M., Dewa, C. S., & Goering, P. (2006). The influence of organizational factors on return-to-work outcomes. *Canadian Journal of Community Mental Health*, 25(2), 121-142.

National Institute for Health and Clinical Excellence. (2009b). *Managing long-term sickness absence and incapacity for work*. London, UK: National Institute for Health and Clinical Excellence (NICE).

van der Klink, J. J. L., Ausems, C. M. M., Beijderwellen, B. D., Blonk, R., Bruinvels, D. J., Dogger J., et al. (eds.). (2007). *Handelen van de bedrijfsarts bij wekenden met psychische problemen* [Guideline for the Management of Mental Health Problems by Occupational Physicians]. Utrecht, NL: NVAB [Netherlands Society of Occupational Medicine].


### B.3.4.3. Low quality


Dewa, C. S., Hoch, JS, Carmen, G., Guscott, R., & Anderson, C. (2009). Cost, effectiveness, and cost-effectiveness of a collaborative mental health care program for people receiving short-term disability benefits for psychiatric disorders. *Canadian Journal of Psychiatry*, 54(6), 379-388.

Verdonk, P., de Rijk, A., Klinge, I., & de Vries, A. (2008). Sickness absence as an interactive process: Gendered experiences of young, highly educated women with mental health problems. *Patient Education and Counseling*, 73(2), 300-306.

Wald, J., & Alvaro, R. (2004) Psychological factors in work-related amputation: considerations for rehabilitation counselors. *Journal of Rehabilitation*, 70(4), 6-15.

Principle

**3**

**Application of systematic, structured and coordinated return-to-work practices improves return-to-work outcomes**

## *B.4. Principle 3: Disability Management Practice Interventions*

### B.4.1. Key points

#### B.4.1.1. Strong evidence:

Adapted implementation of the Netherlands Society of Occupational Medicine [NVAB; see p. 34] (van der Klink et al., 2007) guidelines for occupational physicians who treat workers with mental health conditions can decrease the time to return to work and improve partial and full return-to-work rates (Corbière & Shen, 2006; Rebergen, Bruinvels, Bezemer, et al., 2009; Rebergen, Bruinvels, van Tulder, et al., 2009).

Return-to-work practices that activate the worker and help keep the worker engaged in the return-to-work process are effective in improving partial return-to-work rates and time to return to work (Corbière & Shen, 2006; van der Klink et al., 2007; Rebergen, Bruinvels, Bezemer, et al., 2009; Rebergen, Bruinvels, van Tulder, et al., 2009).

Check-ins at distinct times, to assess the progress in the return-to-work process

**STAKEHOLDER INPUT ON PRINCIPLE 3**

**Continuity of care is a key concern in return to work/stay at work**

*"…need for a lot of collaboration because you know someone that is ill can't be bounced back and forth" (disability manager)*

**Need for clarity around roles and responsibilities of all return-to-work/stay-at-work stakeholders; guidance must be provided to supervisors dealing with workers with mental health conditions**

*"…there should be a process with training managers and HR because those are the key players. They should get that understanding and training first" (healthcare provider)*

**Workplace conflicts can pose significant barriers to effective return-to-work/stay-at-work practices**

*"The big elephant is always those workplace issues… [and it is] creating anxiety for employees" (disability manager)*

**Need for more knowledge and tools related to functional capacity assessments for mental health conditions**

*"The biggest issue is determining cognitive limitations in the work accommodation process" (disability management consultant)*

*"We have tools for mental health conditions but standardized tools that exist tend to have been developed for severe mental health conditions only, the sort of people not typically seen in the workplace….there's no translation of instruments for assessment of individuals with links to functional abilities" (return-to-work coordinator)*

**Return-to-work discussions need not revolve around symptoms or diagnosis, but around functional capacities**

*"What should guide [the communication between return-to-work coordinators and front-line supervisors] is the need to know; the coordinator may well need to know [the diagnosis] but managers don't necessarily need that information" (disability management consultant)*

and the worker's needs, are important return-to-work practices (Corbière & Shen, 2006; Dewa et al., 2009; Grossi & Santell, 2009; Heidel et al., 2007; Lander, Friche, Tornemand, Andersen, & Kirkesokov, 2009; NICE, 2009b; Nieuwenhuijsen et al., 2008; Rebergen, Bruinvels, Bezemer, et al., 2009; Saint-Arnaud et al., 2006; Søgaard & Bech, 2009; van der Klink et al., 2007; van Oostrom et al., 2009; Wang et. al., 2007). Those include:

- Initial intake
- Detailed assessment with potential referral to specialists for further evaluation
- Continuous check-ins during intervention
- Follow-up check-in
- Relapse prevention

Return-to-work practices that are specific, goal-oriented, and notably, maintain a focus on:

- Work function
- Workplace behaviour
- Return-to-work outcomes

can result in improved partial and full return-to-work rates and decreased time to return to work (Corbière & Shen, 2006; NICE, 2009b; van der Klink et al., 2007; Rebergen, Bruinvels, Bezemer, et al., 2009; Rebergen, Bruinvels, van Tulder, et al., 2009; van Oostrom et al., 2009; Verdonk et al., 2008).

#### B.4.1.2. Moderate evidence:

Worker-supervisor collaboration is the basis for return-to-work plans and needs to be supported and based on trust (BOHRF, 2005; Caveen et al., 2006; van der Klink et al., 2007).

#### B.4.1.3. Limited evidence:

United Kingdom National Institute for Health and Clinical Excellence (NICE, 2009b) guidelines for managing long-term sickness absence and incapacity for work (see p. 31) can improve disability management practice and return-to-work outcomes in workers with mental health conditions.

### B.4.2. Strategies and actions

Employer representatives in collaboration with workers, healthcare providers and union representatives:

- Adapt and implement the NVAB and/or NICE guidelines: The NVAB guidelines for occupational physicians treating workers with mental health conditions (van der Klink et al., 2007) and the NICE guidelines for managing long-term sickness absence and incapacity for work (2009b) are based on evidence from a wide array of international sources. Those two guidelines can be used as a framework to develop new or optimize existing return-to-work practices. Their implementation needs to be tailored to the local context.

- Provide training to return-to-work coordinators and supervisors to implement return-to-work practices effectively

- Develop and implement workplace guidelines for clear delineation of responsibilities of general practice physicians, mental health professionals, other healthcare providers, return-to-work coordinator, supervisor, union representative and worker

- Include worker consent in communications and specify stakeholders with access to information
- Ensure that communications with stakeholders maintain a focus on the workplace and on worker's needs and functional capacities
- Facilitate face-to-face meetings between the worker and supervisor or other employer and worker representative to identify, address, and resolve return-to-work barriers
- Enable supervisors to speak with and carefully listen to workers with mental health problems at an early stage
- Encourage supportive co-worker relationships and deal with discrimination
- Monitor return-to-work strategies and progress on a regular basis. For example, the NVAB (van der Klink et al., 2007) guidelines recommend that a standardized questionnaire be used to assess mental health symptoms and help the worker monitor progress. Occupational physicians are also encouraged to provide feedback to workers about their return-to-work progress
- Visit the worksite post return to work to better understand the return-to-work process and to address any workplace barriers if required

### B.4.3. Finer points

- The NVAB (van der Klink et al., 2007) and NICE guidelines (2009b) recommend training and sustained supervision of return-to-work coordinators. The return-to-work coordinators may also require access to and consultation with other professionals, and access to advice concerning employment, health and safety, and discrimination law.
- The NVAB guidelines (van der Klink et al., 2007) recommend that assistance be offered to workers in identifying evidence-based treatments which meet workers' needs and which can improve symptoms and quality of life. Occupational physicians can also monitor whether treatments result in desired outcomes and help workers identify alternative treatments.
- The NICE guidelines (2009b) recommend that return-to-work coordinators arrange for a referral to or encourage the worker to contact relevant and appropriate health specialists, such as a general practice physician with occupational health experience.
- In addition to referral to evidence-based treatment, both the NVAB (van der Klink et al., 2007) and NICE guidelines (2009b) recommend that trained occupational physicians or return-to-work coordinators consider ways to help workers overcome the barriers to returning to work using psychological interventions. Such interventions can help workers develop problem-solving and coping strategies based on evidence-based principles (e.g., solution-focused treatment).
- The NVAB (van der Klink et al., 2007) and NICE guidelines (2009b) as well as other documents in our evidence base (e.g., Dewa et al., 2009; Heidel et al., 2007) recommend regular check-ins that can help assess the return-to-work process and the worker's needs. Those check-ins include: (a) an initial intake phase, involving a discussion around potential barriers and facilitators for return to work, functional issues and potential need for further

assessment; (b) a detailed assessment, if needed, where specialists' advice may be sought; (c) continuous assessment during the intervention phase to help make timely adjustments to return-to-work strategies and address the worker's needs during return to work; (d) follow-up check-in to examine stay-at-work progress and strategies; and (e) relapse prevention to help the worker and the workplace understand potential triggers and develop a plan to prevent those triggers.

- Although both the NVAB (van der Klink et al., 2007) and the NICE (2009b) guidelines outline a return-to-work process, it is noteworthy that the stay-at-work process is detailed only in the NVAB guidelines. Also, the NVAB guidelines are developed from a client-, worker-centred perspective, whereas the NICE guidelines have a system or disability management approach.

### B.4.4. NVAB (Dutch) and NICE (U.K.) guidelines

The following box provides a short summary of the NVAB (Dutch) guidelines for occupational physicians treating workers with mental health conditions (van der Klink et al., 2007) and the NICE (UK) guidelines for managing long-term sickness absence and incapacity for work (2009b) (for a detailed summary of the NVAB guidelines, which are currently available in Dutch only, see Appendix 8). The box also provides an overview of the regular check-in points during the return-to-work process. Although the NVAB guidelines have only been examined as offered by occupational physicians, their adaptation for other types of healthcare providers or for return-to-work coordinators is promising.

| NVAB (Dutch) Guidelines | NICE (U.K.) Guidelines |
|---|---|
| **Developed for:** Trained occupational physicians<br><br>**Timing:** Two weeks into work absence<br>**Effort:** Initial consultation plus 30-minute meeting with worker every 3 weeks, monthly meeting with supervisor | **Who:** Supervisors, human resource personnel, return-to-work coordinators<br>**Timing:** Two-six (max 12) weeks into work absence<br>**Effort:** Not specified |
| **Initial Intake** | |
| ***Understand*** | ***Initial Assessment by Employer*** |
| • Understand whether the worker has a common mental health condition. Do not follow the guideline if: worker objects to discussions about mental health, there is intense emotional reactions, or a physical condition<br>• Discuss symptoms, functional issues, workplace factors, capacity for problem solving in worker and supervisor | • Identify reason for work absence and existing treatment<br>• Discuss worker's barriers to return to work<br>• Decide on options for return to work, by consensus<br>• Determine prognosis and need for detailed assessment<br>• If necessary, appoint return-to-work coordinator |
| **Detailed Assessment** | |
| ***Diagnose*** | ***Detailed Assessment*** |
| • Dimensional and categorical diagnosis: Explore environmental and individual causes of stress and mental health issues<br>• Diagnose (stress-related symptoms vs. depression vs. anxiety vs. other psychiatric disorder) using provided tool. | Any of the following:<br>• Get specialist advice on diagnosis and treatment<br>• Use screening tool for likelihood for return to work<br>• Identify interventions and services<br>• Organize a combined interview and work assessment<br>• Develop a return-to-work plan |
| **Interventions** | |
| ***Intervene*** | ***Interventions and Services*** |
| • Adopt monitoring role of the return-to-work plan (the primary plan is developed by worker and supervisor)<br>• Develop and implement work-focused activating intervention. Contact general practice physician if symptoms persist. Refer worker to specialist treatment if needed. Monitor whether treatment is beneficial to worker with use of mental health tool and facilitate change in treatment choice.<br>• Develop workplace-directed interventions: workplace side of the process, emphasis on functional capacities and potentially, need for management training | • Return-to-work coordinator maintains regular contact with worker; ensures interventions are appropriate and that workers agree with interventions; coordinates and supports implementation of the return-to-work plan; arranges for referral to specialists.<br>• Consider less intense interventions to those likely to return to work<br>• Consider more intensive specialist input when there is recurring long-term work absence |
| **Check-ins and Relapse Prevention** | |
| ***Prevention/Relapse Prevention*** | |
| • Strengthen problem-solving capacity for worker and supervisor to prevent recurring absence<br>• Address workplace structural problems that increase risk of relapse<br>• Guide worker self-identification of factors that increase risk of relapse and remain available for discussions<br>• Recommend employers to address issues that seem to be shared among multiple employers | • Help workers develop problem-solving strategies |
| **Evaluation/Completion** | |
| ***Evaluation/Complete Supervision*** | |
| • Foster sense of shared responsibility for the process by both worker and workplace<br>• Identify timeline for evaluation<br>• Specify elements of evaluation<br>• Determine when monitoring role is complete | |

## B.4.5. Supporting evidence

### B.4.5.1. High quality


Corbière, M., & Shen, J. (2006). A systematic review of psychological return-to-work interventions for people with mental health problems and/or physical injuries. *Canadian Journal of Community Mental Health*; 25(2), 261-288.

Nieuwenhuijsen, K., Bültmann, U., Neumeyer-Gromen, A., Verhoeven, A. C., Verbeek, J. H., & Feltz-Cornelis, C. M. (2008). Interventions to improve occupational health in depressed people. *Cochrane Database of Systematic Reviews*, (2), Art No: CD006237 DOI: 10.1002/14651858.CD006237.pub2.

Rebergen, D. S., Bruinvels, D. J., Bezemer, P. D., van der Beek, A. J., & van Mechelen, W. (2009). Guideline-based care of common mental disorders by occupational physicians (CO-OP study): a randomized controlled trial. *Journal of Occupational & Environmental Medicine*, 51(3), 305-312.

Rebergen, D. S., Bruinvels, D. J., van Tulder, M. W., van der Beek, A. J., & van Mechelen, W. (2009). Cost-effectiveness of guideline-based care for workers with mental health problems. *Journal of Occupational & Environmental Medicine*, 51(3), 313-322.

van Oostrom, S. H., Driessen, M. T., de Vet, H. C., Franche, R.-L., Schonstein, E., Loisel, P., et al. (2009). Workplace interventions for preventing work disability. *Cochrane Database of Systematic Reviews*, (2), Art No: CD006955.

Wang, P. S., Simon, G. E., Avorn, J., Azocar, F., Ludman, E. J., McCulloch, J., et al. (2007). Telephone screening, outreach, and care management for depressed workers and impact on clinical and job performance outcomes: a randomized controlled trial. [see comment] *Journal of the American Medical Association*, 298(12), 1401-1411.


### B.4.5.2. Medium quality


British Occupational Health Research Foundation. (2005). *Workplace interventions for people with common mental health problems: Evidence review and recommendations*. London, UK: British Occupational Health Research Foundation (BOHRF).

National Institute for Health and Clinical Excellence. (2009b). *Managing long-term sickness absence and incapacity for work*. London, UK: National Institute for Health and Clinical Excellence (NICE).

Saint-Arnaud, L., Saint-Jean, M., & Damasse, J. (2006). Towards an enhanced understanding of factors involved in the return-to-work process of employees absent due to mental health problems. *Canadian Journal of Community Mental Health*, 25(2), 303-315.

Søgaard, H. J., & Bech, P. (2009). The effect on length of sickness absence by recognition of undetected psychiatric disorder in long-term sickness absence. A randomized controlled trial. *Scandinavian Journal of Public Health*; 37(8), 864-871.

van der Klink, J. J. L., Ausems, C. M. M., Beijderwellen, B. D., Blonk, R., Bruinvels, D. J., Dogger J., et al. (eds.). (2007). *Handelen van de bedrijfsarts bij wekenden met psychische problemen* [Guideline for the Management of Mental Health Problems by Occupational Physicians]. Utrecht, NL: NVAB [Netherlands Society of Occupational Medicine].


### B.4.5.3. Low quality


Dewa, C. S., Hoch, JS, Carmen, G., Guscott, R., & Anderson, C. (2009). Cost, effectiveness, and cost-effectiveness of a collaborative mental health care program for people receiving short-term disability benefits for psychiatric disorders. *Canadian Journal of Psychiatry*, 54(6), 379-388.

Grossi, G., & Santell, B. (2009). Quasi-experimental evaluation of a stress management programme for female county and municipal employees on long-term sick leave due to work-related psychological complaints. *Journal of Rehabilitation Medicine*, 41(8), 632-638.

Heidel, S., Klachefsky, M., McDowell, D., Muldoon, E., Pendler, P., & Scott, M. (2007). *Assessing and treating psychiatric occupational disability: New behavioral health functional assessment tools*. A report from the partnership for workplace mental health taskforce on disability and return to work. Arlington, VA: American Psychiatric Foundation.

Lander, F., Friche, C., Tornemand, H., Andersen, J. H., & Kirkesokov, L. (2009). Can we enhance the ability to return to work among workers with stress-related disorders? *BioMed Central Public Health,* 9, 372-378.

Verdonk, P., de Rijk, A., Klinge, I., & de Vries, A. (2008). Sickness absence as an interactive process: Gendered experiences of young, highly educated women with mental health problems. *Patient Education and Counseling*, 73(2), 300-306.

Principle

**4**

**Work accommodations are an integral part of the return-to-work process and the context of their implementation determines their effectiveness**

## *B.5. Principle 4: Disability Management Practice Interventions*

### B.5.1 Key points

#### B.5.1.1. Moderate evidence:

Work accommodations as part of the return-to-work process are recommended. However, the specification of appropriate work accommodations and their implementation needs to take into account the circumstances around the worker and the workplace (Krupa, 2007; Mizzoni & Kirsh, 2006; NICE, 2009b; van der Klink et al., 2007; Verdonk et al., 2008).

Although work accommodations can be tremendously beneficial to workers and workplaces, they can also create unforeseen obstacles to the return-to-work process, if unsuitably conceived or implemented. For that reason, moderate evidence supports several considerations around the implementation of work accommodations:

- Work accommodations should include a sensible redistribution or reduction of work demands on the worker and the co-workers (Krupa, 2007; Saint-Arnaud et al., 2006).

**STAKEHOLDER INPUT ON PRINCIPLE 4**

**Work accommodations must be flexible, creative, and individualized**

*"Formal accommodations aren't flexible enough; they assume that people can gradually return, but what if they need to adjust up and down… [great need for a] continuous process, not one-size fits all" (healthcare provider)*

**Performance issues are often the first point of discussion between the supervisor and the worker with mental health conditions**

*"Most often in mental health conditions, the first signs are performance issues" (disability manager)*

*"…at that point, the manager already has a problem with the worker – a bad relationship" (disability manager)*

**Co-workers' and supervisors' perceptions impact the success of worker accommodations; substantial support must be extended to both co-workers and supervisors**

*"…I hear from staff, 'that person has so and so, I need to pick up their work.' We need to educate everyone that there is a problem and we need to get people back to work. Otherwise, we have employees fighting among themselves" (worker representative)*

**Union representatives may play a supportive role in mediating unresolved workplace conflict**

*"What I did is go to the union and say, 'we want to be successful, can we talk to his group together, so it's not just black sheep/white sheep?'" (worker representative)*

- Making transitions to less stressful environments may be beneficial for work absent workers who are unable to change or cope with the fast-paced, high-pressure nature of their working conditions (Mizzoni & Kirsh, 2006; Saint-Arnaud et al., 2006; Verdonk, et al., 2008).
- Senior management support of work accommodations may have a notable impact on return-to-work rates for workers with mental health conditions who are absent from work (Caveen, et al., 2006; Mizzoni & Kirsh, 2006).
- Support by co-workers is essential for the success of work accommodations, but stigma and co-workers' unclear understanding of the worker's strengths and limitations can hinder that success (Krupa, 2007; Michalak et al, 2007; Mizzoni & Kirsh, 2006; Saint-Arnaud et al., 2006).

#### B.5.1.2. Limited evidence:

Evidence is limited to recommend specific details about what a work accommodations plan should entail for workers with mental health conditions who are absent from work. However, the following types of work accommodations have been applied to workers with mental health conditions:

- Decrease in hours of work (Caveen et al., 2006; Saint-Arnaud et al., 2006)
- Lightening of workload (Saint-Arnaud et al., 2006)
- Changing work tasks to reduce the intensity of demands (Mizzoni & Kirsh, 2006)
- For workers with bipolar disorder, changing rotating shifts into fixed shifts (for example, sticking to a day schedule for nurses) may have a positive impact on the worker's ability to cope more effectively in the workplace (Michalak et al., 2007)

### B.5.2. Strategies and actions

Employer representatives in collaboration with workers, healthcare providers and union representatives:

- Enable return-to-work coordinators to coordinate return-to-work plans and work accommodations together with the worker, supervisor, union representative, healthcare provider and other relevant stakeholders based on the worker's functional capacities*, workplace issues and personal concerns
- Develop clear mandates to empower return-to-work coordinators to be flexible with creating different work accommodations or other return-to-work initiatives
- Ensure that the worker's return-to-work date and accommodations are sensible, flexible and safe for the worker
- Empower senior and front-line management to exercise flexibility with work accommodations and to evenly redistribute workload without overburdening departments
- Offer training to supervisors on issues related to mental health conditions in the workplace. Raising awareness about mental health conditions can address issues around stigma about mental health conditions and thus facilitate the work accommodation process
- Support the role of the supervisor, when appropriate, in initiating a work accommodation plan with the worker

- Consider aspects of the worker's work demands which could trigger a set-back in the work accommodation plan and return-to-work process

### B.5.3. Finer points

- **Specific work accommodations:** There is a dearth of evidence around specific work accommodations suitable for workers with mental health conditions. Work accommodations addressing problems with concentration include space enclosures, white noise, natural lighting, uninterrupted work time, working from home, or organizing assignments into smaller tasks (Krupa, 2007). Other work accommodations include trying new training methods, spending more time with the worker on work tasks, implementing many repetitions and reminders, or being understanding of the worker's health status on a daily basis (Mizzoni & Kirsh, 2006). Also, allowing the worker to return to work in a gradual capacity helps ease the anxiety for getting back into the "rat race" (Saint-Arnaud et al., 2006).
- **Supportive and flexible management:** Supportive management that is trained and flexible in synchronizing the workers' return-to-work capacity with their actual work situation and the work situations of co-workers is more likely to positively influence the fears and anxieties of a returning worker. Flexibility in the return-to-work plan and accommodation is critical to ensuring a safe, successful, and sustainable return to work. It is equally important that supervisors be trained to recognize and appreciate when not to accommodate, especially if the worker's overall working conditions are no longer conducive to maintaining their mental health (Caveen et al., 2006; Mizzoni & Kirsh, 2006; Michalak et al., 2007).
- **Disclosure of the mental health condition:** There is conflicting evidence about the benefits of disclosure of the mental health condition to co-workers. Workers vary in their opinions about letting co-workers know about their condition. Co-workers who are aware of the mental health condition can be more supportive than co-workers who are not aware. Overall, it appears that disclosure should remain in the hands of the worker him/herself. Regardless of disclosure, the evidence supports that reducing stigma and silence around mental health conditions can facilitate the success of the return-to-work plan and resulting work accommodations (Michalak et al., 2007; Mizzoni & Kirsh, 2006; Saint-Arnaud et al., 2006).

## B.5.4. Supporting evidence

### B.5.4.1. Medium quality

Caveen, M., Dewa, C. S., & Goering, P. (2006). The influence of organizational factors on return-to-work outcomes. *Canadian Journal of Community Mental Health*, 25(2), 121-142.

Krupa, T. (2007). Interventions to improve employment outcomes for workers who experience mental illness. *Canadian Journal of Psychiatry*, 52(6), 339-345.

National Institute for Health and Clinical Excellence. (2009b). *Managing long-term sickness absence and incapacity for work*. London, UK: National Institute for Health and Clinical Excellence (NICE).

Michalak, E. E., Yatham, L. N., Maxwell, V., Hale, S., & Lam, R. W. (2007). The impact of bipolar disorder upon work functioning: A qualitative analysis. *Bipolar Disorders*, 9(1), 126-143.

Mizzoni, C., & Kirsh, B. (2006). Employer perspectives on supervising individuals with mental health problems. *Canadian Journal of Community Mental Health*, 25(2), 193-206.

Saint-Arnaud, L., Saint-Jean, M., & Damasse, J. (2006). Towards an enhanced understanding of factors involved in the return-to-work process of employees absent due to mental health problems. *Canadian Journal of Community Mental Health*, 25(2), 303-315.

van der Klink, J. J. L., Ausems, C. M. M., Beijderwellen, B. D., Blonk, R., Bruinvels, D. J., Dogger J., et al. (eds.). (2007). *Handelen van de bedrijfsarts bij wekenden met psychische problemen* [Guideline for the Management of Mental Health Problems by Occupational Physicians]. Utrecht, NL: NVAB [Netherlands Society of Occupational Medicine].

### B.5.4.2. Low quality

Verdonk, P., de Rijk, A., Klinge, I., & de Vries, A. (2008). Sickness absence as an interactive process: Gendered experiences of young, highly educated women with mental health problems. *Patient Education and Counseling*, 73(2), 300-306.

Principle

**5**

**Facilitating access to evidence-based treatment reduces work absence**

## *B.6. Principle 5: Individual-level interventions*

### B.6.1. Key points

#### B.6.1.1. Strong evidence:

The delivery by appropriately trained occupational physicians of an activating intervention* (workplace-based and work-focused) based on cognitive behavioural therapy* principles, results in improved partial and full return-to-work rates and decreases time to return to work among workers with common mental health conditions (BOHRF, 2005; Corbière & Shen, 2006; van der Klink et al., 2007; Rebergen, Bruinvels, Bezemer, et al., 2009; Rebergen, Bruinvels, van Tulder, et al., 2009).

**STAKEHOLDER INPUT ON PRINCIPLE 5**

**It is unknown whether training for occupational physicians in offering an activating intervention is transferable to other professionals involved in the management of workers with mental health conditions who are absent from work**

**Symptom improvement may be required before the worker can entertain any return-to-work plans**

*"…one of the most frustrating parts of doing [stay-at-work] for me was when the medical [person] says that the person is fit to be at work – a lot of times, people weren't actually fit to be at work when they were at work…by the time their job is affected, their life is probably in shambles" (union representative)*

**Workers need information about specific, evidence-based, and appropriate treatment; union representatives can be involved in this process**

*"We don't necessarily need one provider, just a roster to select from…unions can appreciate the need for specific providers…" (union representative)*

**Treatment and interventions need to be client-centered**

*"What I'm finding with treatment is that it has to be client-directed, not just prescribed" (healthcare provider)*

Delivery by insurer-based trained mental health professionals of cognitive behavioural therapy-based care (workplace-based and symptom-focused) and care management* improves work absence duration (time to return to work), quality of work outcomes (more hours worked, higher job retention rates), and levels of depressive symptoms (van Oostrom et al., 2009; Wang et al., 2007).

To reduce work absence duration, improve partial return-to-work rates and decrease symptoms, cognitive behavioural therapy-based interventions should be combined with the following work-

focused interventions (Bilsker et al., 2004; NICE, 2009b; van der Klink et al., 2007; Rebergen, Bruinvels, Bezemer, et al., 2009; Rebergen, Bruinvels, van Tulder, et al., 2009; van Oostrom et al., 2009):

- work accommodations and/or
- counselling* about return to work

#### B.6.1.2. Moderate evidence:

There is moderate evidence showing that occupational therapy programs that maintain a strong connection with the workplace (e.g., contacts with return-to-work coordinators and strong return-to-work support) can improve time to return to work, return-to-work rates and mental health symptoms in a cost-effective manner (Krupa, 2006; Nieuwenhuijsen et al., 2008).

#### B.6.1.3. Limited evidence:

For workers with posttraumatic stress disorder (PTSD), early return to work with cognitive behavioural therapy-based graded work exposure* seems to be more effective in improving return-to-work rates and levels of PTSD-related symptoms, than other cognitive behavioural therapy-based treatments (namely imaginal exposure and coping skills training, *in vivo* exposure to accident at the worksite, or worksite visits plus practice of learned coping skills) (Wald & Alvaro, 2004).

There is limited evidence with regards to the effectiveness of stress management* programs in improving either return-to-work rates or mental health symptoms (BOHRF, 2005; Grossi & Santell, 2009).

There is limited evidence to recommend specific counselling treatments with regard to any return-to-work outcomes (Athanasiades, Winthrop, & Gough, 2008; BOHRF, 2005; Krupa, 2007; Wald & Alvaro, 2004). Counselling needs to maintain a primary focus on the workplace (e.g., direct workplace exposure, graduated return to work, supervised reintegration). Structured counselling (identification of work-related problems and solutions) appears to be more effective than less structure counselling (that explores interpersonal relationships) (BOHRF).

### B.6.2. Strategies and actions

#### B.6.2.1. Employer representatives:

- Offer training to return-to-work coordinators to help workers identify and overcome barriers for return to work and stay at work
- Facilitate access to evidence-based treatments, such as cognitive behavioural therapy

#### B.6.2.2. Insurers:

- Engage cognitive behavioural therapy-trained mental health professionals to provide cognitive behavioural therapy and care management

#### B.6.2.3. Healthcare providers:

- Integrate work focus in evidence-based treatment

## B.6.3. Finer points

### B.6.3.1. Focus of cognitive behavioural therapy

- Cognitive behavioural therapy provided by mental health professionals with no connection to the workplace is an evidence-based treatment that improves clinical symptoms but, so far, does not seem to improve work-related outcomes (McPherson, Evans, & Richardson, 2009).
- When cognitive behavioural therapy maintains a strong connection to the workplace and is work-focused, it can reduce work absence duration (Rebergen, Bruinvels, Bezemer, et al., 2009; van der Klink, Blonk, Schene, & van Dijk, 2003, reviewed by Corbière, & Shen). However, there is limited evidence to suggest that workplace-based cognitive behavioural therapy can improve both work absence duration and clinical symptoms and so more work is needed in this area (Blonk, Brenninkmeijer, Lagerveld, & Houtman, 2006, reviewed by van Oostrom et al., 2009).
- There is moderate evidence that workplace-based, work-focused cognitive behavioural therapy may be more beneficial for workers with less severe symptoms in terms of reductions in recurrent work absences (Rebergen et al., 2009).
- Cognitive behavioural therapy that targets clinical symptoms and is combined with care management provided by insurer-based mental health professionals is effective in improving both symptoms and quality of work (hours worked, job retention) in actively employed workers screened for depression (Wang et al., 2007).
- Cognitive behavioural therapy is effective in reducing symptoms for workers with workplace-related posttraumatic stress disorder (Wald & Alvaro, 2004).
- There is moderate evidence that cognitive behavioural therapy is more effective among workers with more control over their work. For workers with lower levels of job control, priority is placed upon increasing their control and then following-up with cognitive behavioural therapy (BOHRF, 2005).

### B.6.3.2. Duration of cognitive behavioural therapy

There do not appear to be any incremental benefits in providing cognitive behavioural therapy for more than 8 weeks (BOHRF, 2005).

### B.6.3.3. Method of delivery of cognitive behavioural therapy

There is moderate evidence that cognitive behavioural therapy can also be offered via a computer software program yielding significant improvements in return to work (BOOHRF, 2005; McDaid, 2007). Care management and cognitive behavioural therapy can be effectively provided over the phone by trained insurer-based mental health professionals in actively employed workers screened for depression (Wang et al., 2007).

### B.6.3.4. Training of providers to deliver cognitive behavioural therapy

Different types of providers in successful workplace-based interventions received training: occupational physicians were trained in a three-day course to provide work-focused, multiple cognitive-behavioural, prescriptive interventions (Rebergen, Bruinvels, Bezemer, et al., 2009; Rebergen, Bruinvels, van Tulder, et al., 2009); care management and cognitive behavioural therapy

can be effectively provided over the phone by trained insurer-based mental health professionals received training in care management and cognitive behavioural therapy for depression (Wang et al., 2007).

## B.6.4. Supporting evidence

### B.6.4.1. High quality


Corbière, M., & Shen, J. (2006). A systematic review of psychological return-to-work interventions for people with mental health problems and/or physical injuries. *Canadian Journal of Community Mental Health*; 25(2), 261-288.

Nieuwenhuijsen, K., Bültmann, U., Neumeyer-Gromen, A., Verhoeven, A. C., Verbeek, J. H., & Feltz-Cornelis, C. M. (2008). Interventions to improve occupational health in depressed people. *Cochrane Database of Systematic Reviews*, (2), Art No: CD006237 DOI: 10.1002/14651858.CD006237.pub2.

Rebergen, D. S., Bruinvels, D. J., Bezemer, P. D., van der Beek, A. J., & van Mechelen, W. (2009). Guideline-based care of common mental disorders by occupational physicians (CO-OP study): a randomized controlled trial. *Journal of Occupational & Environmental Medicine*, 51(3), 305-312.

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van Oostrom, S. H., Driessen, M. T., de Vet, H. C., Franche, R.-L., Schonstein, E., Loisel, P., et al. (2009). Workplace interventions for preventing work disability. *Cochrane Database of Systematic Reviews*, (2), Art No: CD006955.

Wang, P. S., Simon, G. E., Avorn, J., Azocar, F., Ludman, E. J., McCulloch, J., et al. (2007). Telephone screening, outreach, and care management for depressed workers and impact on clinical and job performance outcomes: a randomized controlled trial. [see comment] *Journal of the American Medical Association*, 298(12), 1401-1411.


### B.6.4.2. Medium quality


Athanasiades, C., Winthrop, A., & Gough, B. (2008). Factors affecting self-referral to counselling services in the workplace: A qualitative study. *British Journal of Guidance & Counselling*, 36(3), 257-276.

British Occupational Health Research Foundation. (2005). *Workplace interventions for people with common mental health problems: Evidence review and recommendations*. London, UK: British Occupational Health Research Foundation (BOHRF).

Krupa, T. (2007). Interventions to improve employment outcomes for workers who experience mental illness. *Canadian Journal of Psychiatry*, 52(6), 339-345.

National Institute for Health and Clinical Excellence. (2009b). *Managing long-term sickness absence and incapacity for work*. London, UK: National Institute for Health and Clinical Excellence (NICE).

van der Klink, J. J. L., Ausems, C. M. M., Beijderwellen, B. D., Blonk, R., Bruinvels, D. J., Dogger J., et al. (eds.). (2007). *Handelen van de bedrijfsarts bij wekenden met psychische problemen* [Guideline for the Management of Mental Health Problems by Occupational Physicians]. Utrecht, NL: NVAB [Netherlands Society of Occupational Medicine].


### B.6.4.3 Low quality


Bilsker, D., Gilbert, M., Myette, L., & Stewart-Patterson, C. (2005). *Depression and work function: bridging the gap between mental health care and the workplace*. Vancouver, BC: University of British Columbia: Mental Health Evaluation and Community Consultation Unit. Partnership for Workplace Mental Health.

Grossi, G., & Santell, B. (2009). Quasi-experimental evaluation of a stress management programme for female county and municipal employees on long-term sick leave due to work-related psychological complaints. *Journal of Rehabilitation Medicine*, 41(8), 632-638.

McDaid, D. (2007). The economics of mental health in the workplace: What do we know and where do we go? *Epidemiologia e Psichiatria Sociale*, 16(4), 294-298.

Wald, J., & Alvaro, R. (2004) Psychological factors in work-related amputation: considerations for rehabilitation counselors. *Journal of Rehabilitation*, 70(4), 6-15.

# C. Main Conclusions

The Best Practices systematically reviewed evidence to answer three main questions:

1. Are workplace-based interventions effective in improving return-to-work or stay-at-work outcomes for workers with mental health conditions?
2. What are key elements of effective interventions?
3. Are any interventions specific to the healthcare sector?

The Best Practices also aimed to:

- Synthesize knowledge from quantitative evidence about which interventions have been found to be effective in improving return-to-work and/or stay-at-work outcomes in workers with mental health conditions
- Complement this knowledge with evidence from reviews (narrative and systematic), qualitative studies, and established guidelines and reports, to better capture the context in which workplace-based interventions take place
- Take into account the experiences of a wide array of stakeholders involved in the disability management of workers with mental health conditions. Those stakeholders also include consumers of disability management practices and their representatives

We found that workplace-based interventions are effective in improving work absence duration, quality of work and stay-at-work, quality of life and economic outcomes. Elements of interventions that were found to be effective include among others:

| | |
|---|---|
| **Organizational-level interventions** | • Organizational policy for workplace mental health<br>• Supportive management<br>• Educational initiatives to combat stigma around workplace mental health conditions<br>• Early identification of mental health conditions through increased awareness and skills training |
| **Disability management practice-level interventions** | • Return-to-work coordination<br>• Strategies to keep the worker activated and engaged<br>• In-person or telephone contacts among return-to-work stakeholders<br>• Focus on work function, workplace behaviour and return to work<br>• Regular check-ins to assess and monitor progress<br>• Supported worker-supervisor relationship<br>• Well-planned work accommodations that take into account co-workers and supervisors |
| **Individual-level interventions** | • Workplace-based and work-focused interventions offered by trained occupational physicians<br>• Insurer-based care management and cognitive behavioural therapy by mental health professionals |

The following Discussion section first summarizes answers to the three main research questions. While the Best Practices principles are exclusively derived from the synthesis of evidence and from stakeholder input, the following section relates our findings to a broader literature base and extends

the discussion to consideration of strengths and limitations of the Best Practices process, as well as consideration of directions for future work.

# D. Discussion

## *D.1. Question 1: Are workplace-based interventions effective in improving return-to-work or stay-at-work outcomes for workers with mental health conditions?*

The evidence provides support for the effectiveness of workplace-based interventions in improving return-to-work outcomes in workers with common mental health conditions. The evidence support is strongest for the outcome of work absence duration in particular. It also supports the potential of workplace-based interventions in improving quality of work in workers who stay at work, quality of life and economic outcomes. The following section summarizes the benefits of workplace-based interventions and describes the most effective elements of these interventions at the organizational-, disability management practice-, and individual-levels.

### D.1.1. Workplace-based interventions reduce duration of work absence

The majority of the documents recommended the implementation of workplace-based interventions as a strategy to improve work absence duration in workers with mental health conditions.

- In the Canadian context, an intervention involving workplace-based collaborative mental health care (using standardized tools for psychiatrists and improved communication between the psychiatrist and the general practice physician) helped workers return to work, on average, 16 days sooner when compared to usual care. This intervention also reduced the number of workers who transitioned to long-term disability over the year by over three-quarters (Dewa et al., 2009);
- Workers who received guideline-based case management from occupational physicians were 30% more likely to partially return to work (Rebergen, Bruinvels, Bezemer, et al., 2009; Rebergen, Bruinvels, van Tulder, et al., 2009). In this intervention, workers with less severe symptoms appear to derive the most benefit in terms of impact on work absence duration, when compared to workers with more severe symptoms (Rebergen, Bruinvels, Bezemer, et al., 2009);
- Even minimal workplace-based interventions can be highly effective in reducing duration of work absence. For example, Fleten and Johnsen (2006) found that mailing information packages to workers on short-term disability made workers 80% less likely to receive disability benefits after 1 year, and resulted in an average 8.3 days of shorter work absence.

### D.1.2. Workplace-based interventions improve quality of work

Workplace-based interventions are essential for improving work functioning and other quality of work outcomes in workers with mental health conditions who stay at work.

- An intervention among actively employed workers screened for depression, that involved structured telephone-based care management provided by insurer-based trained mental health professionals and in-person or telephone-based cognitive behavioural therapy resulted in a 3.5-hour per week increase in effective hours worked and in a 70% increased likelihood for being employed one year later (Wang et al., 2007);
- Workers feel that their work quality benefits from having the flexibility to remove themselves from the workplace if symptomatic, or if they can reduce their workload, change their work

activities or schedules, or have emotional or practical support from the workplace (Michalak et al., 2007).

### D.1.3. Workplace-based interventions improve quality of life

Workplace-based interventions are effective ways to reduce symptoms among workers with mental health conditions, (Bergerman et al., 2009; Bilsker et al., 2004; Grossi & Santell, 2009; Steffick et al., 2006; Wang et al., 2007), or help workers manage their symptoms (Krupa, 2007; Michalak et al., 2007; Wald & Alvaro, 2004).

- Nearly 50% more workers who received the insurer- and telephone-based care management discussed above were clinically recovered after 12 months, and of those workers who were not recovered, over 40% more of the workers receiving the intervention experienced substantial symptom improvement after 12 months than among those receiving usual care (Wang et al., 2007).

### D.1.4. Workplace-based interventions reduce costs

Workplace-based interventions can be cost-effective ways to improve work absence duration, quality of work, and quality of life among workers with mental health conditions.

- In the Canadian context, the collaborative mental health care intervention assessed by Dewa et al. (2009) cost the employer $503 less per worker compared to usual care. These are significant costs savings: For every 100 workers on short-term disability due to a mental health condition, the employer would save $50,000 over a year with this collaborative mental health care program;
- The guideline-based case management by occupational physicians reduced overall healthcare costs by 520€, approximately $730 per worker over a one year period (Rebergen, Bruinvels, Bezemer, et al., 2009; Rebergen, Bruinvels, van Tulder, et al., 2009).

## *D.2. Question 2: What are key elements of effective interventions?*

The majority of the interventions described in the 29 documents focused on making existing practices more effective, more efficient and less fragmented by strengthening communication, and specifying roles or facilitating return-to-work coordination.

We classified the interventions identified in the retained evidence in three categories: Organizational-level interventions, disability management practice-level interventions, and individual-level interventions. The following section describes our conclusions with respect to each intervention level, and discusses the role of unions in providing workplace-based interventions. We conclude this section with a discussion about the similarities and differences between effective elements in workplace-based interventions for mental health conditions *versus* musculoskeletal disorders.

### D.2.1. Organizational-level interventions

Support for organizational-level interventions as a strategy to improve return-to-work or stay-at-work outcomes came primarily from qualitative studies, guidelines, and reports. These documents offer valuable suggestions about how to create and leverage organizational policies and strategies on workplace mental health. Unfortunately, the documents do not provide direct tests of their recommendations and so it is unclear whether the implementation of those strategies can

confidently result in the desired outcomes. Consequently, it is difficult to speak about *effective* elements of organizational-level interventions; rather the documents make several recommendations that can be seen as valuable areas of work to consider.

#### D.2.1.1. Promotion of workplace mental health

Overall, promoting workplace mental health at the primary prevention level is mentioned in documents and in stakeholder input as a foundational element for workplace-based initiatives aimed at improving return-to-work and stay-at-work outcomes for workers with mental health conditions. There are several ways in which organizations can work towards promoting workplace mental health:

1. **People-oriented culture*:** A people-oriented culture, whereby teamwork and individual contributions are acknowledged and where individual aspirations match organizational needs, is important for promoting positive work and work integration process and outcomes. Here, progressive human resource policies and work practices that promote reasonable work hours, healthy and safe behaviour, work-life balance, and support for employees in distress are particularly important (Bilsker et al., 2004; Caveen et al., 2006; WHO, 2005);

2. **Recognition of mental health needs:** Organizational initiatives must recognize that all employees have mental health needs, and identify and address the factors that impact employee mental health and well-being in the workplace. Policies should also raise awareness of what employees can do to pay attention to their own and others' well-being. In this manner, supportive organizational practices can break the silence surrounding mental health conditions, reduce stigma and discrimination, and facilitate access to appropriate services;

3. **Raising awareness of mental health conditions:** Organization-wide initiatives, such as educational and training programs to increase awareness and knowledge about mental health conditions, can be wide-ranging and cost-effective ways to prevent mental health-related episodes at work and improve upon the success of return-to-work plans.

4. **Workplace mental health policies:** The evidence supports creation and implementation of clear workplace mental health policies and procedures (Bilsker et al., 2004; Caveen et al., 2006, WHO, 2005). A coordinating body, such as a steering committee, can be established to guide the creation of such a policy by first analyzing the prevalent mental issues in an organization and then creating an organizational health profile. Strategies to support employees at risk or those experiencing mental health conditions can be put into effect with clarity, and with collective coordination and collaboration among disability management stakeholders. A clearly formulated workplace mental health policy can be used to promote return-to-work communication and collaboration when there is need for greater clarity during discussions. However, based on stakeholder feedback, there are pertinent issues to bear in mind about creating a specific workplace mental health policy, including the possibility of further stigmatizing workers with mental health conditions. Support options must, therefore, be confidential and non-stigmatizing, and employment practices should reflect consistent return-to-work and stay-at-work policies and procedures to effectively support the worker.

### Stigma around mental health conditions at the workplace

Stakeholder input as well as qualitative studies (Michalak et al., 2007) emphasized the immense consequences of stigma and silence around mental health conditions for the worker, the worker's family and the workplace. For example, stakeholders have discussed how stigma can hinder co-workers and supervisors from providing support to the returning worker. Stigma can also prevent a worker with a mental health condition from seeking treatment or support from the workplace.

#### D.2.1.2. Training for supervisors, and healthcare providers on workplace mental health

The importance of supervisors in the return-to-work process was consistently highlighted throughout the documents (Bilsker et al., 2004; Caveen et al., 2006; Mizzoni & Kirsh, 2006; Saint-Arnaud et al., 2006; WHO, 2005). Senior management commitment and active involvement are key to implementing workplace mental health policy. Mental health education and training should reflect the size, complexity, level of risk, and available organizational resources. Organizational investment in mental health education for supervisors, through conferences and seminars, can improve awareness of the occupational implications of mental health conditions while presenting supervisors with opportunities for identifying and facilitating early intervention for mental health conditions.

Occupational implications of mental health conditions are usually not emphasized in the academic curricula for healthcare providers, indicating a strong need for curricula revisions in order to increase awareness and knowledge of the role of the workplace in the functioning and recovery of individuals with mental health conditions. Also, occupational health workshops may help outline effective communication strategies for healthcare providers so that they can preserve clinical confidentiality while providing functional capacities information to a returning worker (Bilsker et al., 2004).

#### D.2.1.3. Early identification strategies for workers with mental health conditions

Organization investment in early identification and intervention for depression, through skills training and educational programs, can help supervisors and co-workers detect behavioural changes and symptoms in workers before their depression becomes unmanageable. Such training can also assist workers to recognize depressive symptoms in themselves and either administer recommended self-care strategies or seek help from the workplace or community healthcare providers (Bilsker et al., 2004).

## Main points about organizational-level interventions:

1. Creating a people-oriented culture is important for promoting positive work and work integration process and outcomes;

2. Recognition of workers' mental health needs should be part of organizational initiatives;

3. Raising awareness of mental health conditions can be achieved through educational programs;

4. Developing a workplace mental health policy with the help of a bipartite steering committee can support workers with mental health conditions;

5. Training for supervisors, and healthcare providers on workplace mental health can support the implementation of workplace mental health policies and improve awareness of the occupational implications of mental health conditions;

6. Investment in early identification through appropriate skills and awareness training and prompt interventions can reduce the severity, duration and cost of depressive illness.

### D.2.2. Disability management practice-level interventions

Support for the effectiveness of disability management practice interventions came from multiple documents: Reviews, quantitative and qualitative studies, and guidelines. Below we discuss intervention elements that were found to be effective.

#### D.2.2.1. Return-to-work coordination

Overall, the evidence identified in our review highlights the importance of return-to-work coordination in the disability management process (e.g., Rebergen, Bruinvels, Bezemer, et al., 2009; Rebergen, Bruinvels, van Tulder, et al., 2009; NICE, 2009b; van der Klink et al., 2007). Return-to-work coordination is needed to connect critical information from a variety of workplace and non workplace-based stakeholders and to help them communicate effectively with each other. Return-to-work coordination also ensures that information is not fragmented when presented to the worker and also helps to guide the worker through the return-to-work process.

##### D.2.2.1.1.Conditions underpinning return-to-work coordination

Although return-to-work coordination is widely recommended, its success depends on several factors. For example, return-to-work coordinators need to be appropriately trained and have the necessary skills to perform their activities. Shaw et al. (2008) have described six competencies for effective return-to-work coordination: ergonomic and workplace assessment, clinical interviewing, social problem solving, workplace mediation, knowledge of business and legal aspects, and knowledge of medical conditions. Stakeholder input has emphasized strong communication skills and ability to empathize as two interpersonal area competencies necessary in a return-to-work coordinator. Furthermore, organizational policies and procedures must leave room for flexibility and

creativity in developing individualized return-to-work plans and work accommodations that are appropriate for the worker.

Stakeholder discussions highlighted the importance and challenges of insurer-healthcare provider communication. The effectiveness of a program addressing this issue was tested in the Canadian study by Dewa and colleagues (2009). In this study, the insurer-based psychiatrist performing a functional and psychiatric assessment of the worker contacted the workers' general practice physician over the phone to exchange information about diagnosis, prognosis and treatment plans. This study showed that, despite demands on time and the difficulty of reaching general practice physicians, the strategy was both effective at reducing work absence duration and cost-effective. This program was based on the principles of a collaborative mental health care model, whereby primary and secondary healthcare providers work together to provide care, and where the workplace is also always part of the intervention discussion. This model can "improve the quality of mental health care by extending the availability of specialty mental health resources in primary care settings, enhancing communication and promoting continuity and follow-up care" (Dewa et al., p. 380).

#### D.2.2.1.2. Confidentiality and disclosure

Qualitative studies and stakeholder consultations emphasized the challenge of maintaining confidentiality in coordinating activities and communicating confidential information among stakeholders. The need for confidentiality can limit the quality and extent of information that can be shared in creating return-to-work plans; however, a focus on work-related functional capacities *versus* diagnosis can ensure that valuable information is exchanged between the return-to-work coordinator, worker, supervisor, healthcare provider and union representative without necessarily resulting in harm to the worker. Nevertheless, the challenge of maintaining worker privacy and confidentiality while attempting to coordinate with a variety of stakeholders cannot be underestimated; tested and clear organizational policies and procedures could provide some help in this direction.

### Dilemmas of disclosure: Balancing confidentiality and silence-related stigma

Workers with mental health conditions are vulnerable; understanding worker sensitivity and maintaining worker trust are crucial aspects of successful return to work and stay at work. Protecting worker privacy and confidentiality is, therefore, of highest importance. However, non-disclosure of mental health conditions may increase silence and contribute to stigma around mental health conditions in the workplace. Assisting workers with mental health conditions is therefore complex and several challenges exist.

The return-to-work process, when involving multiple stakeholders and rigid strategies, can be overwhelming for workers with mental health conditions. It can also lead to a sense of distrust and reluctance to disclose private health-related information. The issue of disclosure needs to be approached with clarity, so that workers understand what information is needed by each stakeholder during the return-to-work process, and how this information will be useful in helping the worker return to or stay at work. For example, supervisors typically do not need to know the worker's diagnosis, but do need information on functional capacities and work limitations. While information on limitations and capacities is useful to ensure appropriate work accommodations, disclosure of the diagnosis to the supervisor or other party could result in inadvertent leaking of this sensitive information to co-workers or other parties and should be considered carefully.

Co-workers or supervisors who are aware of a worker's mental health condition can be a valuable support system; however, this will likely depend on the worker's relationships with these individuals prior to disclosure. In cases where there is pre-existing distrust or conflict in the workplace, disclosure may not be in the worker's best interests. Disclosure of a mental health condition to co-workers or supervisors can leave the worker vulnerable to stigma, isolation, or work restrictions. It is thus imperative to leave the decision around disclosure to the worker's judgment of the potential benefits or challenges of such an action.

For more information on the key legal principles around disclosure and worker consent, please see the following:

Canadian Human Rights Commission. (2007). *A guide for managing the return to work.* Ottawa: Canadian Human Rights Commissions. Retrieved from http://www.chrc-ccdp.ca/publications/gmrw_ggrt/toc_tdm-en.asp

Chartier, M.-C. (2006). *Human rights and the return to work: The state of the issue.* Ottawa: Canadian Human Rights Commission. Retrieved from http://www.chrc-ccdp.ca/research_program_recherche/rtw_rat/toc_tdm-en.asp

Canadian Human Rights Act, R.S.C. 1985, c. H-6. (2010).Retrieved from http://laws.justice.gc.ca/en/H-6/FullText.html

### D.2.2.2. Keeping the worker activated

Multiple documents emphasized the importance of keeping the worker engaged throughout the return-to-work process (Corbière & Shen, 2006; Rebergen, Bruinsvel, Bezemer, et al., 2009; van der Klink et al., 2007). More specifically, the NVAB guidelines (van der Klink et al., 2007) recommend that occupational physicians who provide return-to-work coordination ensure that the worker plays a leading role in identifying both barriers and solutions for return-to-work. The occupational physician plays a facilitating and monitoring role in the return-to-work process; the worker and the supervisor have direct knowledge of what is needed to create a successful return-to-work and work accommodations plan.

### D.2.2.3. Fostering the worker-supervisor relationship

The worker-supervisor relationship is viewed as the deciding factor in the success of work accommodations and return-to-work plans (BOHRF, 2005; Caveen et al., 2006; van der Klink et al., 2007). Although this relationship can be very constructive and conducive to the development of flexible, individualised and creative return-to-work plans, it can also be a significant roadblock in this process if distrust exists. Despite substantial information in the documents to support the significance of this relationship and the actions that need to be taken to facilitate it, a more direct test of an intervention that facilitates this relationship is lacking. An example of a promising intervention that targets the worker-supervisor collaboration is described in the box below.

**Facilitating worker-supervisor relationship: A feasibility study (van Oostrom et al., 2008)**

A return-to-work coordinator collaborates with the occupational physician and facilitates the development of a return-to-work plan and work accommodations by directly intervening in the worker-supervisor relationship. More specifically, the return-to-work coordinator arranges three separate meetings:

**Meeting #1:** The worker performs a task analysis and identifies obstacles for return to work in a structured conversation with the return-to-work coordinator. These obstacles are ranked according to priority, based on their frequency and perceived severity;

**Meeting #2:** The return-to-work coordinator meets with the supervisor to help him/her identify potential return-to-work barriers;

**Meeting #3:** The worker, the supervisor and the return-to-work coordinator meet together to brainstorm about solutions and to create a plan of action;

Although this intervention was generally found to be feasible and well-received by the relevant parties, there are no results with regard to effectiveness (the study results are forthcoming).

Another potentially promising intervention involves applying conflict resolution strategies (Deutsch, 1994) in cases where the worker-supervisor relationship is not optimal. It would be of interest to train relevant parties (the return-to-work coordinator, the worker, the supervisor or other stakeholders) in conflict resolution and examine the effectiveness of this intervention in terms of return-to-work plan facilitation, relationship quality and work absence duration.

#### D.2.2.4. Check-ins to help assess progress in the return-to-work process and the worker's needs

The NVAB (Dutch) (van der Klink et al., 2007) and the NICE (U.K.) (2009b) guidelines provide recommendations about the flow and type of activities that make up the return-to-work practices for workers with mental health conditions (see page 34 for a comparison of these guidelines and Appendix 8 for more details on the NVAB guidelines). According to those two guidelines, the return-to-work practices consist of the following check-ins:

1. **Initial intake**
2. **Detailed assessment**
3. **Continuous check-ins during intervention**
4. **Follow-up check-in**
5. **Relapse prevention**

The majority of the information that we have discussed in the Best Practices has focused on interventions and their effectiveness in improving return-to-work outcomes. However, in many documents of our evidence base, such as reports (Heidel et al., 2007), reviews (Nieuwenhuijsen et al., 2008; van Oostrom et al., 2009), quantitative (Dewa et al., 2009; Grossi & Santell, 2009; Rebergen, Bruinvels, Bezemer et al., 2009) or qualitative studies (Saint-Arnaud et al., 2006) the importance of regular check-ins throughout the return-to-work process is emphasized. Check-ins can assist with the assessment of progress towards return to work, help fine-tune return-to-work

strategies and address worker needs, and offer opportunities for adjusting strategies during stay at work. Below we summarize some of the initiatives that can take place in each of the check-in phases. While the NVAB guidelines have been developed for occupational physicians as the providers, it is important to note that these guidelines could be adapted to other professionals acting as return-to-work coordinators.

| Check-ins | Description |
|---|---|
| **Initial intake** | An initial contact with the worker is made. The person conducting the intake can have a range of disciplinary background, e.g. an occupational physician, a nurse, a human resource specialist, or the person's supervisor, depending on the resources of the organization and the circumstances around the work absence. During the initial intake, occurring before 6 weeks after work absence began, a first discussion takes place with the worker around the potential reasons for the work absence, barriers and options for return to work, functioning issues, presence of treatment options and need for further assessment. |
| **Detailed assessment** | Detailed assessment can include an interview and work assessment, use of a screening tool to assess the likelihood of a return to work, referral to a specialist for further assessment/diagnosis. This detailed assessment is offered when its need is identified during the initial intake, or in the presence of another sign that more information is needed, e.g. when a workers remains off work beyond the expected point of recovery. Ultimately, the assessment leads to a more informed return-to-work plan, in which need for specific interventions and services is included. The worker's environmental and individual needs and circumstances need to be taken into account in the development of any return-to-work plan. The worker needs to remain engaged and activated in this phase; for this, the worker's needs have to be addressed. |
| **Continuous check-ins during intervention** | The occupational physician or return-to-work coordinator can monitor the implementation of return-to-work interventions in a continuous fashion. These check-ins can include the identification and discussion of where the process has stagnated, as well as regular standardized test to monitor symptom improvement. The worker and the occupational physician or return-to-work coordinator together discuss the results of those tests, the trends in symptoms over time, which can foster a sense of self-efficacy and draw attention where additional interventions are needed. |
| **Follow-up check-ins** | Follow-up check-ins take place when the worker has returned to work. The return-to-work coordinator needs to be available for any follow-up consultations the worker needs to have after return to work. The purpose of this phase is to help make adjustments and facilitate stay at work. |
| **Relapse prevention** | The return-to-work coordinator needs to plan relapse prevention into the process from the very beginning of the return-to-work process, that is during the initial intake. In other words, the return-to-work coordinator ensures that the worker's problem-solving capacities are addressed at every step of the way in the return-to-work process. The |

| | |
|---|---|
| | return-to-work coordinator works together with the supervisor or other workplace stakeholders on their own problem-solving capacities. An important point is that workplace issues need to be resolved during the return-to-work process to help prevent relapse. The return-to-work coordinator also discusses with the worker issues around initial signs and symptoms that can point to a potential relapse, how to identify them, and the conditions that need to be in place for the worker to return to work and stay at work. Finally, if more structural and organizational problems need to be resolved to help the worker stay at work, the occupational physician makes contact with decision-makers to initiate appropriate changes. |

### D.2.2.5. In-person or over the phone communication

Communication among the many return-to-work stakeholders is key to preventing fragmentation in information and care provided. Direct communication between healthcare providers can enhance the quality of care and result in reduced work absence duration and costs. Both in–person and phone communications are part of successful interventions (Dewa et al., 2009; Rebergen, Bruinvels, Bezemer, et al., 2009). Although we did not have a direct test of the effectiveness of written *versus* in person/telephone communication, our evidence [contrast between telephone communication *versus* no communication (Dewa et al., 2009) and between the Dewa et al. and the Søgaard and Bech (2009) studies] suggests that direct in-person or telephone contact may allow for the calibration of information and may facilitate the development of individualised return-to-work plans that better respond to the needs of the worker and the workplace.

### D.2.2.6. Providing information to the absent worker about the return-to-work process

This low cost strategy was explicitly tested in a quantitative study whereby the insurer distributed an information letter to workers on work absence (Fleten & Johnsen, 2006). Interestingly, this strategy was proven most effective in reducing work absence duration among workers who were absent due to mental health conditions, compared to workers receiving usual care. This positive effect was found only for workers with mental health conditions, and not workers with musculoskeletal or rheumatoid disorders, possibly because the usual care was already more successfully meeting the needs of the workers with musculoskeletal or rheumatoid conditions, as compared to the workers with a mental health condition. The program was successful in reducing work absence duration also for workers who were absent for mental health problems for longer than 12 weeks.

It is possible that receiving information while on work absence about options for modified work, about the process of collaboration between employer and worker, and about disability benefits provides workers with much needed clarity and confidence about what lies ahead and possibly makes the return-to-work process more predictable. This may be especially important for workers who have been absent for a long period of time as it helps resolve ambiguities and may also be a way of empowering and activating those workers. It may also be an indirect way to break the silence around the mental health condition and provide necessary acknowledgment of the worker's condition and its consequences. This may explain why this minimal postal intervention was more beneficial for workers with mental health conditions *versus* other health-related conditions.

### D.2.2.7. Well-designed and prepared work accommodations

Although work accommodations have been part of many interventions and are generally thought to be an effective element of interventions, no studies in our evidence base focused solely on work accommodations. We were thus not able to derive any conclusions about the effectiveness of *specific* work accommodations for workers with mental health conditions.

Information from qualitative studies and reports provide directions about the conditions that can facilitate or undermine the success of work accommodations. Several questions need to be answered in the process of developing and implementing work accommodations:

- What are the characteristics of the job of the returning worker?
- How do co-workers view the return of the absent worker?
- What are the co-workers' expectations about the return of the absent worker?
- What is the co-workers' knowledge about mental health conditions?
- What workplace factors need to be in place to facilitate the success of work accommodations?

The qualitative literature and stakeholder consultations relate to the adverse workplace reactions the returning worker can face when work accommodations do not consider redistribution of workload and tasks among co-workers, and to issues around stigma or supervisor knowledge about mental health conditions (Mizzoni & Kirsh, 2006; Saint Arnaud et al., 2006). There are several questions that remained unanswered in these Best Practices around work accommodations:

- What are the most effective ways to encourage and elicit support from co-workers and supervisors?
- How can we best assess functional capacities and limitations in workers with common mental health conditions and who should conduct functional assessments?
- What is the best way to convey information to supervisors about the worker and his/her functional capacities and limitations?
- What is the best process for monitoring progress in work accommodations and who should implement the monitoring?

Mizzoni and Kirsh (2006) described how many employers apply a wide variety of work accommodations without being aware that these are work accommodations. Employers mentioned that those work accommodations were just 'ways to get around' limitations and were being done in an informal manner. Stakeholders emphasized that although unofficial work accommodations can be functional in the short-term, they might be harmful to the worker in the longer-term when the parties who have agreed to those accommodations (such as the supervisor) are no longer present. Mizzoni and Kirsh recommend that employers must be informed about the legal aspects of work accommodations.

Mental health conditions are characterized by a variety of symptoms and individuals vary in their mental health symptom profiles. This fact should be taken into account when we attempt to create a pool of work accommodations that can effectively facilitate the return to work of workers with mental health conditions. One possibility for overcoming this problem is to link specific work accommodations to functional limitations. For this, tools for assessing functional strengths and

limitations need to be validated in a wider range of populations of workers with different common mental health conditions.

## Main points about disability management practice-level interventions:

1. Return-to-work coordination can result in favourable return-to-work outcomes, but needs to be considered in the context of the limitations around disclosure of mental health conditions at the workplace;

2. Keeping the worker activated and engaged throughout the return-to-work process is critical;

3. Facilitating the worker-supervisor relationship is an important condition for the success of work accommodations and return-to-work plans;

4. Regular check-ins to assess and monitor progress in the return-to-work plan are recommended;

5. In-person or telephone contact may help stakeholders calibrate the information exchanges and create more individualized return-to-work plans;

6. Information to the absent worker with a mental health condition about the return-to-work process can provide much needed clarity and may be an indirect way to break the silence around the mental health condition;

7. Work accommodations for returning workers with mental health conditions could be tailored to functional strengths and limitations, but tools to assess function need to be further validated or developed.

### D.2.3. Individual-level interventions

The majority of the evidence around individual-level interventions focused on cognitive behavioural therapy-based initiatives. In the following sections, we discuss details of elements of individual-level interventions found to be most effective: Firstly, we outline programs that utilized cognitive behavioural therapy-based interventions, and then we discuss issues of access to treatment.

#### D.2.3.1. Cognitive behavioural therapy

Cognitive behavioural therapy (CBT) is an evidence-based treatment that has been found to consistently improve clinical symptoms in both mood (Butler, Chapman, Forman, & Beck, 2006; Parikh et al., 2009) and anxiety disorders (Bellenger, Davidson, Lecrubier, & Nutt, 2001; Podea, Suciu, Suciu, & Ardelean, 2009; Ponniah, & Hollon, 2009).

## What is Cognitive Behavioural Therapy?

"Cognitive [Behavioural] Therapy is a form of psychotherapy proven in numerous clinical trials to be effective for a wide variety of disorders. The therapist and client work together as a team to identify and solve problems. Therapists help clients to overcome their difficulties by changing their thinking, behavior, and emotional responses." *From www.beckinstitute.com*

We now clarify aspects of CBT initiatives reviewed in our evidence base. First, CBT can be symptom-focused, as it has traditionally been offered in the last few decades. Second, CBT can be work-focused, in the sense that its content is focused on work issues, such as interpersonal issues, productivity, and symptom management within the context of work. Third, CBT can be offered in close link to the workplace – called workplace-based – or outside the workplace. In our evidence base, only workplace-based interventions were included.

#### *D.2.3.1.1. Workplace-based and work-focused CBT interventions*

CBT can reduce work absence duration when it is both workplace-based and work-focused (Blonk et al., 2006, reviewed by van Oostrom et al., 2009; Rebergen, Bruinvels, Bezemer, et al., 2009; van der Klink, Blonk, Schene, & van Dijk, 2003, reviewed by Corbière, & Shen, 2006). Of note is that workers with less severe symptoms derive more benefits from a workplace-based and work-focused intervention (called an activating intervention) with respect to work absence duration reduction compared to workers with severe symptoms (Rebergen, Bruinvels, Bezemer et al., 2009). Work-focused CBT offered outside the workplace has not been successful in decreasing work absence duration in workers with mental health conditions (Lander, Friche, Tornemand, Andersen, & Kirkesokov, 2009). In addition, looking outside our evidence base, CBT which is neither workplace-based or work-focused has not resulted in improved return-to-work or stay-at-work outcomes (de Vente, Kamphuis, Emmelkamp, & Blonk, 2008; McPherson et al., 2009).

## What is an activating intervention?

An activating intervention is in fact one type of cognitive behavioural initiative. The activating intervention was first introduced and tested by van der Klink and colleagues (2003) and is comprised of a graded activity approach. The intervention is based on a three stage model, resembling stress inoculation training, an effective form of cognitive behavioural therapy.

**Stage 1:** In the first stage, there is emphasis on information: Understanding the origin and cause of the loss of control by the worker with a mental health condition. Workers are also stimulated to do more non-demanding daily activities.

**Stage 2:** In the second stage, workers are asked to draw up an inventory of stressors and to develop problem-solving strategies for these causes of stress.

**Stage 3:** In the third stage, workers put these problem solving strategies into practice and extend their activities to include more demanding ones. The workers' own responsibility and active role in the recovery process are emphasized.

In terms of the impact of workplace-based interventions on clinical symptoms, only two studies in our evidence base examined effects on both work absence duration and clinical symptoms (Blonk et al., 2006, reviewed by van Oostrom et al., 2009; van der Klink, Blonk, Schene, & van Dijk, 2003, reviewed by Corbière, & Shen, 2006) in work absent workers. In these studies, the intervention involved a work-focused activating intervention, and usual care involved either contact with workers' general practitioner (Blonk et al.) or with an occupational physician (van der Klink et al.), - physicians who are not specialists in mental health. In both studies, both workers receiving the activating intervention and those receiving usual care improved in terms of clinical symptoms, with no significant differences between groups. There were also no differences in symptom improvement between workers receiving the activating intervention, and those receiving CBT from a mental health professional (Blonk et al.). However, it is worth noting that workers in Blonk et al.'s study were self-employed individuals which may have influenced their trajectory of improvement – they may have had a higher incentive to return to work than workers who are not self-employed. Moreover, the concept of "workplace-based" of course needs to be adjusted to the context of self-employed workers. Hence, the degree with which we can generally conclude that activating interventions lead to a symptom reduction equivalent to that of a symptom-focused intervention provided by a mental health specialist is very limited.

Overall, the limited data available suggests that workplace-based activating interventions do not improve clinical symptoms more than regular contacts with physicians who do not specialize in mental health. In terms of the incremental value of the workplace-based activating intervention in improving symptoms over treatment offered by mental health professionals, the available study's sample of self-employed workers (Blonk et al., 2006, reviewed by van Oostrom et al., 2009) is too specific to allow any generalization to other employed workers.

#### *D.2.3.1.2. Workplace-based and symptom-focused CBT interventions*

For actively employed workers who are struggling with mental health conditions, the single study in our evidence base examining the impact of a workplace-based intervention demonstrated positive impact on both productivity and clinical symptoms (Wang et al., 2007). In this randomized clinical trial, the intervention included care management and CBT provided over the phone by insurer-based mental health professionals. Usual care included screening for mental health conditions and advice to those identified as high risk to consult their general practitioner. The intervention was found to be more effective in improving clinical symptoms than usual care. The intervention also increased the number of hours worked, here considered as a proxy for work absence. In this sense, this intervention was superior to usual care in improving both clinical symptoms and work absence in individuals actively working.

Overall, the evidence suggests that workplace-based and work-focused CBT can reduce work absence duration. However, to achieve improvement in clinical symptoms, the intervention needs to be symptom-focused, and delivered by mental health professionals. Given the small number of studies, more work is needed to replicate past findings and to generate more information about the potential of workplace-based CBT interventions to improve both work absence duration and clinical symptoms.

### D.2.3.2. Improving the quality of and access to mental health care available to workers

Effective disability management of mental health conditions is dependent upon access to a range of evidence-based treatment options, as well as on quality of care. Establishing organizational policies

to ensure that workers are accurately diagnosed and have an appropriate treatment plan that allows access to evidence-based therapy is a key element to effective disability management and to the return-to-work process (Bilsker et al., 2004; Heidel et al., 2007).

Well-designed extended health benefits plans can be formulated in conjunction with medical and disability providers to ensure that affected workers are treated by appropriate and trained mental health professionals (Heidel et al., 2007). Organizational planning can help to ensure that financial, geographic, or technological reasons are not a barrier to treatment access for depressed workers.

### How accessible is treatment for mental health conditions?

Currently, access to evidence-based mental health services is difficult in the local Canadian context (Bilsker et al., 2004). In addition, extended health benefits may cover access to drug therapy but funding for appropriate psychotherapy is limited or non-existing. Employers must work together with insurers and the healthcare system to promote therapeutic equity to better facilitate the management of depression among workers (Bilsker et al., 2004). These issues need to be taken into account around discussions of facilitating access to treatment. In addition, stigma around mental health conditions may hinder willingness to seek treatment. Finally, availability of different types of treatments and other mental healthcare options can be confusing to the worker with a mental health condition, who needs to consider appropriate information around what treatments are effective in making informed treatment decisions.

In summary, individual-level workplace-based interventions can be effective in reducing work absence duration and in improving both clinical symptoms and quality of work outcomes. In the box below, we summarize some of the key points presented in this section.

## Main points about individual-level interventions:

1. Workplace-based and work-focused cognitive behavioural therapy can help expedite return to work;

2. Only two studies examined the impact of workplace-based and work-focused cognitive behavioural therapy on clinical symptoms and so conclusions about the effectiveness of this intervention with regard to symptoms are premature;

3. Workplace-based and symptom-focused cognitive behavioural therapy can improve both clinical symptoms and work absence in individuals actively working;

4. Facilitating access to evidence-based treatment is a critical element of disability management for workers with common mental health conditions.

## D.2.4. Additional issues

### D.2.4.1. The role of union representatives

The majority of the evidence base focused on the role of the employer, the worker, insurer or healthcare provider in the return-to-work process. Very little information was provided about how union representatives can be effectively involved. Nevertheless, it was implicit in many documents (e.g., NICE, 2009b) that union representatives play a key role in the return-to-work process for workers with mental health conditions. Input from stakeholders and especially from healthcare workers' union representatives can provide additional and much needed information. The following stakeholder considerations on the role and involvement of union representatives were provided:

- Union representatives can provide information to workers on work absence about available services, return-to-work options, worker confidentiality, and privacy rights;
- Union representatives can assist with developing meaningful work accommodations.
- Union representatives should be notified of a worker being on work absence for a mental health condition, with appropriate worker consent. This does not necessarily mean that the unions will contact the worker; rather it implies that the union is available for support if needed;
- Union involvement can occur at various levels: co-workers and worker representatives on the Joint Occupational Heath and Safety Committee can provide front-line worker support; union stewards can assist with providing meaningful work accommodations and developing return-to-work or stay-at work plans; and provincial-level union representatives can provide guidance on program and policy development;
- Unions can play a facilitative role in conflict resolution when workers are experiencing workplace conflict or lack of workplace support;
- Unions are legally responsible to represent their members; however the degree of union involvement will vary from individual to individual.

It should also be noted that the specific roles and responsibilities of the employer and unions on return-to-work and stay-at-work practices will be specified in the language of their respective collective agreements. Furthermore, as policies and procedures develop in the area of return to work and stay at work for workers with mental health conditions, the role of union representatives is expected to be further developed.

### D.2.4.2. Workplace-based return-to-work and stay-at-work interventions for mental health conditions and musculoskeletal disorders: Similarities and differences

Much of what we know about disability management stems from work conducted with injured workers with musculoskeletal injuries. It is therefore important to examine the similarities and differences emerging from a comparison of Best Practices for workers with musculoskeletal conditions and with mental health conditions, as primary conditions.

In terms of the similarities, they can be summarized as follows:

- ***Return-to-work coordination:*** For both health-related conditions, coordination of return-to-work activities by a return-to-work coordinator is an effective approach (Franche, Cullen, et al., 2005);

- ***Communication among return-to-work stakeholders:*** The coordination of multiple stakeholders and the use of appropriate and effective communication methods is key to achieving favourable return-to-work outcomes (Franche, Baril, Shaw, Nicholas, & Loisel, 2005; Friesen, Yassi, & Cooper, 2001);
- ***Work accommodations*****:** The planning and implementation of work accommodations is effective in both health-related conditions. However, with regard to mental health conditions, we are still lacking specific tools assessing functional capacities that could help tailor work accommodations (Krause, Dasinger, & Neuhauser, 1998);
- ***Cognitive behavioural interventions:*** Just as they are found to be part of return-to-work interventions for workers with mental health conditions, cognitive behavioural interventions are also part of return-to-work interventions for musculoskeletal disorders, particularly for those in the chronic phase (Friedrich, Gittler, Arendasy, & Friedrich, 2005; Linton, Boersma, Jansson, Svard, & Botvalde, 2005). The role of workplace-based cognitive behavioural interventions could be further explored in both mental health conditions and musculoskeletal disorders;
- ***The role of the supervisor:*** In both health-related conditions, the quality of the worker-supervisor relationship is emphasized as a key condition for the success of a return-to-work plan (Gates, 1993; Nieuwenhuijsen, Verbeek, de Boer, Blonk, & van Dijk, 2004);
- ***The role of union representatives:*** Participation of union representatives is a critical element of the return-to-work process. In the case of mental health conditions, more work is needed in specifying the roles and tasks that would help union representation be most effective in achieving the desired return-to-work outcomes (Franche, Baril, et al., 2005).

There are, however, a few differences in the effective elements of workplace-based interventions for musculoskeletal disorders *versus* mental health conditions:

- ***Stigma:*** There is persisting stigma and silence around mental health conditions at the workplace, which can complicate both the identification of the condition and the return-to-work process. Stigma is less present in musculoskeletal disorders: However, mental health conditions are often prevalent in cases of musculoskeletal disorders (Dersh, Polatin, & Gatchel, 2002): in one study of Canadian injured workers, prevalence of high depressive symptom levels at 1 month and 6 months postinjury was 42.9% and 26.5% respectively (Franche et al., 2009);
- ***Stay at work:*** Common mental health conditions have been found to be more strongly associated with stay-at-work problems (such as work limitations or presenteeism) than with work absence (Sanderson & Andrews, 2006), meaning that workers with a common mental health condition, such as depression, are more likely to choose to continue to work when having symptoms than to be absent from work. More attention needs to be focused on stay-at-work outcomes in these workers;
- ***Insurance systems:*** There are differences with regard to insurance systems managing and covering musculoskeletal disorders *versus* mental health conditions. Cases of musculoskeletal disorders are typically covered by workers' compensation boards while mental health conditions fall under private insurance companies. It is possible that the experiences of workers with musculoskeletal disorders are different from those of workers with mental health conditions as a result of the insurance system under which they fall;

- ***Education and training for co-workers and supervisors:*** Because of the stigma around mental health conditions, workplace staff is often unaware of symptoms and their impact on the worker's work life and behaviour. Education and training around mental health conditions and related symptoms and behaviours is needed to address the lack of awareness;
- ***Access to treatment:*** Workers with musculoskeletal disorders have better access to treatment than workers with mental health conditions in Canada (Bilsker et al., 2004; Patten & Beck, 2004). This difference imposes barriers to effective symptom management for workers with mental health conditions, which can also impact timely return to work;
- ***Specific work accommodations:*** Although there has been a recognized need for workplace-based interventions, challenges remain regarding how to best achieve optimal work accommodation for workers with mental health conditions. Unlike workers with musculoskeletal injuries, who display physical limitations that are more readily measurable and detectable, workers with mental health conditions display symptoms that are less tangible, creating greater challenges and barriers when offering work accommodations to facilitate their return to work;
- ***Quality of life:*** Workplace-based interventions for musculoskeletal disorders have been found to consistently improve work absence duration, but have been less successful in reducing clinical symptoms of pain, and in improving other quality of life outcomes (Franche, Cullen, et al., 2005). In contrast, the Best Practices have shown that individual-level interventions have the potential to improve both work absence duration and mental health-related symptoms. Interventions that target how mental health symptoms relate to the workplace and help the worker identify and implement workplace-based solutions can result in improved work absence duration (Rebergen, Bruinvels, Bezemer, et al., 2009). Workplace-based interventions that target the management of clinical symptoms are better suited to address clinical symptom improvement (Wang et al., 2007).

## *D.3. Question 3: Are any interventions specific to the healthcare sector?*

The majority of the evidence base included a mixed population of occupational groups and did not focus on a single sector. Despite the lack of specific evidence about workplace return-to-work/stay-at-work interventions in healthcare workers, the majority of the interventions described in the Best Practices can directly apply to the healthcare sector. Stakeholder input is particularly valuable in contextualizing the Best Practices to a specific work environment, and participating stakeholder representatives from healthcare organizations were able to identify several potential areas for tool development as they flow from the Best Practices.

Examples of such tools applicable to the healthcare setting included:

- Developing internal communication campaigns to raise awareness of mental health conditions at the workplace, to combat stigma and distrust associated with mental health;
- Creating a business case addressing the benefits for all concerned stakeholders of disability management initiatives for workers with mental health conditions to provide impetus for top management support for such initiatives, and to ensure their sustainability.

- Strengthening communication among disability management stakeholders by developing resources for supervisors and healthcare providers, and creating standardized modes for communication specific to mental health;
- Creating training and education tools for return-to-work coordinators, healthcare providers and supervisors to improve knowledge and expertise, and to build confidence when assisting workers with mental health conditions;
- Creating tools and forms specific to healthcare workers with mental health conditions to perform job demands analysis or functional capacities assessment to provide better work accommodations, and;
- Developing resources for supervisors who are assisting workers with a mental health condition. Such resources can include: Information about the available services, points of contact to assist with return-to-work, and knowledge about potential workplace risk factors and stressors.

## E. Strengths and Limitations

The Best Practices are based on a systematic review of available evidence and on stakeholder input. In the systematic review process, we cast a wide net to capture different types of documents (reviews, quantitative studies, qualitative studies, guidelines and reports) that spoke to return-to-work and stay-at-work workplace-based interventions for workers with mental health conditions. This is a novel and comprehensive approach to developing Best Practices, as previous reviews did not include reviews, qualitative studies, guidelines or reports.

At the same time, the methodological quality of all documents was assessed using well-established criteria, and only documents meeting our quality criteria were retained.

While quantitative studies provide us with information about the effectiveness of workplace-based interventions in relation to specific outcomes, existing reviews offer a more synthesized perspective. Qualitative studies in turn address the importance of social and workplace influences on the return-to-work/stay-at-work process. Additionally, the systematic incorporation of relevant guidelines and reports allows for a better understanding of the gaps in local knowledge, as well as the higher-level practical challenges in return-to-work coordination and collaboration.

With regard to stakeholder input, we tried to capture issues around the context, applicability and feasibility of workplace-based interventions by holding structured meetings and working groups with participating stakeholders. We then created summary reports to synthesize the main points of those meetings and reflected those points throughout the Best Practices. This way, the reader of the Best Practices can be aware of the evidence as well the stakeholder contextualization for each one of the key points.

These Best Practices also have certain limitations. Our evidence base is characterized by heterogeneity in populations, intervention components, data sources and outcomes. It comes from different countries, characterized by many cultural differences and differences in compensation systems and disability management practices. This heterogeneity needs to be taken into account in future dissemination or implementation plans. However, eight out of 29 documents are from a Canadian source, hence many of our conclusions are based on Canadian content.

# F. Directions for future work

## *F.1. Workplace-focused versus Individual-focused interventions*

Although there is a growing interest in workplace-focused interventions for return-to-work and stay-at-work outcomes, the majority of current interventions still focus on the individual worker and try to improve his/her capacity to return to work by targeting individual coping strategies. According to van Oostrom et al. (2009, p. 26), "there is a growing demand in the literature for workplace interventions with active stakeholder involvement." Interestingly, it is telling that in Nieuwenhuijsen et al.'s (2008) review of randomized controlled trials* of return-to-work interventions for workers with depression, only one study was found with a workplace-based component (Schene, Koeter, Kikkert, Swinkels, & McCrone, 2007). We were able to identify more documents on workplace-focused interventions, since our review was less limited in its search criteria: we did not only look for randomized controlled trials and did not only focus on depression. However, more work on workplace-focused interventions is needed, especially since individual-based interventions are still more prevalent.

## *F.2. Range of outcomes*

Mental health conditions and related stay-at-work issues are highly prevalent and pose a challenge to both workers and employers (Stewart, Ricci, Chee, Hahn, & Morganstein, 2003). A clear gap refers to investigations of quality of work or stay-at-work outcomes and how to best tailor workplace-based stay-at-work interventions to produce desirable effects. Our evidence base indicated that workplace-based interventions could improve both work absence duration and clinical mental health outcomes in workers who were still working but struggling at work (see Wang et al., 2007). More work is needed in this area and should include general health and quality of life outcomes in addition to mental health condition-specific symptoms.

Economic outcomes are also often neglected in investigations of workplace-based interventions. Economic outcomes are an important endpoint of the return-to-work process, and in-depth investigations are necessary to capture their complex conceptualization and measurement (Tompa et al., 2006).

## *F.3. Range of interventions*

Although we found support for the effectiveness of workplace-based interventions generally, future work needs to explore other promising workplace-based interventions. Some examples are discussed below:

- ***Workplace-based interventions that are tailored to address issues around stay-at-work:*** Workers with mental health conditions who are at work but are struggling may be facing particular challenges (e.g., workplace relationships, workload, fear of relapse) and those challenges need to be part of specific interventions;
- ***Interventions that facilitate the worker-supervisor relationship in the return-to-work process:*** The feasibility study by van Oostrom et al. (2009) is a good example and a starting point for interventions that can help the worker and the supervisor create and implement successful return-to-work plans;

- ***Workplace-based and work-focused interventions that utilize cognitive behavioural principles:*** More information is needed to understand whether maintaining a work focus is effective in cognitive behavioural therapy for both work absence and clinical outcomes. Also, more workplace-based interventions need to be explored that utilize cognitive behavioural therapy principles, such as on-site, accessible, services which was discussed in one qualitative study (Athanasiades et al., 2008);
- ***Workplace modifications (in the psychosocial or physical environment):*** Work accommodations are an integral part of the return-to-work process. However, there is a lack of specific recommendations for effective work accommodations. Work accommodations are based on the consideration of functional capacity* evaluations within the context of psychosocial and physical demands of work. Although general instruments exist, they have been validated in a limited set of populations (Munir, 2008). More validated instruments are needed to help guide the work accommodation process;
- ***Investigation about the effectiveness of specific workplace mental health organizational policies in improving work absence duration:*** There has not been any direct test of organizational policy impact. Issues to consider when conducting such an evaluation include the potential of such policies to increase rather than reduce stigma. More work in this area is needed to help elucidate those dilemmas.

Finally, based on the evidence available and the knowledge of participating stakeholders, we were able to demonstrate that workplace-based interventions need to be considered in return-to-work programs for workers with mental health conditions. Our approach included a comprehensive search strategy that identified a varied set of documents (reviews, quantitative studies, qualitative studies, guidelines, and reports) and incorporated stakeholder input.

In creating this document, OHSAH and participating stakeholders hope to provide a solid evidence base, contextualized by stakeholder input, to provide a common knowledge base, and to support future development of effective workplace-based return-to-work and stay-at-work interventions for workers with mental health conditions.

# G. Glossary

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| **Activating intervention** | The intervention is based on a three stage model, resembling stress inoculation training, a highly effective form of cognitive behavioural treatment. In the first stage, there is emphasis on information: understanding the origin and cause of the loss of control. Workers are also stimulated to do more non-demanding daily activities. In the second stage, workers are asked to draw up an inventory of stressors and to develop problem-solving strategies for these causes of stress. In the third stage, workers put these problem solving strategies into practice and extended their activities to include more demanding ones. The workers' own responsibility and active role in the recovery process are emphasized (van der Klink et al., 2003) |
| **Care management** | A set of activities designed to assist patients and their support systems in managing health conditions and related psychosocial problems more effectively, with the aims of improving patients' functional health status, enhancing the coordination of care, eliminating the duplication of services, and reducing the need for expensive medical services (Bodenheimer & Berry-Millet, 2009) |
| **Cognitive behavioural therapy** | "Cognitive behavioural therapy is a psychological treatment where people work with a cognitive behavioural therapy-trained therapist to look at how their problems, thoughts, feelings and behaviour fit together. Cognitive behavioural therapy can help people to challenge negative thoughts and change any behaviour that causes problems. It may be delivered in one-to-one or group sessions" (NICE, 2009b, p.41) |
| **Counselling** | "The overall aim of counselling is to provide an opportunity for the client to work towards a more satisfying and resourceful life. Counselling involves a relationship between a trained counsellor and an individual. The objectives will vary according to the client's needs. They may include addressing and resolving specific problems, making decisions, coping with crisis, developing personal insight and knowledge, working through feelings of inner conflict or improving relationships. A distinction needs to be made between counselling and counselling skills. Many health service and other professionals routinely and appropriately use counselling and basic human relationship skills as part of their work. This is distinct, however, from more formal counselling which involves a clearly defined professional relationship" (NICE, 2009b, p.41) |
| **Disability management** | Disability management is a proactive process that coordinates the activities of labour, management, insurance carriers, healthcare providers and vocational rehabilitation professionals for the purpose of minimizing the impact of injury, disability or |

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| | disease on a worker's capacity to successfully perform his or her job.<br><br>Disability management has also been defined as "a combination of prevention and remediation strategies that reflect an employer's commitment to the prevention of serious illnesses and injuries and the use of cost conscious, high quality rehabilitation services to ensure the continued employment and accommodation of those employees who experience functional work limitations" (Olsheski, Rosenthal, & Hamilton, 2002, p. 63) |
| **Functional capacity** | Functional capacity describes workers' ability to perform their job tasks. Functional capacity is impacted by mental health directly through workers' ability to manage their mental health condition and to develop coping strategies for work, as well as indirectly through the workers' interactions with the psychosocial work environment. Stigma and misinformation or poor knowledge about mental health in the workplace can reduce functional capacity. Factors such as physical and mental stamina, concentration limits, mood fluctuations, ability to function under stress, and interpersonal skills contribute to overall functional capacity (Attridge & Wallace, 2010). |
| **Graded work exposure** | A specialized form of light duty in which the hours, duties, and/or performance expectations of a job are gradually increased until the worker is ready for regular or full duty. Also called therapeutic return to work or work hardening (Krause et al., 1998) |
| **People-oriented culture** | A people-oriented culture places emphasis on ensuring that the organization involves employees in meaningful decision-making, where there is trust between management and employees, and openness to share information in a cooperative work environment (Amick et al., 2000) |
| **Qualitative study** | Research using concepts, classifications, and attempts to interpret human behaviour reflecting not only the analyst's view but the views of the people whose behaviour is being described. The emphasis is on verbal descriptions as opposed to numerical ones (Jackson, 2003) |
| **Quantitative study** | Research that seeks to quantify, to reflect with numbers, observations about human behaviour (Jackson, 2003) |
| **Randomized controlled trial** | An experiment in which subjects in a population are randomly allocated into groups, usually called study and control groups, to receive or not to receive an experimental procedure or intervention. Randomized controlled trials are generally regarded as the most scientifically rigorous method of hypothesis testing. Nonetheless, they may suffer serious lack of generalizability, due, for example to the non-representativeness of the sample participants who are ethically and practically |

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| | eligible, and chosen or consent to participate (Porta, 2008) |
| **Return-to-work coordinator** | A return-to-work coordinator may be located in a clinical, corporate, insurance, or governmental setting, and he/she facilitates and supports safe and sustained return-to-work through proactive communications with the worker, the workplace, and other stakeholders. Job titles include return-to-work coordinator, case manager, disability prevention specialist, or rehabilitation counsellor (Shaw et al., 2008) |
| **Stress management** | Stress management is the application of methods to either reduce stress or improve ability to cope in a competent manner with stressors. Stress management interventions can include: relaxation techniques, cognitive behavioural therapy techniques or systems approaches. |
| **Work accommodations** | Work accommodations are employer-sponsored modifications and strategies used to adapt the job and work environment for an employee who is expected to return to work after a disability leave. Some of the kinds of work accommodations include: reduced hours, different work schedules, modified or reduced tasks, changing the function or job, a reduced pace of work, transferring the employee to another department, and modification of the workstation or workplace (Attridge & Wallace, 2010) |

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performance outcomes: a randomized controlled trial.[see comment]. *Journal of the American Medical Association*, 298(12), 1401-1411.

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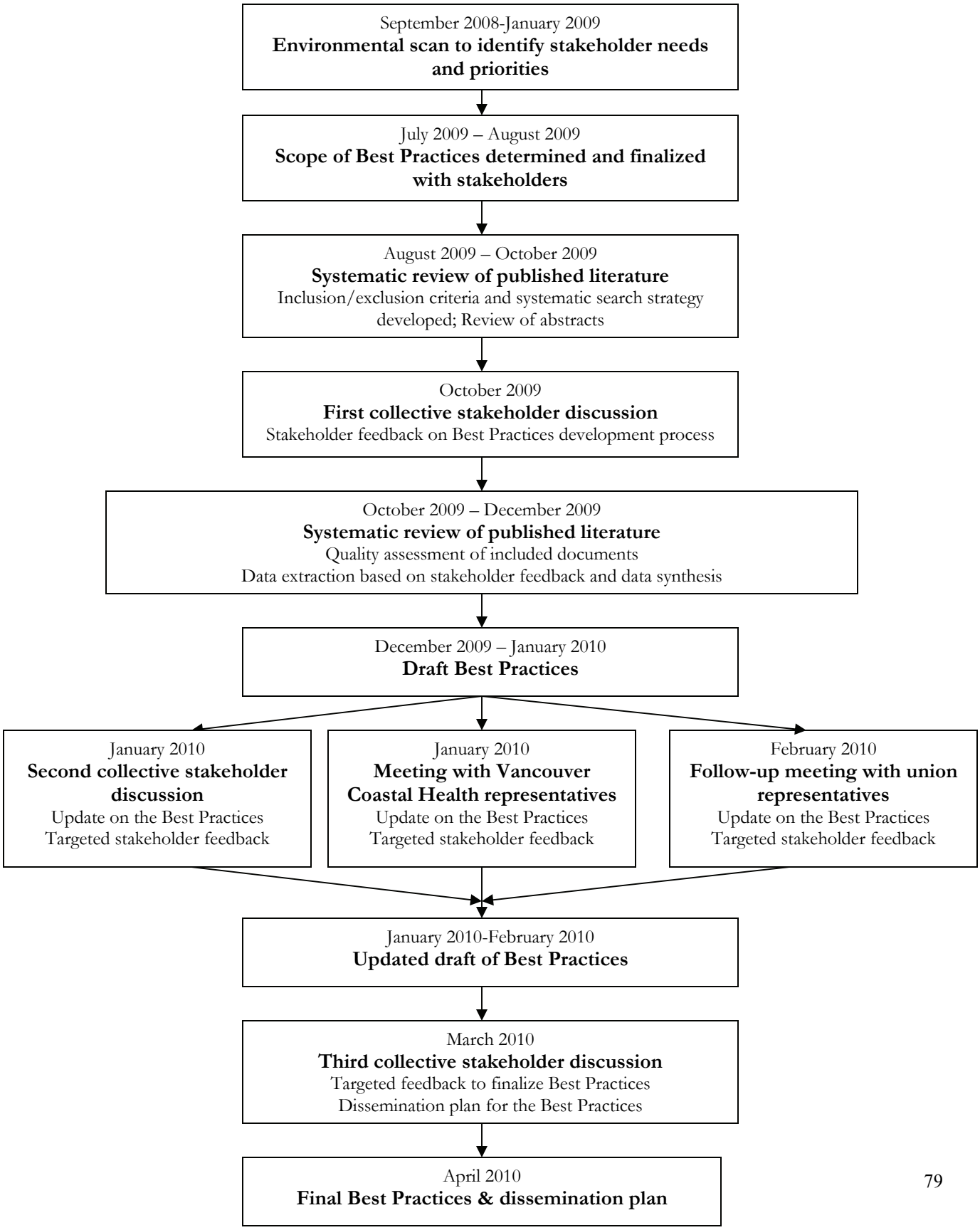
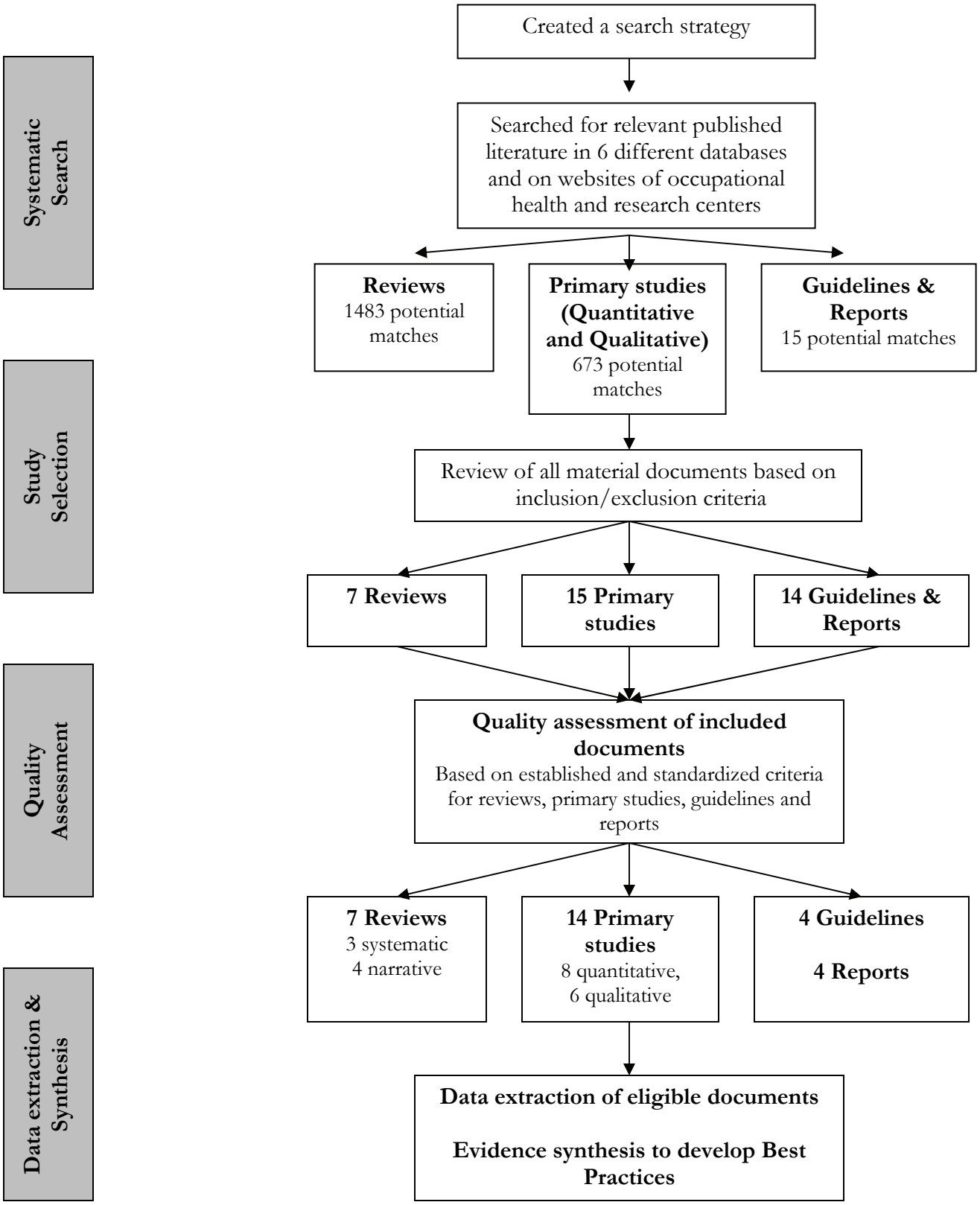
# Appendices

# Appendix 1 – Summary of the Best Practices Development Process



## Appendix 2 – Summary of the Systematic Review Process



# Appendix 3 – Inclusion/Exclusion Criteria for Reviews and Primary Quantitative and Qualitative Studies

| | Inclusion | Exclusion |
|---|---|---|
| Population | • Employees with common mental health conditions as primary or secondary diagnosis: mood disorders (major depressive disorder, bipolar disorder, cyclothymic disorder, dysthymic disorder), anxiety disorders (generalized anxiety disorder, panic disorder, phobias, acute stress disorder, agoraphobia, post-traumatic stress disorder, obsessive-compulsive disorder), adjustment disorders<br>AND<br>• On short- or long-term work absence, or "struggling" at work due to a mental health condition<br>OR<br>• Employees with burnout, reaction to severe stress diagnosis, or work-related stress or psychosocial complaints<br>AND<br>• On short- or long-term work absence | • Any other DSM-IV diagnosis (such as personality disorder, psychotic disorder, substance-related disorder)<br>• Claimants without a mental health condition<br>• Unemployed individuals with mental health conditions<br>• Workers with postnatal depression |
| Study design | • Systematic/narrative review of quantitative or qualitative studies, meta-analysis<br>• Primary intervention study published at a date succeeding the last review (2007) and with the following design: randomized controlled trial (RCT), non-randomized trial, pre-post, or qualitative study | • Non-comparative quantitative studies |
| Setting/ Provider of intervention | Interventions must be facilitated by the employer or the insurer and can take place:<br>• At the workplace (provided by healthcare providers or other experts such as case managers) OR<br>• At the insurer (provided by insurer healthcare providers or case managers ) OR<br>• At a healthcare/community facility (in strong collaboration with the employer or the insurer and with a heavy return-to-work focus or as part of a return-to-work program) OR<br>• By phone or online: Telephone or online interventions provided within the context of the settings and provider relationships described | • Interventions that are not facilitated by the employer or the insurer<br>• Interventions that are facilitated by the employer or the insurer but do not have a return-to-work or disability management focus and occur outside the workplace |
| Nature of intervention | Interventions with a return-to-work or disability management focus which can include:<br>• Work accommodation interventions;<br>• Interventions involving managers or supervisors providing disability management;<br>• Individual worker level interventions (e.g., CBT, self-management, multidisciplinary rehabilitation: if they are provided outside the workplace or insurer system, the intervention has to be primarily focused on return-to-work/disability management);<br>• Case management (provided by workplace or insurer);<br>OR<br>• Individual worker interventions for mental health conditions (e.g. CBT, Self-management) that are provided at the workplace even if they do not have a return-to-work focus | • Interventions that do not have a return-to-work or disability management focus and which are not provided at the workplace<br>• Interventions that target workers 'at risk for work absence' based on a screening instrument. Those workers are not absent from work and are not diagnosed with a mental health condition as defined by our inclusion criteria for Population |

| | Inclusion | Exclusion |
|---|---|---|
| Outcome of intervention | One or more of the primary outcomes needs to be included:<br>Work absence duration outcomes (self-reported or administrative data):<br>• Point prevalence of status, such as having returned to work, remaining work absent, or transitioning to long-term disability<br>• Time to return to work (first, sustained, partial or full return to work)<br>• Duration of time off work<br>• Number of work absences<br>Quality of work outcomes (self-reported or administrative data):<br>• Work productivity<br>• Job performance<br>• Work functioning<br>• Work limitations (stay at work or presenteeism)<br>• Job satisfaction<br>• Work conditions<br><br>Studies may also include one or more secondary outcomes of interest:<br>Quality of life outcomes (self-reported or administrative data):<br>• Mental health symptoms<br>• Functional status (not work specific)<br>• General physical health<br>• Treatment satisfaction<br>Economic outcomes (Administrative data):<br>• Healthcare costs<br>• Indemnity costs<br>• Vocational rehabilitation costs<br>• Intervention costs | |
| Themes (Qualitative studies) | Qualitative studies should consider the following themes:<br>1) Experiences of interventions from the worker or provider perspectives<br>2) Reasons for participating in the intervention, including barriers and/or facilitators<br>3) Workers' or providers' experiences with return to work | |
| Language | • English, French, Dutch, German | |
| Date | • Systematic and narrative reviews, meta-analyses, qualitative studies (2004-2009)<br>• Primary quantitative studies: published at a date succeeding the most recent primary study included in the reviews, unless hand-searched (2004-2009) | |

# Appendix 4 – Inclusion/Exclusion Criteria for Reports and Guidelines

| | Inclusion | Exclusion |
|---|---|---|
| Date | • 1999 or later | • Pre 1999 |
| Condition | • Employees with common health conditions as primary or secondary diagnosis: mood disorders (major depressive disorder, bipolar disorder, cyclothymic disorder, dysthymic disorder), anxiety disorders (generalized anxiety disorder, panic disorder, phobias, acute stress disorder, agoraphobia, post-traumatic stress disorder, obsessive-compulsive disorder), adjustment disorders, burnout<br>OR<br>• Employees on short or long-term work absence, or "struggling" at work due to a mental health condition<br>OR<br>• Adults with common mental health disorders, with a substantial reference to the return-to-work or stay-at-work process | • Sole focus on children, youth, or adolescents with common mental health conditions<br>• All other DSM-IV conditions |
| Evidence base | • Identifies a systematic literature search, including documentation of sources, filters, and limits<br>OR<br>• Refers to a body of scientific evidence published in peer-reviewed journals | • No identification of evidence used to inform guideline development |
| Stakeholder involvement | At least one of the following:<br>• Stakeholders (medical providers, allied health providers, nurses, other relevant healthcare professionals, and workers with mental health conditions) were consulted to identify areas of inclusion<br>• Stakeholders endorsed the guidelines<br>• Medical specialty associations, government agencies, healthcare organizations or plans, and/or other relevant professional societies helped produce the guideline | • No stakeholder involvement |
| Strategies or guidance | Includes a disability management and/or return-to-work focus, or includes a discussion about interventions that can be offered at the workplace and that are proven to help manage common mental health conditions (cognitive behavioural therapy, self-management etc.) | • Sole focus on primary care |
| Outcomes considered in the guideline | Includes recommendations, strategies or information that assists employers, physicians, patients, or other healthcare practitioners about the following:<br>1) Work absence duration outcomes (Self-reported or administrative data):<br>a. Point prevalence of status, such as having returned to work, remaining work absent, or transitioning to long-term disability<br>b. Time to return to work (first, sustained, partial or full return to work)<br>c. Duration of time off work<br>d. Number of work absences<br>2) Quality of work outcomes (Self-reported or administrative data):<br>a. Work productivity | |

| | Inclusion | Exclusion |
|---|---|---|
| | b. Job performance<br>c. Work functioning<br>d. Work limitations (Stay at work or presenteeism)<br>e. Job satisfaction<br>f. Work conditions<br>3) Quality of life outcomes (Self-reported or administrative data):<br>• Mental health symptoms<br>• Functional status (not work specific)<br>• General physical health<br>• Treatment satisfaction<br>4) Economic outcomes (Administrative data):<br>• Healthcare costs<br>• Indemnity costs<br>• Vocational rehabilitation costs<br>• Intervention costs | |
| Language | English, French, Dutch, German | |

# Appendix 5 – Evidence Base for Best Practices

| ***Reviews*** |
|---|
| 1. Corbière, M., & Shen, J. (2006). A systematic review of psychological return-to-work interventions for people with mental health problems and/or physical injuries. *Canadian Journal of Community Mental Health*, 25(2), 261-288. (High quality)<br>2. Krupa, T. (2007). Interventions to improve employment outcomes for workers who experience mental illness. *Canadian Journal of Psychiatry*, 52(6), 339-345. (Medium quality)<br>3. McDaid, D. (2007). The economics of mental health in the workplace: What do we know and where do we go? *Epidemiologia e Psichiatria Sociale*, 16(4), 294-298. (Low quality)<br>4. Nieuwenhuijsen, K., Bültmann, U., Neumeyer-Gromen, A., Verhoeven, A. C., Verbeek, J. H., & Feltz-Cornelis, C. M. (2008). Interventions to improve occupational health in depressed people. *Cochrane Database of Systematic Reviews*, (2), Art No: CD006237 DOI: 10.1002/14651858.CD006237.pub2. (High quality)<br>5. Steffick, D. E., Fortney, J. C., Smith, J. L., & Pyne, J. M. (2006). Worksite disease management programs for depression - Potential employer benefits. *Disease Management & Health Outcomes*, 14(1), 13-26. (High quality)<br>6. van Oostrom, S. H., Driessen, M. T., de Vet, H. C., Franche, R.-L., Schonstein, E., Loisel, P., et al. (2009). Workplace interventions for preventing work disability. *Cochrane Database of Systematic Reviews*, (2), Art No: CD006955. (High quality)<br>7. Wald, J. & Alvaro, R. (2004) Psychological factors in work-related amputation: considerations for rehabilitation counselors. *Journal of Rehabilitation*, 70(4), 6-15. (Low quality) |
| ***Primary quantitative studies*** |
| 1. Dewa, C. S., Hoch, J. S., Carmen, G., Guscott, R., & Anderson, C. (2009). Cost, effectiveness, and cost-effectiveness of a collaborative mental health care program for people receiving short-term disability benefits for psychiatric disorders. *Canadian Journal of Psychiatry*, 54(6), 379-388. (Low quality)<br>2. Fleten, N., & Johnsen, R. (2006). Reducing sick leave by minimal postal intervention: a randomised, controlled intervention study. *Occupational and Environmental Medicine*, 63(10), 676-682. (High quality)<br>3. Grossi, G., & Santell, B. (2009). Quasi-experimental evaluation of a stress management programme for female county and municipal employees on long-term sick leave due to work-related psychological complaints. *Journal of Rehabilitation Medicine*, 41(8), 632-638. (Low quality)<br>4. Lander, F., Friche, C., Tornemand, H., Andersen, J. H., & Kirkesokov, L. (2009). Can we enhance the ability to return to work among workers with stress-related disorders? *BioMed Central Public Health*, 9, 372-378. (Low quality)<br>5. Rebergen, D. S., Bruinvels, D. J., van Tulder, M. W., van der Beek, A. J., & van Mechelen, W. (2009a). Cost-effectiveness of guideline-based care for workers with mental health problems. *Journal of Occupational & Environmental Medicine*, 51(3), 313-322. (High quality)<br>6. Rebergen, D. S., Bruinvels, D. J., Bezemer, P. D., van der Beek, A. J., & van Mechelen, W. (2009b). Guideline-based care of common mental disorders by occupational physicians (CO-OP study): a randomized controlled trial. *Journal of Occupational & Environmental Medicine*, 51(3), 305-312. (High quality)<br>7. Søgaard, H. J., & Bech, P. (2009). The effect on length of sickness absence by recognition of undetected psychiatric disorder in long-term sickness absence. A randomized controlled trial. *Scandinavian Journal of Public Health*, 37(8), 864-871. (Medium quality)<br>8. Wang, P. S., Simon, G. E., Avorn, J., Azocar, F., Ludman, E. J., et al. (2007). Telephone screening, outreach, and care management for depressed workers and impact on clinical and job performance outcomes: a randomized controlled trial.[see comment]. *Journal of the American Medical Association*, 298(12), 1401-1411. (High quality) |
| ***Primary qualitative studies*** |
| 1. Athanasiades, C., Winthrop, A., & Gough, B. (2008). Factors affecting self-referral to counselling services in the workplace: A qualitative study. *British Journal of Guidance & Counselling*, 36(3), 257-276. (Medium quality)<br>2. Caveen, M., Dewa, C. S., & Goering, P. (2006). The influence of organizational factors on return-to-work |

outcomes. *Canadian Journal of Community Mental Health*, 25(2), 121-142. (Medium quality)
3. Michalak, E. E., Yatham, L. N., Maxwell, V., Hale, S., & Lam, R. W. (2007). The impact of bipolar disorder upon work functioning: A qualitative analysis. *Bipolar Disorders*, 9(1), 126-143. (Medium quality)
4. Mizzoni, C., & Kirsh, B. (2006). Employer perspectives on supervising individuals with mental health problems. *Canadian Journal of Community Mental Health*, 25(2), 193-206. (Medium quality)
5. Saint-Arnaud, L., Saint-Jean, M., & Damasse, J. (2006). Towards an enhanced understanding of factors involved in the return-to-work process of employees absent due to mental health problems. *Canadian Journal of Community Mental Health*, 25(2), 303-315. (Medium quality)
6. Verdonk, P., de Rijk, A., Klinge, I., & de Vries, A. (2008). Sickness absence as an interactive process: Gendered experiences of young, highly educated women with mental health problems. *Patient Education and Counseling*, 73(2), 300-306. (Low quality)

***Guidelines***

1. British Occupational Health Research Foundation. (2005). *Workplace interventions for people with common mental health problems: Evidence review and recommendations*. London, UK: British Occupational Health Research Foundation (BOHRF). (Medium quality)
2. National Institute for Health and Clinical Excellence. (2009). *Managing long-term sickness absence and incapacity for work*. London, UK: National Institute for Health and Clinical Excellence (NICE). (Medium quality)
3. van der Klink, J. J. L., Ausems, C. M. M., Beijderwellen, B. D., Blonk, R., Bruinvels, D. J., Dogger J., et al. (eds.). (2007). *Handelen van de bedrijfsarts bij wekenden met psychische problemen* [Guideline for the Management of Mental Health Problems by Occupational Physicians]. Utrecht, NL: NVAB [Netherlands Society of Occupational Medicine]. (Medium quality)
4. Vergare, M. J., Binder, R. L., Cook, I. A., Galanter, M., & Lu, F. G. (2006). *Practice guidelines for the psychiatric evaluation of adults*. American Psychiatric Association (APA), Work Group on Psychiatric Evaluation. (Medium quality)

***Reports***

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2. Bilsker, D., Gilbert, M., Myette, L., & Stewart-Patterson, C. (2005). *Depression and work function: bridging the gap between mental health care and the workplace*. Vancouver, BC: University of British Columbia: Mental Health Evaluation and Community Consultation Unit. Partnership for Workplace Mental Health. (Low quality)
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# Appendix 6 – Definitions of Outcome Categories

| Outcome Category | Definition |
|---|---|
| **Duration of work absence outcomes** | This category of outcomes is highly time-dependent, and measures whether workers have returned to work, remained work absent or transitioned to long-term disability status by a given time point, typically 12 months following the initial day of work absence. Commonly, these measures are assessed using administrative data, such as short-term disability benefits, rather than self-report. Administrative data includes payroll data and insurance payment data; self-report data is information provided to the investigators directly by workers. Return-to-work differences between intervention and control group participants may be assessed on a relative scale (for example, odds ratio) or absolute scale (for example, percentages). |
| | **Point prevalence of return to work:** The proportion of workers who have returned to work at a specific time point, typically 6 or 12 months after the beginning of the work absence. This may be measured as the proportion no longer absent from work, or no longer receiving sickness benefits, or as the proportion working full- or part-time. Both administrative and self-report data can provide an accurate measure of point prevalence of return to work, but self-report data may be subject to more loss to follow-up. Typically, absolute proportions are reported, and can be compared using Student's t-test, or similar statistics. |
| | **Point prevalence of long-term disability status:** The proportion of workers who have transitioned to long-term disability at a specific time point, typically 6 or 12 months after the beginning of the work absences. Administrative data are typically used to improve accuracy, and absolute proportions are compared using Student's t-test, or similar statistics. |
| | **Cumulative work absence:** The cumulative number of days absent from work over a specified time interval. This measure may include days absent before the start of the official work absence or following the first return to work. Administrative data is useful to avoid errors in recall that may be present with self-report data. Comparisons between intervention and control group participants can be made on either relative scales, with odds ratios or hazard ratios (which incorporate time), or absolute scales with Student's t-test or similar statistics. Days absent should be compared using the median number of days, rather than the mean, since this measure is known to have a skewed distribution, i.e. a small number of people will have such a large number of days absent that the mean is not a good measure of the average days absent. |
| | **Time to return to work:** The number of consecutive days absent from work during the period of official work absence over a specified time interval. Time to return to work is typically measured from the first day of work absence and may extend to the first day of any return to work or to the date of sustained return to work. The definition of sustainability of return to work may vary among studies. Administrative data is useful to avoid errors in recall that may be present with self-report data. Comparisons between intervention and control group participants can be made on either relative scales, with odds ratios or hazard ratios (which incorporate time), or absolute scales with Student's t-test or similar statistics. Days absent should be compared using the median number of days, rather than the mean, since this measure is known to have a skewed distribution, i.e. a small number of people will have such a large number of days absent that the mean is not a good measure of the average days absent. |

| Outcome Category | Definition |
|---|---|
| **Quality of work outcomes** | This category of outcomes encompasses both return-to-work conditions and stay-at-work outcomes, specifically, how well does the intervention affect the employee's ability to function at work either after a work absence or when they are struggling at work. The appropriateness of administrative or self-report data varies among the outcomes in this category, as does the usefulness of relative and absolute measures. |
| | **Effective weekly hours:** The number of hours worked per week by an employee, weighted by how well the employee is able to perform their job (see 'job performance' below). The World Health Organization Health and Productivity Questionnaire is a standardized tool available for collecting self-report data on effective weekly hours. Alternately, administrative data on actual hours worked can be combined with self-report data on job performance. Comparisons between intervention and control group participants can be made on either relative scales, with odds ratios or hazard ratios (which incorporate time), or absolute scales with Student's t-test or similar statistics. |
| | **Job retention:** There are two ways of assessing job retention: From the workers' perspective or from the employer's perspective. In the first instance, job retention refers to whether the worker is employed in any job or occupation with any employer at a certain point in time. In the second instance, job retention refers to whether the worker remains employed with the same employer at a certain point in time. In the one quantitative study located which evaluated this outcome, the former definition of job retention was used (Wang et al., 2007). When defining job retention from the worker's perspective, self-report data is the best source of information; while for the employer's perspective, administrative data can be used. Job retention is typically reported as an absolute measure (proportion or percent) and assessed using Student's t-test or a similar statistic. |
| | **Critical incidents:** Critical workplace incidents include work-related accidents or injuries as well as major negative or positive events, such as receiving a promotion. The World Health Organization Health and Productivity Questionnaire is a standardized tool available for collecting self-report data on critical incidents. Administrative data may not be appropriate for critical workplace incidents, since workers may perceive events as major or minor in different ways. The absolute probability of critical incidents for workers in intervention and control groups can be compared using Student's t-test or similar statistics. |
| | **Job performance:** A measure of how well a worker is able to perform his or her job tasks. The World Health Organization Health and Productivity Questionnaire is a standardized tool available for collecting self-report data on job performance, on a 10-point scale. Absolute job performance scores can be compared using Student's t-test or similar statistics. |
| **Quality of life outcomes** | This category of outcomes assesses how effective an intervention is at improving the worker's daily life experiences, such as degree of emotional pain, frequency of depressive episodes or level of stress. There are a wide variety of ways to measure this type of outcome, but typically self-report data are used. However, medical testing may provide an additional source of information on biophysical measures of symptoms. Appropriate scales of measurement will depend on the type of data used. |
| | **Symptom reduction:** Change over a specified time interval in the frequency or severity of psychological or mood symptoms, or comparison of symptom severity or frequency between the intervention group and control group at specified |

| Outcome Category | Definition |
|---|---|
| | intervals before, during or after the intervention trial. Standardized, validated questionnaires should be used for collecting self-report data; administrative data are not typically appropriate. The quantitative studies located which discussed symptom reduction used the Quick Inventory of Depression Symptoms Self-Report (QIDS-SR) (Wang et al., 2007) and the Beck's Depression Inventory (BDI) (Grossi & Santell, 2009) to measure depressive symptoms and the Karolinska Exhaustion Scale – Global Index (KES-G) (Grossi & Santell) to measure burnout symptoms. Absolute differences between intervention and control group participants in symptom reduction can be compared using repeated measures ANOVA, while absolute differences between groups in symptom occurrence at a specified time point can be compared using Student's t-test or similar statistics. |
| | **Physiological measures of stress:** There are a variety of physiological markers which can be used to measure acute or chronic stress levels, such as cortisol levels, blood pressure, and heart rate. In one study, the levels of a protein called HbA1C (glycated hemoglobin), as well as total cholesterol, triglyceride and immunoglobulin G (IgG) levels in the blood stream, were used to measure chronic stress (Grossi & Santell, 2009). Levels of these chemicals in the bloodstream can be measured by investigators by taking blood samples from participants at the start and end of the intervention, or at specified intervals throughout the duration of the intervention. Absolute differences between groups in the levels of these chemicals can be assessed using ANOVA or chi-square tests. |
| | **Treatment satisfaction:** Self-reported information on satisfaction with the treatment process, types of treatment received or level of improvement following treatment, on the part of the worker, the employer or the healthcare provider. The quantitative study located which assessed treatment satisfaction used a version of the Patient Satisfaction with Occupational Health Professionals Questionnaire to assess satisfaction on the part of workers and their supervisors, as well as an evaluation questionnaire to assess provider satisfaction (Rebergen, Bruinvels, Bezemer, et al., 2009; Rebergen, Bruinvels, van Tulder, et al., 2009). When treatment satisfaction is measured at several points during the intervention, the relative level of satisfaction in the intervention group compared to the control group can be assessed using linear regression. |
| **Economic outcomes** | This category of outcomes covers all the financial and economic aspects of providing and assessing interventions. |
| | **Healthcare Costs:** Monetary cost of providing treatment to the intervention group and the control group over the duration of the study period. Healthcare costs can include costs such as primary care, psychiatric care, counselling, occupational healthcare, rehabilitation, hospital care. Differences between groups on the absolute value of healthcare costs can be compared using Student's t-test or similar statistics. Administrative data is typically used to collect cost information, since workers are generally not responsible for these payments. In addition, total healthcare costs can also be derived from the number and type of healthcare services received. |
| | **Intervention Costs:** Monetary cost of providing treatment to the intervention group and the control group, including costs which are not directly related to healthcare, over the duration of the study period. Intervention costs other than healthcare costs can include costs such as training providers to perform the intervention or performing screening of workers to determine eligibility. |

| Outcome Category | Definition |
|---|---|
| | Differences between groups on the absolute value of intervention costs can be compared using Student's t-test or similar statistics. Administrative data are typically used to collect cost information, since workers are not responsible for these payments. |
| | **Cost Effectiveness:** This measure provides an estimate of whether the monetary cost of the intervention is acceptable given the level of improvement in outcomes of interest. There are many ways to assess cost effectiveness, but typically administrative data on costs are necessary. Cost effectiveness analyses which include sensitivity analyses, where the amount that the payer is willing to spend on the intervention is varied over a range of values, are the most useful in determining if the intervention should be implemented over a larger scale. |

# Appendix 7 – Evidence Synthesis for Best Practices Principles

| Principle or Key Point | | Level of Evidence |
|---|---|---|
| **Principle 1** | **Clear, detailed, and well-communicated organizational workplace mental health policy** | |
| Key point #1 | Clear and well-communicated organizational workplace mental health policy minimizes fragmentation and inaction. | Moderate (1, 2, 3, 4, 5, 6, 7, 8) |
| Key point #2 | A people-oriented organizational culture through supportive management facilitates workplace disability management. | Moderate (2, 3 7, 9) |
| Key point #3 | Organizational investment in educational programs can help reduce stigma as a barrier to effective return to work. | Moderate (2, 3, 5, 6, 8, 9, 10) |
| Key point #4 | Early identification and intervention for depression, through increased awareness and skills training at the workplace, can reduce the severity, duration, and cost of depressive illness | Limited (2) |
| **Principle 2** | **Return-to-work coordination and structured, planned, close communication can optimize return to work** | |
| Key point #1 | Coordination and negotiation are both required and may need a trained return-to-work coordinator. | Strong (3, 4, 7, 10, 11, 12, 13, 14, 15, 16) |
| Key point #2 | In-person or telephone contacts are effective, and cost-effective, modes of communication. | Moderate (13, 14, 15, 17) |
| Key point #3 | Maintaining a connection between the worker and the workplace has a positive influence on return to work. | Moderate (4, 9, 11) |
| Key point #4 | Mailed information on return-to-work processes hastens return to work and reduces sickness benefits. | Moderate (3, 18) |
| **Principle 3** | **Application of structured and coordinated return-to-work practices improves return-to-work outcomes** | |
| Key point #1 | Adapted implementation of the NVAB guidelines for occupational physicians is effective. | Strong (11, 12, 13, 14) |
| Key point #2 | Return-to-work practices that activate and help keep the worker engaged in the process are effective. | Strong (11, 12, 13, 14) |
| Key point #3 | Regular check-ins to assess progress and worker's needs in return to work are important return-to-work practices | Strong (11, 17, 23, 24, 25, 4, 22, 13, 9, 26, 12, 19) |
| Key point #4 | Return-to-work practices that focus on work function, workplace behaviour and return to work are effective. | Strong (4, 9, 11, 12, 13, 17, 19, 21, 22, 23, 24, 25, 26) |
| Key point #5 | Strong, supported supervisor-worker collaboration can result in effective and sustained return to work. | Moderate (3, 10, 12) |
| Key point #6 | Implementation of NICE guidelines is effective. | Limited (4) |
| **Principle 4** | **Work accommodations are an integral part of return to work** | |
| Key point #1 | Work accommodations are recommended. | Moderate (4, 6, 7, 12, 20) |
| Key point #2 | Work accommodations should consider the worker, co-workers, management, and stressors to reduce obstacles. | Moderate (3, 5, 6, 7, 9, 20) |
| Key point #3 | Potential accommodations include decreased work hours, lighter workloads, fixed shifts and altered work tasks. | Limited (3, 5, 6, 9) |
| **Principle 5** | **Facilitation of access to evidence-based treatment reduces work absence** | |
| Key point #1 | The delivery by appropriately trained occupational physicians of an activating intervention (workplace-based and work-focused), based on cognitive behavioural therapy, is effective. | Strong (11, 12, 10, 13, 14) |

| Principle or Key Point | | Level of Evidence |
|---|---|---|
| Key point #2 | Delivery by trained professionals of workplace-based and symptom-focused cognitive behavioural therapy and care management is effective. | Strong (19, 21) |
| Key point #3 | Cognitive behavioural therapy-based interventions should be combined with work accommodations and/or counselling about return to work. | Strong (2, 4, 12, 13, 14, 19) |
| Key point #4 | Workplace-based occupational therapy programs are effective and cost-effective. | Moderate (20, 22) |
| Key point #5 | For workers with post-traumatic stress disorder, early return to work with graded work exposure may be effective. | Limited (16) |
| Key point #6 | Stress management programs may be effective. | Limited (10, 23) |
| Key point #7 | Specific counselling treatments may be effective. | Limited (10, 16, 20, 27) |

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# Appendix 8 – Brief description of the NVAB (Dutch) guidelines for occupational physicians treating workers with mental health conditions

**According to this guideline, the disability management practice consists of 4 distinct phases:**

(1) Understanding the problem and diagnosis;
(2) Interventions;
(3) Prevention and relapse prevention; and
(4) Evaluation and completion of supervision. Below is a brief description of the four phases.

*Time line:* The occupational physician starts treatment 2 weeks after the start of the sick leave. Each consultation is min. 30 minutes long. Follow-up consultations occur every 3 weeks. Contact with workplace/supervisor occurs once/month.

The occupational physician receives training on how to apply the guideline.

Initial intake:

i. **Understanding the problem:** The occupational physician has to evaluate: (a) At which phase in problem solving/recovery of control are the worker and the workplace? (b) How long have the worker and workplace been in this phase? (c) What steps have already been undertaken by the worker and the workplace? (d) Are worker and workplace following those steps or is there stagnation in the process? The occupational physician discusses the following with the worker: the relation of symptoms to functioning; function limitations; causal factors; capacity for problem solving; the supervisor's problem solving capacity; whether the relationship between the worker and the workplace facilitates problem solving or hinders it.

Detailed assessment:

ii. **Diagnosis:** The occupational physician proceeds with a dimensional and categorical diagnosis of the mental health condition (a diagnostic manual assists in the diagnosis of 4 dimensions: stress-related symptoms, depression, anxiety, and other psychiatric disorder). The occupational physician also takes into account workplace-related and individual factors as potential causes of stress and of mental health issues.

Interventions:

iii. Return-to-work interventions focus on strengthening the problem-solving capacity of the worker and the supervisor. The worker and the supervisor are considered as primarily responsible for developing and implementing appropriate return-to-work interventions. The occupational physician is responsible for monitoring the process of implementing the return-to-work interventions.

iv. The occupational physician completes three tasks during the Intervention phase:
    (a) The occupational physician monitors the process: Consultations between the occupational physician and the worker occur every 3 weeks and are 30 minutes long. The worker's perceptions of the causes of the condition are discussed. The occupational physician provides information about stress, exhaustion and mental

health conditions. The occupational physician also monitors the process of implementation of return-to-work interventions developed by the supervisor and the worker and intervenes to optimize their implementation, if necessary. At this stage, the occupational physician may also refer the worker to specialist care and monitor the effectiveness of this care. Finally, the occupational physician monitors the symptoms monthly with the help of a standardized test and discusses the results and trends with the worker. If symptom improvement is not satisfactory for the worker, the occupational physician helps the worker identify alternate treatment options.

(b) The occupational physician develops worker-directed return-to-work interventions: The occupational physician offers a work-focused cognitive behaviour therapy-based activating intervention to the worker and provides assistance to the supervisor. The occupational physician also contacts the general practice physician, if symptoms do not improve and facilitates the worker in seeking specialized care.

(c) The occupational physician develops return-to-work workplace-directed interventions: The occupational physician contacts the workplace and helps evaluate existing return-to-work interventions and/or develop new return-to-work interventions that take into account the worker's functional limitations. The occupational physician may also advise the workplace to undertake management training, if necessary.

Check-ins and relapse prevention:

(a) The occupational physician strengthens the capacity of the worker and the workplace to solve problems and implement return-to-work interventions.

(b) The occupational physician addresses structural problems at the workplace that may hinder relapse prevention,

(c) The occupational physician helps the worker identify worker-directed factors that may lead to relapse (signs, and symptoms).

Evaluation/completion:

(a) How can the workplace and the worker have ownership of the process?

(b) Identify the time points for evaluation and agree on those with whom?

(c) Specify what goes into the evaluation.

(d) When is the supervision by occupational physician regarded as complete?