Exploration of the contexts surrounding the implementation of an intervention supporting return-to-work after breast cancer in a primary care setting: starting point for an intervention development

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Background: Many recommendations have been made regarding survivorship care provided by teams of primary care professionals. However, the nature of that follow-up, including support for return-to-work (RTW) after cancer, remains largely undefined. As implementation problems are frequently context-related, a pilot study was conducted to describe the contexts, according to Grol and Wensing, in which a new intervention is to be implemented. This pilot study is the first of three steps in intervention development planning.

Method: In-depth semi-structured interviews (n=6) were carried out with stakeholders selected for their knowledgeable perspective of various settings, such as hospitals, primary care, employers, and community-based organizations. Interviews focused on participants’ perceptions of key contextual facilitators and barriers to consider for the deployment of an RTW intervention in a primary care setting. Data from interviews were transcribed and analyzed. A content analysis was performed based on an iterative process.

Results: An intervention supporting the process of RTW in primary care makes sense for participants. Results suggest that important levers are present in organizational, professional, and social settings. However, many barriers, mainly related to organizational settings, have been identified, eg, distribution of tasks for survivor follow-up, continuity of information, and coordination of care between specialized oncology care and general primary care.

Conclusion: To develop and deploy the intervention, recommendations that emerged from this pilot study for overcoming barriers were identified, eg, training (professionals, survivors, and employers), the use of communication tools, and adopting a practice guide for survivor care. The results were also helpful in focusing on the relevance of an intervention supporting the RTW process as a component of primary care for survivors.

Keywords: complex intervention, primary care, cancer survivorship, return-to-work, knowledge translation approach

Background

Over the past few decades, the number of breast cancer (BC) survivors, ie, adults who complete cancer treatment that is of curative intent,¹ has climbed steadily, thanks to early screening and major advances in cancer treatment.² However, survivors face many challenges after completing cancer treatments, including return-to-work (RTW),³ defined as a complex process that involves “work reentry” and “work retention.”⁴,⁵
RTW process is important for some survivors, as resuming one’s working role fosters the continuation of social interactions, self-esteem, financial security, and psychological well-being. Despite these benefits, it is often difficult for women to RTW and keep working as long as they would like. They face challenges associated with the recurrent effects of the cancer or treatments (e.g., fatigue, pain), as well as challenges associated with the workplace (e.g., lack of support from supervisors and colleagues, lay-offs, stigmatization). In addition, follow-up care diminishes in intensity during the RTW process once active treatment for BC is completed. Some authors have suggested interventions with multiple components (e.g., educational, physical, vocational, and psychological activities) and several levels (survivor, health care professional, employer) to address issues related to RTW after cancer. This type of multifaceted intervention is similar to complex interventions in which implementation strongly depends on the setting, in which various stakeholders have multiple, often competing objectives. To date, few multilevel interventions (survivor, health care professional, employer) designed to support RTW have been put forward. Considering the many challenges associated with the RTW process, there is reason to believe that these women would benefit from interventions by primary care health care professionals as soon as active treatments end in order to attenuate the impact of side effects and thus facilitate work reentry. A pilot study was performed to provide recommendations for the later development of early intervention supporting RTW after primary care for BC. This pilot study is the first of three steps in intervention development planning. The other steps were exploration of the RTW process of BC survivors and the collaborative creation of the intervention with different stakeholders (e.g., BC survivors, health care professionals).

The Medical Research Council notes the importance of suggesting adapted interventions and understanding the context in which they are deployed. According to Pfadenhauer et al, the context is more than a physical location, as it may include roles, interactions and relationships at multiple levels, as well as a set of characteristics and circumstances. A good number of papers emphasize that the characteristics of the context may influence the implementation of the intervention, acting as either barrier or facilitator. In oncology care, several promising interventions have not been integrated into primary care practice due to context-related implementation problems. For example, survivorship care plans are seldom used in primary care or specialized care, even though practice guidelines encourage their use. Many barriers to making the survivorship care plan an integral part of existing practice have been reported, including low “buy-in” from primary care professionals and the lack of dedicated resources. There are grounds for believing that similar issues could be raised in the development and implementation of an intervention designed to promote RTW in primary care. For this reason, it is necessary to contextualize the intervention to locate levers and barriers, assign priorities, and attempt to understand their synergy.

As part of the development of an intervention to support RTW for BC survivors in primary care, a pilot study was conducted to improve our understanding of the context for the intervention. An approach inspired by integrated knowledge translation was chosen, as it involves stakeholders to facilitate understanding of the real context. In addition, the involvement of stakeholders makes it easier to identify barriers and facilitators, as well as interventions that should be given priority.

The aim of this pilot study is to describe the contexts, according to Grol and Wensing, in which the new intervention is to be implemented. More precisely, the objectives were: 1) to explore the opinions of different stakeholders on the role that primary care could play in supporting the RTW process after BC; and 2) to identify perceived barriers and facilitators to the deployment of this new intervention in a primary care setting in Quebec (Canada).

**Framework**

Given the complexity of the development of the intervention enhancing RTW, the pilot study was guided by the Knowledge to Action framework and the barriers and facilitators identified by Grol and Wensing related to *Improving Patient Care: The Implementation of Change in Health Care*. First of all, the Knowledge to Action framework, built on the theory of planned behavior, suggests an iterative and dynamic process of exchanges between researchers and potential knowledge users to facilitate the implementation of meaningful results, in this case an intervention to support RTW. This model suggests that the development of an RTW intervention in primary care integrates available research evidence as well as stakeholders’ knowledge over seven action phases: 1) identifying the problem and selecting knowledge; 2) adapting knowledge to the local context; 3) evaluating factors that present obstacles or contribute to the use of knowledge; 4) selecting, adapting, and implementing interventions that eliminate barriers to the use of knowledge; 5) monitoring the use of knowledge; 6) evaluating results; and 7) creating mechanisms for maintaining the use of knowledge.

Since the various action phases are interconnected in an iterative process, it is possible to document “identifying the problem” and “evaluating favorable factors and barriers” jointly. The contexts identified by Grol and Wensing are
useful in guiding the description of favorable factors and barriers. The authors state that it is important to identify these factors to be in a position to develop consistent implementation strategies for different contexts: individual health care professionals’ context (eg, skills, attitudes, values, knowledge), the social context (eg, patients’ preferences, expectations, knowledge, needs, attitude and behavior of colleagues, culture in the social network), the organizational context (eg, financial resources, care organization, division of tasks), and the economic and legal context (eg, rules, regulations, laws).

Method
To explore stakeholders’ opinions on the development and implementation of a new intervention, six semi-directed interviews were conducted, using snowball sampling.10 Key informants identified potential participants who were involved in the RTW journey of women who had received treatment for BC in the same geographic region (Quebec, Canada). Participants were to represent oncology care (hospital), community care and services (family medicine unit, nonprofit organization for people with cancer), and employers. The potential participants were contacted by telephone or e-mail to present the project, answer their questions, and validate their interest. Four health care professionals (physicians, nurse, and psychologist), a representative of a community organization, and an occupational health and safety officer from a hospital were recruited (Table 1). All the participants signed consent forms and were told that the data would remain confidential. An interview guide based on items from the reference framework was used to direct the conversation (Box 1). Interviews lasted an average of 35 minutes and were digitally recorded. Interviews were performed in French; a professional translator translated the manuscript from French to English to ensure the quality of the language and the scientific work.

Data analysis
The transcribed data were put through a qualitative analysis of consistent content and an iterative process including the following activities: condensation, presentation of data, and development and verification of the conclusions.31 According to this process, two coding cycles were performed. The first cycle of structural coding32 was designed to assign specific codes to issues related to the RTW process after a BC diagnosis, as well as the role of primary care in the RTW process, favorable factors, processes, and barriers to implementing the intervention. These data were displayed in a summary table. Participants’ perspectives on the issues emerged. In the second cycle, data were skimmed to identify barriers and facilitators. We used a coding grid based on the barriers and facilitators identified by Grol and Wensing.28 Content analysis summary tables were created to make connections between the barriers and facilitators perceived by participants.

Table 1 Sample characteristics

<table>
<thead>
<tr>
<th>Oncology context (n=3)</th>
<th>Community context (n=2)</th>
<th>Workplace context (n=1)</th>
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<tbody>
<tr>
<td>Surgeon</td>
<td>Family physician</td>
<td>Occupational health and safety officer</td>
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<tr>
<td>Pivot nurse</td>
<td>Representative of a community-based organization</td>
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<tr>
<td>Psychologist</td>
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Box 1 Interview guide

- What is your role or experience with BC survivors who wish to RTW?
- What is your point of view regarding challenges BC survivors face in returning to work and keeping their jobs?
- Why do you think so many women don’t manage to keep their jobs?
- As far as you know, what support is offered for women who are returning to work and wanting to keep their jobs?
- Is there reason to believe that support for RTW is possible in primary care? Why?
- Specifically, in primary care?
- How will other professionals react to that solution?
- How will patients react to that solution?
- What do you think will be the advantages and disadvantages of that sort of intervention?
- What factors will facilitate and what factors will impede the implementation of support for RTW in primary care?
  - From the organizational viewpoint
  - From the patients’ viewpoint
  - From the viewpoint of professionals working in a specialized setting
  - From the viewpoint of primary care professionals
- In your opinion, who are the key players in making this project successful?
- What will be the greatest challenge in implementing this solution?

Note: Interviews were performed in French; a professional translator translated the manuscript from French to English to ensure the quality of the language and the scientific work.

Abbreviations: BC, breast cancer; RTW, return-to-work.
according to different contexts (organizational, health care professional, social, economic, and legal). QDA Miner v.4.0.11 software was used to manage qualitative data. The following measures were taken by the researchers to ensure reliability, validity, and transferability: 1) the interviews were listened to after each cycle of coding to review the codes and themes to ensure that the results were truly representative of participants’ perspectives; 2) all authors gave feedback to explore differences and refine codes; and 3) the context of this pilot study was documented in a detailed fashion.

Ethical considerations
Ethical approval was obtained from the Office of Research Ethics and Integrity at Ottawa University before the study commenced. All participants signed consent forms and were told that the data would remain confidential. They received a copy of the consent form.

Results
Stakeholders’ perceptions of RTW after BC
Participants from different milieux (eg, community organizations, employers) presented a converging vision of major challenges relating to the process of RTW after cancer. They mentioned that BC survivors had trouble keeping their jobs. Some said that work reentry came too soon, and recurring symptoms of cancer and treatments (eg, fatigue, cognitive difficulties) were barriers to continuing employment. A gap was reported between the survivor’s ability to complete the prescribed tasks and the employer’s expectations in terms of the desired productivity. It was even noted that some BC survivors have to ask for sick leave again due to symptoms of depression or burnout. A participant explained the situation:

They’re often able to achieve good results at work but after two hours [of concentration] they’re exhausted […] it takes a lot of effort […] it takes a lot of compensation strategies for a while […] often the recovery period after treatment is not completed before RTW so they go back to work with gaps right from the start. (Onco_context #2)

Participants explained that accommodations were offered at the beginning of the work reentry process, but very little planning was done to ensure that they could keep working. Here is an example:

A few years ago, RTW wasn’t planned and it felt like the person was coming back to work as if she’d just had a bad cold. In some cases it is still like that, but I think many employers do act in good faith and really try to accommodate the person and plan RTW properly. Where I think there are enormous gaps is [when] RTW is planned but I’m not sure whether they’ve planned properly for the person to keep on working. (Com_context #1)

Participants also agreed that there are limited resources for supporting patients with RTW after BC. While they are on sick leave, BC survivors find it difficult to gain access to resources that are available in hospitals. Community services are underdeveloped for this group:

I’d like to be able to say that there are lots of resources but there aren’t; I think we were all unprepared for treatments becoming increasingly effective […] I think we just weren’t ready. (Com_context #1)

Stakeholders’ perceptions of developing an RTW intervention in primary care
Participants had a positive perception of an intervention in primary care. They believed in the solution and felt that it met patients’ needs in terms of RTW. They found the solution interesting, as it promoted the accessibility of service, continuity of care during RTW, and the involvement of various professionals. Participants explained:

[…] extremely useful, because resources are available in primary care, such as psychologists; for sure it’s the most interesting approach to improve accessibility because it’s always more difficult in a hospital setting […] (Work_context #1)

It’s interesting when here (in a hospital setting) we’re always limited to things relating to oncology […] all the same, we’re going to limit ourselves to cancer after-effects, since you need to have a framework for a given time, but if it was in primary care, I imagine they could cast a wider net. (Onco_context #2)

Findings on participants’ perceptions of facilitators and barriers are presented in various contexts in the following sections (Table 2).

Factors conducive to intervention
In terms of organizational context, participants coming from primary care and oncology reported that they were able to communicate easily with colleagues from these different milieux. According to participants, the presence of this communication seemed to augur well for the development of an RTW intervention in primary care.

As for the individual health care professional context, all the participants agreed on the necessity of putting in place
Intervention supporting return-to-work after breast cancer

Table 2 Perceptions of facilitators and barriers

<table>
<thead>
<tr>
<th>Facilitators</th>
<th>Barriers</th>
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<tbody>
<tr>
<td><strong>Organizational context</strong></td>
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<tr>
<td>• Previous history of collaboration between hospital and primary care setting</td>
<td>• Task division regarding BC care follow-up</td>
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<tr>
<td>“Even though we don’t know each other, we call each other.” (Onco_context #1)</td>
<td>“Let’s be honest: primary care should not step on our toes.” (Onco_context #1)</td>
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<tr>
<td>• Real needs of BC patients</td>
<td>• Lack of informational continuity between hospital and primary care</td>
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<tr>
<td>“Patients need support for RTW to avoid ‘being dropped’; otherwise, ‘it doesn’t work.’” (Work_context #1)</td>
<td>“Things move so fast that no one takes the time to send a little note on the patient.” (Com_context #2)</td>
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<tr>
<td>• Lack of knowledge about RTW issues</td>
<td>• Low financial resources</td>
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<td>“Patients minimize RTW […] there’s a difference between being in good shape at home and being in good shape at work.” (Onco_context #3)</td>
<td>“At the moment, everyone’s working inside their own box.” (Com_context #1)</td>
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<tr>
<td>• Conflicts between professionals</td>
<td>• Disagreement on RTW recommendations</td>
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<tr>
<td>• Low financial resources</td>
<td>“The trouble is, oncology and primary care pass the buck when it is time for RTW.” (Work_context #1)</td>
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<td>• Lack of knowledge about RTW issues</td>
<td>• Professionals operate in silos</td>
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<tr>
<td>“We need professionals who understand the burden of cancer symptoms and all the features of the job.” (Onco_context #3)</td>
<td>“At the moment, everyone’s working inside their own box.” (Com_context #1)</td>
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<tr>
<td>• Lack of informational continuity between hospital and primary care</td>
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<td>• Lack of accommodation in the workplace</td>
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<td>• Disagreement on RTW recommendations</td>
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<td>• Professionals operate in silos</td>
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<tr>
<td>• Unanimous recognition of the necessity of RTW interventions in a primary care setting</td>
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<tr>
<td>“We must make a ‘small effort’ to give our patients more support.” (Com_context #2)</td>
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<tr>
<td>• Good relationships and trust between professionals from different settings</td>
<td>• Lack of knowledge about RTW issues</td>
</tr>
<tr>
<td>“If we know and trust the team, oncology professionals will make lots of referrals.” (Onco_context #2)</td>
<td>“Patients minimize RTW […] there’s a difference between being in good shape at home and being in good shape at work.” (Onco_context #3)</td>
</tr>
<tr>
<td>• Real needs of BC patients</td>
<td>• Hospital-centric vision of cancer care</td>
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<tr>
<td>“Patients need support for RTW to avoid ‘being dropped’; otherwise, ‘it doesn’t work.’” (Work_context #1)</td>
<td>“Transitioning to a primary care team will be an obstacle. Patients care about our oncology team.” (Onco_context #2)</td>
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<tr>
<td>• Not mentioned</td>
<td>• Lack of accommodation in the workplace</td>
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<tr>
<td>• Budget constraints in health care</td>
<td>“It’s a social issue […] you can’t be half able: you’re able or unable to work.” (Onco_context #2)</td>
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**Notes:** Onco_context: oncology care context; Com_context: community care context; Work_context: employer context. Interviews were performed in French; a professional translator translated the manuscript from French to English to ensure the quality of the language and the scientific work.

**Abbreviations:** BC, breast cancer; RTW, return-to-work.

interventions designed to promote RTW in primary care. The proposed intervention is perceived as filling a “practice gap.”

The highest number of facilitating factors was found in the social context. Good relationships and mutual trust between oncology professionals and primary care professionals were reported as being extremely important aspects. This situation will foster the use of services developed for the intervention. It was also reported that the intervention meets a real need for the population of BC survivors. According to participants, women will be more inclined to participate in such an intervention.

**Barriers to intervention**

When it came to organizational context, many barriers were identified. First of all, participants explained that there was no consensus on the sharing of tasks or the adoption of recommendations for follow-up after BC treatments or on RTW. The sharing of medical activities was raised as a major issue in the context of developing a new intervention that would rally professionals from specialized care and primary care. Participants also mentioned that although there was communication between milieux, various professionals mainly operated in silos. They explained that the last notes dictated are not generally given to family physicians, which makes it hard to have any continuity in terms of information. Participants also doubted the organization’s ability to provide staff and resources for primary care RTW interventions due to the perceived lack of resources in daily practice.

In the individual health care professional context, participants pointed out that many professionals do not know enough about issues surrounding RTW after cancer. They stated that professionals consulted during the intervention should be aware of the problems and challenges related to different types of jobs, the variability of work settings (small or large company), as well as whether there was insurance.
One participant also said that there was some conflict between certain members of his work team who had a lot of influence. This situation could limit the participation of key players. The suggestion was made that only one key professional should be targeted as the main contact person in a pilot project.

As for the social context, participants explained that BC survivors downplay RTW issues and do not get enough information on this aspect of surviving cancer. They also reported that BC survivors prefer specialized oncology teams, though the teams may be reluctant to consult in primary care at the end of treatments and may not see the point of dwelling on aspects related to RTW. On the employer’s side, the point was raised that one of the most complex aspects of RTW is the concept of ability to work after cancer treatments. One participant said that the survivor’s ability to resume work changes over time, which means accommodations in the workplace (e.g., flextime, review of tasks) will need to continue over a longer period. Some employers’ rigid attitudes to making accommodations can limit the effects of the proposed intervention.

As for the economic and legal context, participants said only that health care budget cuts in recent years could limit the deployment of an RTW intervention in primary care. Primary care resources for the implementation of the intervention could be limited.

Discussion
The integrated knowledge translation approach is helpful in improving our understanding of the local context, existing practices, and relationships between particular stakeholders. The pilot study pinpointed barriers and facilitators to the implementation of an intervention in primary care to support RTW after BC. The results further suggest that participants believe that cancer survivors are predisposed to appreciate an RTW intervention in primary care. The results of our study thus provide confirmation that the proposed intervention is a useful way of compensating for issues experienced by various stakeholders from various contexts.

This pilot study enabled us to identify barriers, primarily regarding the organizational context. Although the various stakeholders were aware of problems with RTW after BC, existing practices and procedures did not appear to have been modified to meet the needs of BC survivors. Our results seem to suggest that care and services were coordinated “by referral.” Participants frequently mentioned that practice took place “in silos” and that communication among various players regarding exchanging information on survivors’ health was poor. Problems with communication between oncology and primary care teams, as well as the absence of clear directives on survivor care, can limit coordination of care,\textsuperscript{35-38} transition of routine follow-up care,\textsuperscript{34-36} feeling able to trust family physicians to play a more active role with this clientele,\textsuperscript{38} and survivors having confidence in their primary care team to follow-up posttreatment.\textsuperscript{1,34-36,44,45} Also, these difficulties about coordinating care between primary care and specialized care seem recurrent in the general practice.\textsuperscript{46} In addition, in terms of social context, participants perceived survivors’ difficulty with obtaining ongoing accommodations.
in the workplace. According to a recent Canadian study, this clientele requires tailor-made accommodations that take into account job demands as well as support available in the workplace and work context. It is worth noting that employers have no legal obligations to put in place ongoing accommodations for people who are deemed fit for work, as is the case for BC survivors. This aspect is extremely important, as it reinforces the idea of intervening at an early stage and providing better information for various professionals on the employer’s legal obligations. There have been reports of survivors minimizing problems related to RTW. This is why it is recommended that survivors, professionals, and employers be informed about this subject. In light of these results, recommendations are proposed for different contexts in order to overcome the presence of barriers and focus on identified levers (Table 3).

**Strengths and limitations**

One strength of this study is the use of varied perspectives from stakeholders from the oncology, community and employer contexts. Thanks to this strategy, favorable factors and potential barriers to developing an intervention related to RTW in primary care have been identified. The application of an integrated knowledge translation approach to support the development and implementation of a complex intervention has proven to be a wise strategy, as it helps to identify the opinions of various stakeholders involved in the RTW journey of women treated for BC. Since this is an exploratory stage in a pilot study, the number of interviews was limited. It should be noted that there are scant data to explain the employer’s context. For this project, the stakeholder who was recruited was a workplace health and safety officer working in a hospital, with a background in nursing science. Perhaps that choice should be reconsidered in a future study to include other workplace settings. Also, to reinforce the transferability of the results, more interviews are needed. We suggest conducting focus groups with representatives from each context (oncology, employers, and community). Despite the small number of participants, this pilot study provides some recommendations for a local context as a part of an intervention development strategy. A further note: our results document the specific context of stakeholders in a specific geographical area – the province of Quebec, Canada. Considering these limitations, the results should be interpreted with caution.

**Conclusion**

The results of this pilot study improve our understanding of the local context in preparing for the development of a complex intervention designed to support RTW after BC. The problem (eg, difficulty with RTW) and the solutions (eg, intervention in primary care) were pinpointed, and recommendations for breaking down the barriers were identified (eg, training, communication tools). In addition, the results focus on the usefulness of an intervention supporting the RTW process as a component of primary care treatment for survivors. Ultimately, the intervention to be developed would need to focus on both creating the conditions to change practices in favor of the intervention and making the intervention an integral part of professional practices and the organization of existing services. Finally, the application of an integrated knowledge translation approach has proven to be useful in formulating pragmatic recommendations that will be applicable to the Canadian clinical context.

<table>
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<tr>
<th>Table 3 Recommendations for facilitating the development and deployment of the intervention</th>
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<td><strong>Contexts</strong></td>
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<td>Individual health care professionals</td>
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**Abbreviation:** RTW, return-to-work.
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Disclosure
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