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Development and Implementation of a Mental Health Work Rehabilitation Program: Results of a Developmental Evaluation

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Abstract

Purpose Long-term work disability due to common mental disorders (CMDs) is a growing problem. Yet optimal interventions remain unclear and little is known about implementation challenges in everyday practice. This study aimed to support and evaluate, in real time, the development and implementation of a work rehabilitation program (WRP) designed to promote post-CMD return-to-work (RTW). *Methods* A 2-year developmental evaluation was performed using a participatory approach. At program outset, the researchers held five work meetings to revise the program's logic model and discuss its underlying change theory with clinicians. Data collection tools used throughout the study period were structured charts of activities conducted with workers (n = 41); in-depth interviews with program clinicians and managers (n = 9); and participant observation during work meetings. Quantitative data were analyzed using descriptive statistics. Qualitative data underwent thematic analysis using a processual approach. *Results* Three types of activity were developed and implemented: individual and group interventions targeting workers, and joint activities targeting partners (physicians, employers, others). While worker-targeted activities were generally implemented as planned, joint activities were sporadic. Analysis of the implementation process revealed five challenges faced by clinicians. Determinants included clinicians, host organization, sociopolitical context and resources provided by the evaluation. *Conclusion* The program studied is original in that it is based on the best available scientific knowledge, yet adapted to contextual particularities. The identified implementation challenges highlight the need for greater importance to be placed on the external, non-program context to ensure sustainable implementation in everyday practice.

Keywords Program development · Implementation · Return to work · Mental disorders · Sick leave

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Introduction

Over approximately the past 15 years, interest has risen steadily in the problem of work absenteeism due to common mental disorders (CMDs) such as depressive, anxiety and adjustment disorders. Their prevalence among workers is very high, accounting for as many as one out of two work disability claims in some countries [1, 2]. In addition to its association with a greater risk of long-term work disability than other prevalent disorders such as musculoskeletal disorders [3], work absenteeism due to CMDs generates astronomical costs on both the human [4] and societal levels [5].

Several programs developed to prevent long-term work disability among workers with a CMD have been modelled on work rehabilitation programs (WRPs) already proven effective for musculoskeletal disorders. These CMD-related programs therefore have intervention components targeting workers, the workplace and stakeholders [6]. Yet recently

published reviews tend to demonstrate limited effectiveness of interventions designed to facilitate return to work (RTW) when it comes to CMDs. The meta-analysis performed by Nigatu [7] found no statistically significant difference between experimental and control groups regarding RTW rates among workers absent due to a CMD, but the experimental groups had slightly shorter pre-RTW absence durations. The interventions tested in most of the studies had common ground, i.e., cognitive behavioral therapy, work-related problem-solving and stress-management skills, and the reduction of specific RTW obstacles, in collaboration with the workplace. Mitigated results were also observed in the effectiveness of intervention components targeting the workplace specifically. The van Vilsteren [8] review did not find that programs with a workplace intervention component had a positive impact on sickness absence outcomes in workers with a CMD, whereas there is solid evidence of positive effects in workers with an MSD. The van Vilsteren review defined workplace interventions as having to include work adaptations and active stakeholder involvement of at least the worker and the employer. In summary, current knowledge does not unequivocally identify the specific intervention components to include in WRPs, and innovations are still required to develop programs that will allow the largest number of workers to return to work post-CMD.

Alongside effectiveness studies, a number of studies documenting WRP implementation have been conducted in recent years [9–11], some including workers with a CMD [12–14]. These studies generally took the form of a process evaluation and were mostly conducted in conjunction with a randomized or quasi-randomized controlled trial, with two main consequences. First, very little flexibility was allowed due to the controlled conditions under which the studies had to be conducted, i.e., flexibility either to adjust implementation strategies to the needs of those responsible for implementation or to adapt intervention components to the implementation context along the way. These studies provide specific knowledge about the degree of implementation of very clearly defined intervention components, but little information about the sustainable implementation of context-tailored programs. Second, these process evaluations were designed primarily to help interpret effectiveness study findings, thus focusing on what had been implemented by the end of a given period (e.g., levels of reach, dose received and fidelity to the protocol) [15]. Very rarely does the design of these process evaluations provide an understanding of how the implementation process unfolds over time, in what context and with what effects. Hence it is difficult, based on these studies, to thoroughly grasp the stakeholder experience and the factors facilitating or impeding their actions during the various implementation phases [12]. Yet this type of knowledge is critical to decision makers responsible for implementing these programs in everyday practice [16, 17]. A noteworthy exception is the study by Martin [13], whose analytic strategies revealed considerable variations in the degree of implementation of the evaluated program among the three participating sites and explained these variations in terms of implementation obstacles present at specific times during the process.

Thus, despite the solid foundations of several recent programs designed to reduce long-term work disability post-CMD, great uncertainty remains about the optimal intervention components and the challenges likely faced during implementation in everyday practice. Given the growing importance of the problem of long-term CMD-related work disability in many countries, innovation appears essential if we are to more effectively reconcile (1) the need to produce knowledge on the development and implementation of rehabilitation programs tailored to workers with a CMD, with (2) the need to continue developing everyday practices that will improve outcomes for workers and reduce the societal burden.

Recent developments in the program evaluation field have led some evaluators to propose approaches supporting both the development of complex interventions and their evaluation. The developmental evaluation proposed by Patton [18] is one such approach. It aims specifically to support the development of complex interventions through a learning process in which stakeholders receive data on their program in real time, react to these data and use them to adjust the program. It is therefore particularly appropriate in uncertain contexts where both the route and destination of the innovation process are evolving [18, 19]. In addition to helping improve the intervention, developmental evaluation generates knowledge on the intervention, thereby advancing knowledge in the field.

This article seeks specifically to present the results of a developmental evaluation whose aim was to support and evaluate, in real time, the implementation of a work rehabilitation program (WRP) designed to promote post-CMD return-to-work (RTW) in primary healthcare. The program studied was introduced within a health organization (hereafter referred to as the host organization) located in Laval (Quebec, Canada). The intention of this host organization was to offer the surrounding population a WRP involving interventions based on the best knowledge available in the field, delivered to groups of participants by occupational therapists (OTs) and supporting family physicians who work with this population. Collaborative efforts between the host organization and our research team made the study possible. This paper presents the results pertaining to two of the three objectives, which were, specifically, to (1) describe the rehabilitation program as implemented and (2) identify the main challenges faced during implementation and their determinants. The

third objective, which concerns the program effects from the viewpoints of the participants and their physicians, will be the subject of a subsequent publication.

Methods

Research Approach

The general approach adopted for this study was developmental evaluation, which Patton [18] regards as particularly appropriate for adapting a promising program to changing conditions. Unlike traditional approaches involving external evaluators who are independent of the program, the role of the evaluator in developmental evaluation is that of a "critical friend" who provides information to stakeholders, leads discussion on the data obtained and supports the intervention development process [20]. As developmental evaluation involves a partnership between evaluators and those concerned by the evaluation but who are not evaluators themselves, it is consistent with a participatory approach [21].

Procedure

The research process was divided into four main phases, each carried out in close collaboration with the clinical team and WRP manager.

Phase 1: Specify the intended scope of the evaluation, i.e., the scope of the questions for which answers are sought in the research project.
Phase 2: Develop an initial logic model of the WRP. A logic model is a visual tool for describing the main facets of a program, usually in diagram form [22, 23]. It includes the resources required, activities, target groups and expected outcomes. A preliminary logic model was developed for this purpose using presentation materials on the WRP. It was revised and iteratively clarified in subsequent meetings with the clinical team and program manager until it provided a satisfactory representation of the program implemented.
Phase 3: Develop a data collection and analysis plan.
Phase 4: Implement the data analysis and collection plan. This phase began only after verifying with the clinical team that the activities actually carried out in the WRP were those indicated in the logic model, i.e., almost 1 year after program start-up.

Table 1 provides an overview of the data sources, variables documented and methods used to collect and analyze

Table 1 Overview of data sources, variables, and collection and analysis methods used, by objective

Objectives	Data sources	Variables documented	Tools/procedures	Data analysis
(1) Describe the WRP as implemented	• Logic model of the WRP	• Components of the WRP	• Not applicable	• Not applicable
	• Participants' medical records	• Population reached • Interventions received (type, frequency)	• Structured chart completed by occupational therapists for each participant (n = 41)	• Descriptive statistics
(2) Identify the main challenges faced during implementation and their determinants	• Members of the clinical team (OTs)	• Key events in the implementation process • Problems encountered, facilitators, means used • Implementation context	• Semi-structured interview one year after start-up (n = 2) • Semi-structured interview two years after start-up (n = 3)	• Transcription and thematic analysis using a processual approach
	• WRP manager • Other stakeholders in the WRP	• Implementation context	• Semi-structured interview one year after start-up (n = 2) • Semi-structured interview two years after start-up (n = 2)	
	• Clinician-researcher discussion meetings	• Key events in the implementation process • Problems encountered, facilitators	• Participant observation and field notes taken during work meetings (n = 7)	

WRP work rehabilitation program

the data for each objective. This information will be examined in detail in the following sections.

Study Population

All the clinicians involved in delivering services within the WRP were invited to participate in the study. Essentially they consisted of occupational therapists (OTs). Recruitment took place during preliminary discussions between the two teams (research team and clinical team), and a written consent form was obtained at each step in the data collection process. The WRP manager and other stakeholders were also approached to participate.

Data Collection and Analysis

Structured Charts

A structured chart is a tool used to document various indicators on each program participant, specifically, their main sociodemographic and clinical characteristics and the interventions they received within the program. The form and content of the tool were decided upon jointly with the OTs in the WRP, using pertinence and feasibility criteria. The OTs were responsible for completing the structured charts. The tool was pre-tested twice with them to ensure that it was user-friendly, and adjustments were made accordingly. After stabilizing the tool content and ensuring common understanding of the indicators, the structured charts for 41 consecutive participants in the program were collected, and the data were compiled and analyzed by the research team, using descriptive statistics.

Interviews

A face-to-face semi-structured interview was conducted with each member of the clinical team 1 year after program start-up (n = 2 OTs) and again the following year (n = 3 OTs). The interviews lasted an average of 1 h and 40 min. The clinicians were questioned about how they experienced the events and circumstances they saw as having influenced program implementation, how they coped and the results achieved from their viewpoint. Individual semi-structured face-to-face interviews were also conducted with four key stakeholders: the WRP manager (t-1 year), the program's clinical coordinator (t-2 years), a professional responsible for pre-evaluating requests for admission to the WRP (t-2 years) and the manager of another program in the organization (t-1 year). Averaging 43 min long, these interviews focused mainly on contextual elements perceived as having influenced the WRP implementation. Each interview was recorded after obtaining written consent, and then transcribed verbatim. The data underwent thematic analysis using a processual approach to preserve any temporal changes in the phenomenon studied. A processual approach is especially well suited for analyzing sequences of events involving multiple levels and units of analysis whose boundaries are not well defined [24, 25].

Participant Observation

Participant observation was carried out during discussion meetings with the clinical team. A total of seven meetings were held over 16 months. Observations were recorded in the form of field notes to provide a descriptive account of the highlights of the program's implementation. Analytical comments were added progressively as insights were gained into the dynamics. The field notes were dated, then transcribed in their entirety.

Results

The Rehabilitation Program Implemented

Components of the Program Developed

Figure 1 presents the logic model of the WRP, including its inputs, activities, target groups and expected outcomes. This version was obtained following a series of iterations with the clinical team aimed at defining the program and describing it in as much detail and as faithfully as possible. The version presented in Fig. 1 was obtained after five work meetings, 7 months following program start-up.

The program implemented is run by OTs and has three intervention components: individual interventions, group interventions and exchanges with stakeholders. As the logic model shows, a maximum of five meetings are allotted for individual interventions: two for initial evaluation and three to support workers in their RTW initiatives at the employer's. Two group interventions are held each week over an 8- to 12-week period. Workers are given guidelines for their gradual activation, taught adaptation strategies applicable at work and in life in general (including stress management and work-related problem-solving skills) and prepared for gradual exposure to paid work. The latter takes place concomitantly with their participation in the group at around the eighth week of the program. These first two intervention components (individual interventions and group interventions) target the workers absent from work due to a CMD (first target group), more specifically, people eligible for first-line mental health services whose RTW is planned within 8–12 weeks and who are willing to engage in group activities. Three intermediate outcomes are anticipated in this group: (1) that workers improve their work-related self-efficacy; (2) that they overcome obstacles to their RTW; and (3) that they use strategies allowing them to meet demands at

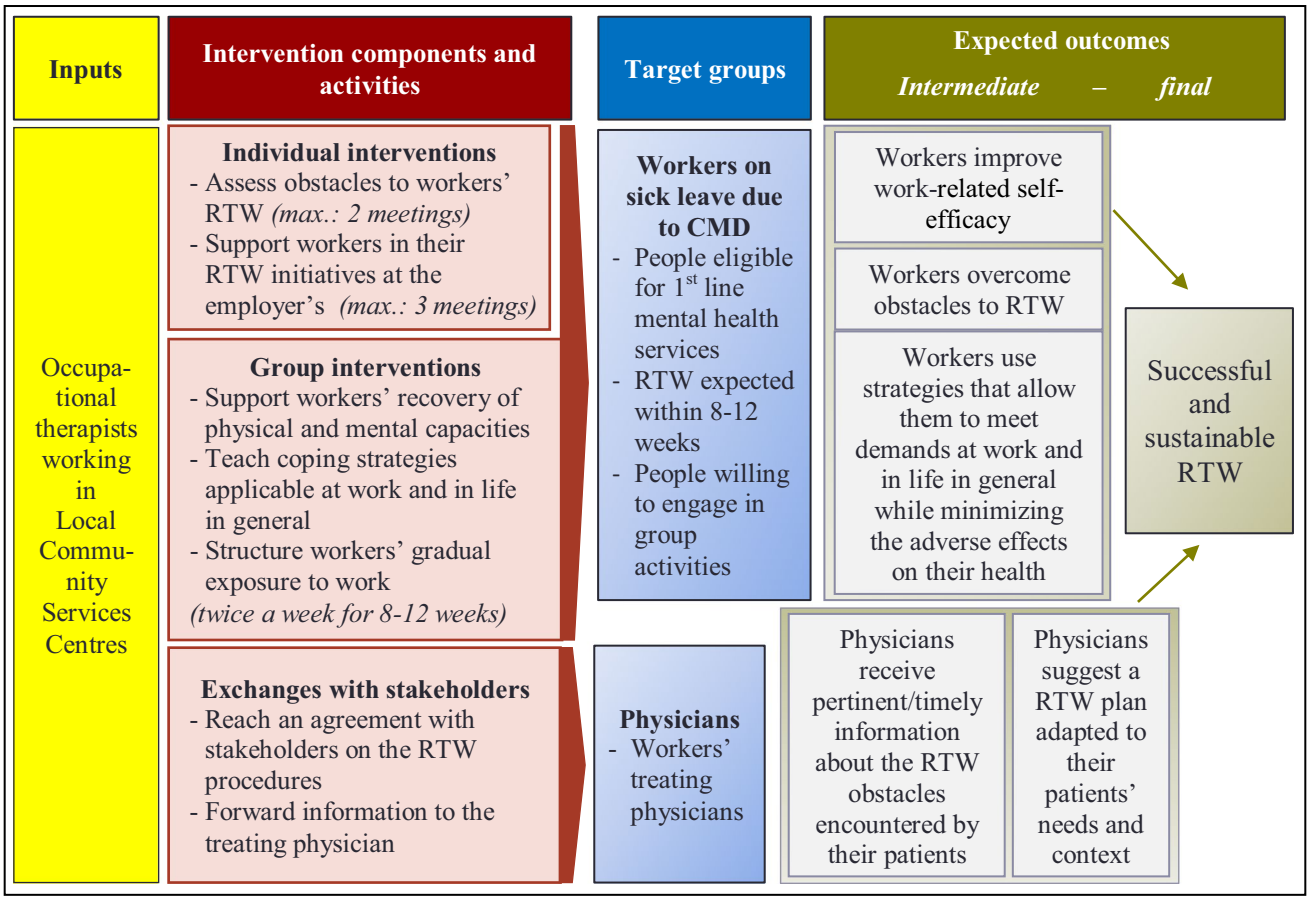

Fig. 1 Logic model of the work rehabilitation program

work and in life in general while minimizing adverse health effects. The third intervention component—exchanges with stakeholders—specifically target the treating physicians (second target group) through information exchange and transmission activities. The expected intermediate outcomes are that physicians receive pertinent and timely information about the RTW obstacles encountered by their patients and that they suggest a RTW plan adapted to their patients' needs and context. Finally, it is expected that intermediate outcomes in line with both target groups will lead to a successful and sustainable RTW (final outcome).

Population Reached

Data from the 41 structured charts indicated that the population reached was composed of 71% women and 29% men, with an average age of 46 years (range 31–59). Of the participants, 20% (n = 8) had a personality disorder on top of their CMD, and a similar proportion was receiving specialized psychiatric follow-up as well as general services. In our study context, the presence of psychiatric follow-up usually indicated a higher degree of CMD severity. Sick leave duration at the time participants started the program was less than 6 months for nearly two-thirds of the sample (63%). Specifically, for 29% of the participants (n = 12), sick leave duration was 13 weeks or less, and for 34% (n = 14), it was 14 to 26 weeks. For nearly one-quarter (22%, n = 9), it was between 27 and 39 weeks, with only one participant sick-listed for between 40 and 52 weeks. The remainder (12%, n = 5) had been off work longer than a year, including two workers for over 2 years.

Interventions Received by the Participants

The individual interventions performed with the participants started with the initial evaluation. The structured charts indicated that in the vast majority of cases, this evaluation took two meetings or less (88%, n = 36). Three individuals interviews or less were needed for 98% of the participants (n = 40), thus falling within the maximum expected. However, two other types of individual meetings were held in addition to these formal ones: one or more telephone conversations in 63% of the cases (n = 26), and one or more interviews conducted after the group intervention in 73% of

the cases (n = 30). These post-group meetings were brief, averaging only 22 min.

Regarding the group interventions, the structured charts indicated an average participation duration of 10 weeks (range 3–14), which fits with what was expected. The intervention attendance rate, i.e., actual number of times present over expected number, was also high, at 77%. Exposure to paid work during participation in the program was also documented, as this activity was integrated into the program. The structured charts showed that such exposure took place in 54% (n = 22) of the cases, but was absent in 46% (n = 19).

Lastly, several observations were made on the basis of the exchanges with stakeholders, the third type of intervention in the program. In this study, exchanges refers to a sharing of information involving direct interaction, either in person or by telephone, between an OT in the WRP and a person from one of the four stakeholder groups: treating physician, other clinicians involved (e.g., psychiatrist, psychologist), insurer representatives and employer representatives. As shown in Fig. 2, the least frequent exchanges were with the treating physicians. No exchanges took place in 78% (n = 32) of the cases, only one exchange in 15% (n = 6) of the cases, and a maximum of two exchanges in 7% (n = 3) of the cases. Although slightly more frequent, exchanges with other clinicians involved were still infrequent, with 69% (n = 28) of the participants having no exchange, 17% (n = 7) having one, 7% (n = 3) having two, and 7% (n = 3) having three. The insurer and employer were the partners with whom exchanges were most frequent, with more than one-third of the participants having at least one exchange. Even so, these actions remained infrequent, as exchanges with the insurer were totally absent in 59% (n = 24) of the cases, and with the employer, in 61% (n = 25) of the cases. The picture is somewhat different if we look at the participants who had at least one contact with either insurer or employer: 63% (n = 26) of the participants had at least one exchange (results not shown in Fig. 2).

Information was also collected on the frequency with which the OTs transmitted personalized information about program participants to their treating physicians, but with no direct interaction by, for example, email or fax. The data indicate that this occurred in 63% (n = 26) of the cases and was absent in 37% (n = 15). For the 15 cases where no information was transmitted by email or fax, in-depth analysis showed that exchanges took place in two of these cases. Hence, in 68% (n = 28) of the cases, an exchange or transmission of information took place with the treating physician, while none took place in 32% (n = 13).

Challenges Faced During the Program Implementation Process

The study revealed five challenges that the clinical team had to overcome during program implementation.

Challenge 1: Draw Attention to the Existence of the Program and Ensure that It Is Recognized by Clinicians Not Associated With It, Both Within and Outside the Host Organization

This challenge proved crucial for the team, as having a sufficient number of referrals was vital for the program to be able to operate. On one hand, family physicians in the territory were made aware of the program's existence, as they were the main anticipated sources of referrals to the program. This was done at a regional symposium attended by many family physicians. The OTs also made numerous presentations to the clinical teams working within the host organization to explain the program's underlying rationale and illustrate how it complemented existing services. These presentations began at program outset and were repeated several months later. Specific instructions were also given to the individuals responsible for pre-evaluating and channeling WRP requests to help them distinguish between requests suited to primary care and those requiring more specialized interventions. All the means used both internally and externally necessitated considerable resources, which would have been impossible without the support of management at different levels

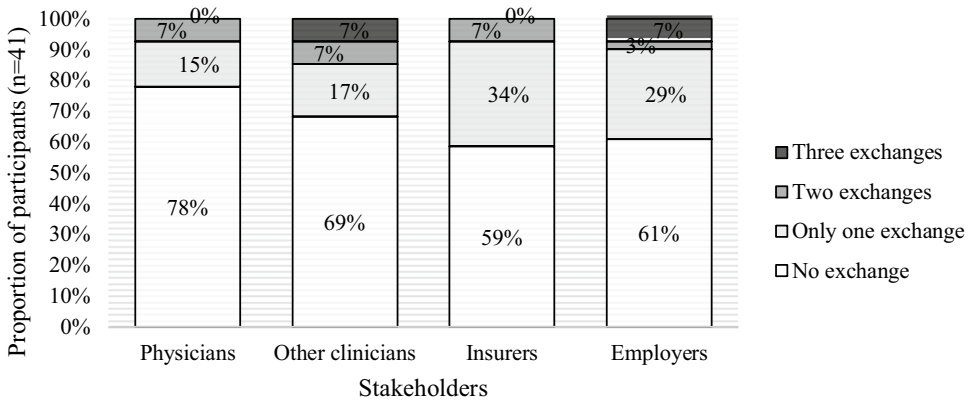

Fig. 2 Frequency of exchanges with each group of stakeholders for all participants (n = 41)

of the hierarchy. This support pledged at program start-up remained constant throughout the study period and was a tremendous asset in terms of meeting both this challenge and the next.

Challenge 2: Develop Original and Clinically Pertinent Means of Intervention

Three types of resources allowed the OTs to meet this challenge. The first was their own expertise. Although acquired in a specialized care rather than first-line context, this expertise made it possible to start the program without delay, based on experience, while also lending credibility to the proposal. The second type of resource was provided by the program evaluation context. This context first gave the clinical team exposure to and training in new clinical tools such as the *Outil d'identification de la situation de handicap au travail* (OISHT, or Work Disability Diagnostic Interview), which has become the main tool used in evaluation. Another resource provided by the evaluation context came from the exchange meetings between the clinical team and researchers. These meetings represented an incentive for reflection by creating forums where the OTs were invited to reflect on the consistency between their interventions and the goals sought, while being given insight by the researchers into the best scientific knowledge in the field. The evaluation context also created an incentive to act methodically, notably, to apply what was agreed to and specified in the logic model. As the following OT indicates, "I was in a research project, so I had to be consistent. You could say that this helped me stay on track."

Finally, the third type of resource was grounded in the principles of action adopted by the OTs to guide their interventions. The first of these principles concerned the individual's capacity for self-determination, as illustrated in this citation.

> "We get the participants to stop feeling as if they're just putting up with their jobs. When they say, 'I have to go back to work, I've got no choice, I'm stuck with this boss,' we ask them instead to see it as their own choice. Because in life, they themselves might have decided not to return to this job, it's their choice and all choices are legitimate, but they have to remember why they're staying there, even if they have a horrible boss. And to see it as their own choice: 'Okay, so I'm going back there and I know why I've decided to face this conflict.' This, this empowers them so they don't feel like they're just putting up with their jobs and are victims, so they don't feel miserable." (OT, year 1)

Another fundamental principle of action for the OTs concerned the therapeutic potential of the group as an intervention modality, a potential they saw as high in this intervention context.

> "[As therapists,] we can understand, but that doesn't mean as much to them as when it's another participant who says it: 'Hey, I'm going through exactly the same thing as you are!' And the participants tell us that hearing someone else say they've gone through it, they've tried these strategies, that things are going well now in their gradual return to work, well, that's motivating." (OT, year 2)

Lastly, seeing the individual as a whole that cannot be reduced to only one of his or her dimensions was the other principle of action driving the OTs in the WRP. In this sense, while a RTW can certainly be regarded as the program's main aim, the absence of a RTW is not seen as a failure.

> "We're still occupational therapists, and we look at the person holistically. For sure, a person who's back in touch with his or her strengths [but not back at work], for me, that's just as much of a success. It's not a success in terms of our return-to-work rate, but it is one at the human level." (OT, year 1)

Challenge 3: Meeting Administrative Demands

However, the OTs' ability to develop original and pertinent means of intervention was constrained by administrative demands. This third challenge stems from the particular characteristics of the organizational context (host organization) where the program was implemented. One characteristic was the way in which first-line services were defined, i.e., as services that must not only meet the health needs of people residing in a given territory, but also be readily accessible. The means of intervention developed thus had to be both clinically pertinent and allow sufficient client turnover to prevent undue waiting times and maintain optimal accessibility, as measured by management indicators specific to first-line services. As one manager explained, "You always have to bear in mind [the need for], yes, good service based on compelling evidence, but [that] accessibility is also important." It was due to this administrative demand that, for example, individual meetings were limited to a maximum of five and that the OTs could not visit the workplaces because it would have required too much time. This constraint fuelled a permanent tension between the OTs' desire to offer participants the most pertinent and personalized intervention possible, and their obligation to meet performance targets set to guarantee service accessibility, even if these targets appeared poorly adapted to work rehabilitation interventions.

Another particular characteristic of the host organization was the importance given to family physicians practicing in the service territory, i.e., a target group that the OTs were

responsible for supporting rather than partners like the other stakeholders. Dealing with this constraint proved difficult because it required the OTs to change their idea of who their client was and to devote additional time to contacting these actors, known to be largely inaccessible, all in a context where time was lacking for tasks regarded as more important.

> "You have to think about this idea of communicating with physicians. Sometimes it doesn't interest them." (OT, year 1)
> "It's harder to reach physicians, but that's our role. Yeah, it's complicated. There are issues, [like] time, momentum, but that's our reality, and we have to adapt to this reality." (manager, year 1)
> "We have two clients: we have our worker, and then we have the physician. We offer services to these two groups." (OT, year 2)

As evidenced in the preceding excerpts, these particular demands gradually stopped representing major constraints and were integrated into routines.

Challenge 4: Enlist the Employer's Collaboration to Begin the Gradual Exposure to Paid Work

This fourth challenge was observed right from the start of program implementation and was only partially resolved after 2 years of operation. It was apparent in both the difficulty of establishing contact with the employer to negotiate work exposure procedures and in some employers' outright refusal to collaborate with the rehabilitation team. According to the OTs, one useful strategy consisted of making early contact with the employer to obtain a sense of its openness to welcoming the worker back for gradual exposure to work.

> "So I try to test the waters with the employer. If the answer is no, well, I stop right there in terms of any intervention with the workplace, and I focus my energies on the person. It's as if this points me in the direction where I should concentrate my efforts: should I focus more on the person or can I count on support from the workplace? For sure it makes a huge difference in the disability situation when the workplace is receptive, and it's hard when it isn't." (OT, year 2)

However, this strategy did not allow the challenge to be completely met, and problems continued to be observed.

Challenge 5: Refine the Program Based on Experiences Gained

The final challenge met after 2 years was that of refining the program based on the experiences gained. For example, the program inclusion criterion concerning the anticipated RTW date (8–12 weeks) remained unchanged, but was applied more stringently. A second example was the increasing importance placed on securing the active involvement of the group rather than of the OT in the process of identifying problem-solving strategies adapted to the work. A determining factor in meeting this challenge was teamwork among the OTs, during which problems observed in the program were discussed and treated as an opportunity for improvement and each person's expertise was recognized and pooled.

Discussion

The aim of this study was to support and evaluate, under real-world conditions, the implementation of a WRP designed to promote post-CMD return to work in primary healthcare. More specifically, the study was carried out by superimposing the development, implementation and implementation analysis phases of the program. The final result obtained was (1) an accurate portrait of the program as implemented after content was stabilized and (2) information on challenges faced during implementation. This approach differs from the usual sequence prescribed for research on health interventions, which starts with developmental research and is followed by implementation research and then effectiveness research [26]. However, our approach is perfectly congruent with trends promoted by developmental evaluation, which seek to support the search for innovative solutions in contexts of uncertainty through exploration and learning [18, 19]. Our findings concern two main aspects that will now be discussed: the content of the program implemented and the implementation process itself.

Content of the Program Implemented

Regarding content, our results show that the program implemented shares many common points with promising components of WRPs for workers on CMD-related sick leave. It focuses on improving skills in solving work-related problems, improving stress management and reducing RTW obstacles. In the meta-analysis conducted by Nigatu [7], these components were found to form common bases for interventions effective in reducing pre-RTW absence duration compared to control groups, although these authors were unable to show that these interventions improved RTW rates. Resumption of contact with the workplace to reduce RTW obstacles was also common to the interventions analyzed by Nigatu et al. However, this type of intervention occurred minimally in the program we studied. For example, our results showed that direct interaction with the employer occurred in only 39% of the cases. This could certainly be explained partially by the difficulty reported by the OTs of establishing contact with the employer and

obtaining minimal collaboration. On the other hand, it is possible that the OTs' desire to rely on the worker's capacity for self-determination led them to delegate to the latter the responsibility of making their own arrangements with their employer or insurer. Interestingly, even though this led to few exchanges between OTs and the employer or insurer, our results showed that exposure to paid work occurred nonetheless in over half the cases. Based on current knowledge in which uncertainty persists about the essential components of a workplace intervention effective for workers with a CMD, it is difficult to reach any unequivocal conclusion about the adequacy or inadequacy of the workplace intervention as deployed in the program studied. To the extent that participants noted few organizational obstacles among the obstacles that persisted post-RTW, as evidenced in the end-of-program participant interviews (Sylvain et al., forthcoming), this may mean that the intervention with minimal workplace involvement implemented in the program was adapted to their needs. It is also conceivable that, from the outset, these workers faced RTW obstacles that were more personal than organizational in nature, which could explain why an intervention with little direct workplace involvement met their needs. This is all the more likely, given that the workers facing more numerous or complicated RTW obstacles had the opportunity to be redirected to another rehabilitation program associated with specialized mental health services.

The program implemented also differs from other programs studied in recent years and designed for workers with a CMD. First, it places major emphasis on group interventions as opposed to individual interventions. One probable mechanism of action is that group interventions provide a forum for "normalizing" the situation experienced by a worker and attenuating the feelings of shame frequently associated with a CMD-related work absence. Some of the data collected from the workers but not reported here substantiate this. This mechanism of action may in fact constitute a key mechanism for preventing long-term work disability among this population. In fact, Knapstad [27] found that people sick-listed for a mental disorder have a four-to-five-times greater risk of feeling a moderate to high level of shame than those with any other health problem. These authors also found that the fact of reporting a high level of shame about one's work absence was a predictor of long-term work absence in the following year. However, even if the emphasis was on group interventions in the program we studied, it appears that this type of intervention cannot substitute entirely for individual interventions. Our results indicate that individual interviews were conducted with most of the participants, albeit often short interviews with a flexible informal structure. These individual interventions are probably essential to allow for personalized adjustments to the intervention plan, which are more difficult to make in a group context.

A second contrast between this program and other WRPs is that it targets not only the absent workers but also their treating physicians, providing a good illustration of the type of adaptation required to ensure that the programs implemented are adapted to their context. Targeting treating physicians may constitute a relevant strategy in jurisdictions where they are the ones certifying the sick leave and authorizing the RTW. Sylvain [28] clearly documented the difficulty physicians have in participating in joint actions with the other partners involved. The fact of specifically targeting these stakeholders, and consequently, of implementing activities designed for them, while identifying the expected outcomes, may represent a pertinent means of acting on the factors determining their collaboration. Our study results indicating a possible transmission of personalized information or an exchange with the treating physician in 68% of the cases show unequivocally that this is an activity applicable in current practice.

Implementation Process

Three main findings emerge about the program implementation process. The first concerns how the implementation was carried out and what resulted. In accordance with the developmental evaluation approach used, implementation took place under real-world conditions and concomitantly with program development. This allowed numerous adjustments to be made in the intervention components during the early stages of implementation, resulting in a program that was very well adapted to its context and whose sustainability was not at risk at the end of the research project.

The second finding concerns the five implementation challenges identified. They consist of five concrete challenges that the team responsible for implementing and running the new program had to face during the first 2 years of the program's existence. These challenges were rooted in the organizational context and broader implementation environment. They thus represent useful knowledge for supporting administrators and clinicians in their efforts to implement programs based on the best available evidence in everyday practice [16, 17]. To our knowledge, none of the few studies having investigated the WRP implementation process has adopted the same analytic perspective as ours. Our results therefore complement current knowledge.

Close examination of the implementation challenges documented also reveals factors that proved decisive in dealing with the challenges encountered. These factors can be categorized using the framework developed by Wierenga [29] for process evaluations for worksite health promotion programs. This framework classifies implementation determinants in five categories: socio-political context, organization, implementer, intervention program, and participant. The determinants highlighted in our study essentially fall into three of

these categories: implementers (OTs' recognized expertise, principles of action reflecting certain professional values, teamwork), organization (management support, administrative demands) and socio-political context (employer's reluctance to collaborate with the rehabilitation team). However, unlike Wierenga [29], for whom the determinants are barriers or facilitators, we found the determinants in our study to correspond more to factors influencing the way the team dealt with the implementation challenges faced. A prime example is the OTs' principles of action (capacity for self-determination, therapeutic potential of the group, the individual as a whole), which helped them define original and clinically pertinent means of intervention, but to which it is difficult to ascribe a positive or negative value. One last determinant brought to light in our study but that does not fit into the categories in Wierenga's framework, corresponds to the resources provided by the developmental evaluation context. In our study, these resources allowed us to present new clinical tools and create an environment conducive to reflection and methodical action. These resources can be seen as implementation support strategies characterized by their responsiveness to the team's needs, a factor known to be favorable to implementation of practice changes [30].

Our research project has certain limitations. First, for reasons of feasibility, the number of variables documented in the structured charts was limited. For example, basic information was collected on the evaluation process (number and duration of meetings), but none on the evaluation results, such as the main RTW obstacles. Such information would have painted a more comprehensive picture of the population reached by the program. This serves as a good example of the compromises required in an evaluation context where a portion of the data collection process depends on the program staff. Despite this limitation, the decision to involve clinicians in data collection seemed pertinent as it reinforced the clinician-researcher partnership, and is also known to promote the use of research results in practice [31, 32].

A second limitation is that, while interviews were conducted with key stakeholders 1 and 2 years after program start-up, it was impossible to interview the same individuals at both times, mainly due to unavailability. We are nonetheless confident about the credibility of our results as several methods (observations, interviews) and sources (clinicians, managers, partners) were used, thus permitting data triangulation. Regarding the number of informants interviewed in each round, while this number is indeed modest, it does not represent a limitation since it corresponds to the limited number of people closely involved in the delivery of this program.

A third limitation concerns the timing of the researcher/clinician work meetings, which was mainly during the first year of the study. The data shared thus concerned the program's initial implementation and did not take account of the data collected once program content was stable. While this had no direct repercussion on the credibility of our results, one might speculate whether continuing to hold regular work meetings during the second year might not have offered the team more opportunities for reflecting and finding solutions to their implementation challenges by drawing on data provided by the evaluation. This touches on the very essence of the evaluator's role in developmental evaluation: as a "critical friend," the evaluator has to draw attention to the developing situation by providing feedback based on empirical data, but also on experience and judgment [19]. Essentially, time constraints on both sides explained the timing of the meetings. Such constraints, which have also been reported by other authors [33, 34], clearly illustrate the difficulty of offering concrete and sustained support for program development, support that is central in developmental evaluation.

Implications for Practice and Research

The development of the logic model underlying this WRP could guide other organizations wishing to develop comparable services for their clientele. For example, the explicit identification of its components and theory of change will facilitate the process of adapting this program to other contextual particularities. The results of the second part of this study, which concern workers' perceptions of the program and its effects, will also provide vital indications of the key components of the program from its principal users' viewpoint, particularly regarding group interventions. These results will be reported in a subsequent paper. Lastly, future research will need to verify whether the five implementation challenges identified in this project also arise in other contexts, and in what form. Until then, organizations wishing to implement such WRPs for workers with a CMD could use the challenges identified here as guideposts for planning and monitoring their implementation process.

Ultimately, we believe that the proliferation of research projects conducted in partnership with practice settings constitutes an invaluable means of advancing scientific knowledge, while supporting developments and improvements in practices. It clearly offers a promising avenue for significantly helping reduce the human and societal costs associated with long-term disability post-CMD.

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Compliance with Ethical Standards

Conflict of interest The views expressed in this article are our own and not an official position of the funders; we retain sole responsibility for this work.

Ethical Standards All procedures followed were in accordance with the ethical standards of the committees responsible for research involving human subjects (institutional and national) and with the Helsinki Declaration of 1975, as revised in 2000 (5).

Informed Consent Informed consent was obtained from all patients for inclusion in the study.

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