

DECISION AID TOOLS FOR MODIFIED WORK FOR WORKERS WITH MUSCULOSKELETAL DISORDERS

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Abstract

There is growing evidence that rehabilitation programs that provide modified work to workers with work-related musculoskeletal disorders (WRMD) are more likely to be effective at improving health status and reducing duration of work absence. This presentation described the development of a set of organizational strategies and an approach for implementing workplace-based modified work (MW) programs as well as disorder-specific decision aid tools that facilitate selection of modified work for workers with back pain, neck or shoulder, elbow disorders and hand or wrist disorders. Principles and strategies for modified work and an algorithm of the steps to follow in a Modified Work Program (MWP) were summarized in a guide book. For each of the 4 body regions, questionnaires were designed that allow rapid assessment of the physical demands of proposed modified work tasks by frontline workplace personnel, communication of this information to the treating physician and allow the treating physician to rapidly describe the relevant functional limitations of the injured worker and communicate them to the workplace. All materials have been developed in French and English. An evaluation study of the implementation of the proposed Modified Work intervention and the individual tools is currently underway in 3 metal, electric and electronic companies.

OUTILS D'AIDE À LA DÉCISION POUR LE MAINTIEN ET LE RETOUR AU TRAVAIL DES TRAVAILLEURS ATTEINTS DE TMS

Résumé

Plusieurs études scientifiques montrent que les programmes de réadaptation de travailleurs atteints de lésions musculo-squelettiques (LMS) liées au travail qui incluent un volet ergonomique ou une assignation temporaire sont plus efficaces pour réduire la durée de l'absence au travail du travailleur atteint que les traitements strictement médicaux. Cependant, les mesures de prise en charge de ces travailleurs permettant un maintien ou un retour précoce au travail s'avèrent souvent complexes; les travailleurs et les intervenants du milieu de travail impliqués dans ces mesures font face à plusieurs obstacles organisationnels et de communication. Cette conférence décrit le développement d'une démarche pour faciliter l'implantation des mesures de maintien ou de retour au travail et l'élaboration des outils d'aide à la décision pour faciliter le choix de tâches d'assignation temporaire (AT) qui respectent la capacité fonctionnelle du travailleur atteint de mal de dos ou de troubles musculo-squelettiques du membre supérieur. Les éléments de la démarche sont décrits dans un guide. Les outils incluent 4 grilles permettant l'évaluation, par des intervenants de l'entreprise, des exigences physiques des tâches proposées pour l'AT. Ces grilles sont spécifiques au type de lésion du travailleur (i.e., mal de dos, problèmes de cou ou d'épaule, de coude, et de main ou de poignet) et permettent de communiquer les exigences physiques au médecin traitant. Chaque grille a une section qui permet au médecin traitant de communiquer à l'entreprise les limitations fonctionnelles du travailleur atteint. Une étude d'évaluation de l'implantation de l'intervention et des outils est en cours actuellement dans 3 entreprises du secteur métal, électrique et électronique.

INTRODUCTION

There is scientific evidence and a growing consensus among researchers, clinicians, employers, unions, and Workers' Compensation Boards that rehabilitation programs that provide modified work to workers with back pain and other work-related musculoskeletal disorders (WRMD) are more likely to be effective at improving health status and reducing duration of work absence^{1,2,3}. But there is also evidence that the communication between the workplace and treating clinicians needed for such programs to work is often lacking. Moreover, frontline supervisors responsible for selecting modified work are often ill equipped to do so and face major organizational barriers.^{4,5} In earlier work by our research team in the electric and electronic industry, workplace stakeholders identified the need for tools to improve communication among workplace actors and treating physicians and for selecting modified work tasks that better match work task physical demands to the functional capacity of injured workers⁶. These results have led to the current project.

OBJECTIVES OF THE PROJECT

- 1 Develop a set of organizational strategies for implementing workplace-based modified work (MW) programs and disorder-specific decision aid tools that facilitate selection of modified work for workers with back pain and various upper extremity disorders;
- 2 Evaluate their implementation in the workplace; and
- 3 Identify the source of costs associated with return to work alternatives that would facilitate future economic analyses.

Here we present the results associated with Objective 1.

METHODS

A multidisciplinary research team and an Advisory Committee representing electric/electronic industry employers, workers, the employer-union joint health and safety association, as well as health care and workers' compensation board professionals was established. Detailed review of existing tools and scientific literature on vocational rehabilitation and physical demand risk factors for back pain and upper extremity disorders was carried out. Based on scientific evidence, investigators' experience, results of the previously conducted needs assessment and consensus discussion among co-investigators, principles and strategies for modified work were elucidated and an algorithm of the steps to follow in a Modified Work Program (MWP) was developed and summarized in a guide book. Key physical work demands and functional limitations relevant to (1) back pain, (2) neck and shoulder disorders, (3) elbow disorders; and (4) hand and wrist disorders were identified and items developed. For each of the 4 body regions, questionnaires were designed that allow rapid assessment of the physical demands of proposed modified work tasks by frontline workplace personnel, communication of this information to the treating physician and allow the treating physician to rapidly describe the functional limitations of the injured worker and communicate them to the workplace. In a series of consultative meetings, tool prototypes were presented to employer and employee representatives, health care professionals and ergonomists for their feedback. Tools were then revised and pre-tested. All materials have been developed in French and English.

RESULTS

Principles and Strategies for Implementing a Modified Work Program

The following 6 elements of resource allocation and organizational measures were identified as strategies that will facilitate successful return to work and are described in a manual:

- Establish a committee to plan, implement and evaluate the Modified Work Program (MWP) that includes managers, supervisor and union/worker representatives, and frontline Health and Safety personnel.
- Describe the current situation – e.g., RTW and MW procedures, resources, statistics of the various types of injuries, duration of work absences and modified work assignments.
- Establish general and specific objectives.
- Allocate resources and establish procedures, roles and mandates for MWP. For each injured worker who enters the MWP:
 - If possible, modify tasks, work methods or schedule of regular job to accommodate the functional capacity of the injured worker; if not possible, assign other tasks
 - Evaluate the physical demands of tasks proposed for modified work that are relevant to the type of WRMD of the worker (e.g. with the appropriate disorder-specific questionnaire developed by the project)
 - Ensure active participation of the injured worker in the modified work process
 - Where appropriate or dictated by law, communicate the physical demands of tasks proposed for modified work to the treating physician (e.g. with the appropriate disorder-specific questionnaire)
 - If needed, request that the treating physician identify functional limitations associated with the worker's injury or disorder (e.g. with the appropriate questionnaire)
 - Carry out periodic follow up of worker with modified work assignments to identify difficulties the injured worker might have with the assigned modified work tasks and adjust tasks accordingly
 - If functional capacity of the worker has improved, adjust MW tasks to take into account improved status of worker
 - When improved functional capacity permits, worker returns to regular work tasks.
- Implement the program.
- Evaluate the program.

It is intended that these guidelines will be adapted to the specific needs and organizational context of each company. An algorithm of the steps to follow has been developed and will be presented as will the manual and 4 disorder-specific tools. An evaluation study of the implementation of the proposed Modified Work intervention and the individual tools is currently underway in 3 metal, electric and electronic companies. The study will be completed in 2002.

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