Designing and implementing a "workplace-oriented musculoskeletal rehabilitation programme"

A case of the German Social Accident Insurance Institution for the administrative sector, part of the German Social Accident Insurance

Special mention, ISSA Good Practice Award – Europe competition 2013

German Social Accident Insurance Institution for the administrative sector
Germany
**Summary**

The rehabilitation concept as used by statutory accident insurance schemes primarily consists of eliminating or compensating for health restrictions and ensuring an individual's occupational and social reintegration as soon as possible. To achieve this objective accident insurance providers use a variety of institution-based rehabilitation procedures such as the postoperative management programme as practiced by the statutory accident insurance and prevention institutions (BGSW) and the extended outpatient physiotherapy programme (EAP).

Until recently structural and functional-oriented therapy approaches were the main ones to figure among the established procedures for medical rehabilitation. Occupational and activity-oriented treatment approaches had previously been under-represented. To dovetail these various therapy approaches and thus drive forward changes in medical rehabilitation the employers' liability insurance association VBG and a committee of experts put together a manual for a concept for workplace-oriented rehabilitation with corresponding minimum requirements for institutions to qualify to offer this rehabilitation procedure.

The concept takes a broad spectrum of occupation-oriented diagnostic and therapy approaches. It is based on the main elements of institution-based rehabilitation procedures with additional work-related components. The procedure is aimed primarily at those capable of work with (specific) physical workloads and health limitations with regard to the musculoskeletal system.

This concept was successfully trialled at institutions specifically licensed for this therapy in a pilot scheme named Workplace-Oriented Musculoskeletal Rehabilitation (Arbeitsplatzorientierte Muskuloskeletale Rehabilitation - AOMR).

**CRITERIA 1**

**What was the issue/problem/challenge addressed by your good practice?**

In years past a variety of offers regarding workplace or occupation-oriented medical rehabilitation had been developed. These procedures differ widely with regard to their levels of development, however. With regard to work-related measures it is the local experience of therapists that has to be relied on since there are almost no occupation-related therapy concepts that have been documented, i.e. available in manual form available to rehabilitation institutions and providers. There is a complete lack of consensus with regard to agreement on terms, quality standards or minimum requirements for programmes.

Some providers stress workplace replication or co-operation with enterprises and training centers while others put the accent on simulating workplace requirements using specific test and training systems. There is a very wide variation in price for these treatment offers due to the multiplicity of vendors and/or therapies.

Against this background the VBG, together with a committee of experts comprising experienced medical practitioners and therapists, has set out standards for a systematic diagnostic and therapeutic approach together with quality requirements for therapy institutions and trialed this as AOMR.
CRITERIA 2

What were the main objectives and the expected outcomes?

The aim of AOMR is not simply to remove or compensate for functional or structural disorders during medical rehabilitation but more to integrate into the therapy concrete actions that are relevant for work. This happens with the help of a specific work orientation in order to reach a sufficiently functional loading prior to the immediately subsequent full return to the (previous) workplace.

This approach has advantages for all concerned. The insured individual regains the ability to work on completing medical rehabilitation without needing further occupational rehabilitation treatment. The social security institutions save on costs.

CRITERIA 3

What is the innovative approach/strategy followed to achieve the objectives?

As already mentioned standards were defined for a systematic approach - from diagnosis to therapy - by defining an overall concept for workplace-oriented rehabilitation.

The first key element is a detailed standardized activity analysis when the patient is admitted for treatment in order to identify concrete occupational performance requirements and load or stress elements. Instruments to provide such analyses, for example, could be the IMBA requirement profile or the functional job analysis from the EFL system developed by Susan Isernhagen.

At the start of rehabilitation the patient's current capability profile needs to be established alongside the requirement profile. The aim here is to know the workplace-specific capability using the standardized FCE procedure such as the EFL test or ERGOS work simulation equipment.

Aligning the workplace-specific requirements obtained against the patient's current capability at the time gives a performance delta as the figure below shows from which an individual made-to-measure therapy programme can be obtained.
The therapy is broken down into basic training consisting of remedial gymnastics, physiotherapy and medical training therapy complemented by the following workplace-oriented therapy elements:

- Ergotherapy focusing on occupational therapy,
- AMTT (medical training therapy focusing on workplace requirements) to train those muscle groups specifically required for the patient's occupation but also on the insufficiently challenged antagonistic muscle groups using training equipment.
- Work simulation training to train individual work situation movement patterns or, if necessary, to learn alternative movements as compensation.

The patient's current capacity at any one time during therapy is recorded at regular intervals to show improvements, deteriorations or stagnation so that the therapy programme can be adjusted as required.

On completion of therapy a new capability profile is obtained using the FCE procedure employed at the start of the treatment to obtain the patient's capability on discharge. This is again aligned against the requirement profile to ascertain whether the performance delta has improved and the patient has regained the ability to work.

The concept deliberately uses the strategy of only working with institutions run by medical practitioners to be able to judge precisely at any time whether a patient's physical state and healing progress will allow an increase in stress loading.

**CRITERIA 4**

**Have the resources and inputs been used in an optimal way to achieve the set objectives and the expected outcomes? Please specify what internal or external evaluations of the practice have taken place and what impact/results have been identified/achieved so far.**

The basis for the specifically workplace-oriented rehabilitation approach is the above-mentioned alignment of capability profile against workplace requirement profile.

A variety of standardized FCE test procedures have gained widespread acceptance among practitioners to assess functional capability in the workplace to provide as objective an evaluation as possible of an individual's physical functional status and his or her ability to meet the physical and psychological requirements of a particular activity. However, performing these procedures is extremely costly and time-consuming.

The approach of carrying out specific screening to assess functional capabilities was deliberately adopted for economic reasons. This test is limited to the five or six relevant items taken from the complete FCE test in accordance with the workplace requirements identified in the activity analysis and which represent the critical load elements in connection with the occupational activity that was last undertaken or envisaged.
The conscious decision not to require therapy institutions to have model workplaces as a minimum requirement in terms of equipment was also taken for economic reasons. The disadvantage with model workplaces is that they require a lot of space relatively and are expensive in terms of investment and maintenance costs. The vast majority of work operations can be simulated simply by using the basic equipment for FCE procedures. Remaining occupational requirements that cannot be covered with the basic equipment can be trained in their essentials by experienced and creative therapists.

Based on these considerations it was possible to agree a price for AOMR below that of other occupation-oriented programmes using model workplaces.

**CRITERIA 5**

**What lessons have been learned? To what extent would your good practice be appropriate for replication by other social security institutions?**

The results of the study were impressive demonstrating that a return to work was more likely to be achieved sooner with a workplace-oriented musculoskeletal rehabilitation programme than with the purely functional rehabilitation programmes hitherto used in therapy treatment institutions. The reasons lay not only in the individual made-to-measure therapy programmes to restore physical functioning but also in the fact the patient undergoing rehabilitation gets back confidence in his or her own occupational capability through the application of workplace-oriented programmes.

The VBG's direction and positive experience with the standardized overall concept of a workplace-oriented rehabilitation programme quickly interested other accident insurance providers. As recently as 2010 the German Statutory Accident Insurance Scheme (DGUV) began nationwide consultations on setting up a workplace-related musculoskeletal rehabilitation programme (ABMR). This intensive conceptual work was successfully concluded in 2011 with the decision to introduce the ABMR.

This made the workplace-oriented musculoskeletal rehabilitation programme available to all insured members of the statutory accident insurance scheme in Germany.

Adoption of such a programme is not just suitable for statutory accident insurance providers but also for any social security institution involved in helping individuals to participate in working life.

This can only succeed if the relation with the workplace is guaranteed during therapy and the therapy content itself continuously adjusted with this in mind. The systematic approach as described is essential for this:

- Ascertain the workplace requirement profile with a standardized activity analysis.
- Determining the performance profile using standardized FCE procedures.
Ongoing alignment of capabilities with requirements by therapists and medical practitioners specialized in occupational therapy to ensure that therapy is always in line with the requirements of the moment.