

THE PRINCIPLES
OF REHABILITATION
FOR INJURED WORKERS

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DEFINITIONS

WHO (1980) definitions of impairment, disability and handicap

A disease or injury produces an **impairment** (of structure or function)

A **disability** is the resulting reduction or loss of an ability to perform an activity

A **handicap** is a social disadvantage resulting from an impairment or disability, that limits or prevents the fulfilment of a normal role

Rehabilitation

‘A process aimed at enabling persons with disabilities to reach and maintain their optimal physical, sensory, intellectual, psychiatric and/or social functioning levels, thus providing them with the tools to change their lives towards a higher level of independence.

Rehabilitation may include measures to provide and/or restore functions, or compensate for the loss or absence of a function or for functional limitation. The rehabilitation process does not involve initial medical care. It includes a wide range of measures and activities, for instance vocational rehabilitation’

(Resolution 48/96, UN General Assembly)

Medical Rehabilitation

The process of medical diagnosis and treatment aimed at the restoration of function (physical and psychological) following illness or injury.

Occupational (Vocational) Rehabilitation

The reintroduction of people to their jobs following illness or injury (or some other unfitness for all or some aspects of their work) in such a way as to facilitate return to full duties (and earning capacity).

‘Occupational Rehabilitation is the combined and co-ordinated use of medical, psychological, social, educational and vocational measures to restore function or to achieve the highest possible level of function of persons at work following illness or injury’

(ACOM/ACRM 1987)

Occupational Rehabilitation must begin with **accurate diagnosis** and early **effective medical treatment**, and involve a **seamless multi-skilled team** approach, with **clear objectives and milestones**.

It requires an **assessment of the physical and mental capacities** of the individual, and of the **demands of the job**, and the provision of **counselling, training and selective work placement**.

Five major principles which underpin successful occupational rehabilitation are that it;

- is industry-based (on-site)
- is function-orientated (i.e. aimed at minimising any disability rather than simply reducing/correcting the impairment)
- involves early intervention
- uses a multi-disciplinary team approach
- involves shared responsibility

4.0 REHABILITATION PROGRAMMES FOR INDIVIDUAL EMPLOYEES

4.1 Encourage/ensure *early reporting* of symptoms and disabilities

Obvious in the case of serious injury/illness

Not necessarily so in the case of minor injury (sprain) or illness (migraine)

Need to encourage reporting by all those who may be aware of the problem; the worker him/herself, family members, workmates, supervisors, occupational health nurses, and regional health professionals (GPs, hospital doctors, physiotherapists, etc) with consent from the worker as required under privacy legislation.

4.2 Conduct *early assessment of the need for rehabilitation* and early/immediate treatment and commencement of rehabilitation

It almost goes without saying that this must include an early, accurate diagnosis in order that therapy may be appropriately targeted, rather than being non-specific as too often occurs. The confident exclusion of serious or progressive pathology allows the initiation of physical exercise and graded return towards normal work duties. At the very least a clear description of symptoms and the role each plays in producing disability is necessary to plan rehabilitation activities.

An important concept to convey to injured workers is that the development or continuation of mild pain during work activities is not necessarily a contraindication to work, and does not necessarily indicate that harm is occurring. Symptoms such as pain and restricted range of movement must be assessed individually and the situation discussed with the patient.

There is good evidence to indicate that the sooner a person returns to some form of work following injury or illness, assuming that this return is planned and supervised, the faster he/she will recover.

The longer people remain away from work, the lower the likelihood of eventual return to work. Ganora reported a series of cases of compensable low back injury in which of those referred within 4 weeks of injury, 86% returned to normal work duties and 14% returned to selected alternative duties. Of those patients referred with chronic disability (average duration of symptoms 2.5 years) 27% returned to normal work duties, and 14% returned to selected alternative duties.

Paul Cornes in Edinburgh studied 521 survivors of motor vehicle accidents who were in employment at the time of injury. Between completion of medical treatment and settlement of claims for personal injury, an average period of 2 years, 71% of survivors returned to work. A very small proportion (2%) remained too ill or disabled to contemplate that option, and a further 5% were economically inactive, having left the labour market on reaching retirement age, through medical retirement, and to pursue higher education.

The remaining 22%, while pronounced medically fit to return to work, did not do so. This group included some persons who had attempted to return to work but failed to sustain employment and others who returned briefly only to be made redundant. It also includes a small proportion (8% of the whole sample) where malingering, poor motivation, secondary gain or functional overlay was suspected.

The following is a suggested format in which to gather basic information and to consider factors useful in determining the need for a rehabilitation programme

Identification/Demographic data

Name/date of birth/age/gender
Occupation/place of work/job title and duties
Date and nature of injury/illness
Description of resulting impairment/disability

Assessment of Need for Rehabilitation

What are the objectives of rehabilitation for this person?
What methods of rehabilitation are relevant (e.g physiotherapy, exercise programme, psychological counselling, etc)?
Do you expect that he/she will be able to resume the former occupation after rehabilitation?
If yes, will the workplace need modification? What special equipment or arrangements will be needed?
Will the worker require retraining to resume work? If so, what resources will need to be provided?
If the person will not be fit to go back to the same job, what handicaps (physical, psychological) will remain?
What level of work could he/she then handle?
Is work at this level available at the workplace?
What special training or equipment would be required to enable a return to work of a different kind or level?
Would a graded return to work (i.e. starting off part-time) be required? If so, for how long?
How frequently should the worker be reviewed by the occupational health service and by management during the rehabilitation process?
What will be considered the level of progress at which the worker will be discharged from formal rehabilitation (e.g. return to full duties, full integration into alternative work, return to full-time but restricted work)?
What is a reasonable length of time to try rehabilitation methods from the employer's point-of-view?
What appear to be the employer's attitude and motivation towards rehabilitation?
How would the costs and benefits of rehabilitation balance out in this case, compared with just providing sick leave payments until the person is ready to resume work?

4.3 Ensure *participation of the injured/ill worker* in planning the programme

No programme will succeed without the co-operation of the worker him/herself and where possible, plans for rehabilitation must involve the worker (and his/her family) at all stages.

Family support is crucial not only in ensuring that the worker complies with the agreed rehabilitation programme, but in providing the support and reassurance outside the workplace necessary for the worker to maintain a positive attitude regarding return to work.

4.4 Ensure *participation of line management* early in the planning process

The OHS should encourage line managers to take an active and continued interest in the employee through his/her injury/illness/rehabilitation, beginning at the earliest possible date after incapacitation

However, it is generally inappropriate for any of the parties involved to discuss medical retirement, altered work schedules, etc until the picture of recovery has become clear.

Employers should be encouraged not to jump to premature conclusions, not to demand a quick prognosis of eventual rehabilitation, and to try to be patient in making a final determination as to what the employee can do.

The employer should encourage the employee about returning to work , emphasise the employee's value and indicate willingness to take whatever reasonable measures are necessary to accommodate his/her rehabilitation.

4.5 Ensure *identification of clinical problems* and development/implementation of action plan

Reaching a diagnosis and defining the problems may involve extensive liaison between the occupational physician and a number of regional health professionals or may be achieved relatively easily.

Using this information on impairment and disability, together with a knowledge of the workplace and an awareness of possible work adaptations, a plan can be developed which is acceptable to all parties.

- 4.6 Develop *timetable* with definite (but flexible) **goals**, both short-term and long-term

The plan for rehabilitation must include a clear timetable, so that all parties have a similar expectation of progress, but this timetable must be reasonably achievable. Given the large number of factors influencing the rehabilitation process, (as will be discussed) including the possibility of medical complications, this timetable must be flexible and all parties must be prepared to renegotiate intermediate and definitive goals as rehabilitation proceeds.

- 4.7 Conduct *ergonomic assessment* of the workplace and biomechanical analysis of tasks

The need for such assessments will depend on the nature of the injury/illness, any causative relationship to work activities and the implications of the illness/injury to performance of the workplace tasks.

- 4.8 Arrange *regular reviews* of the individual worker to monitor progress and to assist liaison with all parties involved

This involves both occupational health personnel and line management, and I believe that it is equally important for managers and vocational counsellors to review progress (both before and after return to work) as it is for medical staff.

It has been shown that workers return earlier from sick leave and take fewer periods of sick leave if they are aware of management surveillance. If this is undertaken in a positive manner, demonstrating concern for the employee's welfare, support and encouragement, an earlier return to work may be expected.

Neither line managers nor occupational physicians should demand complete recovery prior to return to work - most employees can make a useful contribution to the workplace well before full return to function is achieved, except in the most demanding jobs or work environments.

To require complete recovery often places the employee at a disadvantage and interferes with his/her rehabilitation, whereas to return him/her prior to the reasonable recovery may cause recurrence or exacerbation of his/her illness.

There are many advantages to employers accepting workers back to the job before complete recovery has occurred. As well as minimising the attrition associated with prolonged periods off work, the returned worker will retain confidence in his/her ability to work in general, and, if properly supervised in the programme, is likely to be more reliable than those not undergoing rehabilitation (who are only subject to general management supervision). In addition, the costs associated with sickness absence (sick pay, temporary staff costs, insurance levies, interrupted work schedules, etc) will be reduced.

The perception by employers that employees returned to work on restricted duties are a liability to themselves, their workmates and the organisation is rarely justified in most work environments.

There is an optimal time for return to work when strength and other functions have reached a satisfactory level but before complete recovery. Return to work should not be recommended before the diseased or injured organ or part is sufficiently functional to withstand the demands placed upon it. The exact time is determined by the worker's physical and psychological progress, the nature of the duties and the level of employer support as assessed by the occupational physician. Many variables are involved - the type of work, environmental conditions in the workplace, the skill level of the worker, the availability of modified work, the worker's previous state of health and his/her attitude and motivation, the attitude of the employer, the culture of the workplace and the economic/employment environment. Experience, judgement and an ability to communicate with the patient and the management are helpful in effecting a successful outcome.

A psychological evaluation is an important part of the overall evaluation prior to/during the rehabilitation process. This does not always entail a specialist psychological assessment but more often requires just a consideration of such factors as the patient's attitude towards return to work, which will be influenced by the presence of pre-existing and recent stressors (e.g. financial difficulties, domestic relationships, workplace relationships, workplace harassment, health issues, substance abuse, etc).

Is the worker confident that he/she can do the job?

Is the worker afraid that he/she will not be able to do the job?

How does he/she relate to the supervisor and other employees?

Would he/she prefer to take early or medical retirement?

A worker who has made up his/her mind on not returning to work will prove to be very difficult to rehabilitate and will often not make progress with treatment in the way that might have been expected. (case example)

4.9 ***Discharge from programme*** when problem resolved and/or return to highest possible level of function achieved.

There will come a time when either full recovery or a plateau in progress has been achieved and this may or may not be consistent with the original goals for the worker's rehabilitation programme.

At this point the worker should be formally discharged from the programme, and a note to this effect made in the medical record. This does not mean that further progress is not possible, nor that medical treatment or review may not continue, but that only that such care may now be provided as part of routine occupational health care.

At discharge, a formal review of the worker's health status should be conducted, using specialist reports if necessary, and the level of any residual impairment or disability should be noted.

Management should be advised of the worker's functional abilities and whether any restrictions should remain on his/her employment. If the level of disability is inconsistent with the tasks required to be performed, and if no suitable alternative employment is possible, medical retirement may need to be considered.

IMPORTANT ASPECTS IN THE DESIGN OF
WORKPLACE-BASED REHABILITATION PROGRAMMES
FOR ORGANISATIONS AND INDIVIDUALS

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1.0 MANAGEMENT FUNCTIONS

- 1.1 *Management Involvement and Commitment* - understanding, accommodation and acceptance by supervisors
- 1.2 Recognition that rehabilitation is an *essential component* of ensuring health and productivity
- 1.3 Recognition that *absences through work-related illness or injury incur costs* to both employer and employee
- 1.4 Setting of rehabilitation *policy* and defining of *programme objectives*
- 1.5 *Development of procedures* to implement the programme
- 1.6 Recruitment or *nomination of a Rehabilitation Co-ordinator* and programme supervisors (as necessary) and *provision of appropriate training*
- 1.7 *Identification of all other participants* in the programme (medical practitioners, occupational health nurses, physiotherapists, ergonomists, rehabilitation officers, vocational counsellors, psychologists, social workers, etc)
- 1.8 Support for, or development of, *modifications to the workplace, alternative work, part-time work*, etc
- 1.9 *Ensuring awareness* of policy and programme within the workforce
- 1.10 Promoting *integration of rehabilitation* into normal working routines
- 1.11 *Regular evaluation* of the programme (audit)

2.0 ROLES AND RESPONSIBILITIES

- 2.1 *Clearly established roles* for all parties involved (both on-site and off-site)
- 2.2 *Adequate lines of communication* between all parties involved
- 2.3 *Clear delegation of authority and responsibilities* for rehabilitation process

3.0 PROVISION AND CO-ORDINATION OF REHABILITATION RESOURCES

- 3.1 Ensuring *early consultation* with union/worker representatives
- 3.2 *Use of external (off-site) rehabilitation resources* where appropriate or necessary
- 3.3 *Co-ordination of/liaison with other health professionals*, including general practitioners, occupational physicians and other specialists
- 3.4 *Co-ordination of/liaison with line managers*, union representatives, family/next-of-kin, solicitors, compensation authorities (e.g. ACC) and regulatory bodies (e.g. OSH) to ensure co-operation with the recovery process
- 3.5 *Availability of first-aid facilities* within the work-site
- 3.6 Ready *access to medical treatment* (either on-site or off-site)
- 3.7 *Availability of professional counselling* and support to assist the employee in overcoming the emotional, family, social, vocational and financial difficulties associated with illness and injury
- 3.8 *Counselling* shared between in-house professionals (occupational physician, occupational health nurse, psychologist, social worker, vocational counsellor) and community rehabilitation services and support groups

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- 4.3 Ensure *participation of the injured/ill worker* in planning the programme
- 4.4 Ensure *participation of line management* early in the planning process

- 4.5 Ensure *identification of clinical problems* and development/implementation of action plan
- 4.6 Develop *timetable* with definite (but flexible) **goals**, both short-term and long-term
- 4.7 Conduct *ergonomic assessment* of the workplace and biomechanical analysis of tasks
- 4.8 Arrange *regular reviews* of the individual worker to monitor progress and to assist liaison with all parties involved
- 4.9 *Discharge from programme* when problem resolved and/or return to highest possible level of function achieved

5.0 DOCUMENTATION

- 5.1 *Full documentation* in medical record of assessments, diagnoses, treatment and progress with respect to impairment and disability
- 5.2 *Medical certificates and reports* (to management, other participants, general practitioner, compensation organisations, etc) detailing work capacity, restrictions, suitability for alternative or part-time work and a plan for review
- 5.3 *Written schedule of suitable duties* provided to management (within restrictions previously discussed)
- 5.4 *Accumulation of data* to allow evaluation of the programme (both for individual and overall workplace)
- 5.5 *Summary and discharge documents* completed on return to full duties or highest possible level of function

BARRIERS TO REHABILITATION

PITMAN, 'The Challenge of Occupational Rehabilitation' - Journal of Occupational Health and Safety Australia and New Zealand, 1986

CORNES, P - Disability Management Research Group, Edinburgh, 1990

The following factors are negatively associated with an early return to work following injury; i.e. potential barriers to occupational rehabilitation.

1. Longer period of time off work
2. Presence of psychological problems (major vs no psychological problems)
3. Long period until settlement of compensation claim
4. Greater number of injuries and/or significant disability
5. Status of employment market (high unemployment)
6. Increasing age
7. Female gender
8. Unskilled manual (vs professional) occupation
9. Longer period of actual or expected treatment
10. Greater severity of (any) spinal injury

Other personal barriers include;

- low morale and self-esteem
- financial problems
- family worries
- unresolved anger or guilt
- feelings of failure or anxiety
- loss
- depression
- insomnia

ROLES OF A REHABILITATION CO-ORDINATOR

1. Ensuring that the injured person obtains an early accurate diagnosis and aggressive management of the problem(s)
2. Facilitating early return to work by maintaining contact with the injured person, treating practitioner and rehabilitation providers
3. Developing a rehabilitation programme for each individual in conjunction with the treating practitioner and rehabilitation service providers
4. Assisting line managers with the interpretation of medical restrictions or alternative duties
5. Monitoring progress of the injured person and initiating medical and other reviews
6. Preparing a monthly summary of the progress of people on rehabilitation programmes

COSTS OF INJURY TO WORKERS

DIRECT COSTS	INDIRECT COSTS
Salary of non-productive worker	Assessor's fees in litigious cases
Medical and hospital costs	Expenses in investigating the cause of the accident
Paramedical costs	Increase in insurance premiums
Rehabilitation costs	Cost of maintaining courts to decide disputed cases
Legal costs	Costs associated with judges, commissioners, etc
Property damage	Fees to maintain administrative bodies of the compensation system
Production at time of accident	Social security payments to maintain family if claim is denied or disputed
Loss of production due to loss of injured worker's skills	Unquantifiable social costs to family and society
Loss of time and money spent training the injured worker for specific tasks	
'On-costs' while the worker is non-productive	
Overtime costs to get injured workers work done	

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