

Self-insurer priorities for putting a vocational focus back into rehabilitation: Workplace-based social support initiatives

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The way we were

- Early rehabilitation authorities were very clear about the salience of vocational services and goals within rehabilitation:

Rehabilitation's purpose is "to restore the person with the disability to the fullest physical, mental, social, vocational and economic usefulness of which they are capable." (National Council on Rehabilitation, 1944)

The way we were

- British report of Committee of Inquiry into Rehabilitation (Piercy, 1956)

Rehabilitation is the whole process of restoring a disabled person to a condition in which he is able, as early as possible, to resume a normal life – with no clear demarcation between medical, social and employment rehabilitation.

The way we were (continued)

“Rehabilitation after spinal cord injuries seeks the fullest possible physical and psychological readjustment of the injured person to his permanent disability with a view to restoring his will to live and working capacity.” (Guttmann, 1945)

Neff (1971) in writing about rehabilitation and work in the United States described a situation “where ‘rehabilitation’ and ‘vocational rehabilitation’ were virtually synonymous terms.”

The way we were (continued)

“Rehabilitation is the period between the bed and the job.”
(Rusk, 1949)

Implications of Rusk's definition

- A. Return to work is explicitly accepted as the gold standard by which to evaluate the success of the rehabilitation effort (for most).
- B. Evaluations of rehabilitation services and facilities need to be outcome-focussed.
- C. Improvements in behaviour or achievements in the clinical setting are not *per se* enough.

Some of our predecessors' early achievements: SCI rehabilitation

- Guttman (1954) reported on the employment achievements of the first 1000 admissions to the National Spinal Injuries Centre. From 774 discharged, after excluding 18 of retirement age, 69% (518) were employed, the majority (405 or 78%) full-time.

Some of our predecessors' early achievements: Military rehabilitation

- Grahame (2002) reports the “amazing results” achieved in the 1940s with injured RAF personnel.
- Of 20,000 admitted to RAF orthopaedic units for intensive rehabilitation between 1941-1945, 77% returned to fulltime duty and 18% to modified duty; only 5% were invalided out of the service.

Some of our predecessors' early achievements: Cardiac rehabilitation

- Goble (1963) reported on the post-surgery employment achievements of the first 200 cardiac rehabilitation patients from the Melbourne Work Assessment Centre of the National Heart Foundation.
- These were patients whom standard *rehabilitation measures had failed to rehabilitate*, i.e. they had failed to return to full life and employment.

Early cardiac rehabilitation (cont'd)

- 50 patients were working when interviewed (but had other psychosocial problems).
- Of the 150 without employment, more than half had been unemployed >6mths.
 - 32 were judged to be “permanently unemployable” (multiple negative factors involved)
 - 55 unemployable when interviewed (physically capable but disabled psychologically)
 - 63 employable

Early cardiac rehabilitation (cont'd)

- After initial management (involving explanations of unnecessary fears, and discussions with partner and family members, visits to the workplace etc.), the 150 without employment were followed up a minimum of 6 mths later

Early cardiac rehabilitation (cont'd)

- Of the 150 without employment,
 - 32 “permanently unemployable,” 2 had attempted work and failed, while 4 were dead. The remainder, still unemployed.
 - 55 unemployable when interviewed, but considered potentially employable, 38 worked; five of these RTWs failed, leaving 33 working.
 - 63 employable, 58 were placed in work, with 54 still employed at follow up.

Early cardiac rehabilitation (cont'd)

- Conclusion from Goble's paper:
- There are many patients who do not return to work whose physical capacity is no less than that of those who do work. ...Detailed knowledge of a job is required by the physician ... before placement.
- Noteworthy was the close follow up post RTW: after one week, one month, three months, six months, then annually thereafter.

The recent past: Trieschmann (1984)

- “I will consider vocational rehabilitation to be those interventions which enhance the ability of the person to engage in a variety of productive activities. Productivity will be defined as those activities of a vocational (within or outside the home), educational, family participation, community service, avocational, artistic and scholarly nature which contribute to society and one’s satisfaction with life.” (p. 345)

The recent past: Garvin (1981)

- “Vocational guidance and counselling is the core of the rehabilitation process. In the early years of vocational rehabilitation, vocational guidance and counselling was recognised as the one service around which all other services revolved. It was considered the main ingredient of the rehabilitation process. It was the thread that ran through and connected all other services. It was seen as a continuous service needed by the handicapped individual throughout the rehabilitation process.”

The recent past: Victorian WorkCare in the mid-to-late 1980s

- Deficiencies in rehabilitation service delivery and outcomes achieved at the start of no-fault workers' compensation in Australia (WorkCare in Victoria). See Murphy and Foreman (2008).
- Findings from the Victorian Parliamentary Committee of inquiry (Rowe Report, 1988).
 - Re problems discerned in the effective and efficient operation of WorkCare Rehabilitation
 - Re RTW achievements

The recent past: WorkCare (cont'd)

- Reported lack of a vocational focus in OR
 - Skill and knowledge deficits among Rehabilitation Personnel
- Unsustainably low RTW rates
 - 43.8%

Skill and knowledge deficits within the WorkCare system (Rowe, 1988)

- skill profiling and occupational assessment of injured workers;
- occupational and career counselling;
- job search, matching and placement;
- knowledge of training and retraining programs;
- knowledge of the labour market and job availability on an industry basis;
- employer negotiation and advocacy skills on behalf of the worker;
- industrial relations knowledge;
- job re-design skills.

Contemporary situation

- Content of major rehabilitation journals
 - Archives of Physical Medicine and Rehabilitation
 - Journal of Rehabilitation Medicine
 - Cochrane Library holdings
- Research findings relevant to the contribution of employment to rehabilitation
 - Meta analyses of the health benefits of employment (Murphy & Athanasou, 1999; McKee-Ryan et al., 2005).

Archives of Physical Medicine and Rehabilitation

	2003	2004	2005	2006	2007
Employment as outcome variable	5(6)	3(4)	4(5)	3(4)	2
All articles	290	320	366	237	217

Journal of Rehabilitation Medicine

	2003	2004	2005	2006	2007
Employment as outcome variable	4	3	6(9)	4	4
All articles	43	36	57	52	102

Cochrane Library

- Search for *rehabilitation + outcome* identifies 94 records from 5320 held in the library
- Search for *outcome + employment* identifies 17 records
- Search for *rehabilitation + outcome + employment* identifies 5 records

Cochrane Library (cont'd)

- Five records
 - Two pertain to psychiatric rehabilitation
 - One pertains to drug rehabilitation
 - The remaining two pertain to
 - chronic LBP patients (review withdrawn)
 - Multiple sclerosis (Thomas et al., 2006).
- No employment outcomes studied as part of the assessment of MS interventions reviewed by Thomas et al.(2006).
 - Although employment disruption is mentioned in the introduction as a frequent consequence of the disease, no measure of employment is included among the 6 primary or 6 secondary outcome variables reviewed.

Research into the health benefits of employment 1

- Murphy & Athanasou (1999)
- People's health *improved* when they moved from unemployment to employment
- People's health *declined* when they moved from employment to unemployment
- Effect sizes were of practical significance (Cohen's *d* of .54 and .36 respectively), but note the larger effect size for movement into employment.

Research into the health benefits of employment 2

- McKee-Ryan et al. (2005)
- People's health *improved* when they moved from unemployment to employment
- People's health *declined* when they moved from employment to unemployment
- Effect sizes were of practical significance

Research into the health benefits of employment 2: McKee-Ryan et al. (2005)

- Consistent with the results of Murphy & Athanasou, people's health *improved* when they moved from unemployment to employment:
 - Effect size (d) = .89 (MH); .36 (PH)
- People's health *declined* when they moved from employment to unemployment
 - Effect size (d) = .38 (MH); No studies of PH impact of job loss.

Contemporary situation

- The view of (some) authorities
 - Grahame (2002)
 - Waddell and Aylward (2005)
 - Britell (1991)

Grahame (2002)

- The author raises the causal connection between the decline in (vocational) rehabilitation services and the inexorable escalation in the cost of disability benefits in the United Kingdom (from £3.5 billion in 1992 to £9 billion in 2000)
- “My starting point is the present parlous state of rehabilitation services (and in particular, the vocational rehabilitation services). How were we reduced to this?”

Waddell & Aylward (2005): The failure-to-recover paradox

- With medical advances and ever-increasing health budgets, health care and clinical outcomes should be improving, yet return to work outcomes are actually deteriorating in many jurisdictions. (In Australia, durable RTW rates struggle to surpass 80% following work injury - see Campbell reports.)
- The transition between clinical “recovery” and return to work is often neglected and fails.
- The assumed “stages model”, is not valid. Once functional capacity is (mostly) restored, people *do not* concomitantly move back to work.

Britell (1991): The on-going centrality of vocational outcomes in rehabilitation

- “It is our responsibility to support rehabilitation to its completion. If our patients fail to attain successful employment we have not adequately carried out that responsibility.”

Clinical outcomes vs community-based outcomes in injury rehabilitation

- Common clinical outcomes assessed in rehabilitation settings: measures of gait, grip strength, aerobic capacity, range of movement, FIM, short-term memory, depression, anger and irritability.
- Community-based outcomes: Quality of life post-discharge, community re-integration, vocational re-establishment.

Problems if community-based outcomes do not drive injury rehabilitation

- Scenario: A child is severely injured in a MVA.
 - The services received while in acute care and in rehabilitation phase would be continually integrated with the demands and expectations of the educational setting.
 - Outcome: Almost all children return to regular education setting.
- C.f. if it were an adult worker injured
 - ?health services and treatments integrated with workplace factors;
 - ?outcomes re return to regular paid work.

Transport accident rehabilitation: Employment following SCI (Canty et al., 2006)

- *Subjects:*
 - 181 persons who had experienced a traumatic spinal cord injury (a subset of a larger study of 459 participants). All participants were patients of 1 of 2 specialist spinal cord injury services located in south-eastern Australia

Transport accident rehabilitation: Employment following SCI

- *Selection criteria:*
 - Have been in paid employment prior to their injury
 - Have experienced a traumatic SCI for which they were admitted to a spinal unit and discharged with persistent neurological damage
 - Have had at least 18 months elapsed since their injury and no longer than 144 months since their injury
 - Have received either transport accident compensation or no compensation
- *Methods:*
 - A survey, administered on average of 10.33 years after their injury (for the subgroup of 181 participants), was used to collect the data

Transport accident rehabilitation: Employment outcomes with SCI

Post-injury employment status	Transport accident entitlement	No compensation entitlement	Totals
Not in paid employment	58.9% (56)	41.1% (37)	93
In paid employment	43% (39)	57% (49)	88
Totals	95	86	181

Transport accident entitlement as a predictor of post-injury employment

- Using hierarchical logistic regression,
 - With demographic variables entered on first step
 - Injury variables entered on second step,
 - Psychological variables entered on third step
 - Transport accident entitlement (yes; no) entered on last step

Entitlement was a significant, independent predictor. Eligible participants were 20% less likely to be in employment.

The way forward: Implications for stakeholders

- *For treating practitioners:*
- Accepting that for the overwhelming majority of patients, time away from work is not good for them.
- Clinical management needs to be integrated with vocational rehabilitation led by the GP.
- Communication with workplace (two-way) needs to be facilitated.
- Giving a specific RTW date leads to earlier RTW (OR 3.33, 95% CI = 1.62 – 6.87). (Kosny et al., 2006).

The way forward: Implications for stakeholders

- *For Rehabilitation Coordinators*
- Services and plans need more vocationally-relevant components
- More time spent in understanding the detail of the job demands, and of the workplace environment – and in particular the *social environment of the workplace* (less time spent in formal assessments and reports).
- More time spent in understanding key players in the individual's social environment (intimate partner, family members, friends etc.).

The way forward: Implications for stakeholders

- *For allied health professionals working in rehabilitation*
- Therapies and interventions need to contribute to improved function in the natural environment (domestic, social, work).
- Improvements in training programs conducted within clinical setting (e.g., coping skills training) need to lead to improved skill in dealing with set backs encountered in natural environment (e.g., sickness absence following RTW; personal-relationship set backs, off-quality job performance on RTW).

Implications for stakeholders

- *For those responsible for the educational preparation of health professionals*
- Curriculum space needs to be given to topics relevant to “Work and health”.
- Knowledge and skills relevant to effective community-based health services need strengthening (e.g. enlisting the support of significant others in the patient’s natural setting).

Implications for stakeholders

- *For employers*
- Adoption of a Workplace Disability Management approach to employee health, wellbeing and rehabilitation (see published reports of Shrey and Amick)
- Mechanisms to support enhanced communication exchange with treating practitioners

Implications for stakeholders

- *For self-insurer employers*
- Education and training in the area of effective social support for two groups: co-workers, and first-level supervisors
- Investigation by senior management of all failed RTW attempts: it is hypothesised that these non-sustained RTWs involve many preventable workplace-related factors (see Murphy & Young, 2006).

Implications for stakeholders

- *For self-insurer employers*

Interventions using RTW plans developed by workplace-focussed parties (e.g. Occupational Physician, local supervisor, among others) achieved 50%-100% improvements to the RTW rates achieved by “usual care plans” (Loisel et al., 1997; Anema et al., 2007).

The way forward: Implications for stakeholders

- *For rehabilitation researchers*
- More research into environmental factors (both workplace-based and general social) and their role in facilitating return to work.
- Particularly neglected is research into the behaviour of local supervisor, and the study of those supervisor behaviours that facilitate or hinder return to work post injury.
- Occupational rehabilitation researchers have given priority in RTW research to “Characteristics of the injury” or “Characteristics of the person”, rather than “Characteristics of the workplace” – see Murphy & O’Hare (2009)

The way forward: Implications for *rehabilitation researchers*

Review of RTW predictors by Murphy & O'Hare (2009):

- From 52 studies of RTW that met review inclusion and exclusion criteria, 82 variables were identified that were predictors or correlates of RTW.
- 22 (27%) were demographic variables, 34 (41%) were injury or functional independence variables, 16 (20%) were personal psychosocial variables; only 2 (2%) and 8 (10%) were social support variables, involving social support from beyond the workplace (2) or from workplace-based parties (8).

The way forward: Implications for *rehabilitation researchers*

Findings re social support:

Need to measure social support in more than one way (co-worker support, supervisor support, intimate partner support) and independent of injury worker report (see Katz et al., 2005).

The emphasis within contemporary rehabilitation psychology

- The centrality of return to work as an index of the success of the rehabilitation effort
- Targeting anxiety/fears, and depressed affect that limit behaviours engaged in, particularly behaviours relevant to the resumption of pre-injury roles
- That many unhelpful, passive behaviours may be quickly acquired in the rehabilitation setting. “Invalidism” prevalent in many rehabilitation populations.

The emphasis within contemporary rehabilitation psychology

- The contribution of effective social support and appropriate personal control to maximal rehabilitation achievement
- Recognition of the fact that degree of impairment is only weakly related to actual post-injury achievements re community re-establishment/QoL

Conclusions

- Employment is important for optimal health and wellbeing among the majority of the population in western nations such as Australia.
- There is evidence of a move away from vocational services in rehabilitation
- There is evidence of an underachievement of vocational potential post injury.
- For the good of the individual and of society, we can, and should, reverse the trend.
- Self insurers are ideally placed to lead innovations in using effective workplace social support to increase post-injury RTW rates.

Thank you.



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