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Vocational rehabilitation: getting work after acquired brain injury

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Vocational impact of brain injury

**Children – difficulties in:**
- Development/qualifications at school
- Transition to and establishment in work

**Adults – difficulties in:**
- Returning to previous work or voc. training
- Sustaining previous / new job over time
- Finding / coping with alternative work
- Finding suitable alternative occupation
Models of vocational rehabilitation (VR) after acquired brain injury (ABI)

Variety of models reported including…:

• ABI rehabilitation with added VR elements
• Existing VR models, adapted for ABI
• Vocational case coordination/management
• Consumer-based/directed models

A few key models will be illustrated .............
New York University Head Trauma Program
(NYU Medical Center)

- **Intensive holistic remedial interventions** (5 hours a day, 4 days a week for 20 weeks)
  - cognitive remediation: interpersonal communication; social competence, awareness and acceptance
- **Guided occupational trials** (usually on-site for 3-9 mons.)
  - treatment plan (objectives/questions - selected work areas)
    - competence, productivity & interpersonal appropriateness
- **Discharge / work placement & follow-up**
  - assisted job search; familiarisation; and early adjustments

*(Ben-Yishay et al. 1987)*
Supported Work Model (Job coaching)
(Virginia Medical College)

1. Job Matching & Job Placement:
   • matching job needs to client abilities / potential
   • encouraging employer/client/family communications
   • establishing travel arrangements / training
   • analysing environment (verify potential obstacles)

2. Job Site Training & Advocacy:
   • behavioural training:
     – skills acquisition, time-keeping, behaviour & communication
   • advocacy on behalf of client:
     – orientation, communication, counselling (work behaviours)

(Wehman et al. 1988)
Supported Work Model

3. Ongoing Assessment:
   • supervisor & client evaluation

4. Job Retention & Follow-Along:
   • regular on-site visits / phone calls
   • reviews of supervisor evaluations
   • client progress reports
   • parent/caretaker evaluations

(Wehman et al. 1988)
Sharp Memorial Rehabilitation Centre, San Diego

Work Re-entry Program (‘Highly individualised’)

- Vocational rehabilitation
  - simulated work samples
  - work hardening
  - work placements (+ job coach)
  - vocational counselling
  - job seeking/keeping skills
- Supported placement
  - Job analysis / placement
  - On-site support
  - Off-site adjustment/support group
  (Abrams et al. 1993)
Brain Injury Vocational Case Co-ordination

(Mayo Medical Center, Rochester, Minnesota)

• Brain Injury Nurse Case Co-ordinator refers asap to …
• Vocational Case Co-ordinator:
  – works closely with rehabilitation staff
  – integrates vocational goals into rehabilitation
  – assesses vocational readiness
  – develops comprehensive return to work plans
  – provides vocational counselling & evaluation
  – links with local work rehabilitation center
  – provides adjustment to disability counselling

(Buffington & Malec 1997)
The Clubhouse model after ABI

- A consumer-directed, community-based, day programme operated by and for its members – staff facilitative role
- Members focus on practical skills undertaking tasks within centre-based work units, selected by the participants
- Staff review progress, establish goals & identify resources
- Those with requisite skills are supported in seeking paid positions in community (Jacobs, 1997)

- Recent trial of a ‘Vocational Transitions Programme’ – a ‘manualised, employability enhancing intervention’ after ABI within Clubhouses in Virginia (Niemeier et al. 2010).
Effectiveness of VR after TBI

• Quantitative synthesis of TBI return to work (RTW) studies: interventions studies appear to produce higher RTW than non-interventions studies (Kendall et al. 2006)

• Review of ABI VR models - few studies met inclusion criteria, few of high quality and none compared models: currently little clear evidence to suggest best practice in VR after TBI (Fadyl & McPherson, 2009)

• Differential pathways result in RTW for large percentage, if intensity of service matched to disability severity, time since injury & other client characteristics (Malec et al. 2002)
Survey of ABI Vocational Rehabilitation in UK

- 62% of rehabilitation services reported that they address vocational issues – whilst only 8% provide specialist vocational rehabilitation, 80% refer clients on to vocational services.

- 36 such services for people with ABI identified:
  - ABI services which include a vocational element
  - specialist ABI vocational rehabilitation services
  - pan-disability voc. / FE programmes open to ABI

(from Deshpande & Turner-Stokes, 2004)
Vocational rehabilitation services in the UK which are available for people with acquired brain injury

*Places asterisked (blue flashes) are known to have VR services catering specifically or people with ABI
Working Out: A Joint Health/Employment Service
TBI - VR Project (1992-97) (Tyerman & Young, 2000)

<table>
<thead>
<tr>
<th>Vocational Programme</th>
<th>Typical duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Initial assessment)</td>
<td>(3 hrs).</td>
</tr>
<tr>
<td>Vocational assessment</td>
<td>1-3 wks.</td>
</tr>
<tr>
<td>Work preparation</td>
<td>12 wks. +</td>
</tr>
<tr>
<td>Voluntary work trial</td>
<td>12 wks. +</td>
</tr>
<tr>
<td>Supported work placement</td>
<td>6 mons. +</td>
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## Working Out Project Outcomes (Tyerman & Young, 2000)

(severe TBI - median PTA 42 days / median duration 41 mons.)

<table>
<thead>
<tr>
<th></th>
<th>Discharge (n=40)</th>
<th>1 yr. F/U (n=39)</th>
<th>2 yr. F/U (n=36)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employment / Training</td>
<td>50 %</td>
<td>51 %</td>
<td>50 %</td>
</tr>
<tr>
<td>Therapeutic / voluntary work</td>
<td>35 %</td>
<td>28 %</td>
<td>25 %</td>
</tr>
<tr>
<td>Adult education / rehabilitation</td>
<td>12.5 %</td>
<td>15 %</td>
<td>14 %</td>
</tr>
<tr>
<td>Unoccupied</td>
<td>2.5 %</td>
<td>5 %</td>
<td>11 %</td>
</tr>
</tbody>
</table>
Rehab. UK - BI Vocational Centres:  
(Birmingham, London & Newcastle)

A. Pre vocational rehab. phase:
   - compensatory cognitive remediation techniques
   - improve work-related social skills
   - numeracy, literacy & IT
   - self-awareness & knowledge of brain injury
   - start to identify realistic vocational goals

B. In-situ vocational trial phase:
   - work placements in real work settings - sourced, overseen and monitored by job coaches
Rehab. UK - BI Vocational Centres: (Birmingham, London & Newcastle)

C. Final placement stage:
   • Supported job search
   • Support with job applications / interviews
   • Job coaching to assist settling into new role
   • ABI awareness training - supervisors/colleagues
   • Follow-up support
Rehab UK Vocational centre outcomes:  
232 people with ABI (Murphy et al 2006)

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paid competitive employment</td>
<td>41 %</td>
</tr>
<tr>
<td>Mainstream training / education</td>
<td>15 %</td>
</tr>
<tr>
<td>Voluntary work</td>
<td>16 %</td>
</tr>
<tr>
<td>Discharged to other treatment</td>
<td>15 %</td>
</tr>
<tr>
<td>Withdrew from programme</td>
<td>13 %</td>
</tr>
</tbody>
</table>
Vocational Assessment & Rehabilitation after Acquired Brain Injury: Inter-Agency Guidelines

- Guidance / support on return to previous employment, education or training.
- Vocational / employment assessment to determine alternative avenues of employment or training.
- Vocational rehabilitation to prepare for return to alternative employment, education or training.
- Supported employment for those requiring ongoing support and/or additional training.
- Alternative occupation - permitted work, voluntary work or other occupational / educational provision.

(BSRM / Jobcentre Plus / JCP, 2004)……
Brain injury vocational rehabilitation provision
(adapted from BSRM / Jobcentre Plus / RCP, 2004)
UK National Service Framework (NSF) for Long-term (Neurological) Conditions

Quality Requirement 6. Vocational rehabilitation

People with long-term neurological conditions are to have access to appropriate vocational assessment, rehabilitation and ongoing support to enable them to find, regain or remain in work and access other occupational and educational opportunities.

(Department of Health, 2005; www.dh.gov.uk/longtermnsf)
QR6 Markers of good practice:

1. co-ordinated multi-agency vocational rehabilitation that takes account of national guidance/best practice

2. local rehabilitation services:
   - address vocational needs during review of integrated care plan and as part of any rehabilitation programme;
   - work with other agencies to provide:
     • basic vocational assessment
     • support & guidance on return to work
     • support & advice on withdrawing from work
   - refer complex needs to specialist vocational services…..
QR6 Markers of good practice:

3. specialist vocational services address complex needs
   - specialist vocational assessment & counselling
   - interventions for job retention (incl. workplace support)
   - vocational rehabilitation / work preparation programmes
   - alternative occupation or educational opportunities
   - advice to other services.

4. routine monitoring vocational outcomes
   (including the reasons for failure)
Specialist OT support in RTW after TBI (mixed severity) – Nottingham Brain Injury Service

- Evaluation of effectiveness of a guided/supported return to previous work by occupational therapist (OT) within specialist TBI team in Nottingham:
  - Specialist individual guidance/support in RTW was provided in line with VA&R after ABI guidelines
  - Higher proportion (75%) of the specialist OT intervention group (n=40) returned to & remained in work than the control group (60%) (n=54) receiving less specialist care
    (Radford et al. 2011)
DWP / Jobcentre plus:
Recent changes to statutory provision

• Continued input from Disability Employment Advisors / Work Psychologists / Access to Work provision BUT

• Incapacity Benefit > Employment Support Allowance (ESA)
  ➢ Work Capability Assessment / work-focussed interviews

• From 2011 new ‘Work Programme’ for wide range of ‘customers’, replacing most other return to work schemes.

• New specialist disability employment provision ‘Work Choice’, replacing Work preparation, Workstep (supported employment programme) and Job Introduction Scheme.
Vocational assessment and rehabilitation for people with long-term neurological conditions: Recommendations for best practice (VA&R-PwLTNC-RfBP)

1. Introduction
2. Literature reviews (SCI, Epilepsy, MS & CP)
3. Service summaries (OH, Jobcentre Plus, LA & FE)
4. How to use recommendations for best practice
5. Recommendations for best practice
6. Implementation

(Department of Health funded / DWP-Jobcentre Plus supported initiative)
Published by British Society of Rehabilitation Medicine (BSRM), 2010.
5. Recommendations for Best Practice

1. General issues (e.g. disclosure; consent & capacity; access)
2. Identification of need / provision of information
3. Vocational / employment assessment
4. Job retention interventions
5. Return to occupation
6. Withdrawal from work on health grounds
7. Preparation for alternative occupation
8. Transition: education to employment or other occupation
Rehabilitation for return to work 1

Including some of the following:

- Inclusion of specific goals in rehabilitation plan
- Education about difficulties likely to affect work/study
- Development of skills/behaviour necessary for work/study
- Restoring work-related routines (time-keeping, travel etc.)
- Building up attention, work/study tolerance & stamina
- Confidence building
- Assessment, training and support in travel to work

............... cont. .

(from BSRM, 2010)
Rehabilitation for return to work 2

...... cont.

- Advice about aids and assistive technology
- Developing cognitive & other coping strategies for work
- Work on material drawn from, or relevant to work/study
- Graded re-orientation to workplace (e.g. voluntary)
- General encouragement and support (+ information)
- Psychological support (as required)
- Advice on balancing demands of work, home & family

(from BSRM, 2010)
Supported return to previous work

- Integrating vocational goals into core ABI rehabilitation. With consent, discussed / agreed in advance with client.....
- Written information to employer (+ Occupational Health (OH) / Disability Employment Advisor (DEA), when involved)
- Liaison with employer / visit to workplace to agree ……
- Joint RTW plan with client + employer (? + OH / DEA) (e.g. graded return, duties, coping strategies & other work adjustments)
- Ongoing (joint) monitoring, review & follow-up – with feedback from client, employer (and relative).

(BSRM / JobcentrePlus / RCP, 2004)
Ongoing support in the workplace

• Assistance in returning to employment: e.g.
  – physical adaptations to the workplace
  – specialist equipment or aids
  – assistance with travel to/from work
  – significant changes to work duties / role
  – ongoing support or training in workplace

➢ Discuss (with consent) with DEA with a view to joint evaluation and ? referral to specialist provision (e.g. Access to Work or VR provider/ practitioner)

(adapted from BSRM / JobcentrePlus / RCP, 2004)
Recommendations for best practice cover:

- Context, grounds rules & responsibilities
- Components of assessment
- Areas of work adjustments
  - hours and duties
  - adaptations, equipment and coping strategies
  - additional training, supervision and support
- Sources of expert advice
- Other sources of information (websites etc).
- Pro-active progress monitoring and review

(BSRM, 2010)
Vocational rehabilitation (alternative work)

ABI VR programmes should include provision for:

- education / discussion about ABI and work
- strategies to manage difficulties in workplace
- graded work-related activities (work tolerance/confidence)
- vocational counselling to identify suitable job role
- psychological therapy to promote coping and adjustment
- work tasters to sample alternative avenues of occupation
- provision for voluntary work trials / permitted work
- assisted job selection, search, application, interview
- provision for supported work placements

(BSRM / Jobcentre Plus / RCP, 2004)
Preparation for alternative work:

• referral for VA & VR appropriate to individual needs incl. specialist programmes for those with complex needs

• proactive advice/support from specialist practitioners to pan-disability providers to explain needs (esp. when risk)

• proactive monitoring of people with complex needs on pan-disability programmes

• recommended components of specialist VR (incl. voluntary work trials, supported placements & ongoing support)
  – need for both neurological & vocational rehab. expertise

(BSRM, 2010)
CHIS Core Rehabilitation Programmes

- MEDICAL MANAGEMENT
- OCCUPATIONAL THERAPY
- PSYCHOLOGICAL THERAPY
- CLINICAL NURSE SPECIALIST
- PHYSIOTHERAPY
- SPEECH & LANG. THERAPY
- BRAIN INJURY EDUCATION PROG.
- COMMUNICATION GROUP
- PSYCHOLOGICAL SUPPORT GROUP
- COGNITIVE REHAB. GROUP
- LEISURE & LIFESTYLE GP.
- WOODWORK GROUP
- REVIEW
- NEURO-PSYCHOTHERAPY
- FOLLOW-UP
- SUPPORTED RETURN TO WORK

REHAB TEAM ASSESSMENT
Working Out Programme 2011
Community Head Injury Service, Aylesbury, UK

INITIAL ASSESSMENT

JOB RETENTION

(REHAB. TEAM - RETURN TO WORK)

JOB RETENTION ASSESSMENT

JOB RETENTIONS INTERVENTIONS

ONGOING REVIEW / SUPPORT

WORK PREPARATION

FULL VOCATIONAL ASSESSMENT

WORK PREPARATION

VOLUNTARY WORK TRIAL

SUPPORTED PLACEMENT
Working Out - Job retention – assessment

Evaluation of the job:
• Job profiling – person (job description / person specification)
• Worksite visit with supervisor/manager and/or
• Consultation with other employers / training colleges etc.

Evaluation of the person in the job:
• Perceptions of person & relative
• Review of performance against duties in job description
• Feedback from work supervisor/manager & colleagues
• Direct observation / co-working (performance/behaviour)
• Formal assessments (tests and/or practical)
WO - Job retention – key interventions

• General support + advice on other support (legal, Union etc.)
• Feedback to person (& relative) / identification of key issues
• Problem solving with client on potential work adjustments

• Feedback to employer (+HR) & recommend adjustments eg:
  – Changes to hours and/or work duties / practices
  – Aids, adaptations & management / coping strategies
  – Training / supervision / support (e.g. colleague / mentor)
  – Education/support - supervisors, managers & colleagues

• If agreed: assist work adjustment / strategy implementation
• Ongoing guidance, monitoring & support
• Review with person (& relative), supervisor/manager + HR
## Working Out Programme Outcomes (Sept. 2010)

<table>
<thead>
<tr>
<th>Voc. Rehab. Outcomes</th>
<th>(n=132)</th>
<th>Cum %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full-time employment</td>
<td>29 %</td>
<td></td>
</tr>
<tr>
<td>Part-time employment</td>
<td>23 %</td>
<td></td>
</tr>
<tr>
<td>Supported employment</td>
<td>3 %</td>
<td></td>
</tr>
<tr>
<td>Vocational training</td>
<td>5 %</td>
<td>60 %</td>
</tr>
<tr>
<td>Permitted work</td>
<td>10 %</td>
<td></td>
</tr>
<tr>
<td>Voluntary work</td>
<td>10 %</td>
<td></td>
</tr>
<tr>
<td>Adult education</td>
<td>2 %</td>
<td></td>
</tr>
<tr>
<td>Housewife / carer</td>
<td>1 %</td>
<td>83 %</td>
</tr>
<tr>
<td>Further rehabilitation</td>
<td>7 %</td>
<td></td>
</tr>
<tr>
<td>Disengaged</td>
<td>8 %</td>
<td></td>
</tr>
<tr>
<td>No occupation</td>
<td>2 %</td>
<td>100 %</td>
</tr>
</tbody>
</table>
VR-ABI : Feedback 1

“I think it very much heightens your awareness of what you should and should not get involved in. . . . the Working Out programme makes you aware of the sorts of work that you are going to have problems with so you can flag that up straight away . . . . the awareness of what you can and can’t do empowers you in a way because . . . . when you do take on a job, you are pretty certain that’s the one you are going to be successful with. . . . .”
VR–ABI : Feedback 2

“...It’s a dual thing though because, whilst the Working Out programme makes me aware and gives ways of getting around the problems (like diarising things, making notes and such and looking at different ways of doing tasks), it also allows you to talk to the people who are working around you and say, ‘Look, these are the problems that may crop up, these are the things I may do when I’m working, look out for them’. And if you have got the right kind of people around with you they start to work with you, so you are not just helping yourself they are helping you as well......”
VR-ABI : Feedback 3

“..... After a while I remember somebody saying ‘Since you have been here a while, I think you’re getting better’. You know you’re not getting better, it’s just the situation is getting better. The thing is they don’t realise that they are slotting into you …it’s like a jigsaw … it’s their half that fits in with your half as much as the other way round…. before it was just a game of catch-up where you were just struggling to keep up with things but now…..you can set things up so that they work for you, rather than you run around trying to make them work”.
VR–PwLTNC–RfBP: Implementation: Inter-agency recommendations

- Inter-agency review of local services in context of NSF
- Develop local referral criteria/protocols across agencies
- Establish service links to discuss specific client needs
- Review by all relevant professions of training in VR.
- Inter-agency approach to raising awareness of vocational needs and specialist VR skills training.
- Research to identify new and effective VR for PwNC.
- Regular audit of provision against requirements of the Disability Discrimination Act (DDA) and the NSF.

(BSRM, 2010)
Key references


