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Vocational rehabilitation after traumatic brain injury

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Vocational impact of brain injury

Difficulties in:

- Return to work, education and training
- Finding / coping with alternative occupation
- Sustaining previous or a new job over time

as a result of combination / interaction of ...

- Physical and sensory difficulties
- Cognitive and communication difficulties
- Neuro-emotional and neurobehavioural difficulties
- Personal, family and social impact of ABI difficulties
- Barriers to work (e.g: environmental, knowledge/attitudes)

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)

ABI vocational case management model (Australian Commonwealth Rehabilitation Service)

- Rehabilitation consultant works 1:1 (mean 36 hrs.) with clients drawing on range of interventions
- Interventions rated most effective were as follows:
 - work training placement
 - graded return to work programmes
 - teaching compensatory strategies
 - coaching clients regarding hidden job market
 - vocational counselling
 - coaching regarding work behaviours

(O'Brien et al. 2007)

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 26 outcome studies involving 3688 adults with TBI: aggregated results indicated that interventions studies appear to produce higher and quicker RTW than non-interventions studies (Kendall et al. 2006).
- Systematic review of evidence for 3 models - program-based; supported employment; case coordination: few studies met inclusion criteria (only 5 high quality), none compared approaches. Conclusion: currently little clear evidence to suggest what is the best practice approach to VR after TBI (Fadyl & McPherson, 2009).

Comparison of VR pathways after ABI

- 114 people (median 1 year post-injury) – 3 pathways:
 - Specialist vocational service (SVS) only
 - SVS plus community re-integration outpatient group (CROG)
 - SVS plus 6 hour per day comprehensive day treatment (CDT)
- At 1 year follow-up community-based employment (CBE) overall outcomes did not differ across groups:
 - SVS - 77%; SVS+CROG – 85%; SVS+CDT – 84%.
- **Conclusion:** differential pathways result in CBE for large %, if intensity of service matched to severity of disability, time since injury and other participant 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)

Jobcentre Plus: Specialist Brain Injury Work Preparation Providers in UK (13 programmes in 2003)

- England – 7 programmes:
 - Aylesbury, Banstead, Birmingham, London, Newcastle, Rochdale, Liverpool.
- Scotland – 5 programmes:
 - Aberdeen, Dundee, Edinburgh, Glasgow, Kirkaldy
- Wales - 1 programme:
 - Cardiff

Working Out: A Joint Health/Employment Service TBI -VR Project (1992-97) (Tyerman & Young, 2000)

Vocational Programme:

Typical duration:

(Initial assessment)

(3 hrs).

Vocational assessment

1-3 wks.

Work preparation

12 wks. +

Voluntary work trial

12 wks. +

Supported work placement

6 mons. +

Working Out Project Outcomes (Tyerman&Young, 2000)

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

	Discharge (n=40)	1 yr. F/U (n=39)	2 yr. F/U (n=36)
Employment / Training	50 %	51 %	50 %
Therapeutic / voluntary work	35 %	28 %	25 %
Adult education / rehabilitation	12.5 %	15 %	14 %
Unoccupied	2.5 %	5 %	11 %

Rehab. UK - BI Vocational Centres: (Birmingham, London & Newcastle - 2006)

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 - 2006)

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 centres - outcomes:

232 people with ABI (Murphy et al 2006)

Outcome	Percentage
Paid competitive employment	41 %
Mainstream training / education	15 %
Voluntary work	16 %
Discharged to other treatment	15 %
Withdrew from programme	13 %

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).....

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) -
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)

Vocational rehabilitation (alternative work)

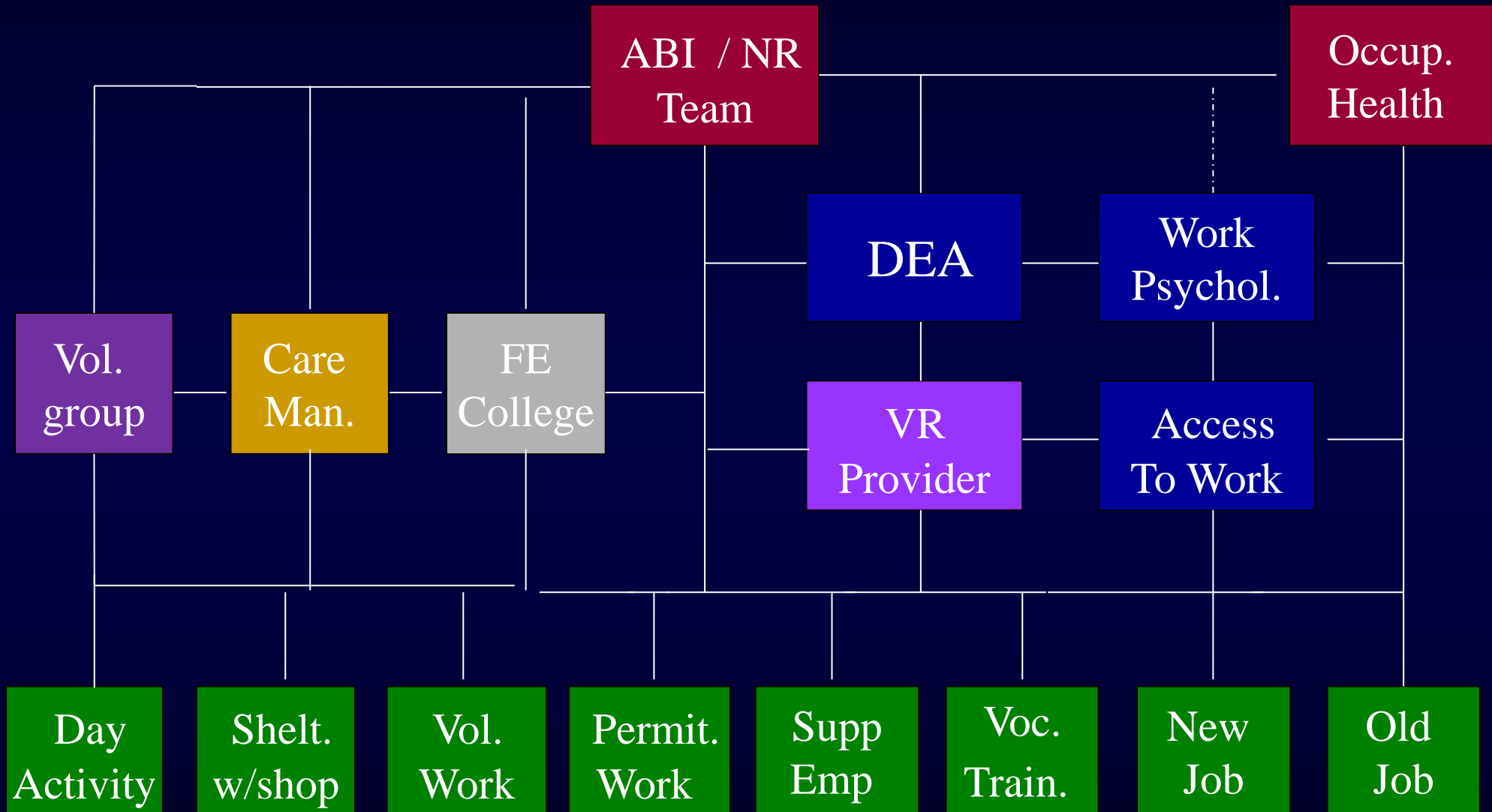
ABI VR programmes should include provision for:

- education / discussion about ABI and work
- strategies to manage ABI 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)

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 and remained in work than the control group (60%) (n=54) receiving less specialist care

(Radford et al. 2011)

Changes to DWP/Jobcentre Plus provision

- Continued input from :
 - Disability Employment Advisors / Work Psychologists
 - Access to Work provision
- BUT
- 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.

VR–PwLTNC–RfBP

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
9. Occupational / educational provision (BSRM, 2010)

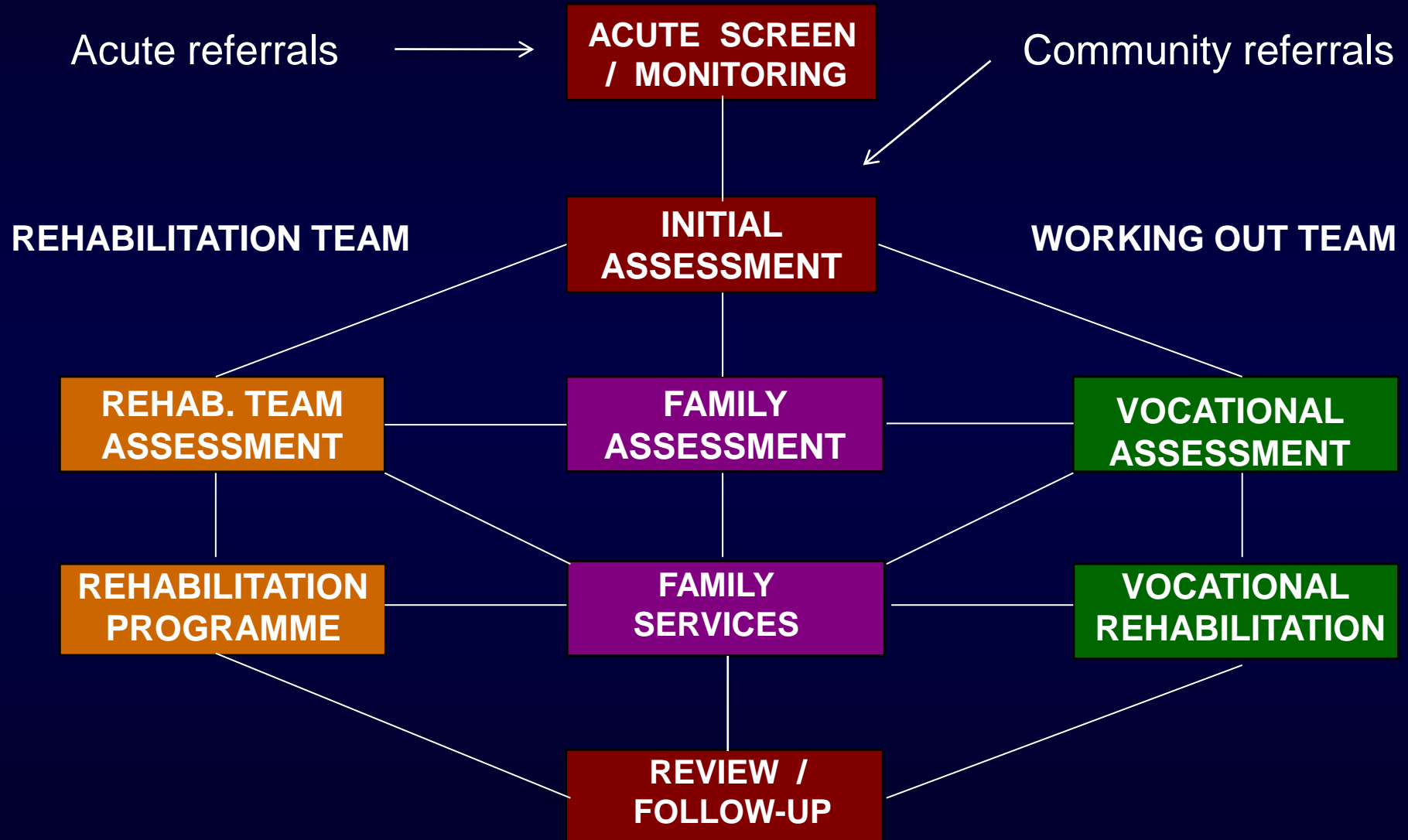
VA&R–PwLTNC–RfBP

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

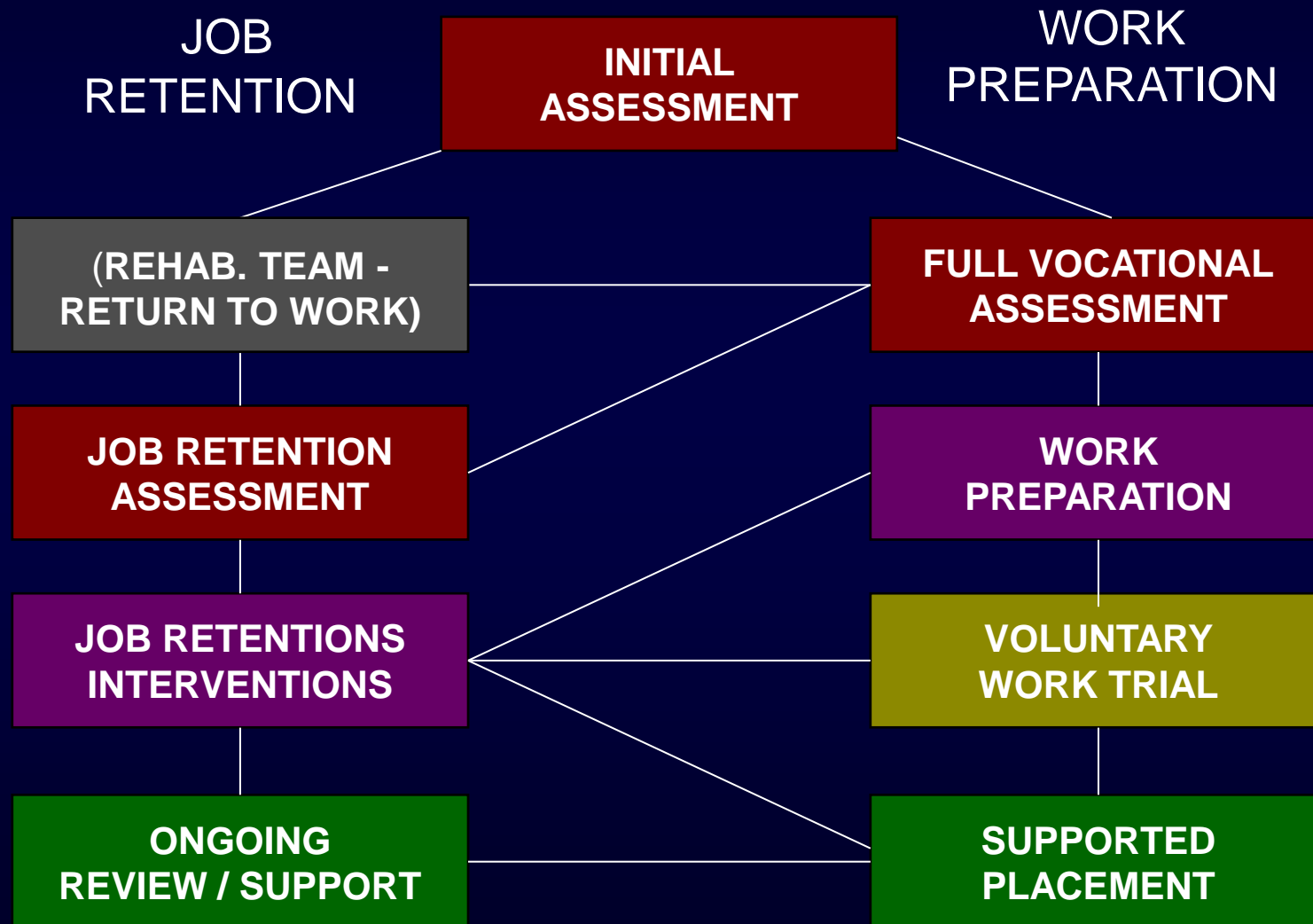
(BSRM, 2010)

Community Head Injury Service, Aylesbury



Working Out Programme 2012

Community Head Injury Service, Aylesbury, UK



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.

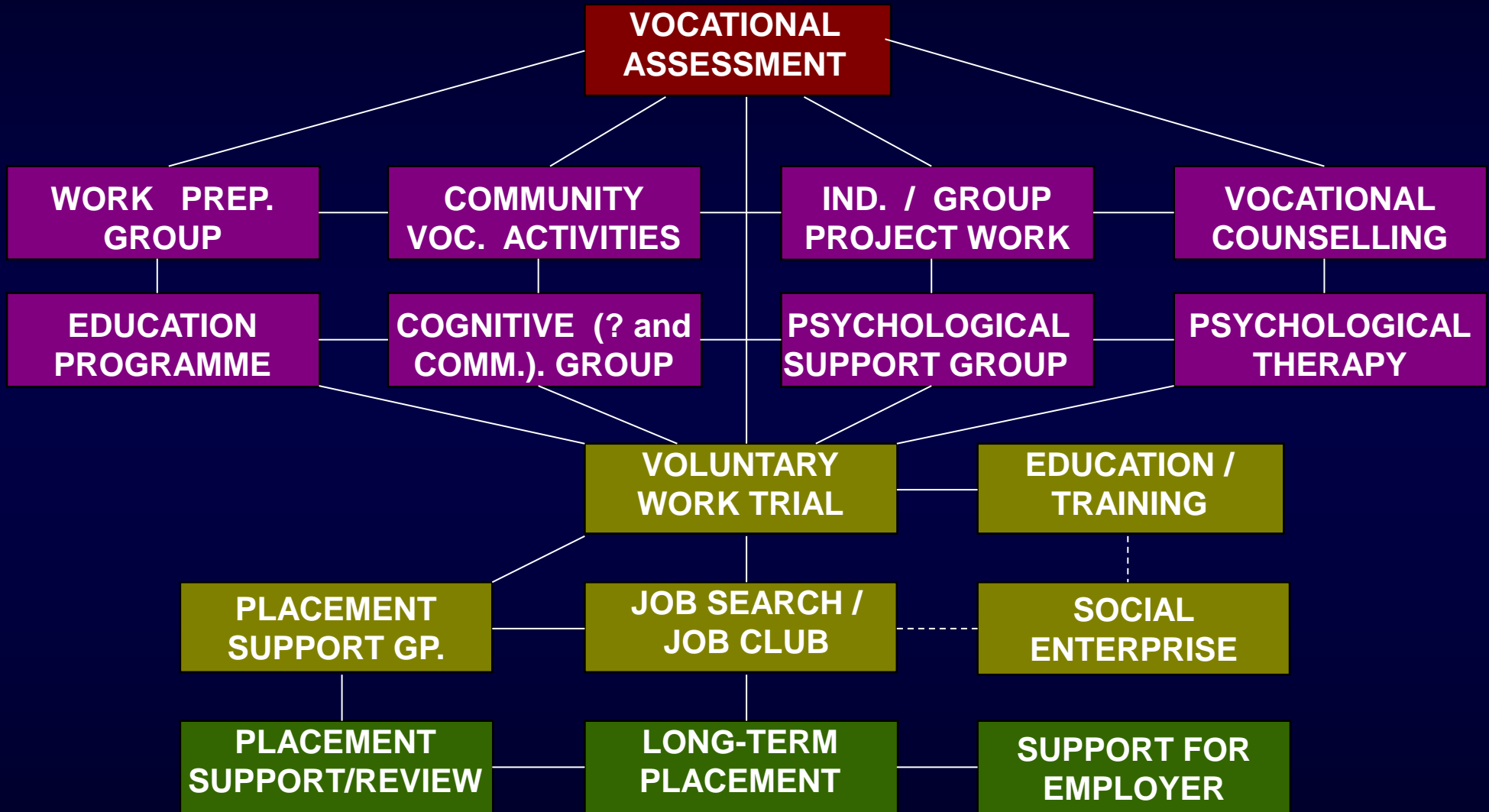
Evaluation of the person in the job:

- 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

CHIS Working Out Programme (2012)



Working Out Programme Outcomes (Sept. 2010)

Voc. Rehab. Outcomes	(n=132)	Cum %
Full-time employment	29 %	
Part-time employment	23 %	
Supported employment	3 %	
Vocational training	5 %	60 %
Permitted work	10 %	
Voluntary work	10 %	
Adult education	2 %	
Housewife / carer	1 %	83 %
Further rehabilitation	7 %	
Disengaged	8 %	
No occupation	2 %	100 %

Working Out – Situation in 2010

- Well established programme with a proven model of specialist brain injury vocational rehabilitation
 - Vocational outcomes well maintained over time (with for some ongoing and others intermittent/occasional support)
 - Encouraging vocational outcomes, sustained over the duration of programme
- Banking crisis 2008 > recession**
- Lack of paid jobs (and voluntary work) opportunities
 - Difficulty in assisting people to progress from completion of work trials phase into long-term work placement
 - **Group of clients in Job Club decide to take initiative and develop a social enterprise project - supported by the service**

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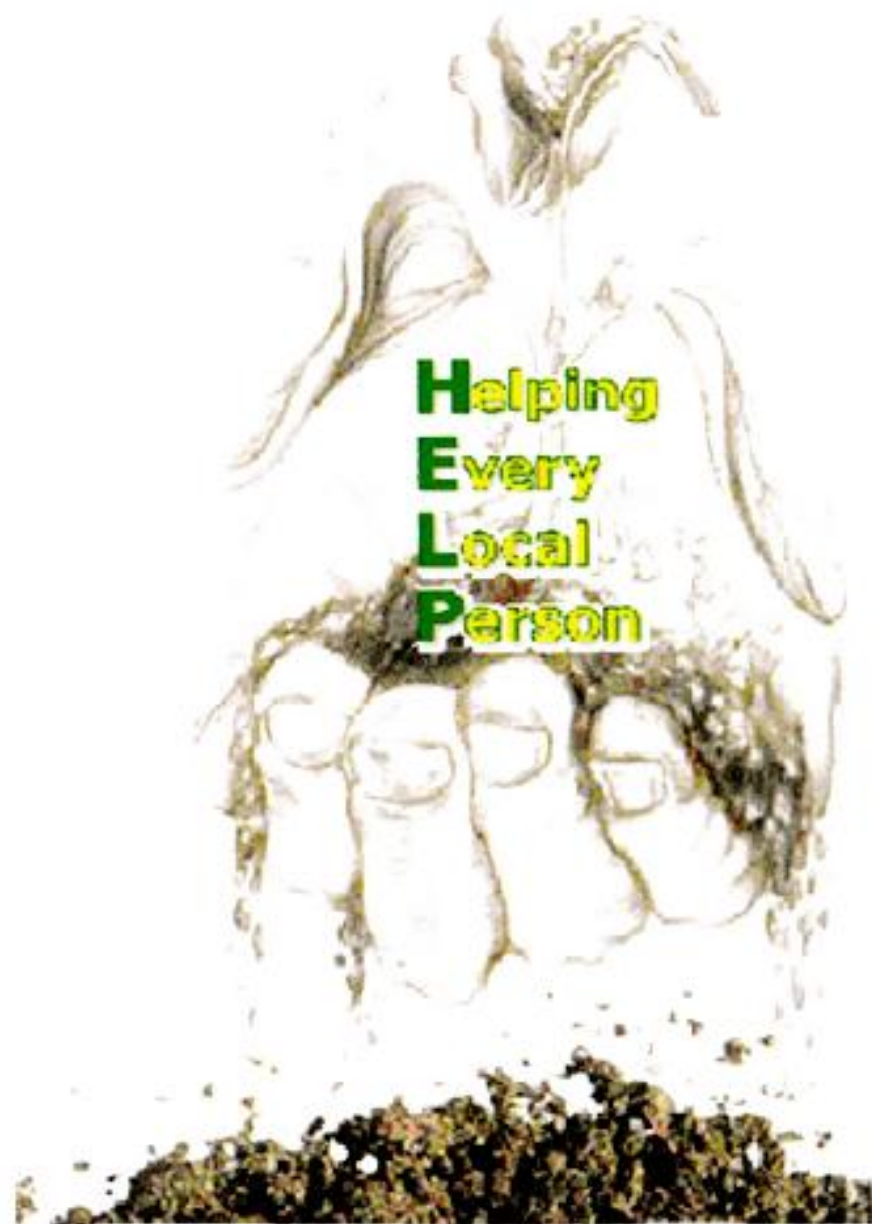
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HELP – Current position

- Not-for-profit social enterprise :by clients with ABI
 - provides interim (or long-term) VR activity for around 10 clients
 - group members act as directors and company secretary
 - builds on practical, admin. & social skills + strengthens CV
- Current income modest but pays for:
 - costs of running HELP (i.e. insurance, tools & administration etc).
 - group lunch and social events
- Exploring additional contracts / personal customers :
 - permitted earnings to clients + training (& ? Transport)
- Future aspirations:
 - widen services (? cleaning, dog walking, decorating, shopping)

Vocational needs after brain injury - Bucks.

- Core rehabilitation (incl. vocational goals) – CHIS Rehab Team
 - Guided/supported return to previous work – CHIS Rehab Team
 - Assessment of readiness to RTW – Rehab Team/Working Out
 - Extended work preparation prior to RTW – Working Out
 - Complex return to work / job retention – Working Out
 - Preparation/placement into alternative/new work – Working Out
- + Occupational provision for clients with greater needs - Headway
- BUT**
- Sub-group of people with ABI who are unable to RTW who have no occupational activity but who are not currently attending Headway

ABI Photography Social Enterprise

A joint initiative between:

- Bucks. Adult Learning
- Community Head Injury Service – Rehabilitation Team
- Headway Aylesbury Vale

Aim:

To assist people with brain injury who are unable to return independently to occupation (but who have the capacity to learn skills and participate) with appropriate support.....
to develop the skills and confidence to participate in a supported photography social enterprise project

Photography Social Enterprise - Project Outline

- People with ABI to be provided with skills and support to participate in development of a not-for-profit photography social enterprise (e.g. making/selling calendars, cards etc).
- Aim to generate sufficient income to be self-sufficient (i.e. cover Headway staff time, materials & rent of premises).

Proposed three stage process:

- Jan. 2013: Pilot 10 wk course - Taster (course/project) + identify learning support needs
- Apr.2013: 1 year course - Photography, computing, setting up a social enterprise)
- Apr.2014: Launch Social Enterprise (run by Headway)

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

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