Introduction

Return to work is a recognised goal of rehabilitation (Johansson and Bernsprang 2001, Corr and Wilmer 2003, Yorkston et al 2003, Davis and Rinaldi 2004) and, in the absence of a vocational rehabilitation specialist, the task of addressing vocational issues often falls to the occupational therapist. This is appropriate because occupational therapists have an understanding of the relationship between the individual's medical condition, functional abilities, psychosocial status and work demands (Stuckey 1997). There are increasing reports of successful projects by the profession in this area (Sample and Rowntree 1995, Partridge 1997, Joss 2002, Chappell et al 2003, Brewin and Hazell 2004, Jackson et al 2004). However, without specific provision in terms of occupational therapy staff numbers, there is a danger that interventions will not meet the patients' needs.

The Astley Ainslie Hospital, Edinburgh, provides post-acute rehabilitation for adults mostly aged 16-65 years in a number of specific diagnostic groups, including neurological conditions, stroke, acquired brain injury, amputation, cardiac conditions and chronic pain. The outpatient occupational therapy resource consists of a 1.8 whole-time equivalent (wte), of which 0.3 wte is designated for the cardiac service, 0.5 wte for acquired brain injury and the remaining 1 wte for all other cases. Patients are seen on an individual and a group basis and are offered a variety of interventions, including community living skills, cognitive rehabilitation, physical rehabilitation and advice on return to work and leisure activities.

Referrals consist of people discharged from inpatient care and outpatients seen in consultants' clinics.

The referrals made to the outpatient occupational therapy service have risen steadily over the last 5 years. The possible reasons for this include shorter hospital admissions (Joss 2002), increased survival rates following an injury or illness (Thurman et al 1999, Howard et al 2001) and the introduction of more community-based resources aimed at the prevention of acute hospital admissions. The nature of referrals has also changed, with an increasing number of people requesting occupational therapy intervention aimed specifically at return to work. Such interventions have included an analysis of work skills, the practice of work-related tasks, advice on a graded return, adaptations to the workplace or job and communication with the employer.

This paper describes an audit of the vocational rehabilitation aspects of the outpatient occupational therapy service over a 6-month period. The principal aims were to determine the size and nature of the demand for return-to-work interventions and to gauge whether these were effective. For the purpose of the report, the term ‘vocational rehabilitation’ encompasses interventions aimed at a return to paid employment, voluntary work and/or further education.

Method

All people referred to the outpatient occupational therapy service for the 6-month period from October 2002 to
March 2003 were assessed to determine whether return-to-work interventions were required. The trust’s Quality and Effectiveness Department, which assisted with the study design and data analysis, stated that no separate ethical approval was required because the patients’ assessment and treatment would remain the same and all information would be held by the occupational therapist delivering the service. The patients were informed that an audit was being carried out and that any results would respect anonymity and confidentiality.

A combination of quantitative and qualitative data was collected. For the former, a proforma sheet was devised consisting of three sections: patient data (age, diagnosis and gender); vocational intervention (job evaluation, workplace assessment, practice of work-related tasks, graded return and liaison with employer); and outcome at discharge from occupational therapy (that is, work status). The qualitative data consisted of a patient questionnaire, which addressed the individual’s understanding of the interventions and his or her satisfaction with the service provided. This questionnaire was issued only to those whose vocational interventions had been completed by the end of the audit period. The patient completed this questionnaire anonymously and sent it directly to the Quality and Effectiveness Department.

The data from the proforma sheet and the questionnaire were scanned using the Statistical Package for Social Sciences (SPSS 2002, Watson 2003) to reduce any potential for bias and improve reliability.

A small-scale pilot study was completed prior to commencing the audit project. The aim of this was to review the brevity and clarity of the questions and the length of time taken to complete the proforma sheet and the questionnaire. Both were amended accordingly.

**Results**

A total of 118 referrals was received by the outpatient occupational therapy service during the 6-month audit period. Of these, 76 (64%) patients required interventions related to return to work and they represent the study population.

**Patient data**

All patients were aged between 16 and 65 years (mean age 35 years); 51 (67%) were male and 25 (33%) female. The diagnoses are summarised in Table 1 and the pre-injury employment status in Table 2.

**Table 1. Diagnostic groups (n = 76)**

<table>
<thead>
<tr>
<th>Diagnosis</th>
<th>Number of patients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brain injury</td>
<td>31</td>
</tr>
<tr>
<td>Cardiac</td>
<td>16</td>
</tr>
<tr>
<td>Cerebrovascular accident</td>
<td>16</td>
</tr>
<tr>
<td>Neurological (e.g. Parkinson’s disease, multiple sclerosis, tumours)</td>
<td>7</td>
</tr>
<tr>
<td>Chronic pain</td>
<td>5</td>
</tr>
<tr>
<td>Amputees/locomotor</td>
<td>1</td>
</tr>
</tbody>
</table>

**Table 2. Employment status pre-injury (n = 76)**

<table>
<thead>
<tr>
<th>Employment status</th>
<th>Number of patients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full time</td>
<td>53</td>
</tr>
<tr>
<td>Part time</td>
<td>5</td>
</tr>
<tr>
<td>Self-employed</td>
<td>5</td>
</tr>
<tr>
<td>Student</td>
<td>2</td>
</tr>
<tr>
<td>Unemployed</td>
<td>11</td>
</tr>
</tbody>
</table>

**Vocational interventions**

Initial assessment included determining each person’s employment status at the time of referral to the outpatient service; the results are given in Table 3. The decision as to whether or not an individual was considered as ‘ready for work’ was made by the treating occupational therapist. This was based on detailed information from the person regarding the nature of his or her employment and the therapist’s evaluation of the person’s medical condition, physical and psychological status and functional abilities.

**Table 3. Employment status at time of initial assessment (n = 76)**

<table>
<thead>
<tr>
<th>Employment status</th>
<th>Number of patients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employed and ready for work</td>
<td>11</td>
</tr>
<tr>
<td>Employed but not ready for work</td>
<td>51</td>
</tr>
<tr>
<td>Unemployed and ready for work</td>
<td>1</td>
</tr>
<tr>
<td>Unemployed but not ready for work</td>
<td>10</td>
</tr>
<tr>
<td>Unlikely to return to work</td>
<td>3</td>
</tr>
</tbody>
</table>

The actual interventions used varied according to individual needs and employment status at the time of initial assessment. Sixty-two (82%) of the 76 patients were identified as requiring a prevocational treatment programme in an attempt to improve their readiness for work. In others, a graded return to work, a change to the workplace or other measures were advised. Fig. 1 indicates the range of interventions used.
highlighted on the main list; these included referral to a community occupational therapist for the provision of assistive equipment, a pain management programme or a local day centre. The results of this section are shown in Fig. 2.

Fig. 2. Referral to other support services (multiple answer) (n = 26).

Outcome at discharge from occupational therapy
Finally, the employment status at discharge from the service was determined and this is summarised in Fig. 3.

Fig. 3. Outcome at discharge from occupational therapy (n = 76).

Questionnaire results
Of the 76 patients in the study, 68 (89%) were issued with the patient questionnaire (8 patients were excluded because their treatment was continuing at the end of the audit.

Fig. 4. Patients’ understanding of occupational therapy intervention received (multiple answer) (n = 29).

Discussion
The audit showed that almost two-thirds of the patients referred to the outpatient occupational therapy service required advice and interventions regarding a return to work. The nature of the interventions varied and included specific training to improve work skills, a graded return to employment and changes to the workplace or working conditions. Negotiating with employers or other agencies was also often involved. Although vocational issues have always been accepted as part of the overall remit of the outpatient occupational therapy service, it has frequently been perceived as a lesser part of the workload than interventions aimed at improving basic activities of daily living skills.

The success found in the return to employment or education was encouraging. In 65 cases, jobs or college placements were kept open for people while they were attending rehabilitation and 46 of them successfully returned to their previous vocational pursuit. Another eight were still receiving input at the end of the audit period and were expected to be able to get back to their posts. This would support the argument for early intervention and speedy placement back into the familiar employment role whenever possible. As Brewin and Hazell (2004) have reported, support at an early stage can prevent problems being encountered on returning to the person’s previous position. Boschen (1989, p260) emphasised the importance of early intervention, stating: ‘Timeliness of treatment is the single most important consideration in rehabilitating an injured employee.’ Many of the patients in the audit had themselves prioritised return to work as a goal of their rehabilitation and the incorporation of vocational issues in their occupational therapy programme was likely to encourage active participation. Early return to work, where possible, may also avoid long periods of inactivity, with loss of confidence and self-esteem.

The relative success in helping people to return to employment demonstrated by the audit cannot be attributed solely to occupational therapy because some patients received additional input from other allied health professions, such as physiotherapy and speech and language therapy, and from neuropsychology. These professions adopt a team approach wherever possible and appropriate, but the occupational therapist usually takes the lead responsibility for coordinating vocational issues.
It was also evident that some individuals were not successful in returning to, or finding, employment within the 6-month period that the audit covered. A detailed investigation of the reasons for this was not possible, but it was felt that it related principally to the severity of the individual's disability. Inevitably, a proportion of patients with impairments resulting from conditions such as acquired brain injury or stroke will be unable to return to employment, even with a change of role or working conditions. Some patients appropriately opt for retirement on medical grounds and the occupational therapist's task then alters to focus on recreational or other interests as part of their programme. There were also individuals who were long-term unemployed which, when coupled with their newly acquired cognitive and/or physical problems, made the task of finding employment extremely difficult in the service currently provided.

As well as providing information about the size and nature of the demand for vocational rehabilitation, the audit has demonstrated some of the limitations of the service. The interventions appropriate to assist people to return to work, such as negotiations with the employer, workplace visits and the accurate evaluation of the exact nature of an individual's work, are often time consuming. It is the authors' opinion that the occupational therapist working in a post-acute setting is the appropriate person to assess and advise on occupational matters and it should be part of the routine service. However, some dedicated resources are required, principally in terms of an increase in the therapy time available. An alternative would be to develop the case for a post that deals exclusively with employment matters. In the United Kingdom, unlike some other western countries, specialist vocational rehabilitation practitioners are scarce and rarely found as part of the multidisciplinary rehabilitation team. When available, they are often a separate service to which the team refers the patient. Prior to this referral, there still needs to be the assessment and selection of patients for this service and this is usually an occupational therapist's task. This process is also likely to incur delays in the individual getting back to work.

From the experience with the audit, the authors intend to modify their practice slightly by giving priority to identifying and addressing employment issues as soon as possible. They will also continue to press for increased staff to improve the quality of the service that they are able to offer. Finally, it is their intention to continue to audit the vocational rehabilitation practice but to focus on particular diagnostic groups, initially acquired brain injury and stroke, and to take more detailed information regarding the actual hours of time required per patient to provide this service.

**Conclusion**

Return-to-work issues were identified as important in the rehabilitation programme of two-thirds of those patients referred to the outpatient occupational therapy service. In many cases, the timely provision of a range of vocational interventions assisted in getting people back to employment or education. It is contended that vocational rehabilitation can be achieved within a service such as the one audited and, indeed, that such rehabilitation should be an integral part of an outpatient occupational therapy service.

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**References**


**Further reading**


**Authors**

Lynne Main, BSc(Hons)OT, Senior Occupational Therapist, Occupational Therapy Department, Astley Ainslie Hospital, 113 Grange Loan, Edinburgh EH9 2HL. Email: lynne.main@ipct.scot.nhs.uk

Jane Haig, DipCOT, MSc, Senior Occupational Therapist, Occupational Therapy Department, Astley Ainslie Hospital, 113 Grange Loan, Edinburgh EH9 2HL. Email: jane.haig@ipct.scot.nhs.uk