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**Implementation of an employment intervention in mental health teams: A naturalistic 1 year employment outcome study in people with severe mental illness.**

**Running title: Improving employment outcomes in routine care**

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## **Abstract**

### **Background**

In the UK, the severely mentally ill have high rates of unemployment.

### **Aims**

To 1) evaluate implementation of an employment intervention and 2) test the effectiveness of training an existing staff member in providing the employment intervention (Model A) against the provision of a dedicated employment specialist to a team (Model B).

### **Methods**

An employment service was implemented in 5 mental health teams, with three teams having an existing team member trained and two teams receiving an additional member of staff to carry out the employment intervention. Work outcomes for the two groups were compared at 1 year.

### **Results**

Competitive employment was obtained by 17.7% receiving an employment intervention (10.3%, Model A v.s 22.8% Model B). Rates of employment or training obtained were 25.6% (10/39) in

Model A vs 35.1% (20/57) in Model B but the difference was not statistically different. Type of employment service model was not significantly associated with working.

## **Conclusion**

An employment service can be introduced effectively into mental health teams in the UK and positive employment outcomes achieved in a short space of time. Providing an additional resource is more effective compared to asking existing staff to deliver the intervention alongside other roles.

## **Declaration of Interest**

Nil. Funded by West Midlands Strategic Health Authority Innovation Grant

## **Keywords**

Severe mental illness, employment, implementation

## **Introduction**

Work is extremely important for mental health and is a key part of recovery. Having an open market paid job is associated with better quality of life and wellbeing (Marwaha et al., 2008) and has a positive impact on more areas of life than almost any other intervention (Boardman et al, 2003). In the UK those with severe mental illness have very high rates of unemployment of around 80-90% (Marwaha and Johnson, 2004) though most say that they wish to work (Secker et al., 2001). The financial costs due to the unemployment of the mentally ill are enormous (Layard, 2006) estimated to be £3.4 billion in 2004/2005 for those with schizophrenia (Mangalore and Knapp, 2006). In recent years the UK government has recognised that the lack of employment opportunities for people with mental health problems is a serious issue and policy has recommended health and social care services have a stronger focus on maintaining and promoting employment for these individuals (Black, 2008). Barriers to obtaining and maintaining employment for this group include a lack of choice and opportunity, low self-

esteem, coping with the pressures of working and stigmatisation and the benefits trap (Marwaha and Johnson, 2005).

Current literature has highlighted the limited response of mental health services to meet the needs of individuals seeking to work (Perkins et al, 2009). More recently there has been a well documented shift toward vocational models that place less emphasis on pre-employment training experiences and a greater focus on competitive jobs (Drake et al, 2003). An important issue is whether employment intervention models can be developed and implemented in routine services away from areas of national and international expertise and whether this can be achieved in the least costly way possible whilst maintaining effectiveness. This is particularly important when healthcare funding is contracting.

The aims of this study were therefore to 1) evaluate the implementation of an employment intervention introduced into routine community mental health services 2) test the relative effectiveness of training existing staff in providing the employment intervention (Model A) vs. the provision of a dedicated employment specialist to a team (Model B), on employment rates at year 1.

## **Methods**

### **Process of implementation**

The implementation was carried out in a mental health provider organisation covering a catchment area of 850000 people in England, UK. The study was considered not to require ethics approval by the West Midlands Research Ethics Committee. Support was obtained from the general manager of the organisation to implement an employment intervention service. There was discussion with and support from other senior managers throughout the implementation process. The general strategy and purpose was widely discussed with clinicians.

All community mental health teams (CMHTs), assertive outreach and early intervention services (N=13) in the Trust were contacted and the study explained. They were then invited to identify one staff member within their team who would be willing to be trained as an employment specialist and provide at least 4 sessions (2 days) per week dedicated to this role.

Two of the CMHTs received an additional part time member of staff to carry out the employment intervention (Model B) rather than having an existing team member trained (Model A). One of these additional staff had a benefits advice background and the other was a support worker who had primarily provided employment support in her previous role. Employment specialists in all services had 2 working days to provide the intervention and maximum caseloads of 13 at any one time.

A 12-month training and support package was provided to the employment specialist workers. The purpose of the training was to enable the set up of the employment intervention and to provide ongoing supervision to employment workers. It initially involved one half day each month for 3 months. The content of the training emphasized that the goal of the program was helping people to obtain competitive employment consistent with individual preferences, rapid job search without an emphasis on prevocational training, support which is not time limited, the employment specialist embedded within the mental health team and provision of welfare benefits counselling. Any patients who expressed a desire to obtain work were offered the intervention unless they were acutely mentally ill as defined by the care coordinator. Consistent with good practice the model implemented had many of the characteristics of Individual Placement and Support (IPS), which has a good evidence base (Bond et al 2012a).

After the initial training, peer supervision took place monthly so that employment specialists could share experiences and problem solve around issues such as giving advice to service users about disclosure, disability discrimination act issues, and coping with unsuccessful applications.

After 6 months an experienced vocational services manager provided professional supervision monthly. This manager had strong links to the U.K Centre for Mental Health, an organization that formally supports the development of IPS in the UK.

### **Data collection**

Baseline employment figures for all service users of the mental health teams were coded using existing routinely collected service user data facilitated by a researcher.

Baseline information about patients referred to both sets of employment specialists (Models A and B) was collected, including psychiatric diagnosis, gender, ethnicity, age, work history and whether they were in receipt of employment benefits. Whether service users were in employment in the month prior to baseline data collection, number of hours per week, pay per hour and job title was recorded. Referral to the employment worker was followed by rapid job searching according to the preferences of the individual, support to complete applications and attend interviews. Support to the service user and employer (where required) continued after employment had commenced. Employment specialists returned monthly data on the progress of service users they worked with including the number of contacts. Work outcomes for the two groups of service users were compared after 1 year.

### **Data analysis**

A total of 6 teams out of the total pool of 13 agreed to participate in the study but one withdrew from the study after a few weeks. There were 4 CMHTs and 1 early intervention team (in Model A).

Analyses were completed using SPSS (Version 20). We initially described and compared the characteristics of participants in each model. Using parametric and non-parametric tests as appropriate we investigated whether there were statistically significant differences between the

groups. We then examined the work levels for service users who received each type of intervention model and tested whether employment outcome strictly (paid work only) or broadly defined (any kind of work or training) significantly differed.

Logistic regression using the enter method was performed to assess the impact of a number of factors on competitive employment at year 1. The model contained 6 predictor variables, known to be important in explaining employment (Marwaha and Johnson, 2004). These were ever having had an open market job, educational attainment, gender, diagnosis, age and intervention group. A second logistic regression was also performed using the same predictor variables to assess their impact on service users obtaining any kind of work, including volunteering or training.

## **Results**

An employment service was provided to 106 service users. Sixty seven people received the employment intervention from a worker who was an additional resource to the team (Model B) and 39 from an existing worker who had been trained to deliver the intervention (Model A). Ten of the service users who received the Model B were in competitive employment at baseline and maintained employment but have not been included further in the analysis. None of those receiving Model A were working at baseline.

### **Baseline**

At baseline the mean rate of paid employment for all service users in the 5 teams was 13.3% but varied between 4.6% and 27.7%.

### **Service user characteristics**

Table 1 shows that participants in the two intervention groups were similar in terms of gender, marital status, education, whether ever employed and time since first contact with services. The



groups differed significantly in diagnosis ( $p=0.037$ ), with more people with schizophrenia and bipolar disorder receiving Model A and more with depression receiving Model B. Service users in Model B were also older ( $p<0.001$ ).

### **Employment outcomes at 1 year**

After 1 year the rate of employment for all service users on the caseloads of the participating teams had fallen to 10.4% from 13.3%. However the competitive employment rate was 17.7% at 1 year in those service users who were offered an employment service by either model. A further 4 people (4.2%) were engaged in voluntary work and 9 (9.4%) were studying or training. The mean number of employment specialist contacts with service users for each of the intervention groups was similar (5.8 for Model A and 5.7 for Model B) and the small difference was not significant ( $p = 0.934$ ).

The number of service users who obtained employment defined broadly as work or training in the two groups is shown in Table 2. 35.1% of service users in the Model B intervention group gained employment compared to 25.63% in Model A with no difference between the groups at 1 year. Table 3 gives a more detailed breakdown of employment outcome. Thirteen (22.8%) people in Model B obtained competitive employment during the year compared to 4 (10.3%) in Model A ( $p= 0.114$ ).

### **Intervention model type and employment outcome**

In the full model containing intervention group and all other explanatory variables, type of employment service provision was not statistically significant in explaining employment broadly defined (table 4). Only age made a significant contribution to the model. When the logistic regression was performed to assess the odds of obtaining competitive employment none of the predictor variables made a statistically significant contribution to the model.

## **Discussion**

This study indicates that it is possible to implement an employment service into routine NHS care over the course of a year and for this to lead to service users obtaining work and training. Furthermore, the two models of implementation did not lead to significantly different paid employment outcomes though there was a trend for those who received the Model B intervention to have a higher success rate.

### **Challenges in implementation**

Challenges were apparent from the set up stage of this study. The study was conducted during a period of economic recession. The unemployment rate for the local population as a whole was almost 10%, which was 3% higher than the UK average (Office for National Statistics, 2012). Thirteen mental health teams were eligible to participate in the study but 5 teams were willing to participate throughout, a substantially smaller number than anticipated.

A variety of reasons were given by team managers for not wishing to participate including lack of resources, high current staff sickness levels, a perception that employment services were provided elsewhere or that no staff within the team were interested in undertaking the training. There was also ambivalence about whether community teams could feasibly be expected to deliver an employment intervention given other demands such as maintaining safe community tenure, which were seen as much more “core” than helping people back to work. These views may reflect a view within mental health services that employment is not a priority or even possible for people who are severely mentally ill, or that it is not within the remit of mental health services to provide employment interventions.

Provision of management structures for the support of the employment specialists also presented challenges, as there was no specific project manager for the employment service. The 6<sup>th</sup> team who had originally agreed to participate, withdrew citing pressure to provide more core

interventions. An employment service project manager may have been able to problem solve this issue and prevent it occurring. Obtaining a better understanding of the reasons for refusal to participate in such an implementation would be a worthwhile future research study. Organisational changes taking place within the Trust during the study implementation period also resulted in difficulty accessing the estates resources necessary to perform the employment specialist role for some of the workers. These difficulties may have influenced how the employment service was perceived by other Trust staff and by service users, which in turn may have affected referral levels and up-take of the service. One possible way to have improved implementation could be the participatory action research method (Maciver et al 2013)

### **Intervention model type and employment outcomes**

In the teams that had specifically employed a study employment specialist the service user employment rates increased overall. At 23% the level of competitive employment for recipients of this model of intervention was markedly higher than for both service users within the teams as a whole and service users in Model A. Informal discussions with the employment specialists suggest that those who were an additional resource for the team in which they were based (Model B) found it easier to carry out their role than those who had been trained to provide the employment support part time within their original teams. Those workers found that it was difficult to ‘wear two hats’ and that they were often called upon to meet other needs within the team even when they were rostered to provide employment support. In essence the other workers did not respect the employment specialist’s time. The employment specialists in Model B may have also been better able to take on the identity of being employment service workers.

It would appear that providing an additional resource to each team and ‘ring-fencing’ it may be a more effective model of employment service implementation. The average number of contacts with service users was similar in the two groups. However the workers in the Model B teams appeared to be more productive taking on more service users over the course of the year. This

may reflect a greater enthusiasm or feasibility in their role and may explain there being more positive outcomes in that group. However it is not possible to test this further in this study as data about type, length and content of employment service worker contacts with service users was not collected.

An exploration of the impact of a number of variables including model of implementation (Model A v.s. Model B) on work outcomes found that only younger age predicted obtaining any kind of work or training at year 1. Over 80% of those who obtained paid work were aged 40 years or younger. In relation to psychosis there is some evidence that early vocational intervention is effective (Rinaldi et al., 2010) and that functional recovery in first episode psychosis is predictive of long term outcomes (Alvarez-Jimenez et al., 2012). Given this, investment in employment services may be particularly effective when targeted at those at an early stage of illness.

For comparison, researchers have reported on the implementation of IPS, a much more specified form of employment intervention than we were able to provide. In terms of implementation studies of IPS in the UK, Rinaldi and Perkins report 39% of patients were able to achieve competitive employment at 12 months (Rinaldi and Perkins, 2007) a figure higher than the findings of Schneider et al (2009) who reported 22.7% of people who were unemployed at baseline obtained competitive employment after 1 year (Schneider et al 2009). Therefore the competitive employment rates achieved in the current implementation study sit in the lower to middle range end of the results from UK studies. In order to explore this we completed a post hoc assessment of the employment intervention using the supported employment fidelity scale (Bond et al 2012b). This indicated a score <73 meaning that we did not have model fidelity to IPS. This may in part explain our findings.

This study had a number of limitations. We did not do a formal analysis of how representative the 5 teams that took part were of other teams in the Trust. However the participating teams covered deprived, affluent, urban and rural areas and were widely geographically located within the Trust. As far the authors are aware they were also constituted in the same way as those that did not take part in terms of required team structures and caseloads. We did not control for caseloads or staff ratios in our analysis as this information was not collected.

There was a relatively short time scale in which to train employment specialists, set up the service and evaluate outcomes. The implementation was during a period of significant contraction in the labour market. These factors may have affected the numbers of people who were able to find a competitive job through either implementation model. The number of teams implementing the employment service and therefore the number of service user participants was fewer than anticipated. This loss of sample size may be the reason that the employment outcomes in the two intervention groups were not statistically significantly different. A post hoc power calculation for a trial comparing models A and B shows that assuming a 90% confidence interval our study only had 25% power to detect a difference.

In conclusion this study illustrates the need for whole-organisation buy-in and support for promoting vocational recovery of patients in order for implementation to have maximum effect. Ideally this would include an employment service champion to promote both the employment service in particular, and more widely the importance of employment as an integral part of recovery oriented mental health services. An employment service can be introduced effectively into community mental health services, but to have maximum impact additional financial and management resources will be required.

## **References**

- Alvarez-Jimenez, M., Gleeson, J.F., Henry, L.P., Harrigan, S.M., Harris, M.G., Killackey, E., Bendall, S., Amminger, G.P., Yung, A.R., Herrman, H., Jackson, H.J., McGorry, P.D. (2012), Road to full recovery: longitudinal relationship between symptomatic remission and psychosocial recovery in first-episode psychosis over 7.5 years. *Psychological Medicine*, 42(3), 595-606.
- Black, C. (2008) *Working for a healthier tomorrow*. London: TSO
- Boardman, J., Grove B., Perkins, R., & Shepherd, G. (2003). Work and employment for people with psychiatric disabilities. *British Journal of Psychiatry*, 182(6), 467-468.

Bond, G. R., Peterson, A. E., Becker, D. R., & Drake, R. E. (2012a). Validation of the Revised Individual Placement and Support Fidelity Scale (IPS-25). *Psychiatric Services*, 63(8), 758-763.

Bond, G. R., Drake, R. E., & Becker, D. R. (2012b). Generalizability of the Individual Placement and Support (IPS) model of supported employment outside the US. *World Psychiatry*, 11(1), 32-39.

Drake, R.E., Becker, D.R., Bond, G.R. Recent research on vocational rehabilitation for persons with severe mental illness. *Current Opin Psychiatry*, 16(4), 451-455.

Layard, R., (2006). The case for psychological treatment centres. *British Medical Journal*, 332, 1030. doi: <http://dx.doi.org/10.1136/bmj.332.7548.1030>

Maciver, D., Prior, S., Forsyth, K., Walsh, M., Meiklejohn, A., Irvine, L., & Pentland, D. (2013). Vocational rehabilitation: Facilitating evidence based practice through participatory action research. *Journal of Mental Health*, 22(2), 183-190.

Mangalore, R., & Knapp, M. (2006). Equity in mental health. *Epidemiologia E Psichiatria Sociale*, 15(4), 260-266.

Marwaha, S., Johnson, S. (2004). Schizophrenia and employment. *Social Psychiatry and Psychiatric Epidemiology*, 39(5), 337-349.

Marwaha, S. & Johnson, S. (2005) Views and experiences of employment among people with psychosis: a qualitative descriptive study. *International Journal of Social Psychiatry*, 51(4), 302-316.

Marwaha, S., Johnson, S., Bebbington, P., Angermeyer, M.C., Brugha, T., Azorin, J.M.; Kilian, R., Kornfeld, A., Mondher, T. (2008). Correlates of subjective quality of life in people with schizophrenia: findings from the EuroSC study. *Journal of Nervous and Mental Disease*, 196(2), 87-94.

Office for National Statistics (2012) *Regional Labour Market: Local Indicators for Counties, Local and Unitary authorities* April 2012. <http://www.ons.gov.uk>. Accessed 29.9.12.

Perkins, R., Farmer, P., Litchfield, P. (2009). *Realising Ambitions: better employment support for people with a mental health conditions*. London: TSO  
<http://www.dwp.gov.uk/docs/realising-ambitions.pdf>

Rinaldi, M., & Perkins, R. (2007). Implementing evidence-based supported employment. *Psychiatric Bulletin*, 31, 244-249.

Rinaldi, M., Killackey, E., Smith, J., Shepherd, G., Singh, S.P., Craig, T. (2010) First episode psychosis and employment: a review. *International Review of Psychiatry*, 22(2), 148-62.

Secker, J., Grove, B., Seebohm, P. (2001). Challenging barriers to employment, training and education for mental health service users: The service users perspective. *Journal of Mental Health*, 10, 395-404.