Developing evidence-based supported employment services for young adults receiving public mental health services

Nikki Porteous & Geoffrey Waghorn

Abstract

This report describes the application of an evidence-based practice fidelity measure to monitor the effectiveness of an expanding supported employment program for young adults with first episode psychosis. An occupational therapist working within a New Zealand community mental health service in Wellington expanded the program to several new sites in 2007. Both low and high scoring fidelity items helped identify practical ways to further develop evidence-based practices at each site. These early management experiences add to international knowledge on how best to implement evidence-based supported employment for people with serious mental illness.

Key words:

mental illness; psychosis; supported employment.

Occupational therapists working in public mental health in New Zealand and Australia are leading the implementation of evidence-based practices in the provision of supported employment services for people with psychiatric disabilities (Lloyd & Waghorn, 2007; Porteous & Waghorn, 2007; Waghorn, Collister, Killackey & Sheering, 2007). Occupational therapists are ideally positioned within Australian and New Zealand mental health systems, to help implement the latest evidence-based practices in psychiatric vocational rehabilitation.

The most effective form of supported employment for people with psychiatric disabilities was developed by Professors Robert Drake and Deborah Becker in New Hampshire, USA (Becker et al., 2001). Known as evidence-based supported employment or individual placement and support (IPS), it has been more extensively investigated than any other approach in psychosocial rehabilitation (Bond, 2004; Bond, Drake, & Becker, 2008). A defining feature is that employment services are integrated into public mental health services (Bond, 2004; Cook et al., 2005; King et al., 2006).

To date, 16 randomised controlled trials (RCTs) and six day treatment conversion studies in nine developed countries have compared IPS to the best alternative approaches. Of these, 11 RCTs examined high fidelity IPS services which reported employment outcomes of mean 60%, typically two to three times greater than the best alternative employment services (mean 24%). In addition to evidence for overall effectiveness, there is also evidence for four of seven core elements and emerging evidence that three other ingredients improve competitive employment outcomes (Bond, 1998; 2004; Bond et al., 2008).

Successful implementations of evidence-based supported employment for people with psychiatric disabilities are well documented in the USA (Bond et al., 2001) and in the UK (Rinaldi et al., 2004). In Australia, three recent reports (Killackey & Waghorn, 2008; King et al., 2006; Waghorn et al. 2007) identify country-specific factors which need to be addressed before a sustainable integrated program can be successfully established. Two further reports (Killackey, Jackson, & McGorry, 2008; Porteous & Waghorn, 2007) show that vocational outcomes of 60-80% can be expected in New Zealand or Australia, when the service users are young people with early psychosis, and formal study options are added to competitive employment as the primary vocational goals. While international reports are informative, the differences among developed countries in terms of labour markets, health, and welfare systems, means that Australian and New Zealand experiences can best guide the introduction of evidence-based practices in the Australian and New Zealand contexts. This report summarises recent results and describes the key management

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strategy used to manage the program's expansion to several new sites in the Wellington region.

The New Zealand context

The major changes in the New Zealand labour market during the past five years have been positive for workers with disabilities (Organisation of Economic Cooperation and Development, 2007). These changes can be attributed to increased labour demand driven by continuing economic growth and the ageing of the population. The New Zealand context is characterized by low inflation; economic growth of 2-4% per annum 2000-2004; and low official unemployment currently at 3.8%.

In addition to the labour market, health and welfare systems can also impact on labour force activity by people with severe mental illness (Burns et al., 2007). Public mental health treatment and care is funded by the government and delivered via semi autonomous District Health Boards. Disability employment services are funded via non government organisations contracted to the Ministry of Social Development to deliver disability employment services to eligible people in receipt of income support payments. Accessing public mental health services in New Zealand can be as challenging as in Australia and the USA (King et al., 2006; Waghorn et al., 2007). A job seeker with a serious mental illness may need to access separately, a public mental health service, government income support payments, and a non government organisation for suitably intensive disability employment services.

This lack of integration between employment and mental health services is now recognised as a key, yet missing, component of evidence-based practices in New Zealand, as it is in Australia (King et al., 2006). However, this information is not well known to the disability employment sectors in Australia and New Zealand. Hence, even the concept that employment services ought to be integrated with public mental health services is not yet explicitly supported by official policies in either country. To achieve integration, close links usually through co-location, are needed between employment services and publicly-funded mental health services (Becker et al., 2001; Bond, 2004; Killackey & Waghorn, 2008). New Zealand began a formal trial of the integration of employment and public mental health services in June 2002. Progress in terms of vocational outcomes from 2002 to 2007 has steadily improved (Porteous & Waghorn, 2007).

A brief history of evidence-based practices in New Zealand

The Capital and Coast District Health Board (C&CDHB) established a pilot IPS program within an early intervention psychosis team in the Wellington region during 2000-2002. For marketing purposes, this program was branded WorkFirst and the occupational therapist's role including generic care management, was changed to that of employment specialist while operating from the same desk within the mental health team. Although the results were not published, preliminary vocational outcomes and feedback from clinicians were gathered for inclusion in a formal submission by C&CDHB to the Ministry of Social Development (MSD). The result was a two year contract to enable two full-time employment consultants to co-locate within the early intervention psychosis team as part of a demonstration project. The second two year contract funded this and one other site until 2006, and was extended to two more sites for another two years until August, 2007. The project at C&CDHB reported here has been successful and has recently obtained ongoing funding to June 2008.

The four innovative demonstrative project sites were funded in the first Ministry of Social Development contract in 2002 as the 'employABLE Project'. Three of the four sites were intended to assist people with mental illness: (1) Kaupapa Maori for clients with a mental illness within the Taranaki region, administered by Tui Ora and Te Rau Pani, based in New Plymouth; (2) Capital and Coast District Health Board, for users of public mental health services aged less than 25 years, based in the Wellington region using the IPS approach; and (3) Richmond Fellowship, a service for adults with mental illness in the Canterbury region, using the IPS approach, based in Christchurch.

Sites 1 and 2 described above received continuation funding from the Ministry of Social Development for the period 2004 to 2006. At the time of writing, vocational outcome information was available from the Wellington site but was not available from the Kaupapa Maori service in Taranaki. The Richmond Fellowship site in Christchurch in the Canterbury region had also attempted an IPS implementation but did not receive continuation funding and the project was discontinued. The Canterbury mental health service returned to using a brokered approach to linking clients into suitable disability employment services. The reasons for project failure were not formally reported other than to the Ministry of Social Development. However, anecdotal reports suggest that the absence of co-location and too few employment consultants linked with too many community mental health teams, were critical factors.

Other than the Wellington sites, the next most important attempts at implementing good fidelity evidence-based services involved a partnership between the Waikato District Health Board and Workwise Employment Agency, to implement the IPS approach. Two pilot sites were established, one in Thames in July 2004, followed by Hamilton in August 2004. Both sites commenced with a visiting service at a regular time each week to liaise with clinical staff about the progress of shared clients. Described as an attachment model, it was an alternative to full-time co-location of employment staff within the clinical team. The project was independently evaluated and results for the first 5 months were aggregated across both sites (McLaren, Kristensen, & Li, 2005). Results were encouraging given that the project did not aim for maximum integration. For 30 clients in each of 'integrated' and 'non-integrated' service groups, employment outcomes achieved over five months were 60.3% and 40.0% respectively. The authors documented many qualitative benefits of the project and recommended ways to achieve closer integration and greater fidelity with the IPS approach.

The Capital & Coast DHB IPS implementation

An IPS pilot project was established at an early intervention psychosis specialist community mental health service in March,

2001. At this time the job description was changed from Occupational Therapist to Employment Consultant, to clearly differentiate the role from that of other mental health team members. The IPS approach was adopted and previous roles and responsibilities within the mental health team were ceased to enable a hands-on approach to providing employment services. Career planning, benefits counselling, disclosure counselling and supported education were provided simultaneously with intensive support for job searching, gaining and retaining employment. The success of this pilot led to a successful trial funded by MSD which in turn has led to continuing funding.

The C&CDHB employed two occupational therapists as employment consultants. The risk with this type of implementation is that occupational therapists already working in the health system may have difficulty with the transition to a business oriented approach which requires a business focus and immediate responses to the needs of jobseekers, workers, students and employers. Advantages were expected through occupational therapists having first identified employment as the unmet occupational need of the client group; having the relevant professional skills; and being already established in the early intervention team. Having a common discipline background with other health team members was expected to support longer term service integration.

In June 2004, a second contract with MSD included provision for a third employment consultant, who was then co-located with a community mental health youth specialty service with the focus on ages 16-19 years. Together with the community early intervention psychosis service where the focus is on ages 16-25 years, three full-time employment consultants were employed in the region, two occupational therapists and one consumer employment consultant.

Additional services

A recent development in supported employment is the recognition of the need for benefits counselling (Bond 2004). Benefits counselling in New Zealand aims to enable individuals to predict the financial and welfare benefit implications of moving to employment, in order to reduce financial uncertainty, a likely source of additional stress for people on low incomes. The rationale for introducing this component differs from that in the USA, where the major challenge is the dual fear of loss of health insurance and social security disability income support, if one returns to work above a certain income level. Due to New Zealand's more substantial and accessible public health system, the salient issues concern how best to utilize existing incentives, while minimizing the disincentives associated with employment.

Because both Wellington sites had a focus on youth with psychosis and other serious mental illnesses, it was considered important to address the wider career aspirations of young adults. To this end, evidence-based supported education (Megivern, Pellerito, & Mowbray, 2003) supplemented supported employment. This program can help young people restore illness-disrupted secondary and vocational education when this matches their career goals.

A unique approach to co-location

The approach to integrating mental health and employment services by C&CDHB is a novel approach, unlike the majority approach currently taking hold in Australia (Waghorn et al., 2007). The C&CDHB approach involves the mental health service creating a 'separate' employment service staffed from within and supported by new MSD contracts. Whereas, the standard approach to co-location in Australia has involved negotiating formal partnerships between an existing disability employment service and a neighbouring mental health service. In these partnerships, the employment consultant continues to be employed by the non government organisation with the disability employment network (DEN) contract, while operating from a desk within the mental health service. ORYGEN Youth health in Parkville, Melbourne, is the only Australian site that to our knowledge, operate a similar approach to C&CDHB, in that the employment consultant is employed directly by the health service and operates outside the Australian Government's DEN system (Killackey & Waghorn, 2008).

Using the IPS fidelity scale as a program management tool

With the expansion of the program in 2007, the most pressing issue became a need to coordinate implementation, training and evaluation across sites, to maximise learning and to promote continuing service development. In February 2007, this challenge was addressed by the C&CDHB funding a program coordinator allowing recruitment of a fifth employment consultant using existing MSD contract funds. In late 2007, the program coordinator decided to coordinate all aspects of program development with specific reference to the Supported Employment Fidelity Scale-Implementation Questions (Becker et al., 2001). Scores between 66 and the maximum 75 on this scale indicate good fidelity of implementation of the IPS approach.

The fidelity scale was applied at each site, at the individual employment consultant level. An interview was conducted between the coordinator and the employment consultant. The employment consultant's practice was directly observed, employment outcomes were measured, and anecdotal reports from onsite mental health team members were sought informally. The fidelity assessments by site and by individual employment consultant are shown in Table 1. The items in Table 1 summarise all 15 items in the fidelity scale. Inter-rater reliability was managed by comparing independent site assessments with the self-reported ratings made by each employment consultant. Differences in particular item scores were resolved by: discussion of particular item interpretations and item anchors; and by discussing examples of observable evidence. If any disagreement remained scores were averaged. The resulting total fidelity scores indicate a good level of fidelity was achieved at all sites. The scale seemed sensitive to site differences and helped identify improvement opportunities at each site. Both the lower and higher scored items suggested practical ways in which each site could further develop evidence-based practices at each site. Examples are discussed in the following sections.

Challenges identified

A major challenge concerned the limited ability to continue client support to retain employment beyond two years when clients are typically discharged from youth community mental health teams (see item 13 of Table 1). This is particularly important as the program extends from youth to adults with more long-term mental illness, who are more likely to need a level of continuing support to retain employment beyond two years. Expanding the program to all working age groups is necessary to reduce age-based exclusion. Although defensible on the grounds that age is also an eligibility criterion for receiving youth-based mental health services, this is not ideal because people with severe mental illness may need access to the best available evidence-based employment services throughout their working life.

Another challenge concerned how best to operate as a vocational unit when the employment consultants are direct employees of the mental health teams. Several suggestions were advanced: (1) meeting weekly with other employment consultants; (2) maintaining regular email and phone contact

Table 1. Assessments of individual employment specialist fidelity with evidence-based practices in supported employment.

			Employment specialist fidelity scores					
Subscale	**Item Label**	**Item Descriptor**	**1**	**2**	**3**	**4**	**5**	**Mean**
Staffing	1. Caseload size	Employment specialists have active caseloads not exceeding 25 clients.					E,E,T, Y,P	5.0
	2. Exclusively vocational	Employment specialists provide only vocational services. Vocational duties are not added to treatment responsibilities.					E,E,T, Y,P	5.0
	3. Generalist vocational role	Each employment specialist delivers all phases of vocational services.					E,E,T, Y,P	5.0
Organisation	4. Integration with mental health team	Employment specialists are accepted as part of the mental health treatment team, routinely sharing team decision making.					E,E,T, Y,P	5.0
	5. Vocational Unit	Employment specialists work as part of a vocational unit with group supervision and back-up arrangements.			Y	E,E, T,P		3.8
	6. Zero exclusion	No additional screening such as job readiness assessment.			T	Y,P	E,E	4.2
Services	7. Continuous assessment	Assessment is ongoing based on employment experiences.					E,E,T, Y,P	5.0
	8. Rapid job search	Job searching commences within 4 weeks.				P	E,E, T,Y	4.8
	9. Client choice	Client preferences determine the assistance provided and the jobs selected, not the availability of positions.					E,E,T, Y,P	5.0
	10. Diversity of jobs	Jobs obtained are diverse in type and setting					E,E,T, Y,P	5.0
	11. Permanent jobs	Jobs are not temporary or time limited.				E,P	E,T,Y	4.6
	12. Career development	Assistance to find a new job is provided when requested.					E,E,T, Y,P	5.0
	13. Follow along support	Time-unlimited support is available to clients and employers.				E,T	E,Y,P	4.6
	14. Community based service	Services are provided mostly in the community and are not office-bound.		P	T	E,E,Y		3.4
	15. Assertive outreach	Assertive outreach is used to maintain contact with clients.			T,P		E,E,Y	4.2

Notes: 1. Site descriptors. E = EIS (Early Intervention Service 16-25 years), T = Tory (Adult Mental Health Service, 18-35 years), Y = YSS (Youth Specialty Service, 16-18 years), P = Porirua (Adult Mental Health Service, 18-35 years).
2. Average score 69/75. 3. Fidelity assessment was conducted at all sites with individual employment specialists on 19 December 2007.

about vocational topics including employment opportunities for clients; (3) increasing frequency of supervision and mentoring for employment consultants; (4) encouraging participation in relevant education and training opportunities and (5) ongoing education for clinicians about the role of the employment consultant and how to make an appropriate referral.

Discussion of work practices with high fidelity scores helped identify how these can be maintained or improved over time. Although capping case-load size to 25 clients met fidelity requirements, the consequences of this were reported as challenging to employment consultants. For instance, a successful employment service can increase demand which increases the need for delays before the service can be delivered. A proposed solution was to provide clinicians with a resource pack and training in how to refer and support clients through alternative employment service pathways using other MSD contracted disability employment services in the region.

Regularly reviewing the challenges to implementing and maintaining evidence-based practices helped identify other issues representing longer term challenges to both fidelity and program efficacy. These included the need for infrastructure to support program quality and fidelity by continuing training, renegotiating contracts, and developing longer term evaluation plans. The need for a career structure, accredited training, and access to career development opportunities for employment consultants was noted as contrasting with the higher pay and better career prospects available to clinical case manager staff. These and many other specific issues raised provided critical information for program enhancement over the next year.

Discussion

The fidelity scale enabled site-specific discussion of both systemic issues and individual practices, hence providing a balance between a focus on site characteristics and individual performance. This seemed to facilitate discussion of all salient issues at each site, with minimal triggering of defensive reactions from individual employment consultants. This strategy appears promising because the wide range of relevant issues and practical strategies that were identified, were not anticipated by the site coordinator in advance of discussions at each site.

A limitation of this report is its exploratory and anecdotal nature. However, we are confident in these results because the same approach was used at all sites and the issues were consistently documented by the same person. These results suggest that the brief fidelity scale is a useful and practical program planning tool through its specificity and ability to facilitate discussion of practical issues that can hinder or facilitate the development of evidence-based practices. The next research issue to be investigated concerns whether programs reviewed with a similar fidelity focus develop more quickly than programs established without this focus. Another limitation is that we were unable to link performance data directly to program fidelity issues, due to the early stage of implementation at the new sites. This is a promising area for further investigation because during the same period that fidelity was a management focus, vocational outcomes steadily increased (Porteous & Waghorn 2007). Client characteristics and vocational outcomes attained in the project are shown in Table 2.

Table 2. Client characteristics and vocational outcomes 2006–2007[1]

Contract	Program characteristics	Client characteristics	Vocational outcomes	Comments
Third contract with Ministry of Social Development – 1 July 2006 to 31 August 2007.	Funding per person assisted $NZ 3,913.60 (GST included) for term of contract only.	**Sex:** Male 78 (58%) Female 57 (42%)	**Employment:** Full time 27 Part time 36 Total 63 (47%)	By the end of the contract 67% of participants had attained a continuing vocational outcome. The contract target was 40% into work or study.
	Five full time Employment Consultants employed including the coordinator: two at an early intervention psychosis service (E); one with a youth specialty service (Y), and two with two adult community mental health services (T, P).	**Age (years):** 14-19 43 (32%) 20-24 59 (44%) 25-26 33 (24%) **Ethnicity:** NZ European 94 (69%) Maori 17 (13%) Pacific Islanders 7 (5%) Others 17 (13%) **Diagnosis:** First episode psychosis 64 (47%) Schizophrenia 16 (12%) Major Depression 31 (23%) Bipolar Affective Disorder 8 (6%) Other[2] 16 (12%)	**Education enrolments:** Full-time 14 Part time 14 Total 28 (21%)	

Notes: 1. Outcomes from the first two contracts were reported by Porteous and Waghorn (2007).

2. Other diagnoses included Borderline Personality Disorder, Generalised Anxiety Disorder, Attention Deficit and Hyperactivity Disorder, Obsessive Compulsive Disorder, Posttraumatic Stress Disorder, and Aspergers Syndrome.

Conclusions

Implementing evidence-based practices to optimise fidelity and to increase vocational outcomes requires a systematic approach to developing integrated services over time. The fidelity scale is a promising tool for this purpose, particularly when expanding a program to new sites in the region. Fidelity strengths and weaknesses can be identified that have implications for other sites in terms of what employment consultants can most productively do within the constraints of their immediate environment. The practical lessons from managing this innovative New Zealand program add to international knowledge on how best to implement and develop evidence-based supported employment and supported education services for people with psychiatric disabilities.

Key Messages

- Evidence based supported employment services are not yet widely available to young people with serious mental illness in New Zealand.
- Occupational therapists and other allied health professionals can help facilitate system change towards the routine delivery of employment services integrated with public mental health treatment and care.

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