Developing high performing employment services for people with mental illness

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Aims: *This analysis examined employment outcomes achieved by a supported employment service in Hawke's Bay, New Zealand. The evaluation aimed to identify opportunities and challenges for ongoing service development, and to demonstrate how other employment services can use these methods and benchmarks in service development.*

Methods: *Service performance over 4 years was examined on multiple levels, and compared with outcomes recently reported by published international controlled trials with high fidelity to evidence-based practice in supported employment.*

Findings: *As a segregated supported employment service, there were no formal arrangements to coordinate employment services with local mental health services. Despite this limitation, the service was high performing on a range of employment outcome variables.*

Conclusions: *With challenging economic times ahead, this analysis provides a timely framework for allied health professionals, supported employment and vocational rehabilitation service providers, to review their operations in comparison to established evidence-based practices and international performance benchmarks.*

Key words: ■ evidence-based practice ■ international benchmarks ■ mental illness ■ psychiatric disabilities ■ supported employment

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Recent advances in the science of supported employment for people with psychiatric disabilities have created new opportunities for service development among existing supported employment and vocational rehabilitation services. Knowledge has advanced in terms of what constitutes evidence-based practice, how this is best implemented, and objective performance benchmarks based on a range of employment outcome and service effectiveness variables. These three forms of knowledge can now be applied by existing services to benchmark current practices and employment outcomes against the best services reported in international trials of supported employment and vocational rehabilitation.

The most effective form of supported employment for people with psychiatric disabilities is known as individual placement and support (IPS). This approach is a supported employment programme designed specifically for people with the most severe forms of mental illness. The programme is characterized by seven core principles which include: an individualized approach to finding open competitive employment; close coordination of mental health treatment with employment assistance; a focus on commencing employment as soon as possible; and the availability of ongoing individual support to retain employment. This approach has been more extensively investigated than any other method in psychosocial rehabilitation (Bond, 2004; Bond et al, 2008). Successful implementations of this form of supported employment for people with psychiatric disabilities are now well documented in the USA (Bond et al, 2001); UK and Europe (Burns et al, 2007); Canada (Latimer et al, 2006); Hong Kong (Tsang et al, 2009); Australia (Waghorn et al, 2007; Killackey and Waghorn, 2008); and in New Zealand (Porteous and Waghorn, 2007; 2009).

The relative effectiveness of IPS over other forms of vocational rehabilitation has increased over time as the programme has developed. This is now captured in a series of systematic reviews (Bond et al, 2001; Crowther et al, 2001; Twamley et al, 2003; Bond, 2004; Bond et al, 2008); and a multi-site USA study (Cook et al, 2005). A key principle is that employment services are closely integrated with

public mental health services (Bond, 2004; Cook et al, 2005; King et al, 2006). This principle can be challenging to implement where mental health and employment services are well established yet segregated. However, even if service integration is not possible, much can be done to improve employment service efficiency by implementing the other evidence-based principles (Waghorn et al, 2007).

In Australia and New Zealand, service integration requires a partnership between a mental health service and an employment service, which in Australia and New Zealand is typically a non-government organization contracted to the government for employment service delivery. Service integration aims to achieve close coordination of the treatment plan with the vocational plan, while ensuring that the client is party to decision-making. Establishing this type of partnership can be challenging when both services do not value integration or do not have common responsibilities and objectives.

Fidelity benchmarks

One established method for improving service effectiveness and efficiency is to use measures of fidelity with evidence-based practices, which are now readily available. The 15-item, 2003 version of the Supported Employment Fidelity Scale (Becker et al, 2001; Substance Abuse and Mental Health Services Administration, 2009) has been successfully used Australia and in New Zealand to develop evidence-based practices, which in turn may lead to increasing performance in terms of employment outcomes attained over time (Killackey and Waghorn, 2008; Porteous and Waghorn, 2007; 2009). Fidelity scores on this measure correlate with performance outcomes at service-level (Bond, 2004). However, there are promising practices for which the evidence is relatively new and which are not yet captured by this version of the fidelity scale. These enhancements have included workplace skills training (Wallace and Tauber, 2004; Mueser et al, 2005); social skills training (Tsang et al, 2009); and cognitive remediation (McGurk et al, 2005; Bell et al, 2008). Cognitive remediation is an intervention designed to improve thinking skills in people with neuropsychological impairment.

Performance benchmarks

A recent review (Bond et al, 2008) showed that basic IPS services, on average, achieved competitive employment commencements for 61% of clients compared with 23% among other vocational rehabilitation services. The range of employment outcome variables in these studies across different countries, labour markets, health, and welfare systems, now provides the basis for international benchmarking. This is also possible with regard to other published studies of IPS implementations in Australia and New Zealand, which are particularly informative comparisons owing to the similarity of New Zealand and Australian labour markets, health and welfare systems. In addition, benchmarking is now possible with regard to data provided by the Australian Government (Department of Education, Employment and Workplace Relations, 2007) revealing the employment outcomes attained by all clients of disability employment services with psychiatric or psychological disability as the primary disability category.

AIMS OF THIS ANALYSIS

The aim was to retrospectively evaluate a supported employment service, Workwise Employment, in Hawke's Bay, New Zealand, by examining the extent of implementation of established evidence-based practices, and by benchmarking employment outcomes over the previous 4 years to international reports of related services using a wide range of employment outcome variables. The dual purposes were to identify opportunities and challenges for ongoing service development, and to demonstrate how other employment services can use these methods and benchmarks in service development.

METHODS

Setting

At the time of this study, January 2005 to March 2009, the New Zealand context was characterized by low inflation; economic growth of 2–4% per annum, and official unemployment at 3.8% or less (Organisation of Economic Cooperation and Development, 2009). Public mental health treatment and care in New Zealand is government-funded and delivered via semi-autonomous district health boards. Disability employment services are provided by non-government organizations contracted to either the district health board directly, or to the Work and Income division of the Ministry of Social Development. Ministry of Social Development funded services are usually restricted to people in receipt of sickness or invalid's benefit.

While service integration characterizes successful implementation of IPS, service segregation between employment and mental health services characterizes service delivery in New Zealand. Hence, integration of services remains a missing component of evidence-based practices (Killackey and Waghorn, 2008; Porteous and Waghorn, 2007; 2009). However, a trial of integration, which began in June 2002, has since led to two important developments. The Capital and Coast District Health Board (Wellington) established five integrated services (Porteous and Waghorn, 2007). Since 2004,

Waikato, Taranaki, Lakes, Counties Manukau and Auckland district health boards have recognized employment as a valid recovery goal, and engaged with Workwise Employment to integrate services.

The intervention: Workwise Employment service in Hawke's Bay

Workwise Employment is a specialist employment service based in Hawke's Bay, New Zealand, and was established in December 2004, contracted under the Ministry of Social Development, National Contract funding structure. The service provided intensive and individualized assistance to people with mental health conditions, including substance abuse, who were seeking employment. The service aimed to implement evidence-based practices within the limits of the contract. The operation began with a full-time team leader, two full-time employment consultants, and one part-time administrator, with little change to this configuration over the 4 years of the contract. There are no mandatory professional qualifications for employment consultants or team leaders. A previous team leader had occupational therapy qualifications. The current team leader has relevant training and experience working with people with severe mental illness. The current employment consultants have relevant experience in mental health, disability services, and education.

Resources were shared, with two vehicles for the service and one computer per two employment consultants. The team leader and the administrator provided operational support to the employment consultants. The team leader had a varying case-load to maintain service provision as well as management and coordination functions. Both employment consultants shared office space with the other two staff members in Hastings. By industry standards in Australia and New Zealand, this is a small service, considered to be below critical mass for sustainable effectiveness.

The goal of the outcome-based funding contract was to increase the number of local people with mental illness obtaining open employment. Open employment was defined as jobs available in the labour market not reserved for people with disabilities, that are ongoing (not temporary), and subject to the standard award conditions applicable to that industry. Contract terms focused on employment retention. The initial target was to support up to 36 clients into open employment, retained for six months or longer, at a minimum of five hours per week. After six months the contract was extended with the target increased to 48 people accumulating six months or more employment. The Hawke's Bay service assisted 123 clients over 51 months (January 2005 – March 2009). The contract target was that 48 of those clients would attain six months of continuous employment.

TABLE 1.
Characteristics of clients accepted by Workwise Employment

Client characteristics*		*n* (%)
Sex	Males	71 (57.7)
	Females	52 (42.3)
Age in years; mean (standard deviation)		36.1 (11.6)
Ethnicity		
	New Zealand European	85 (69.1)
	Maori	27 (21.9)
	Pacific islander	1 (0.8)
	European	6 (4.9)
	Other	4 (3.3)
Primary diagnosis† by disorder category		
	Psychotic (Schizophrenia, Schizoaffective disorder)	31 (25.2)
	Bipolar affective	29 (23.6)
	Major depression	36 (29.2)
	Anxiety	13 (10.6)
	Personality	3 (2.4)
	Autistic spectrum	1 (0.8)
	Other psychiatric	6 (4.9)
	Unknown	4 (3.3)
Comorbid health conditions		
	Yes	41 (33.3)
	No	82 (66.7)
Health care provider		
	Employee of district health board‡	77 (62.6)
	Not an employee of the district health board (private medical practitioners, psychologists, psychiatrists)	25 (20.3)
	Not known	21 (17.1)

*The data represent clients who entered the programme between 11 January 2005 and 31 March 2009.
†Initial information about primary diagnosis was provided by Work and Income staff from benefits records which require written evidence from registered health professionals.
‡Clients with healthcare providers who are employees of the district health board are receiving treatment from the public mental health system in NZ and are the most similar to individual placement and support clients in the USA.

Participants

The contract defined the target group as people aged 16–65 years living in Napier, Hastings, Taradale, Flaxmere and Havelock North, New Zealand. Clients had to be citizens, permanent residents or hold an open work permit. Accepted mental health conditions were those likely to continue for six months or longer and present a barrier to employment. Receipt of a particular type of benefit was not a condition for eligibility.

Referrals were received from four sources. Work and Income service centres referred people in receipt of a benefit; primarily an invalid's benefit or a sickness benefit where the person required assistance to obtain work. District health board referrals were mostly from local community mental health teams, including adult, youth and addiction services. Other third party referral sources included

TABLE 2.
Fidelity with regard to evidence-based supported employment

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

WHB = Workwise Hawke's Bay. The total score 67/75 represents good implementation of individual placement and support according to the fidelity scale scoring key. Fidelity assessment represents an average for both employment consultants and was conducted by examining programme data and by interviews with the team leader in March 2009.

independent health professionals (general medical practitioners, psychiatrists, psychologists), and Iwi (Maori) service providers. Self-referrals were permitted by the contract and enabled people to seek out the service directly, whether they were receiving treatment for a mental health condition or not. Client characteristics are shown in *Table 1*.

Measures

The extent of implementation of evidence-based practices was measured in March 2009 using the 2003 draft version of the IPS fidelity scale available from the USA Department of Health and Human Services website (Substance Abuse and Mental Health Services Administration, 2009). Service fidelity was assessed in March 2009 from multiple sources of information. The assessment was first conducted independently by both the regional manager and an independent researcher who examined the service policy documents and service contract, interviewed staff and the team leader, and examined programme data directly relevant to 12 of 15 fidelity items. A telephone interview with the independent assessor (author GW) was then used to review all sources of information and reach agreement with the team leader (author JW) on item level scores as an average for both employment consultants (*Table 2*).

Candidate outcome variables were identified from the published literature and from the standard reporting required of disability employment services in Australia (Department of Education, Employment and Workplace Relations, 2007). The outcome variables in the rows of *Table 3* (overleaf) represent the identified variables that were also collected by the employment service.

Data collection

Data were collected as a routine part of service delivery representing all clients who entered the programme between 11 January 2005 and 31 March 2009. This retrospective investigation was possible because the service routinely collected demographic and diagnostic information along with an extensive range of employment outcome variables, more than usually reported (*Table 3*). Data quality was governed by the contract which required 100% accuracy and supporting evidence for all employment out-

TABLE 3.
Employment outcomes for Workwise Hawke's Bay, compared with international benchmarks

			Comparable employment services used as benchmarks					
		Workwise Hawke's Bay	**Workwise Christchurch**	**NZ Integrated youth service†**	**Australian Integrated youth service‡**	**Australian Disability Employment Network§**	**IPS integrated with social skills training‖**	**International review of 11 RCTs of IPS services¶**
Client characteristics	Target group	Adults with a primary psychological or psychiatric disability	Adults receiving income support due to a mental illness	Young people receiving public mental health services	Young people with first episode psychosis receiving mental health services	Adults with a primary psychological or psychiatric disability	People of working age receiving public mental health services	People of working age receiving public mental health services.
	Diagnostic classification	yes	yes	yes	yes	no	yes	yes
	Size of the intervention group (*n*)	123	270	125	20	6750	52	Mean 48
Service characteristics	IPS fidelity (Range 15–75) Programme data collection (months) Attrition**	67/75 48 33.3%	64/75 24 24.8%	71/75 24 NA	68/75 6 5%	NA 12 NA	64–67/75 15 22.1%	66–75 Range 6–24 NA
Outcome variables	Percentage of clients beginning competitive employment	64.2%	73.7%	46%	65%	NA	78.8%	Mean 61%
	Percentage of clients commencing study, vocational training or competitive employment	66.7%	77%	59%	85%	NA	NA	NA
	Mean days to commencement of job searching	70 (SD 120) (Range: 0–1132)	31	NA	NA	NA	NA	NA
	Mean days to commencement of first job	135 (SD 140) (Range: 3–756)	86	NA	NA	NA	NA	Mean 138
	Mean hours worked per week in competitive employment	26.6 (SD 13.3) (Range: 2–50)	22	NA	33.9	NA	NA	43.6%=>20 hours
	Mean weekly earnings	$NZ349.50	$NZ275.47	NA	$AU563	NA	NA	NA
	Mean duration of longest job (weeks)	51.7	25.9	NA	8.6	NA	23.8 weeks	Mean 22 (24.2 weeks per year)
	Percentage accumulating 4 weeks or more of competitive employment	62.6%	70%	NA	NA	52.2	NA	NA
	Percentage accumulating 13 weeks or more of employment	53.7%	57%	NA	NA	43.3	NA	NA
	Percentsge accumulating 26 or more weeks of employment	42.3%	41.5%	NA	NA	34.0	NA	NA

† Porteous and Waghorn (2007). ‡Killackey et al, (2008); § DEEWR (2007; 2008). ‖ Tsang et al, (2009). ¶ Bond et al., (2008). ** Although attrition rates were not always identified, these are implicit in the results shown.
NA: information not available. SD: Standard deviation. RCT: randomized controlled trial IPS: individual placement and support

comes. All client records were reviewed monthly by an employment specialist, an administrator and by the team leader for the term of the contract. Records were also subject to regular internal review and external auditing. Data files were not exported to third parties.

Data analysis

Client records were analysed by Workwise staff in MS Excel 2003, as required to by the Upper South A Ethics Committee, Ministry of Health, Christchurch, to protect client confidentiality. This analysis method was selected to demonstrate how other employment services can use readily available tools to examine service performance.

FINDINGS

Overall fidelity with evidence-based practices

The overall rating of 67/75 indicates good fidelity with supported employment principles. This was achieved despite these principles not being previously monitored within the service and despite several failed attempts to integrate with local mental health services. Item level fidelity results are shown in *Table 2*.

Client inclusion

In the first year some referrals were inappropriate. These included referrals by third parties without the consent of the client; poorly timed referrals, when people were in an acute phase of illness; and referrals based on unrealistic expectations of open employment. For instance, the client or the referral agency sometimes wanted or expected sheltered employment conditions. Subsequently, an intake process was developed to ensure that referrals were based on client preferences and an understanding of the nature of the service to be provided. Otherwise, no person was refused assistance if he/she met the terms of the contract. People who declined the service were given the opportunity to return at a more suitable time. Work readiness assessments were not conducted. The first meeting began with a conversation about the reality of competitive employment, the voluntary nature of the programme, individual job preferences, and the range of assistance that can be provided.

Integration with health services

Workwise Hawke's Bay operated as a segregated service independent of mental health services. Collaborative approaches to working with health providers were embraced whenever possible. Individuals were invited to bring support people to appointments (referring agency, clinicians, advocates or friends). To facilitate information sharing, clients were encouraged – through a consent process – to identify key people with whom they wished to share information. Workwise Hawke's Bay made several approaches to the local district health boards to establish coordinated services. The authors attempted to establish coordinated services in order to provide district health board clients with timely access to employment services and improve employment outcomes for district health board clients already referred to the employment service. To date, this interest has not been reciprocated.

Rapid job searching

Fidelity with the principle of rapid job seeking was assessed by examining service records. The mean time to commence job searching was 70 days. Regular discussion of this and other evidence-based practices was not a routine management activity. This is because benchmarking against all IPS practices was not initiated until 2007. Although both employment consultants aimed to begin job searching as soon as possible, these data show that this was rarely achieved. Staff considered this result reliable and noted that they normally provide a thorough planning and preparation phase, and had not realized how much this can delay first contact with employers.

The contract did not limit the provision of ongoing support to retain employment. The clear specification of targets in the contract, without defining how the support can be provided, was noted as helpful and enabled the service to offer individualized and ongoing post-employment assistance.

The other fidelity items were implemented well (*Table 2*). All candidate jobs were selected by clients and not staff. If clients had no clear preferences, individual strengths and signs of job preferences were used to identify a shortlist of candidate jobs. Jobs were rarely casual or temporary, although seasonal jobs in the horticultural industry were used. Non-competitive forms of employment (sheltered work, jobs reserved for people with disabilities, unpaid work experience) were not used. Voluntary work was sometimes used in parallel with job searching when requested by the client. Short-term wage subsidies were rarely used and clients received help to change jobs when needed.

Employment outcomes achieved

Table 3 shows the employment outcomes achieved on a wide range of variables in comparison with national and international benchmarks. Workwise Hawke's Bay performed well overall and outperformed the mean performance in controlled trials of standard IPS sites by proportion commencing employment (64.2 *vs* 61%) and by duration of long-

est job held (51.7 *vs* 22 weeks). The service also performed better overall than an integrated New Zealand youth service, and exceeded the population averages for all new participants with psychiatric disabilities receiving disability employment services in Australia between 1 July 2005 and 30 June 2006, in terms of accumulated employment, at 4, 13, and 26 weeks (*Table 3*).

The Australian Department of Education, Employment and Workplace Relations benchmark represents a population cohort (n=6750) of those with psychological and psychiatric disabilities who received similar segregated and intensive employment services. These clients are likely to have similar income support and diagnostic profiles because the programmes were designed at similar intensity for similar target groups. However, the diagnostic mix within this disability category was not differentiated (Department of Education, Employment and Workplace Relations, 2007), therefore the cohorts could not be confirmed as similar by diagnostic mix.

The possible criticism that the high performance was a result of a diagnostic mix of less challenging clients was explored by examining employment outcomes for people with the most severe forms of mental illness, namely the psychotic disorders, and people with more complex comorbid disorders. Among the 31 clients with psychotic disorders, 64.5% obtained competitive employment. Among the 41 clients recorded as having comorbid disorders, 61% obtained competitive employment. Proportionally more clients with a primary diagnosis of an affective disorder (67.7%; n=65) obtained competitive employment, while fewer clients with anxiety disorders as the primary diagnosis obtained competitive employment (53.8%; n=13). These results indicate that performance was not a result of a less severe diagnostic mix.

The service was also effective at obtaining competitive employment for 18 of 27 Maori clients (66.7%), and for 28 of 38 young people aged 15–30 years (73.7%). The most challenging clients, in terms of employment commencements, were those aged 51 years and over, where five of 15 (33.3%) obtained employment.

Anecdotally, staff suggested that the high performance was probably a result of the successful implementation of the IPS fidelity items other than integration with mental health services. The outcome-based funding contract was considered likely to be another important factor because service survival depended on the ability to deliver the contracted employment outcomes. The performance incentives induced by outcome-based funding now characterize disability employment services in both Australia and New Zealand, yet the impact of outcome-based funding has yet to be examined in controlled trials. Outcome-based funding needs to be examined in controlled trials because it may be a stronger influence on employment outcomes than specific IPS practices.

DISCUSSION

Programme attrition

One area of concern is the apparent high attrition of 33.3%, an outcome variable which is insufficiently reported in most published studies. Attrition reporting is necessary to fully understand success factors and to prevent inflation of results if some attrition reasons are not counted as negative outcomes. However, when adjusted by the 51 months duration of assistance this represents an attrition rate of 0.65% per month, which is less than that achieved by Killackey et al (2008) at 0.8% per month, and less than half the attrition rate reported by Tsang et al (2009) at 1.5% per month. Workwise records captured reasons for attrition among the 41 clients who exited before attaining a competitive employment (part-time or full-time), or a full-time formal training or education outcome. Exit reasons included: client opted out (n=22); health relapse (7); did not engage (5); left the district (3); transferred to another provider (2); did not meet contract criteria (1); and deceased (1). Anecdotally, staff commented that a common drop out reason given by clients was that they no longer held an employment goal owing to the impact of other life events.

Implications for service development

The most salient lesson from these findings is the opportunity to focus on decreasing the time to commencing job searching and the time to beginning the first job. This is important to prevent discouragement and attrition, and can be achieved by introducing clients to job searching earlier, in parallel with other activities. This conveys positive messages to clients about the importance of their vocational goals and demonstrates the nature of the services that can be provided. More rapid commencement of employment also represents an important way to improve service efficiency, particularly when funding is case-based and linked to outcome milestones.

Another opportunity for service development is to reduce the active caseloads to 25 clients or below. This is because larger caseloads hinder the provision of time-intensive and individualized services. Another service development opportunity exists around providing more persistent and assertive community outreach to clients when they miss appointments or lose contact. At a service level, there is an opportunity to develop an integrated service with the local district health board, if interest is reciprocated by a local mental health team. This would

be expected to enhance performance at Workwise Hawke's Bay because 62.6% of clients were also District Health Board clients, and international evidence suggests that integrated services improve employment outcomes in the longer term (Bond, 2004; Bond et al, 2008).

Implications for integrating employment and mental health services

Workwise's performance in Hawke's Bay is consistent with the excellent results obtained from a similar segregated service in Christchurch and shows that both the Hawke's Bay and Christchurch sites have established high performance through good implementation of nearly all fidelity principles except integration with mental health services. The performance evidence supports both sites seeking closer links to their respective local community mental health services.

Service integration remains an important missing ingredient because integration can increase access to employment services by other clients of public mental health services. Although 62.6% of Workwise Hawke's Bay clients were already public mental health clients, this proportion may increase, along with demand for employment services, once an effective integrated service is established. Public mental health clients are an important referral source because this type of employment service is designed for people with the most severe and complex forms of mental illness (Bond et al, 2001). Hence, service integration remains both a challenge and an opportunity for service development.

Why is service integration so challenging in Hawke's Bay? The local reasons are unclear. At a national level, district health boards have the authority to contract employment services, and seem to do so when the funds are available and decision makers consider employment an important part of clients' recovery goals. In other regions district health boards have established integrated services (Porteous and Waghorn 2007; 2009) or have established innovative partnerships to support co-located employment services. However, other arms of government (Ministry of Social Development national and regional offices) can also purchase employment services. To the authors' knowledge, there is no national strategy to ensure disability employment services are uniformly distributed and funded. A possible solution is to develop a common purchasing contract with central coordination to ensure that all regions have access to evidence-based employment services by competitive tender for similar contracts. To benefit public mental health clients in particular, a national contract could also be used to encourage formal partnerships between employment services and public mental health services.

Clinical and research implications

The main clinical implication is the opportunity for community mental health teams to either form an integration partnership with an effective local employment service, or to help develop employment service capability by working with a segregated employment service to develop the capacity to work with public mental health clients in an integrated setting. Given the increasing knowledge of how employment contributes to recovery early in treatment and care, there are no longer any valid reasons for mental health services to ignore or discourage clients' vocational goals.

The research implications are also important. Performance benchmarks from randomized controlled trials now enable any employment service working with a similar client group to benchmark practices and performance. This can be done using the fidelity scale version applied in this study, and by using the range of outcome variables identified, some of which can also be used to check fidelity. This is important because employment services which are not part of a controlled trial may receive different resources, training, supervision and support, and may operate under different conditions (e.g. outcome-based funding). Hence, benchmarking enables a wider range of services to be examined in the search for effective ingredients which can then be tested in both controlled settings and real world conditions.

CONCLUSIONS

This study shows how any supported employment or vocational rehabilitation service can review its practices and outcomes against the latest international research, by implementing established evidence-based practices to a high fidelity, and by recording outcomes on a wide range of variables with known performance benchmarks. With challenging economic times ahead, this analysis provides a timely framework for allied health professionals, supported employment providers, and vocational rehabilitation service providers to review their operations in comparison to these international benchmarks. IJTR

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Becker DR, Smith J, Tanzman B, Drake RE, Tremblay T (2001) Fidelity of supported employment programs and employment outcomes. *Psychiatr Serv* **52**(6): 834–6
Bell M, Zito W, Greig T, Wexler BE (2008) Neurocognitive enhancement therapy with vocational services: Work out-

comes at two-year follow-up. *Schizophrenia Research* **105**(1):18–29
Bond GR, Becker DR, Drake RE et al (2001) Implementing supported employment as an evidence-based practice. *Psychiatr Serv* **52**(3): 313–22
Bond GR (2004) Supported employment: Evidence for an evidence-based practice. *Psychiatr Rehabil J* **27**(4): 345–59
Bond GR, Drake RE, Becker DR (2008) An update on randomized controlled trials of evidence-based supported employment. *Psychiatr Rehabil J* **31**(4): 280–90
Burns T, Catty J, Becker T et al (2007) The effectiveness of supported employment for people with severe mental illness: A randomized controlled trial. *Lancet* **370**(9593): 1146–52
Cook JA, Lehman AF, Drake RE et al (2005) Integration of psychiatric and vocational services: a multisite randomized, controlled trial of supported employment. *Am J Psychiatry*. **162**(10):1948–56
Crowther RE, Marshall M, Bond GR, Huxley P (2001) Helping people with severe mental illness to obtain work: Systematic review. *BMJ* **322**(7280): 204–8
Department of Education, Employment and Workplace Relations (2007) *Disability Employment Network case based funding report. Final report*. Australian Government, Canberra

KEY POINTS

- This article looked at a New Zealand employment service, designed to help people with mental health issues find work.
- Fidelity scales are needed to assess the quality of supported employment practices with regard to current evidence-based principles.
- International performance benchmarks can be used to assess the effectiveness of existing services.
- Segregated services can attain high performance by focusing on the fidelity items that can be immediately implemented.
- Funding contracts can be designed to support the implementation of evidence-based practices.
- Allied health professionals can assist in all aspects of designing and implementing evidence-based supported employment services.

Killackey E, Waghorn G (2008) The challenge of integrating employment services with public mental health services in Australia: Progress at the first demonstration site. *Psychiatr Rehabil J* **32**(1): 63–6
King R, Waghorn G, Lloyd C, McMah T, McCloud P, Leong C (2006) Enhancing employment services for people with severe mental illness: the challenge of the Australian service environment. *Aust NZ J Psychiatry* **40**(5): 471–7
Latimer E, Lecomte T, Becker D et al (2006) Generalisability of the individual placement and support model of supported employment: Results of a Canadian randomised controlled trial. *Br J Psychiatry* **189**: 65–73
McGurk SR, Mueser KT, Pascaris A (2005) Cognitive training and supported employment for persons with severe mental illness: One year results from a randomised controlled trial. *Schizophr Bull* **31**(4): 898–909
Mueser KT, Aalto S, Becker DR et al (2005) The effectiveness of skills training for improving outcomes in supported employment. *Psychiatric Services* **56**(3): 1254–60
Organisation of Economic Cooperation and Development (2009) Country Statistics. New Zealand. Available at: http://stats.oecd.org/viewhtml.aspx?queryname=18164&querytype=view&lang=en (accessed 25 August 2009)
Porteous N, Waghorn G (2007) Implementing evidence-based employment services in New Zealand for young adults with psychosis: Progress during the first five years. *British Journal of Occupational Therapy* **70**(12): 521–6
Porteous N, Waghorn G (2009) Developing evidence-based supported employment services for young adults receiving public mental health services. *New Zealand Journal of Occupational Therapy* **56**(1): 34–9
Substance Abuse and Mental Health Services Administration (2009) Supported Employment Fidelity Scale - Implementation Questions. Draft version 2003. Retrieved June 2009: http://mentalhealth.samhsa.gov/cmhs/CommunitySupport /toolkits/employment/ (accessed 25 August 2009)
Tsang HWH, Chan A, Wong A, Liberman RP (2009) Vocational outcomes of an integrated supported employment program for individuals with persistent and severe mental illness. *J Behav Ther Exp Psychiatry* **40**(2): 292–305
Twamley EW, Jeste DV, Lehman AF (2003) Vocational rehabilitation in schizophrenia and other psychotic disorders: A literature review and meta analysis of randomized controlled trials. *J Nerv Ment Dis* **191**(8): 515–23
Waghorn G, Collister L, Killackey E, Sherring J (2007) Challenges to the implementation of evidence-based employment services in Australia. *Journal of Vocational Rehabilitation* **27:** 29–37
Wallace CJ, Tauber R (2004) Supplementing supported employment with workplace skills training. *Psychiatr Serv* **55**(5): 513–5

COMMENTARY

The implementation of supported employment programmes for people with psychiatric disabilities in a real world context is not a straight forward process. Often there are multiple barriers to negotiate, requiring creative problem solving and determination from programme coordinators. This article demonstrates some of the underlying complexities of programme implementation in the Australian and New Zealand communities.

The integration between mental health treatment and employment services is considered a key component of supported employment (Bond, 2004). The Supported Employment Fidelity Scale (Becker et al, 2001) has service integration listed as a principle for measurement. However, in Australia and New Zealand, this is one of the more complex components of the model to achieve. In both countries the mental health and employment systems are currently segregated. In order to achieve integration, supported employment programmes need to be implemented under a partnership arrangement. However, partnership models require a commitment from both parties, and this is not always the reality for people trying to implement the model.

The programme discussed in this article was not able to achieve integration between the employment service and the mental health sector. This demonstrates the complexity of the issues being dealt with by many programme coordinators, and reiterates that at times, barriers are not able to be negotiated. The article highlights though, that in circumstances considered far from ideal, quality outcomes that meet worldwide benchmarks for supported employment can still be achieved. The service was able to achieve high fidelity ratings against many of the other components of the scale as outlined in *Table 2*. It could be hypothesized that this significantly contributed to the positive outcomes achieved, and that with further attempts towards integration, these results may be further enhanced in the future. It is also suggestive that service integration alone is not enough, but that many factors contribute significantly to

achieving good employment outcomes. Therefore programmes that have achieved service integration should not be complacent about the evaluation of other components of the model.

The complex nature of programme implementation demonstrates that strong leadership is required to drive high quality supported employment programmes. The government departments that manage the employment and mental health sectors need to have a thorough understanding of the supported employment model, the opportunities it presents, as well as the barriers to implementation. If supported employment programmes are to be available to the majority of mental health consumers in Australia and New Zealand, a commitment to the model is required from both employment and mental health sectors at all department levels, and infrastructure is needed to support this commitment. The Australian New South Wales (NSW) Health system Vocational Education, Training and Employment programme (VETE) is an example of how this might be achieved. A designated state coordinator position, and VETE consultants employed within every area health service, enables evidence-based employment programmes to be driven at a number of levels. These types of programmes require close monitoring to ensure they are meeting the desired outcomes of the role, but VETE provides a clear infrastructure within NSW Health to drive and evaluate evidence-based practice.

Leadership is also required to drive benchmarking activities of supported employment programmes in order to ensure effectiveness. The quantity and quality of data now available from international studies performed with a variety of populations, cultures and economies enables standards to be set for supported employment programmes. The process of benchmarking discussed in the article could be replicated by other services. This is only possible if sufficient outcome variable data are collected consistently. *Table 3* in the article provides a comprehensive list of data variables for collection to assist with benchmarking, although many of the services listed in the table were not able to report on all these data sets. Consideration of this data list would be advisable to those looking at benchmarking activities in the future.

Barriers to meeting all principles outlined in the Supported Employment Fidelity Scale should not inhibit attempts to implement the model. By focusing on those components that are immediately achievable, much can still be done to dramatically improve employment outcomes for people with a psychiatric disability. In the real world, doing the best you can at any given moment, while continuing to strive towards quality improvements is the only viable option. Without this attitude many supported employment programmes would not reach the initiation stage.

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Becker DR, Smith J, Tanzman B, Drake RE, Tremblay T (2001) Fidelity of supported employment programs and employment outcomes. *Psychiatr Serv* **52**(6): 834–6

Bond GR (2004) Supported employment: evidence for an evidence-based practice. *Psychiatr Rehabil J* **27**(4): 345–59