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Implementation of Evidence-Based Supported Employment in Regional Australia

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Objective: To implement the Individual Placement and Support (IPS) approach at 4 locations in regional New South Wales, Australia. Outcomes attained were compared with a national non-IPS program and with international trials of IPS within and outside the United States. ***Methods:*** Four IPS programs were established through formal partnerships between mental health services and disability employment services. Ninety-five mental health service clients commenced employment assistance and were tracked for a minimum of 12 months. ***Results:*** Two sites achieved good fidelity to IPS principles, and 2 sites achieved fair fidelity. IPS clients had 3.5 times greater odds of attaining 13 weeks' employment than those receiving assistance in the national network of disability employment services. ***Conclusions and Implications for Practice:*** Implementing IPS is challenging in the Australian service delivery context. Factors other than program fidelity appear to contribute to excellent employment outcomes. Further research is needed to identify these factors.

Keywords: psychotic disorders, schizophrenia, severe mental illness, supported employment, educational attainment

The Becker-Drake Individual Placement and Support (IPS) approach to supported employment (Bond, 2004; Bond, Drake, & Becker, 2008; Burns et al., 2007; Cook et al., 2005; Hoffmanm, Jackel, Glauser, & Kupper, 2012) is transportable outside the United States. There is evidence that it can be directly replicated in the Hong Kong region of China and in Australia, with no reduction in effectiveness compared with the U.S. controlled trials (Bond, Drake, & Becker, 2012). Successful IPS implementations in Australia (Killackey et al., 2013; Killackey, Jackson, & McGorry, 2008; Waghorn et al., 2012) and IPS enhancements in New Zealand (Browne, Stephenson, Wright, & Waghorn, 2009) show how it can be replicated. However, detailed implementation reports are needed to understand the relative quality of implementations in Australia and relative performance compared with U.S. controlled trials.

One approach to implementing IPS in Australia utilizes existing funding sources by establishing formal partnerships between community mental health services and local disability employment services (Waghorn et al., 2012). Attaining optimal fidelity to IPS principles (Bond, Peterson, Becker, & Drake, 2012) is the main challenge to this approach (Sherring, Robson, Morris, Frost, & Tirupati, 2010). Ongoing technical support is expected to help by enhancing IPS fidelity via the provision of external training and fidelity assessments (Rinaldi & Perkins, 2007).

In 2011, rehabilitation specialists at the Hunter-New England Mental Health Service commenced a regional IPS implementation. Results were benchmarked to a national non-IPS program over the 6- to 9-month period commencing in March 2010 (Department of Education, Employment and Workplace Relations [DEEWR], 2012). This national program represents the same form of disability employment services as utilized for this study, which are contracted to the federal government via a common contract and are segregated from community mental health services (Waghorn et al., 2012; Waghorn, Collister, Killackey, & Sherring, 2007). Australian implementation experiences (Killackey et al., 2008; Waghorn et al., 2012) and international reviews of controlled trials (Bond, 2004; Bond et al., 2008; Bond, Drake, & Becker, 2012) informed our expectation that sites with good or higher fidelity would attain outcomes of 60% or more commencing employment.

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Method

Results from this observational design were benchmarked to national results for a cohort with a similar primary disability type. The same implementation method and technical support were provided to each site. Each site formed a local steering group and appointed a site coordinator. Site characteristics are shown in Table 1 and the technical assistance provided is shown in Table 2.

Participants

All participants provided written informed consent. Ethics approval was provided by the Hunter New England Research Ethics and Governance group. Inclusion criteria were as follows: (a) a current client of the mental health service; (b) a severe mental illness or psychiatric disability; (c) aged 18–64 years; (d) expressing interest in competitive employment as a recovery goal; (e) not currently employed; (f) available to work for 8 hours or more per week; (g) not currently enrolled with another employment service; (h) speaks English and does not need an interpreter; and (i) considered by the clinical team as able to safely participate in the program. Clients with severe or comorbid psychiatric disorders were not excluded.

The Intervention

Employment services were selected and partnered to community mental health teams. This enabled the existing employment services contract to generate recurrent case-based funding for each participant, provided they also met Australian Government eligibility criteria. Conflicts between contract obligations and IPS practices were proactively addressed by each local steering group. Employment specialists were colocated at the community mental health service 4 of 5 days per week.

Measures

Employment outcomes were monitored by monthly reporting to the technical assistance team in accord with recent reviews (Bond et al., 2008, Bond, Drake, & Becker, 2012). Variables included the following: referral date, referral commencements, reasons for nonacceptance, time to commence job-seeking, time to first job, proportion commencing employment, proportion commencing other vocational activity, employment duration, hours worked, hourly wage, attrition, and reasons for attrition.

The primary employment outcome was 1 or more days of competitive employment, defined as jobs in the open labor market paid at minimum wages or above. Noncompetitive employment included temporary jobs, piece work, voluntary work, unpaid work experience, and jobs reserved for people with disabilities. Jobs that attracted Australian Government wage subsidies were counted as competitive because this program is widely used in Australia. Noncompetitive employment was recorded along with formal study and vocational training as "other vocational activity." Job diversity was assessed qualitatively by counting the number of job types reflected in the combined list of jobs commenced.

Adherence to IPS principles was assessed by on-site external fidelity reviews with the 25-item IPS fidelity scale (Bond, Peterson, et al., 2012). Each site received at least one and a maximum of two external fidelity assessments.

Table 1
Site and Client Characteristics at Four New South Wales (NSW) Individual Placement and Support (IPS) Implementations

	PMHS	NMHT	HVMHS	LMMHS
Site characteristics				
Location	Rural	Urban	Rural	Urban
Catchment area population in 2011	56,570	148,531	69,600	200,850
Mental Health Service clients	430	880	460	740
Employment specialists	2	1	2	2
Program commenced	Jul 2011	Mar 2011	Feb 2011	Oct 2008
Cohort inclusion period	Jul-Oct 2011	Mar-Oct 2011	Feb-Oct 2011	Nov 2010-Oct 2011
Follow-up period	31 Oct 2011 to 31 Oct 2012	31 Oct 2011 to 31 Oct 2012	31 Oct 2011 to 31 Oct 2012	Nov 2011-Oct 2012
IPS Fidelity at first review	78/125	83/125	90/125	90/125
Date of first fidelity review	Feb 2012	Dec 2011	May 2011	Mar 2011
IPS Fidelity at last review	78/125	83/125	103/125,	100/125
Date of last external fidelity review	Feb 2012	Dec 2011	Dec 2011	Sep 2011
Client characteristics				
Males	13/25, 52.0%	10/18, 55.6%	17/24, 70.8%	13/28, 46.4%
Age, *M* (*SD*)	35.5 (12.0)	38.7 (10.8)	39.1 (9.0)	38.0 (12.6)
Psychotic disorder	12/25, 48.0%	6/18, 33.3%	15/24, 62.5%	13/28, 46.4%
Bipolar affective disorder	3/25, 12.0%	5/18, 27.8%	4/24, 16.7%	8/28, 28.6%
Major depression or dysthymia	4/25, 16.0%	3/18, 16.7%	3/24, 12.5%	6/28, 21.4%
Anxiety disorder	2/25, 8.0%	2/18, 11.1%	1/24, 4.2%	1/28, 3.6%
Personality disorder	4/25, 16.0%	2/18, 11.1%	1/24, 4.2%	0/28, 0%

Note. PMHS = Peel Mental Health Service; NMHT = Newcastle Mental Health Team; HVMHS = Hunter Valley Mental Health Service; LMMHS = Lake Macquarie Mental Health Service.

Table 2
Nature of Individual Placement and Support (IPS) Support Actually Provided to Each Site

Source of support	Regional team based at Newcastle consisting of two full-time Occupational Therapists and one part-time Research Officer. The team have other duties besides this program.	Local mental health team member (or Team Leader) designated as IPS coordinator or site champion. This role is in addition to their other duties.
Amount of support	Average 5 hr per week on-site support. Additional support to each site may be provided by telephone and by e-mail.	Daily support as required
Support provided	1. Assess potential partners and prepare partners and sites for IPS implementation. 2. Provide education to mental health teams about IPS and its part in client recovery plans. 3. Develop resources such as referral forms, guides to facilitate Government assessments of assistance needs, information sheets, and promotional posters. 4. Provide orientation and training in IPS principles and common implementation issues to mental health staff, employment specialists, and their supervisors. 5. Provide on-going consultation and mentoring to employment specialists and supervisors about the implementation of IPS principles. 6. Attend on-site weekly supervision between employment specialists and supervisors. 7. Assist employment specialists further by consulting on specific client challenges when these are raised by the employment specialist. 8. Attend Steering Committee meetings, and other local mental health meetings when required. Use these meetings to build relationships with leaders in both services. 9. Arrange or implement independent and external on-site fidelity reviews. Ensure a detailed report with recommendations for service development is provided to the Steering Committee. 10. Assist the Steering Committee to apply the recommendations from the fidelity report to ongoing IPS service development. 11. Collect and interpret data from monthly program progress reports. Compile, clean, check accuracy, and analyze data for 12-monthly program evaluations. Distribute and discuss progress reports and 12-monthly evaluation reports with all parties. 12. Assist the Steering Committee to apply this information to program development. 13. Mediate any difficulties between partner services if needed.	1. Act as a contact point for mental health staff and as an advocate for the program. 2. Inform mental health staff individually and at regular meetings about program progress and outcomes. 3. Support the employment specialist and facilitate their integration into the mental health team. 4. Liaise between the local mental health service, the regional technical assistance team, and the employment service as needed, to ensure smooth running of the program. 5. Identify ways to develop or tailor mental health programs to complement employment programs for specific clients (e.g., through provision of additional mental health interventions to reduce barriers to employment).

Statistical Methods

Participant characteristics were examined using T tests and χ^2. Employment outcome differences from national benchmarks (Department of Education, Employment and Workplace Relations [DEEWR], 2012) were assessed from Odds Ratios and Confidence Intervals in STATA version 11. The national benchmark was reported over a 9 month follow-up period, so we also extracted results from an equivalent 9-month period for direct comparison to this benchmark.

Results

Sites reported a similar participant mix by age, gender, and diagnostic category (Table 1). External fidelity reviews were conducted on site twice at Hunter Valley and Lake Macquarie and once each at Peel and Newcastle. Peel and Newcastle had the lowest fidelity at 78/125 and 83/125, respectively. Both sites had room for improvement on at least 20 of 25 fidelity items. Two sites reached good fidelity (Lake Macquarie 100/125; Hunter Valley 103/125), yet both could improve on 17 or more items.

The overall referral commencement rate was 54.3%. The majority of noncommencements (46%) were because of the client declining assistance. For 11% the reason was not recorded, and 10% were declined through already being employed. Referral commencements varied from 46.7% at Lake Macquarie to 69.4% at Peel. Attrition was defined as commencing assistance and exiting before obtaining a vocational benefit. Over 12 months, attrition reached 21.1% overall, ranging from 0% at Peel to 44.4% at Newcastle.

Over 12 months, the four sites achieved a mean proportion commencing competitive employment of 57% (54 of 95). Over 9 months, 47.4% (45 of 95) commenced employment, which was significantly better than the national benchmark of 24.5% over the same period (odds ratio [OR] = 2.77, confidence interval [CI] = 1.85–4.15, $p < .001$). The proportion commencing employment over 12 months varied from 39% at Newcastle to 72% at Peel. When other vocational

activity was added to competitive employment, 67% obtained a vocational benefit over 12 months. In terms of continuing employment for 13 weeks or more, 45% attained this milestone in 12 months. The 9-month results favored IPS by 35.8% (34 of 95) versus 13.6% (1111 of 8,165; OR = 3.54, CI = 2.32–5.41, $p < .001$). Over 12 months, 32.6% of IPS participants attained 26 weeks' employment, although no national benchmark was available for comparison.

The mean duration from referral to commencing job seeking was 55 days, ranging from 30 days at Peel to 79 at Hunter Valley. The mean period from referral to commencing the first job was 149 days, ranging from 90 days at Peel to 217 at Hunter Valley. Job diversity was good at all sites,with the number of different job types (48) approaching the total number of jobs (54). Mean weeks worked and hours worked were similar to U.S. studies (Bond, Drake, & Becker, 2012); however, hourly wages were higher than most international studies (site mean hourly wage ranged from $AU19.7 to $AU25.6).

Discussion

These results replicate the finding (Killackey et al., 2008) that IPS can be implemented in Australia with good fidelity (Bond, Drake, & Becker, 2012). Different barriers to higher fidelity were found at each site, suggesting that all could attain good to exemplary IPS fidelity. All four sites were implemented with external on-site support of 5 hr per week, using the same partnership model, in the same service delivery context, under the same contract conditions. Despite these similarities, several notable site differences remained. The four sites involved partnerships with four different local employment services with different approaches to service delivery before IPS practices were introduced. Sites also differed by referral acceptance rates, attrition rates, IPS fidelity, time to commence job searching, and employment outcomes. Power and sample sizes were insufficient to compare locations, hence the focus on aggregated results in this report.

The main limitation was the uncontrolled parallel group observational design. To compensate, results were benchmarked to both international trials and to a national program of disability employment services. Another limitation concerned the lack of specific information about the prevalence and duration of wage subsidies and the relationship to job tenure. This is an important issue for future examination because differential use of wage subsidies across sites may have influenced these results.

Conclusions

IPS was significantly better (2.8 times greater odds), than national non-IPS services compared over the same follow-up period, in terms of commencing competitive employment. IPS clients had significantly better odds (3.5 times greater) of reaching a 13-week employment milestone. Yet, despite these encouraging results, implementing IPS at a regional level remains challenging in Australia. Factors other than program fidelity appear to contribute to excellent employment outcomes. We speculate that employment specialist skills, clinical leadership, or other factors are important. Further research is needed to identify these.

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