

**SERVICE COORDINATION AND LONG-TERM SUPPORT IN THE
DELIVERY OF VOCATIONAL SERVICES FOR PERSONS WITH
PSYCHIATRIC DISABILITIES**

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ATTACHMENT

Service Coordination and Long-Term Support in the Delivery of Vocational
Services for Persons with Psychiatric Disabilities

PREFACE

This report summarizes the activities and findings of a three-year project funded by the U.S. Department of Education, National Institute for Disability and Rehabilitation Research (Grant #H133A10011). The work was conducted by Berkeley Planning Associates, a small west-coast employee-owned firm with a long history of conducting research in the vocational rehabilitation field as prime grantee and its subcontractor, Human Services Research Institute, a small east-coast non-profit research organization with many years of experience in studying mental health services.

Initially entitled “Case Management in the Vocational Rehabilitation of Persons with Psychiatric Disabilities,” the title was changed to reflect the evolution of the mental health services field as consumer/survivors have begun to take greater control of their service delivery process and have become less willing to identify themselves as “cases” that need to be managed. The study sought to examine programs that effectively blend case management and vocational services, in order to better understand how service coordination and long-term services contribute to vocational success among individuals with psychiatric disabilities¹.

The project had both research and dissemination goals. It involved conducting case studies of service programs as well as collecting and analyzing client-level data to assess program performance. It also included developing conference workshops involving staff of participating sites to explore emerging issues in the delivery of vocational services to persons with psychiatric disabilities. Beginning with our first workshop, we built a network of service providers that expanded to ultimately include, in addition to our study sites, 97 organizations in 34 states, Canada and New Zealand. Network members received materials from all of our workshops, and more importantly received updated lists of network members and contact information to facilitate sharing of ideas among service providers around the country. Through gathering information on effective practices from focus groups of staff and consumers, we developed curriculum materials for training mental health professionals in vocational service strategies. In addition, we produced four journal articles and a book chapter addressing different service delivery issues and strategies.

¹The phrase “persons with psychiatric disabilities” is used throughout and refers to individuals whose diagnoses and experience with the mental health system suggest a need for long-term assistance and support. See Toms Barker (1994) for a fuller discussion of terminology.

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I. STUDY DESIGN AND METHODOLOGY

The study included several key components:

- C site visits and case studies of “effective” programs;
- C collection and analysis of client-level data from selected programs;
- C developing consensus on key issues and exploring them through conducting conference workshops with panels of program staff;
- C developing training materials by conducting focus groups of staff and consumers to identify key competencies and develop case scenarios; and
- C disseminating knowledge gained through conference presentations, journal articles and training materials.

SITE SELECTION

The first step in the process of selecting study sites was to identify a broad range of programs providing vocational services to persons with psychiatric disabilities that were known by funding sources and consumers to be successful and effective in their service approach. In particular we sought programs that made an active effort to blend case management services with the delivery of vocational services. The site selection process began with a review of the service practice and research literature, which was followed by a nationwide effort to solicit nominations of programs considered by funding sources and consumer organizations to be effective in assisting people with psychiatric disabilities to obtain and retain employment.

Sites studied during this project are presented in Table 1. We originally intended to limit the sample to six sites but as we spoke with more and more people, and as we disseminated information about the project, additional sites came to our attention. Some of these sites served small numbers of clients and thus were not appropriate for data collection (we determined that we

needed a sample of 50 clients from each site) . Thus, we identified some sites as Primary, to receive multiple visits and provide client-level data:

- c The Center for Mental Health, Anderson, Indiana;
- c Shawnee Community Health Center, Topeka, Kansas;
- c West Central Mental Health Services, Lebanon, NH;
- c Breakthrough Club, Wichita, Kansas;

and some as Secondary, to receive fewer visits and not provide client-level data:

- c Building Bridges, Decatur, Illinois;
- c Project WINS, Grand Rapids, Michigan;
- c Sumner County Mental Health Center, Wellington, Kansas;
- c The Hospital Transition Project, Eugene, Oregon; and
- c Community Companions, San Jose, California.

However, during the data collection process, one of the sites initially identified as Primary dropped out of the data collection as we discovered that in order to identify 50 cases with a sufficiently long observation period it would be necessary to include participants who had entered the program prior to the implementation of the current data system, rendering it cumbersome to retrieve data and limiting the number of data items comparable across all participants. In addition, one of the Secondary sites was, in fact, able to provide data. (These are noted in Table 1.)

Table 1
Study Sites

Location	Program Name	Participant Data
PRIMARY SITES:		
San Jose, California	Community Companions	-----
Anderson, Indiana	Center for Mental Health	52 cases
Wichita, Kansas	Breakthrough Club	52 cases
Topeka, Kansas	Shawnee County Mental Health Center	50 cases
SECONDARY SITES:		
Grand Rapids, Michigan	Project WINS	-----
Lebanon, New Hampshire	West Central Community Support Services	51 cases
Decatur, Illinois	Building Bridges	-----
Wellington, Kansas	Sumner County Mental Health	-----
Eugene, Oregon	Hospital Transition Program (Laurel Hill Center)	-----
TOTAL:	9 sites	205 cases

CASE STUDIES

The nine sites were visited at least once by two study team members, one from BPA and one from HSRI. A detailed topic guide was developed to ensure comparability of data collection across sites (see Appendix A). Interviews as well as focus groups with both staff and consumers were conducted. Primary sites received two to three visits. Subsequent visits were used to clarify any topics not covered in sufficient detail during the first visit, and to develop a detailed plan for collection of client-level data. All together, fourteen site visit trips were conducted during the grant period. Visits were also made to Thresholds and the University of Kansas where we consulted with other researchers investigating vocational services for individuals with psychiatric disabilities.

PARTICIPANT DATA

A data collection/extraction form was developed for collecting client-level data from the primary study sites (see Appendix B). This instrument was based on a thorough review of the types of data already being collected by participating sites to identify common data elements. Extensive discussions were held with relevant staff regarding sources of different kinds of client level information. In many cases, multiple contacts for data collection were needed—with both those who were knowledgeable about computerized sources and those knowledgeable about case file contents. Once a common dataset was agreed upon by the participating sites, data extraction forms were individually tailored to each site for collecting items not available through automated data systems (including one site with no automated data at all.)

Data collection procedures varied somewhat by site and were individually negotiated based on the availability of computerized data and staff resources. In each case, BPA staff initiated data collection through a data collection site visit which involved guiding, or assisting the site staff in extracting data from computerized databases and participant case files. Sites were given a choice of having BPA staff conduct the case file data extraction process or being reimbursed for doing it themselves.

If at all possible, we tried to retrieve client level data from computerized sources, limiting the need to seek information from paper case files. But actual data extraction proved to be more difficult than our discussions about the instrument indicated. In many cases, program staff were unpleasantly surprised as they learned about the state of information on their participants.

Site MIS capacity varied dramatically. In turn, data extraction relied heavily on cumbersome, painstaking, and not always successful case file reviews. Paper case files also varied substantially across sites as well as varying over time within a site. Programs varied on the extent to which they utilized easy to read forms to record key information in contrast to narrative case notes. Changes in program data recording did not always coincide with time frames for individual participants, resulting in data source variation. Depending on the program, case information might be in one central case file, or in multiple case files at different locations. Newer Supported Employment programs tended to have more necessary information easily available. But programs which evolved over many years, often decades, and provided a range of employment and other services, were the more difficult to collect data from. In some cases, case files were multi-volume toms in which dated information was not always in chronological order within the file and pages were sometimes duplicated, which made extraction very time consuming. Other

difficulties were related to identifying participant samples and identifying the study time frame for each participant.

IDENTIFYING SAMPLES OF PARTICIPANTS

Again, what in theory seemed straight forward, became much more complex when the time came for the sites to identify actual participants for the study. Even in programs with centralized files and programs of more recent vintage, identifying whom a program had served over a specific time period proved surprisingly difficult. A definition of what constituted program participation had to be derived for each program. It became clear that it was insufficient for a participant to have “signed up,” or for a case file to indicate that a participant had received at least four program contacts. In one program, participants had to have been active (four or more contacts) for one quarter of the year to be considered a participant. We did not want to include participants who did not actually experience the program of services for this study.

IDENTIFYING STUDY TIME FRAMES

Determining appropriate program starting points for individual participants proved to be a significant challenge. Our question to sites was, “When did this participant begin receiving employment services?” The answer was not always straightforward. For example, at Breakthrough Club, members of long standing have received services over many years. It was necessary to define a minimum amount of employment services during the period of time when employment services at the clubhouse became more clearly differentiated from other activities. In another program of long-standing (Community Companions), it turned out that some of the participants identified as beginning employment services during a specific time period had actually had prior stints of service. We determined that it would not be appropriate to include these participants in the study since their service histories were different from others. It became necessary to clarify with the sites that we wanted participants who began employment services on or after a certain date and who had not been previously been served by some different type of employment service.

PERFORMING DATA EXTRACTION

BPA staff were able to complete data extraction for the full sample during a single visit at one site. Other sites were offered the option of BPA staff extracting data on site, a combination of on-site and xeroxed materials, or reimbursement for their staff to collect the data. In one site, BPA and the program tried valiantly to collect the data through several visits over a period of months until it was agreed to cease efforts. The process was simply too time consuming and unproductive for either BPA or program staff to continue. Most other sites chose reimbursement option, perhaps not realizing themselves what lay in store. Not being high on their priority list, data collection conducted in this way proved to be slow and difficult, resulting in incomplete data and huge delays in completion of the data collection.

DISSEMINATION

Dissemination was a major component of the project and consisted of four major strategies:

- c conducting conference workshops involving program staff—which was both a research activity and a dissemination strategy;
- c developing a Provider Network to facilitate communication and sharing of ideas among the provider-community (as described above);
- c preparation of written products including several journal articles and a book chapter; and
- c development of training materials designed to help mental health programs prepare their staff to provide effective vocational services.

Dissemination activities were conducted throughout the project, beginning with outreach to identify study sites and continuing with the conduct of workshops, developing the Provider Network, and developing written products.

CONFERENCE WORKSHOPS

Originally intended as a dissemination strategy, our approach to conducting conference workshops proved to be a valuable component of our research as well. Rather than try to learn all the answers and then present research papers with our findings, most of our conference

workshops were interactive, involving program staff as presenters and attendees as participants. The workshops shared the following features:

- C Program directors from all the programs participating in our study were contacted to solicit ideas for workshop topics three to four months in advance of an upcoming national conference. They were also notified that once a workshop panel was planned, BPA would pay a major portion of the travel costs for one person to attend the conference (allowing some programs to participate in such conferences for the first time and other programs to send a second staff person);
- C Once a few ideas had been generated, BPA conducted a conference call with interested programs to discuss these emerging issues and pick one or two to submit as conference abstracts.
- C Programs were encouraged to consult with and include consumers in their plans, and often they brought consumers to the conference to serve on the workshop panel.
- C Conference abstracts were developed jointly between BPA and program staff.
- C Once BPA received notification that the abstract had been accepted, we conducted a second conference call with members of the proposed panel to refine the workshop agenda, and then assisted programs to develop materials for their portion of the agenda.
- C Workshops were designed to be interactive to involve participation from the audience as a means to gather wider-reaching information about the issue area and to encourage active learning among attendees.
- C Workshops emphasized applying ideas to individual situations and identifying ways that participants could begin the process of change in their own programs and organizations.
- C Workshop participants were invited to join an information -sharing network by completing a very brief form before leaving the session that included a few key descriptors of their program in addition to basic contact information.
- C Results of the workshop were summarized and sent out to all members of the network including both workshop attendees and members that were not able to attend the session, along with an updated network list (see Appendix C).

We chose two annual national conferences as the major targets for these conference workshops, APSE (Association for Persons in Supported Employment) and IAPSRs(International Association of Psychosocial Rehabilitation Services) as being the ones that reached the largest number of mental health/vocational providers and also include consumers.

The project sponsored and conducted ten conference workshops throughout the study period. In addition to general workshops on the conduct of the study and variations in case management approaches across programs, four major issues or themes emerged as key issues for discussion:

- (1) mental health/VR collaboration
- (2) system-spanning service coordination
- (3) career development, and
- (4) follow-along services

The conference materials for all of these workshops are included in Appendix D.

JOURNAL ARTICLES

BPA and HSRI prepared a number of articles discussing key issues that emerged during the study. Two articles have already appeared in journals, one is pending journal publication and one will be included as a chapter of a book:

- c “New Developments in Vocational Services: Services Combining Elements of Case Management and Vocational Rehabilitation,” unpublished paper, H.S. Leff, R. Warren, S. Raffe, P. Weinstock, L. Toms Barker (December 1994).
- c “Community-Based Models of Employment Services for People with Psychiatric Disabilities,” published in the *Psychosocial Rehabilitation Journal*, L. Toms Barker (January 1994).
- c “Enhancing Vocational Outcomes for Persons with Psychiatric Disabilities: A New Paradigm,” published in *Innovative Services for Difficult to Treat Populations*, Washington, D.C.: American Psychiatric Press, C. Mowbray, S. Leff, N. McCrohan, D. Bybee (In press).

- C “Towards an Understanding of the Role of ‘Models’ in the Development of Vocational Services for Persons with Psychiatric Disabilities,” L. Toms Barker (April 1996). (Publication pending in the *Psychosocial Rehabilitation Journal*.)
- C “Mental Health and Vocational Rehabilitation Collaboration: Local Statistics That Work,” P. Weinstock and L. Toms Barker, published in the *Psychosocial Rehabilitation Journal*, (Spring 1995).

These materials are included in Appendix E.

TRAINING MATERIALS

Staff of HSRI conducted focus groups with staff and consumers at selected study sites to identify the specific tasks and key competencies involved in providing quality vocational services to individuals with psychiatric disabilities. The focus groups also participated in developing case stories or scenarios to be included in the training materials. BPA and HSRI then worked together to package this information into training materials that include a trainer’s guide for using the materials, and instructions on how to develop other such materials using the same procedures. These materials are included in a separate volume as an attachment to this report.

II. PROFILES OF PROGRAMS PROVIDING VOCATIONAL SERVICES TO INDIVIDUALS WITH PSYCHIATRIC DISABILITIES

As mentioned above, the study involved collecting data from nine different programs around the country. While all of these programs have been successful in assisting participants to obtain employment, and all have blended case management and vocational services in some way, they vary a great deal in the kinds of case management approaches they use, their organizational and staffing structures, and even in the kinds of vocational approaches they emphasize. The sites participating in the study are described below, based on site visits conducted in 1993 and 1994.

COMMUNITY COMPANIONS [SAN JOSE, CALIFORNIA]

Community Companions is a free-standing case management agency serving an ethnically diverse population. The agency has provided community services for over 20 years and serves approximately 1200 clients a year. Consumers are matched with case managers who speak their primary languages, which include Chinese, Vietnamese, Cambodian, Spanish, and Tagalog. Case managers work together in teams, but serve consumers primarily on a one-to-one basis. Crisis teams have caseloads of 10 consumers; other teams have caseloads of 20-25. Employment has become an increasingly important and formalized service over the years. Under a Mental Health-VR cooperative agreement that was first developed in 1992, a division of Community Companions called Mission Valley Employment Services provides vocational services billable to VR. Staff of Mission Valley work closely with case managers in order to serve consumers who vary widely in their degree of job readiness. Highly individualized services include job development, job coaching, and seminars for the less job ready. The local VR counselor has assisted by streamlining the VR eligibility process for mental health clients.

CENTER FOR MENTAL HEALTH [ANDERSON, INDIANA]

This is a private, non-profit mental health agency serving a mixed suburban and rural county north of Indianapolis. The Community Support Program of CMH operates, in addition to its vocational services, a clubhouse, a supported housing program, and case management services

provided on a one-to-one basis. CSP staff have borrowed from different philosophies of case management, while emphasizing consumer self-determination and a practical approach to overcoming disincentives to employment. In 1991, this agency became the first in the state to develop a Purchase of Services Agreement with the Office of Vocational Rehabilitation. The agreement has since become a model for mental health programs throughout Indiana, and staff of the CMH have become technical assistance providers for the State Office of Vocational Rehabilitation. The vocational division of the CSP has been expanding continuously since 1990. At the time of our 1993 site visit, this division included a vocational supervisor, four job coaches with caseloads of about ten each, and a vocational follow along case manager. An additional follow-along case manager and at least two additional job coaches later joined the staff. The division emphasizes active outreach to the business community, rapid placement in community jobs, and on-site job coaching. The follow along case manager is involved early in the vocational process for each participant, assisting with certification, and then later becomes involved again as an ongoing source of support after job placement and the most intensive period of coaching has been completed.

BUILDING BRIDGES [DECATUR, ILLINOIS]

Building Bridges is a collaborative program of the State of Illinois Department of Rehabilitation Services (Decatur office) and the Decatur County Mental Health Center. The program was created in 1989 when a Decatur Vocational Rehabilitation supervisor became concerned about the lack of ongoing supports for adults who had “graduated” from local psychosocial rehabilitation programs and were attempting to live independently; they now were eligible for services only if they experienced a crisis. He sought to create a program that could be more proactive in helping the more severely impaired adults adjust to the community, and especially in promoting their vocational success. He succeeded in obtaining the 20% match from county Mental Health funds needed to leverage VR dollars, and in creatively blurring the boundaries of the two systems. VR dollars are used to fund the position of Life Coach; the Life Coach is employed and partially supervised by the MH Center. The Life Coach, an employment specialist, and a VR counselor have side-by-side offices at the Decatur VR office and work closely together as a team. The Life Coach provides secondary or tertiary case management services to clients since most clients have multiple sources of case management services. The Life Coach has a great deal of flexibility in providing services, and can “cross barriers”. Her roles include job developer and job coach as well as case manager.

HOSPITAL TRANSITION PROGRAM [EUGENE, OREGON]

The purpose of this demonstration program, jointly funded by Oregon's Vocational Rehabilitation Division and Mental Health/ Development Disabilities Division, was to promote complete community integration in housing as well as employment for long-term state hospital residents. The site included in our study, Laurel Hill Center, is a private, nonprofit psychiatric rehabilitation agency which has been operating under the same leadership for over 20 years. The agency has long emphasized vocational services, including supported employment, along with a social program and supported housing. The VR counselor and Hospital Transition Program Director at this site jointly recruited consumers and provided them with presumptive eligibility for VR Supported Employment funds. The demonstration funded two kinds of staff positions which supplemented the wide array of services in place. Two Rehabilitation Counselors provided Case Management services to 10 clients each; and 2.5 Vocational/Community Skills Trainers tackled any issue that was "getting in the way of work". Thus, they provided deep backup to independent living skills trainers as well as to supported work specialists.

PROJECT WINS [GRAND RAPIDS, MICHIGAN]

Project WINS was a three-year NIMH demonstration project that funded the addition of vocational specialists, assisted by peer support specialists, to existing case management teams at two agencies operated by the Kent County Community Mental Health Board. These two agencies, Harbinger and Transitions, operate both Assertive Community Treatment Teams (approximate caseload size of 55) and Comprehensive Teams (approximate caseload size of 180). Seven vocational specialists were hired, including some with a strong clinical mental health background and others with a vocational rehabilitation or job development background. Vocational specialists were employees of Project Wins, but worked closely with the Harbinger and Transition teams to which they were assigned. The vocational specialists hired and supervised peer specialists to provide additional support, encouragement, and training to participants who requested them (about half of participants requested peer specialists). Vocational strategies and services emphasized the "choose, get, keep model," were highly individualized, and made extensive use of clinical input from case managers. The local Vocational Rehabilitation Counselor also provided input on service planning for each consumer. The collaborative nature of the project was reinforced by an interagency advisory board.

WEST CENTRAL COMMUNITY SUPPORT SERVICES [LEBANON, NEW HAMPSHIRE]

Over the past few years this private, nonprofit agency has changed its focus from day treatment services to vocational services based on the Individual Placement and Support model. This model emphasizes rapid job placement, with more extensive training, counseling, and follow-along support emerging in the context of the employment situation. Case managers work in PACT teams with other providers, but clients develop relationships with individual case managers. Case managers have caseloads of 22 consumers; RN case managers have 11 consumers each. The New Hampshire Department of Mental Health funds several vocational specialist positions and the Department of Vocational Rehabilitation funded a job developer for one year. Vocational specialists work closely with the teams, and also serve as a liaison with the local VR office.

BREAKTHROUGH CLUB [WICHITA, KANSAS]

The Breakthrough Club was once a part of Episcopal Social Services, Inc., and recently became an independent non-profit community agency. It offers a clubhouse model of service provision, emphasizing transitional employment and supported education. Consumers are involved in all aspects of management and service provision; they run the clubhouse work units, serve on the board, provide job coaching and peer support. Mental health case management based on the “strengths” model is provided by teams. A State of Kansas rehabilitation services counselor specializing in clients with psychiatric disabilities works closely with the Breakthrough Club staff, visiting once a week, counseling consumers, signing off on plans, and providing funding for transitional employment placements as well as for the development of more permanent positions and careers for clients who have completed TE.

SHAWNEE COUNTY COMMUNITY MENTAL HEALTH CENTER [TOPEKA, KANSAS]

This mental health center has operated a supported employment program since 1991, funded by a Kansas Rehabilitation Services grant plus fee for service dollars. Center staff provide case management based on the “strengths” model and utilize the “choose, get, keep model” of supported employment. Each vocational consumer receives additional funding as he or she enters each stage of the latter model. Long-term, post-employment follow-up is provided by a peer support specialist. All supported employment consumers participate in other activities of the center, with about half participating in case management. The center’s board and its medical director actively support the employment program and encourage employment activities for consumers.

III. DESCRIPTION OF PARTICIPANTS, SERVICES AND OUTCOMES AT FOUR SAMPLE SITES

CHARACTERISTICS OF PROGRAM PARTICIPANTS

Table 2 summarizes the characteristics of the program participants included in our study sample for each site. As the table shows, the participants were similar across programs. Participants were somewhat less likely to be male (in three of the four sites), most had a diagnosis of schizophrenia, they tended to be in their late thirties, most had at least completed high school and were receiving SSI/DI at program entry. Very few were married, living with a partner or had children at home. Very few had a history of criminal activity although a significant number (25-49%) had a history of substance abuse. One-third to one-half had been hospitalized during the year prior to program entry. Most had some work experience with the average ranging from three to five years.

There were only two characteristics with significant differences across sites. First, there was considerable variation in living situation, with the percent of participants in supported living arrangements ranging from 8% to 53%, those living with family or roommates ranging from 24% to 58% and those living alone ranging from 16% to 52%. Second, the percent of participants with cognitive disabilities in addition to their psychiatric disability ranged from 10% to 37%.

Table 3 compares the characteristics of participants who were successful in obtaining employment by the end of the study period with those who weren't. While this is only a simple bivariate analysis, it does suggest that none of the differences between sites had a significant effect on employment outcomes. Only gender was significantly different between the employed and unemployed groups. With the employed participants more likely to be male, comprising 56% of the employed group vs. only 32% of the unemployed group.

Table 2
Characteristics of Program Participants

CHARACTERISTICS	Site #1	Site #2	Site #3	Site #4
Sex (%)				
Male	43	43	60	48
Female	57	57	40	52
Primary Diagnosis (%)				
Schiz/Psychotic	59	54	54	62
Affective	27	28	20	33
Other	14	18	26	6
Ethnicity (%)				
White	82	96	79	83
Minority	18	4	21	17
Education (%)				
Less than high school	30	28	24	24
High school	46	38	57	40
Beyond high school	25	34	20	36
Receiving SSI or SSDI at Program Entry (%)	76	69	71	69
Living Situation at Entry (%)*				
Alone	47	35	16	52
With family/roommates	24	58	31	24
Supported	29	8	53	24
Dependent Children in Home (%)	4	15	16	3
History of Substance Abuse (%)	36	49	31	25
History of Criminal Activity (%)	16	20	10	6
Hospitalized During Year Prior to Program Entry (%)	50	55	33	33
Mean Age at Program Entry (years)	37	38	39	38
Marital Status (%)				
Single	55	67	58	56
Married or w/partner	11	8	19	10
Previously married	34	25	23	35
Percent With Cognitive Disability*	16	37	29	10
Mean Years of Prior Work Experience	5.3	Not Available	3.2	4

* significant variation across sites ($p \leq .05$)

Table 3

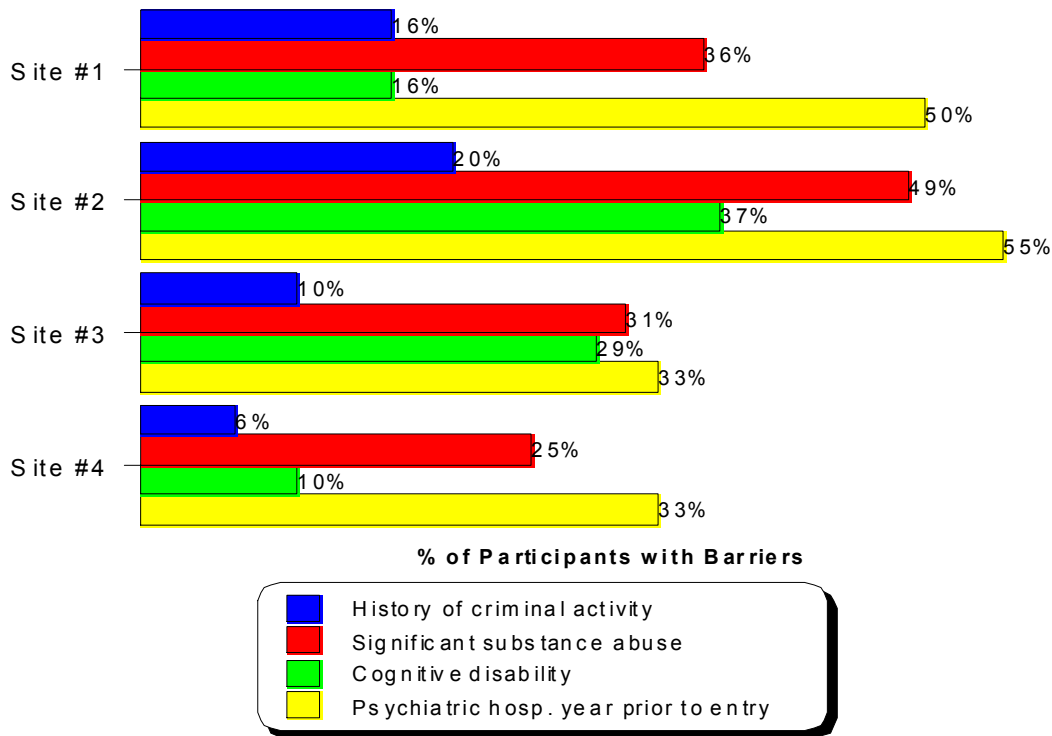
Characteristics of Employed vs. Unemployed Participants

CHARACTERISTICS	EMPLOYED (N=146)	UNEMPLOYED (N=59)	TOTAL (N=205)
Gender (%) [*]			
Male	56%	32%	49%
Female	44%	68%	51%
Primary Diagnosis (%)			
Schiz/Psychotic	55	66	58
Affective	27	25	26
Other	18	9	16
Ethnicity (%)			
White	84	84	84
Minority	16	16	16
Education (%)			
Less than high school	25	31	26
High school	47	38	44
Beyond high school	29	31	29
Receiving SSI or SSDI at Program Entry (%)	71	81	74
Living Situation at Entry (%)			
Alone	34	46	37
With family/roommates	35	28	33
Supported	31	26	30
Dependent Children in Home (%)	10	9	9
History of Substance Abuse (%)	42	32	39
History of Criminal Activity (%)	14	14	14
Hospitalized During Year Prior to Program Entry (%)	46	40	44
Mean Age at Program Entry (years)	40	37	39
Marital Status (%)			
Single	57	67	60
Married or w/partner	13	9	12
Previously married	30	25	29
Percent With Cognitive Disability	23	27	24
Mean Years of Prior Work Experience	4.2	4.4	4.3

^{*} significant difference between groups ($p \leq .05$)

However, even though comparison of employed vs. unemployed participants showed no relationship between characteristics that are typically considered barriers to employment and whether or not participants obtained employment, one can't dismiss these barriers as being unimportant. Rather, the fact that those who succeeded were just as likely to have various barriers present may be an indication that programs were successful in addressing these barriers. Even though there were very few differences between groups when viewing the characteristics individually, as shown in Figure 1 when looking across several barriers together, differences between sites become more apparent. According to these measures, sites #1 and #2 served participants with a greater likelihood of barriers to employment overall than sites #3 and #4.

Figure 1
Percentage of Clients with Selected Historical Barriers at Program Entry



SERVICES PROVIDED

Data on the types and amounts of services provided proved to be the most difficult data to collect across the study sites. In spite of prior agreement on service categories and efforts to simplify the data collection through accessing existing data systems, the data received was not fully

comparable across sites, and in some cases was not a complete record of services for all participants. We did receive a large amount of data in the form of units of service by month that form a rich database for studying patterns and intensity of services over time that although not completely uniform across sites would nonetheless be extremely valuable for further services research. For the purposes of this study, however, in order to maximize uniformity across sites, the service data was summarized into which participants received which of a small number of large categories of services.

Table 4 illustrates the variation in service delivery across sites. The services included on this table are only those that are distinct from general job development and placement services provided to all participants, thus the table does not reflect participants' full service experience. As the table shows, there was significant variation in the percent of participants receiving these distinct services in every one of the service areas. It's interesting to note, for example, that in Sites #1 and #2, not all participants received any of these services (the total percentages add up to less than 100%). In Site #3, a significant number of participants received all of the different services except supported education. Site #4 provides clubhouse services to almost all its participants.

Table 4
Percentage of Participants Receiving Services by Site

Services	Site #1	Site #2	Site #3	Site #4
Clubhouse*	40%	22%	58%	87%
Supported Education*	2%	6%	8%	27%
Substance Abuse Treatment*	2%	28%	14%	6%
PASS/IRWE*	0%	4%	23%	2%
Other Service*	10%	0%	33%	0%

**significant variation across sites*

Table 5 illustrates the relationships between these various services and the achievement of vocational outcomes. As the table shows, while none of these services has a clear relationship to the likelihood of obtaining employment or the percent weeks worked over time, there does

appear to be some relationship between receipt of a particular service and some of the other employment outcomes such as hours worked per week, and hourly wages. While this table offers some interesting ideas for further research, we are hesitant to place too much emphasis on it because of the difficulties encountered in collecting complete and accurate service data.

Table 5

Relationship of Employment Outcomes with Services Received

	Clubhouse	Supported Education	Substance Abuse Treatment	PASS/IRWE	Other Service
Percentage obtaining a: First job Second job Third job	--	--	--	--	--
Percentage who lost first job during study period	--	--	fewer lost job**	--	fewer lost job**
Mean hours/week on first job	--	less hours **	less hours**	more hours**	more hours**
Mean weeks on first job	longer**	--	--	longer **	longer **
Mean beginning hourly wage on first job	lower**	--	--	--	--
Mean total earnings	--	--	--	--	higher**
Mean total weeks worked	longer**	--	--	longer**	longer**
Mean weeks worked as percent of time in program	--	--	--	--	--

** significant relationship between outcome and receipt of service ($p \leq .05$) as indicated.

-- no significant relationship

EMPLOYMENT OUTCOMES

Table 6 presents a summary of employment outcomes across sites. As the Table shows, there were significant differences in outcomes in all of the outcome areas measured. One of the four programs had significantly better outcomes overall than the other three. (Figure 2 displays some of these outcomes graphically for ease in comparing sites.) Site #3 had the best overall outcomes as illustrated by:

- c the highest success rate (81% obtained employment);

- c the best retention of first job (65 weeks of first job) and good employment retention overall (54% weeks worked of total weeks observed);
- c the highest average hours per week; and
- c the highest overall earnings.

Even though Site #3 had relatively low average hourly wages, this is somewhat reflective of the rural area it serves. These are still considered high quality jobs because more than other sites they had:

- c leave benefits (15% compared to 6% or less); and
- c health benefits (15% compared to 6% or less).

Table 6
Employment Outcomes

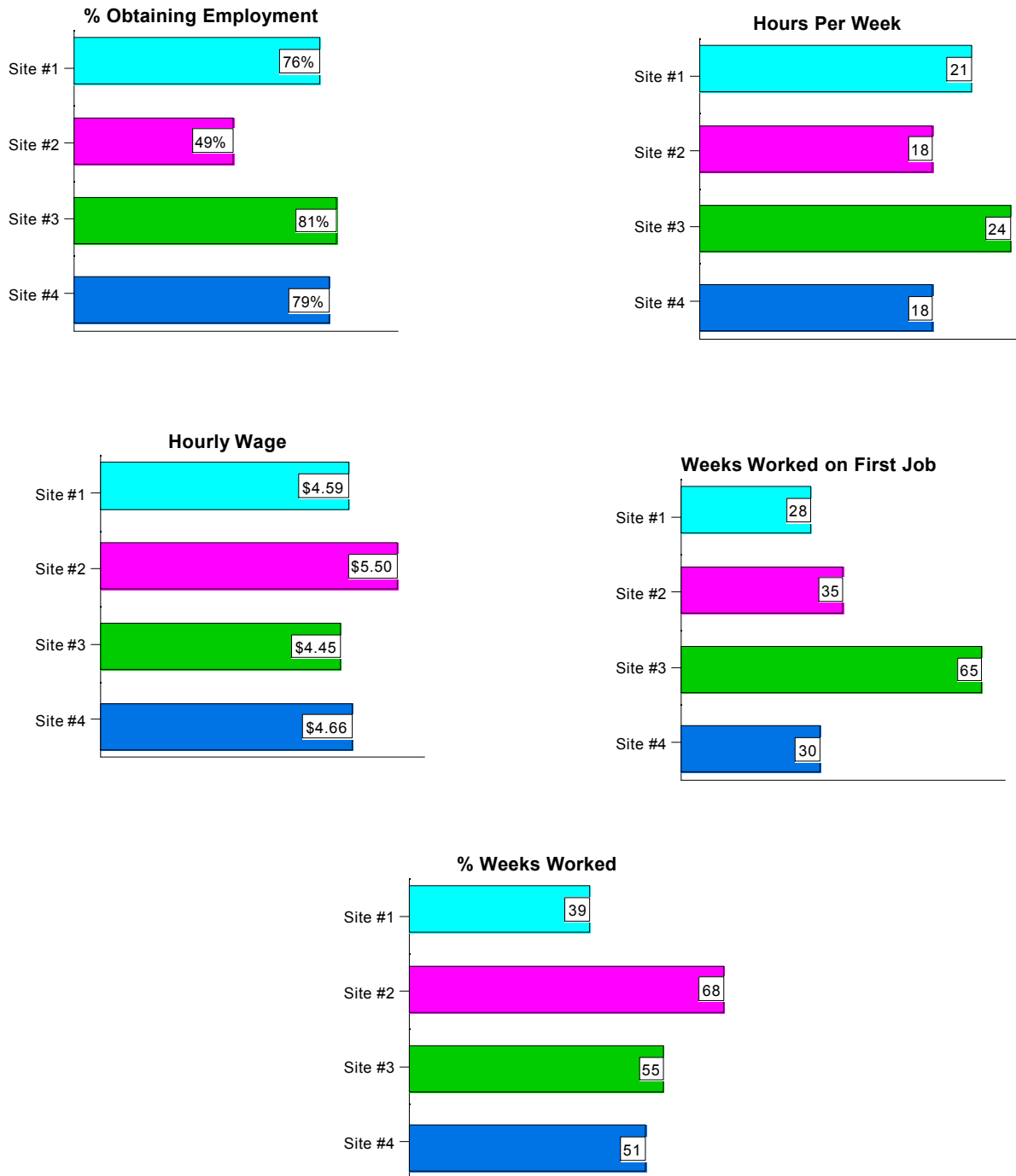
	Site #1	Site #2	Site #3	Site #4	TOTAL
Number Obtaining Employment	38	25	42	41	146
Percentage obtaining a					
First job**	76	49	81	79	71
Second job	28	20	20	33	25
Third job	6	8	0	6	5
Percentage who lost their first job before the end of data collection**	79	46	27	83	62
Mean hours/week on first job**	18.3	17.8	24.1	17.5	19.7
Mean beginning wage/hour on first job**	\$4.59	\$5.50	\$4.45	\$4.66	\$4.72
Percent of first jobs with health benefits**	0%	4%	15%	2%	6%
Percent of first jobs with leave benefits**	0%	4%	15%	2%	6%
Mean weeks on first job**	28	35	65	30	39
Mean weeks on all jobs**	33	64	67	54	54
Percent weeks worked**	39%	68%	55%	51%	52%
Mean earnings on all jobs**	\$2,864	\$6,900	\$7,106	\$4,338	\$5,171

TOTAL N=205
TOTAL EMPLOYED = 146

**significant variation across sites ($p \leq .05$)

Figure 2

Examples of Outcome Achievements Across Sites



Because we had different lengths of observation period for different individuals depending on when they entered the study, we have employed survival analysis to control for the varying data collection periods. Fabian (1992) and Shafer and Huang (1995) have each used survival analysis to examine longitudinal outcomes for consumers with psychiatric disabilities in a single supported employment program in order to examine the factors associated with success. We use it here to compare job retention across programs as well. (Survival analyses were conducted for all of the characteristics described above, but none of them showed a significant association with job retention.) As shown in Figure 3, Site #3 has significantly better job retention outcomes than the other programs.

EXPLANATION OF RESULTS

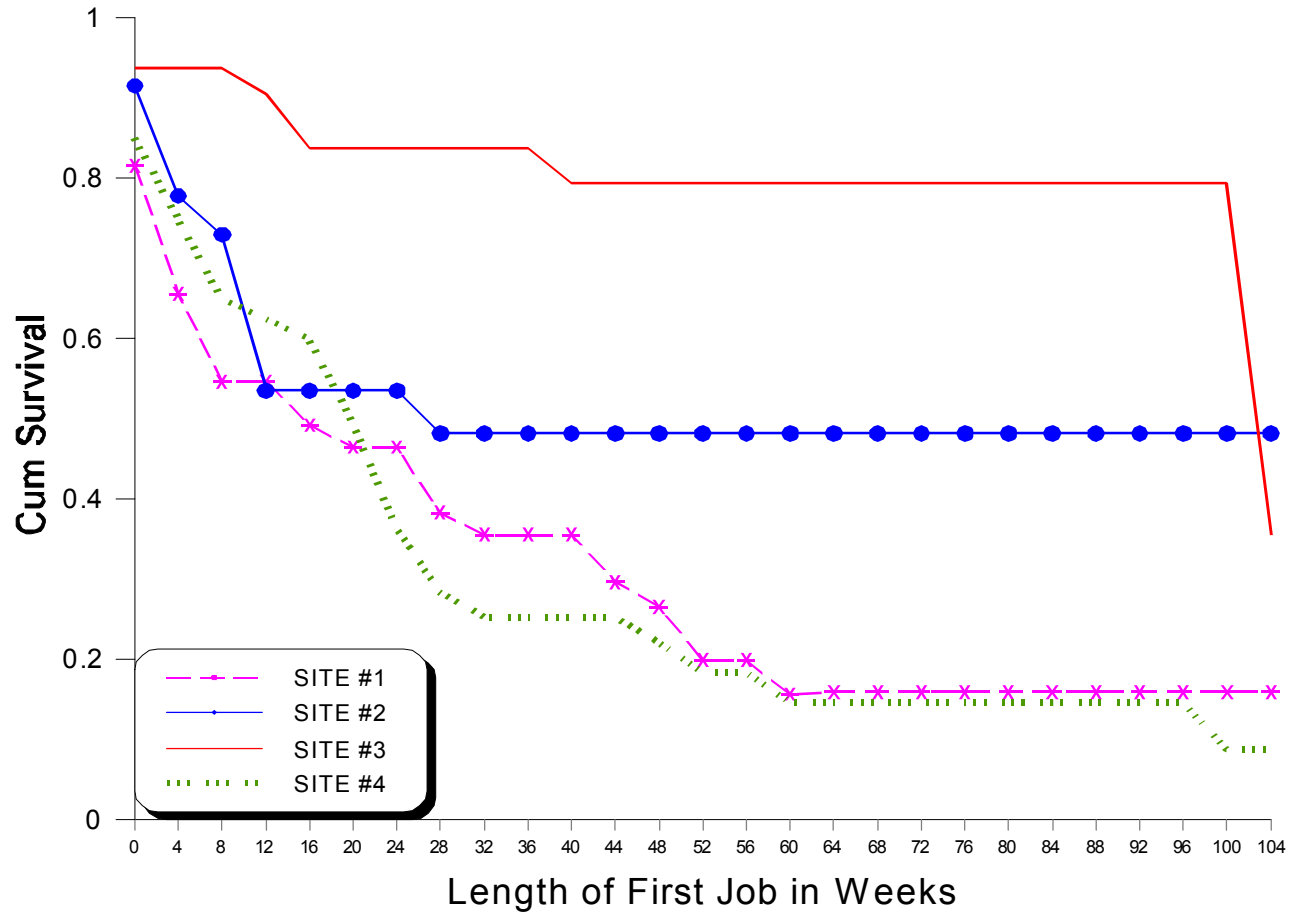
All of the programs involved in this study were successful in increasing labor force participation of their program participants, and all were known (or considered) by program funders and consumer groups to be effective. All of these programs shared some common attributes such as their commitment to providing effective service coordination to minimize fragmentation in service delivery and to assist participants to make employment an integral part of their lives. Yet one program was significantly more successful than the others. A review of the case study data revealed a number of significant program features that may not have been present (or at least were less apparent) in the other programs including:

- (1) Strong interagency coordination — in addition to coordination with VR, good working relationships with JTPA, local business groups, SSA and others;
- (2) A blending of case management (formerly followed the ACT model and has incorporated features from other approaches including the continuous Treatment Team approach) and vocational service delivery models (clubhouse, supported employment);
- (3) Strong emphasis on consumer empowerment and involvement in program operations; and
- (4) Small caseloads — 12-13 per vocational case manager.

These observations are consistent with the findings of our previous study of “Optimum Models of Supported Employment for Persons with Psychiatric Disabilities” (Strong, 1994), in which we found that rather than defining an optimum model, we identified dimensions of variation and common attributes of programs that seemed not to adhere to any one particular model. We also found that the most successful programs seemed to blend aspects of different models in a way that was particularly well adapted to their participants and their community (Toms Barker, 1994).

Figure 3

Comparison of Length of Time on First Job Across Sites



V. SUMMARY OF FINDINGS, OBSERVATIONS AND LESSONS LEARNED

The major findings of our study seemed to have emerged from the conference workshops and the focus groups where key service delivery issues were identified by service providers and consumers, with the case studies and participant data essentially verifying much of what we learned from those less formal research methods. Thus, the issues discussed in more detail in the journal articles and training materials attached include:

- (1) effective approaches to mental health/VR collaboration;
- (2) economic disincentives to employment inherent in the structure of income support programs;
- (3) approaches to incorporating a career development orientation into vocational programs rather than focusing only on entry-level jobs, including the role of supported education;
- (4) challenges inherent in disclosing a disability to the employer;
- (5) alternative approaches to providing (and funding) follow-along services and keeping the door open for participants to re-enter services periodically as they may need to; and
- (6) the changing role of the case manager in the context of a consumer-controlled service environment.

While the research design did not focus on formal hypothesis testing, we did approach the study with a number of expectations about what we might find. Below we describe some expectations that were not borne out in the reality of the programs we studied:

Expectation: Because case management encompasses a wide variety of roles, we expected that it would be possible to identify and compare different philosophies of case management and the differences in how these approaches influence the case management process. We expected to identify variation in case management approaches in terms of the extent to which case management was defined as service coordination, coaching, advocacy, monitoring, service brokering, gatekeeping, or counseling.

Observation: The study of case management is extremely difficult in the context of the current evolution in mental health services towards consumer empowerment and control. Case managers themselves have a difficult time reporting on their case management styles and approaches, often identifying all of the possible roles and approaches as valuable and claiming that they at least try to do all of them. Differences in case management approaches such as these tend to vary more at the individual case manager level, or even at the level of individual relationships with specific clients than at the program level. Program level variation would tend to be more evident as structural differences such as team approaches and caseload size. However, the programs that we studied have tended to evolve their own hybrid approaches that blend aspects of a variety of different case management models.

Expectation: Mental health system case management would be a focal point for participants at each site. Because we thought it was going to be a central issue, we originally selected programs that appeared likely to integrate mental health case management and vocational services. We had expected that mental health case management would be a core service central to vocational services.

Observation: Mental health case management was not always seen as central to the VR process. If traditional sources of mental health case management (e.g., CMH) weren't strong, they would be bypassed and the functions assigned to other people or to special project staff. For example, at Building Bridges in Illinois, participants often technically had primary mental health case managers from community mental health or a supported housing program. But, in fact, while other sources of case management were variously involved, the specially funded Life Coach provided the most extensive case management services as a part of broader coaching and life management skills training and support. At the Hospital Transition Project in Oregon, Laurel Hill Center chose to provide in-house service coordination, rather than relying on the community mental health agency case management system. The project funded two full-time service coordinator positions; each carried a caseload of ten participants.

Expectation: Lessons and practices from time-limited grant funded programs would be limited in transferability to other programs because they wouldn't reflect typical program circumstances.

Observation: Some of the “novel” approaches we observed seem to have great potential to be incorporated in programs on an ongoing basis. Building Bridges and Shawnee had experiences where demonstrations and time-limited contracts evolved into ongoing arrangements specially funded by state VR.

Expectation: Strong cooperation and support of programs for people with psychiatric disabilities at the state level would be critical for local program effectiveness.

Observation: In order to identify successful programs, we began by focusing on states with high ratings as reported in *Care of the Seriously Mentally Ill* (Torrey et al., 1990), but we quickly abandoned this approach as we were informed of effective programs in many states without a high rating. Interest, willingness, individual working relationships and coalitions at the local level can all be extremely effective, even in the absence of state level cooperation. We encountered many examples of local initiative, sometimes between local mental health and VR agencies and in sometimes from the vocational programs themselves taking the initiative in establishing collaborative working relationships.

Expectation: One of the stages of the service process that could be captured as an outcome measure was the transition to follow-along status as participants stabilized in their supported employment jobs.

Observation: In fact, some programs we deemed effective did not have a clear-cut change of status. With extensive service data it might be possible to detect a difference in intensity or type of service, but not necessarily. Some people continue to participate in programs without necessitating any particular kind of status change. They may continue to receive support from the program with such continuity that a change in status is never even apparent. This may be due in part to the fact that in most programs, follow-along does not have a separate and distinctive funding source. In fact, in some states, where the mental health agency is designated to provide follow-along once the vocational rehabilitation process is “complete”, if the program didn’t continue to provide services it would be essentially the same as closing the case with a traditional VR

closure. Many programs raised concerns about the problems inherent in giving the mental health agency responsibility for follow-along services without providing mental health case managers with sufficient training in how to provide ongoing employment support.

Expectation: Services and staff roles would be participant-centered.

Observation: In fact, for some job developers and job coaches, there exists a dynamic tension emanating from the two types of customers they serve—businesses and consumers. At Building Bridges, for example, as job developers cultivate relations with employers, they hear employers asking for “job-ready” workers. As job developers work in supported employment programs, they hear the expectation that participants can be placed and trained, perhaps somewhat less job ready than employers might prefer.

In addition to the various expectations described above that were not borne out, there were a number of other unanticipated lessons about how effective programs operate.

Unexpected: In a substantial number of cases, we observed the serendipitous and sometimes purposeful cross-fertilization of program staff. In some cases, vocational providers or agencies recruited vocational workers from the staffs of mental health agencies; in other cases, mental health agencies and programs sought personnel with background and experience in vocational services. There were instances where state officials in the vocational rehabilitation agency had previously worked in the mental health agency. Such exchanges could actually be sought on an open and temporary basis—staff switching. In each case, staff with one type of background are exposed and trained in another discipline and set of procedures and regulations.

Unexpected: Business backgrounds and marketing skills seemed to play a large role in program success. Just as it was not uncommon for successful programs to have mental health staff with expertise in vocational rehabilitation, or for vocational staff to have mental health backgrounds, it was also not uncommon to find staff who came from the sales, marketing and business world. Successful programs intensively cultivated employers, going well beyond employer recognition efforts (plaques, dinners, etc). One program had an annual marketing budget of

\$30,000 with which to take employers to lunch, host awards dinners, make presentations at Chamber of Commerce functions, etc. Marketing specialists were members of local Chambers of Commerce, served on business committees and boards and had strategies for approaching and involving businesses. One program used the “25 minute appointment approach” to get in the door and also hosted a local radio show. Programs who are serious about cultivating employers saw to it that feedback was obtained regularly, either in-face-to-face meetings or by the use of surveys.

Unexpected: The study needed to refocus and change directions from the initial conceptual framework, given the difficulty of studying “case management” during a time when, from a consumer standpoint, case management has fallen out of favor (at a local conference participants wore buttons stating: “I’m not a case and I don’t need to be managed.”) Professionals seem to have a clear understanding of case management—they have job descriptions, member organizations, and are paid to do it. But consumers didn’t always understand whom we were talking about, and they did not identify the role as clearly as “insiders” do. As a result, we had difficulty involving consumers in Participatory Action Research around issues of case management.

MEASURING SUCCESS

Over the course of the study, we watched our programs, as well as the field in general, move from a hearty dissatisfaction with placement statistics as indicators of success in favor of long-term job retention; and from dissatisfaction with long-term job retention as the indicator of success to maintaining a good job match—success came to also include leaving a job for the right reasons. As we left the projects, we saw a healthy interest in long-term investments in people and their futures. Professionals and consumers began articulating just what was meant by supported education and career development and how these activities were related to where we had come in vocational services and case management for people with psychiatric disabilities.

THE EFFICACY OF PROGRAM MODELS

We ended our project with a healthy disregard for the notion of models of case management or models of vocational services, and abandoned the need to pigeon-hole programs and practices. Successful programs adapted and borrowed from pure models and left behind what no longer functioned, happy to embrace a different approach. They evolved and branched out, providing an increasing variety of options. And, where at one time, the field of vocational rehabilitation for people with psychiatric disabilities looked askance at the clubhouse emphasis on

transitional employment positions (not competitive, not real world, more job readiness work instead of real work; anyone worth their salt pursued competitive employment placements), we observed both programs adding supported employment opportunities to a thriving TEP strategy as well as supported employment programs which added TEP opportunities. Successful programs were committed to individualizing services for consumers than they were in adhering to any particular philosophy, school, or service approach.

The effort to identify and document program features associated with success is vital to the dissemination and replication of the lessons learned by effective programs. Classifying a typology of these features can be useful to developers of new programs as a starting point. However, the information gathered during this study argues for blended service approaches rather than adherence to any one particular program model, and the need for flexibility to maximize success for each individual participant.

There is no doubt that many individuals with psychiatric disabilities need and want help in coordinating the service process that supports their vocational goals, and will continue to need long term support as they achieve those goals. However, this help need not necessarily take the form of traditional mental health case management. Many creative approaches including team support, peer support, and transitional support from different types of specialists (e.g. employment specialists, life coaches) can all be effective if provided in the context of addressing individual needs and desires.