
**A SUPPORTED
LIVING/SUPPORTED
EMPLOYMENT PROGRAM FOR
REDUCING THE NUMBER OF
PEOPLE IN INSTITUTIONS**

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The discharge to the community of people who have made extensive use of state hospitals has become an accepted way to reduce the number of people in institutions, to close wards and decrease costs. However, concern exists over the ongoing community program costs and the sustained community functioning of individuals discharged after the census reduction efforts have ended. The present study investigates the program cost and community functioning of individuals discharged to an innovative transition project that was sponsored and funded jointly by the Division of Vocational Rehabilitation and the Department of Mental Health. In the original study, twenty-six people were discharged to a supported living/supported employment program. This paper reports on a follow-up study conducted one year after the original formal evaluation of the project was completed. Similar to the original study, the follow-up study assessed residential and vocational status; data on ongoing need for program support, and program costs were collected. Results indicated that individuals were able to maintain most of the residential and vocational gains made during their initial year of their transition to the community. In addition, hospital days remained low, and the ongoing costs of the program per year, while still substantial, were significantly less than the costs for the first year of their transition into the community.

People identified as relatively high users of the state hospital system have been specifically targeted for discharge to the community. In this climate of cost containment and concomitant inpatient census reduction, many have expressed concern about the community functioning of individuals discharged in census reduction projects, once the discharge

initiatives have been completed (Anthony, Cohen & Farkas, 1990). Studies have raised the question of whether individuals discharged were succeeding in the community or simply existing in the community (Arns & Linney, 1995; Brown, Ridgway, Anthony & Rogers, 1991).

Hospital Transition Project

The present study followed-up 21 individuals who were discharged to a psychosocial rehabilitation center (PRC) as part of a state-wide institutional downsizing initiative. The follow-up period is one year after the completion of the transition project and its formal state sponsored evaluation (Berkeley Planning Associates, 1993). The Hospital Transition Project was different in several ways from typical institutional downsizing initiatives. First, the mission of the project focused not only on reduced institutional days but also on improved independent living and vocational success; secondly, the program was a combined effort of the Division of Mental Health and the Division of Vocational Rehabilitation; finally, the program contained ongoing, albeit reduced, funding for community services once transition to the community and formal project evaluation were successfully completed. During the Hospital Transition Project, the PRC was responsible for providing people who were discharged the full array of community support services, including medical treatment, and was financially responsible for any rehospitalizations.

The 21 discharged individuals served by the psychosocial rehabilitation center (PRC) were part of a larger sample of people who were discharged during the study period. As described in the final project evaluation report (Berkeley Planning Associates, 1993), another group was discharged to a different county and was served by several agencies with a less extensive employment program. The purpose of the present study was to follow the individuals in the PRC program for one additional year to determine if they maintained their residential and vocational status, and at what financial cost.

METHODS

Participant Selection

Individuals institutionalized for over 180 days and/or institutionalized three times in the year prior to the start of the study were eligible for the transition project. The PRC program was designed to serve 20 people. Recruitment began in the fall of 1991 after a pool of eligible people had been identified by staff members. The PRC (2 hours away from the institution) actively recruited service recipients by talking with them and inviting them for day and overnight visits to the community prior to making a final decision about participating. During these visits, potential participants met program staff members, tried different vocational training areas, toured the community and looked at potential living arrangements. Participants and program staff members evaluated the "match" during a series of 10-day hospital passes (generally 30 days total). Individuals were discharged to the program if they believed themselves to be ready to live in the community and, if from the staff's perspective, they demonstrated sustained interest in and potential for employment; 55% of the people who visited the program on an overnight pass were discharged to it. Discharges began in December. By October of the following year, 26 people had been discharged to the PRC.

Eight months later, in June, the formal project evaluation was completed. Depending on their date of discharge, people had been in the original transition project from 8 months to 1-1/2 years. During the following summer, data for the one year follow-up were collected. Of the 26 people discharged to the PRC program, 21 people remained in the PRC program. Four decided to return to their home counties following discharge and one person died of lung cancer just prior to the evaluation.

Complete one-year follow-up evaluation included 19 people. Two people were partially lost to follow-up: data on one of these people were unavailable (he no longer wanted to continue in the program, and left 1 month after the follow-up period began) but status data were available for the other person, who was committed to a forensics facility.

Participant Description

Demographic data were collected from the state records and reported in the initial project evaluation (Berkeley Planning Associates, 1993). In addition to meeting eligibility criteria for the project, the characteristics of the PRC sample were: average length of last hospitalization was 523 days; 62% of the people had a primary diagnosis of a schizophrenic disorder, 14.5% were diagnosed with affective disorders, 9.5% with schizoaffective disorders, and the remainder had other diagnoses. Thirty-eight percent were diagnosed with co-existing personality disorders. Sixty-seven percent had a history of drug or alcohol use; 19% had a history of criminal activity; 86% of the participants were white; 67% were men; and the average age was 36. Eighty-one percent of the sample had never been married and the median level of education was 12 years.

Procedures

One year after the original project evaluation period ended, data were once again collected by the PRC program using the same instruments that were used in the formal evaluation project. Thus, follow-up data could be directly compared to project data collected one year previously when the formal project evaluation ended. Data collected at follow-up included: residential and vocational status, hospitalizations and monthly hours of program support.

Program Intervention

During the transition project year and the follow-up year, the transition project

staff members provided community support, coordination, skills training in all aspects of community living, medication management and monitoring, social/recreational activities, and 24-hour on-call crisis intervention services.

Psychiatric and medical services were provided by the project psychiatrist and contracted nursing services (for blood tests, medication injections, drug/alcohol testing). The project's philosophy, based on the concepts and technology of psychiatric rehabilitation developed at Boston University, was oriented around participant choice and involvement, utilizing the Choose-Get-Keep approach (Danley, Sciarappa & MacDonald-Wilson, 1992). Skills training and interventions were largely provided in the natural setting of a specific environment such as the person's apartment, job site, grocery store or laundry.

Individuals in transition from the hospital selected their initial work training site, their residence, and their roommate(s). If housing or job changes became necessary, the person continued as an active participant in the problem-solving process.

Project staff members were not restricted to providing a predetermined level of support or frequency of services. Interventions were based on the person's goals, and activities were designed to assist in achievement of those goals, with long-term individualized supports provided as needed. In addition, staff were visible and available to assist landlords, neighbors, neighborhood businesses, and employers whenever needed.

RESULTS

The follow-up data described the participants' skills during the follow-up year, which was 20–30 months after their discharge. The follow-up data were compared to the project data collected at

Table 1—Number of Participants Engaged in Various Types of Vocational Activity at Project End and at Follow-up

	STATUS AT PROJECT END	STATUS AT FOLLOW-UP ^a
No Vocational Activity	5	10
Vocational Assessment/Work Adjustment Training, Title XIX Work Experience	4	1
Community Based Employment with Intensive Support in Enclave or Crew	3	2
Community Based Employment with Intensive Support in an Individual Setting	3	1
Community Employment with Ongoing Support	6	7

^a Note that the one participant whose whereabouts were unknown at follow-up was counted as having no vocational activity.

project completion, which was 8–18 months after their hospital discharge.

Residential Status

Follow-up data were available on 21 participants. At the 20–30 month follow-up, 18 of the 21 participants were still residing in supported housing, i. e., living in natural residential situations with support from the PRC. Two individuals were hospitalized and one's whereabouts were unknown. In comparison, 8–18 months after the project began, 20 were in supported housing and one was in adult foster care.

Hospitalization

The percentage of days spent in the community for the 19 participants on whom there was complete hospitalization data during the follow-up year was 96.4%, compared to 95.1% of days in the community during the final project year.

Vocational Activity

Follow-up data were available for 21 participants. At the end of the follow-up year, 10 participants were engaged in community-based employment, versus 12 at the end of the project year. At the end of the follow-up year, 10 participants had no vocational activity versus 5 partic-

ipants without vocational activity at the end of the project year (see Table 1).

Level of Program Support

The number of hours of staff members support needed per month to maintain a person in community housing and work was tracked during the follow-up year. Using the 19 people for whom complete data were available, the monthly average across all participants was 26.24 hours of support with a monthly average range of 5.5 to 86.67 per person across the entire follow-up time period. Average support needed to maintain people in the community was rated by staff members of PRC as moderate, 3.35 on a scale ranging from light (1) to heavy (5).

Program Costs

During the initial project year, costs for serving 26 people in the community who were discharged to the PRC were \$790,020 (Berkeley Planning Associates, 1993), or \$30,385 per person, per year, excluding all inpatient costs. These figures include costs related to hospital transition project start-up (for example, \$100,357 for having additional state vocational rehabilitation staff members specifically assigned to monitor and

service the project). Total PRC program costs for 19 individuals during the follow-up year were \$424,596, or \$22,231 per person per year. This figure includes \$35,376 billed for the state division of vocational rehabilitation services. The only costs not included were for 188 inpatient days at a local hospital and 124 state hospital days (out of 7,091 total service days). Estimated combined cost for these inpatient days was \$80,184 resulting in a total follow-up year cost of \$504,780 or \$2,214 per person, per month, or \$26,568 per year. Project year and follow-up year costs were comparable in that neither included charges for food, housing, dental, health, optical and education services.

DISCUSSION AND CONCLUSIONS

Results indicated that this group of formerly institutionalized people were, in large measure, able to maintain a community residence during the follow-up period. Days spent in the community remained high, along with considerable community-based employment, and community integration in non-mental health settings. However, these gains were maintained with considerable program effort and cost. The discharged individuals were not simply assimilated into the PRC program without ongoing staffing and funding.

Advocates have been concerned about institutional downsizing and closure because they believe community funding and programming for people discharged to the community will be slashed during budget cutting. The advocates reason that funds not only must *follow* the individuals to the community but stay there with them. Based on this follow-up study of individuals discharged to an innovative community program, it appears that their fears may be well-founded if the community program intervention is

defunded. Successful institutional downsizing requires considerable funding over a number of years. The individuals discharged in this study had been in the community program between 20 and 30 months, and the level of program support needed to maintain them in their independent living and vocational settings had slightly decreased from an average number of 33.90 hours for the final project year to 26.24 for the follow-up year. In terms of vocational activity, 10 of the original 21 participants (48%) were engaged in community-based employment at the end of the follow-up year, and judged by DVR as successfully rehabilitated. This vocational outcome data is comparable to other studies of vocational outcomes for persons with serious mental disability (Drake, et. al., 1996). There was some decrement in overall vocational activity during the follow-up year because a sizeable number of those participants who moved into the category of "no vocational activity" had previously been engaged in vocational assessment or work adjustment training.

Also of interest in this study is the fact that several individuals needed a disproportionate amount of services. The hours of support needed ranged considerably each month from participant to participant (e.g., from 2 hours to 113 hours in 1 month); while the average for all participants during follow-up was 26.24 hours per month, one participant averaged 86.7 hours per month. Two other participants accounted for 63% of the total inpatient days, and one of them was hospitalized 20 different times. However, all three of these participants were in supported housing at the end of the follow-up year.

Taken together, these data suggest that it is possible to integrate persons in the community who previously have been heavy users of inpatient services. However, even within this group of heavy users, a small percentage of per-

sons accounted for a disproportionate amount of services. For most of the people, program costs and interventions stabilized or decreased in the 20 to 30 months after discharge. Yet a small group of individuals, exceedingly high utilizers of community services, did continue to require and profit from high levels of service at considerable cost.

While these data suggest that promising residential and vocational successes are possible for this group of former patients with an extensive history of inpatient living, these results can only be considered suggestive as the study did not employ a randomized control group or a comparison group. Thus, numerous threats to internal validity exist in this study and compete to explain the outcomes. For example, threats such as maturation, statistical regression and mortality could be considered plausible rival hypotheses. However, given the severe nature of the participants' disabilities, it is unlikely that any of these threats could be singularly, or in combination, responsible for the maintenance of positive outcomes. Given that status measures were used, it is unlikely that statistical regression is responsible for the outcomes, and mortality was counteracted as a threat by counting the dropouts as unemployed when examining vocational outcomes. Thus, it is unlikely that these results would have been found simply with the passage of time.

In essence, by the follow-up year the people cost for mental health inpatient and outpatient services cost was *37% less than costs of their inpatient services alone* for the year prior to discharge. Almost all were living in the community and about one-half were competitively employed. This transition project is one example of a program that marries the perceived competing values of reduced costs with improved outcomes.

Author's Notes

A graph depicting the monthly support needs, as well as a longer version of this study, is available from the senior author.

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