Improving Access to Disability Benefits Among Homeless Persons With Mental Illness: An Agency-Specific Approach to Services Integration

ABSTRACT

Objectives. This study evaluated a joint initiative of the Social Security Administration (SSA) and the Department of Veterans Affairs (VA) to improve access to Social Security disability benefits among homeless veterans with mental illness.

Methods. Social Security personnel were colocated with VA clinical staff at 4 of the VA's Health Care for Homeless Veterans (HCHV) programs. Intake assessment data were merged with SSA administrative data to determine the proportion of veterans who filed applications and who received disability awards at the 4 SSA–VA Joint Outreach Initiative sites (n = 6709) and at 34 comparison HCHV sites (n = 27722) during the 2 years before and after implementation of the program.

Results. During the 2 years after the initiative began, higher proportions of veterans applied for disability (18.9% vs 11.1%; P < .001) and were awarded benefits (11.4% vs 7.2%, P < .001) at SSA–VA Joint Initiative sites.

Conclusion. A colocation approach to service system integration can improve access to disability entitlements among homeless persons with mental illness. Almost twice as many veterans were eligible for this entitlement as received it through a standard outreach program. (*Am J Public Health*. 1999;89:524–528)

Robert Rosenheck, MD, Linda Frisman, PhD, and Wesley Kasprow, PhD

During the 1960s and 1970s, as many people with serious mental disorders began to be discharged from institutions and sent to live in the community, it became clear that their survival required access to a wide range of community services, including mental and physical health care, housing assistance, and income supports. ^{1.2} Income support programs, and especially the Supplemental Security Income (SSI) program, have been identified by policy analysts and researchers as critical resources without which deinstitutionalization would not have been possible. ^{2.3}

When homelessness among people with serious mental illness emerged as a serious problem in the early 1980s, indirect evidence suggested that income support was among the most important factors differentiating mentally ill people who were domiciled from those who were homeless.4 A study of soup kitchen users in Chicago⁵ showed that the most consistent difference between domiciled and homeless persons with mental illness was access to income supports (particularly SSI), and a longitudinal outcome study of homeless mentally ill veterans identified a significant relationship between increased public support payments and successful housing outcomes.6

Efforts to provide comprehensive community care to people with serious mental illness are impeded by barriers to services and especially by a lack of interagency coordination. Homeless people with mental illness are often distrustful of large, impersonal agencies, have significant cognitive impairments, and lack family members to help them negotiate complex bureaucratic procedures. Furthermore, agency staff who provide services to these clients often lack the time, expertise, or interest needed to provide special assistance.

This paper presents the results of a special initiative designed to improve access to Social Security benefits, including both SSI and Social Security Disability Insurance

(SSDI), among homeless mentally ill veterans participating in the Department of Veterans Affairs (VA) Health Care for Homeless Veterans (HCHV) program. Since 1987, the HCHV program has provided outreach, case management, and residential treatment services to more than 220 000 homeless veterans in 34 states and the District of Columbia. In 1991, the central offices of the VA and the Social Security Administration (SSA) designed and implemented the SSA–VA Joint Outreach Initiative to address problems associated with completing disability applications among clients of the HCHV program.

Application for either SSI or SSDI requires a detailed and systematic review of evidence by 2 types of front-line adjudicators. First, a Social Security claims representative must file an initial application and evaluate nonmedical evidence of eligibility (e.g., low employment income for SSI, sufficient work quarters for SSDI). A disability determination analyst, an employee of the state's Disability Determination Service, then must review medical evidence to determine whether the applicant meets disability criteria. In the SSA–VA initiative, both a Social Security claims representative and a

Robert Rosenheck is with the Northeast Program Evaluation Center, VA Connecticut Health Care System, West Haven, Conn; the Yale University Department of Psychiatry; and the Yale School of Epidemiology and Public Health, New Haven, Conn. Linda Frisman is with the Yale University Department of Psychiatry and the University of Connecticut Department of Psychology, Storrs, Conn. Wesley Kasprow is with the Northeast Program Evaluation Center, VA Connecticut Health Care System, West Haven, Conn, and the Yale University Department of Psychiatry.

Requests for reprints and correspondence should be sent to Robert Rosenheck, MD, 182, Northeast Program Evaluation Center, 950 Campbell Ave, West Haven, CT 06516 (e-mail: robert.rosenheck@yale.edu).

This paper was accepted October 13, 1998.

state disability determination analyst were colocated with HCHV clinical teams to facilitate applications for Social Security benefits.

This service integration effort was distinguished by 2 features. First, since the project was developed and supported at the national level of both VA and SSA, it represents a "top-down" approach to service integration as contrasted with a provider-initiated "bottomup" approach. Second, unlike programs that seek to foster integration across multiple agencies spanning entire service systems, 8,9 the SSA–VA Joint Outreach Initiative focused on improving the interaction between 2 agencies—an "agency-specific" approach rather than a "system-wide" approach.

The project had 3 objectives: (1) to increase applications for SSI and SSDI among entitled veterans; (2) to increase awards for disability benefits; and (3) to increase the proportion of timely decisions, defined as those made within 90 days of the application.

Methods

The SSA-VA Joint Initiative

In 1991, 3 colocation projects were implemented at VA medical centers in New York City, NY; Brooklyn, NY; and Dallas, Tex, with a fourth starting in May 1993 in Los Angeles, Calif. At each site, the VA designated a social worker to be responsible for (1) facilitating referrals for SSA benefits from VA clinical staff, (2) shepherding claims through the application process, and (3) helping to obtain medical records and other information required to support the application. Local SSA field offices colocated claims representatives with HCHV teams to increase understanding of the application process among VA staff and to initiate disability claims directly. Disability analysts were also designated to work directly with the HCHV teams. At the Los Angeles site, the same 2 SSA staff members performed the tasks of both the SSA claims representative and the disability determination analyst.

Evaluation Design

The evaluation design was a pre-post nonequivalent control group design that compared benefit outcomes for veterans at SSA-VA Joint Outreach Initiative sites with those for veterans at comparison sites 2 years before and 2 years after implementation of the program. Outcomes of central interest included (1) the proportion of the veterans who applied for SSI or SSDI within 90 days of intake, (2) the proportion who received

awards, and (3) the proportion of the sample for whom a decision was made within 90 days of the application.

Sample

The full sample (N = 34431) included all veterans who received intake assessments at HCHV program sites during the 2 years before the intervention began (n = 14323) and the 2 years after it began (n = 20108). Program entry occurred at 4 special program sites (n = 6709) and at 34 comparison sites (n = 27722). SSA-VA programs began operation at the 3 Joint Outreach Initiative sites between July and September 1991 and at the fourth site in May 1993; site-specific start dates were used to define preproject and postproject periods at those sites. August 1, 1991, was used as the equivalent pre-post marker for the comparison sites.

Sources of Data

Structured intake assessments documenting sociodemographic and clinical factors were completed by HCHV program staff as part of a standard evaluation of all veterans entering the program. A second source of information was an extract of data compiled from 3 SSA databases: (1) the SSI Extract (documenting SSI applications and benefits), (2) the Master Benefit Record (documenting SSDI applications and benefits), and (3) the 831 files (documenting the work of the state Disability Determination Services). SSA records were keyed to the date of the veteran's intake with the HCHV program and were used to document applications, awards, and related dates. Information on the time from application to the initial disability determination was available for SSI applications but not for SSDI applications (because the date of actual application is not recorded in the SSDI files). Data extracts were made in 1996, more than 3 years after the last study client entered the program.

Statistical Analyses

First, we tested characteristics of the veterans in the sample to identify variables that were significantly different across site types and time periods and thus might bias our results.

We then used χ^2 tests to determine the significance of differences between the SSA-VA Joint Outreach Initiative sites and the comparison sites in the 3 outcomes of interest. All comparisons were made for veterans who entered the HCHV program in the 2 years before the SSA-VA Joint Outreach Initiative began and during the 2 years after the program began.

Next, we used multiple logistic regression to evaluate the interaction of site type (SSA-VA Joint Outreach Initiative site vs comparison site) and time (2 years pre-program implementation vs 2 years post-program implementation) in predicting specified outcomes, with adjustment for potentially confounding factors. A significant interaction term indicates that rates of change over time are significantly different across site types.

Administrative Costs

We also analyzed the cost of improving access to benefits from the perspective of the government funding agencies (SSA and VA). We calculated the additional annual costs of the program at intervention sites and divided the amount by the increased number of awarded cases per site per year at these sites compared with those at the comparison sites.

Results

Sample Characteristics

On average, the sample was aged 42.4 years (standard deviation [SD] = 4.5 years) and was 98% male, 48% White, 48% Black, 3% Hispanic, and 1% other ethnicity. One fourth (25%) had been homeless for less than 1 month, 48% for 1 month to 1 year, and 27% for more than 1 year. Only 5.5% were married, 59.8% were separated or divorced, 31.3% had never married, and 3.4% were widowed. Just under half (45%) reported a serious medical problem, and two thirds (68%) had been hospitalized for any mental illness. Overall, the sample reported 2.2 (SD = 6.7) days of drinking to intoxication in the past 30 days and 3.1 (SD = 7.5)days of drug use. The subjects had worked for pay for an average of only 2.4 (SD = 6.1) days during the previous 30 days, and 46% received some type of VA or non-VA public support. Non-mutually exclusive clinical diagnoses included alcohol abuse or dependency (63%), drug abuse or dependency (40%), affective disorder (27%), personality disorder (16%), posttraumatic stress disorder (10.4%), schizophrenia (10.1%), other psychotic disorders (6.7%), and other psychiatric disorders (13.8%). One third (30%) had dual diagnoses.

Comparison across time periods and between intervention and comparison sites revealed statistically significant differences for several variables. As a result, the following client characteristics were included as covariates in the multivariate analyses reported below: age, race, past hospitaliza-

TABLE 1—Application and Award Rates at Intervention and Comparison Sites Across 6-Month Time Periods During the 2 Years Before the SSA-VA Joint Outreach Initiative Began (Times 1-4) and the 2 Years After the Initiative Began (Times 5-8)

Time Period ^a	Intake Evaluations	Applied in <90 Days	Awarded Benefits	Applied <90 Days, % ^b	Awarded Benefits Among	
					Applicants, %c	All Intakes, %
			Intervention Site	s		
1	433	33	19	7.6	57.6	4.4
2	527	36	22	6.8	61.1	4.2
3	480	31	22	6.5	71.0	4.6
4	776	76	42	9.8	55.3	5.4
1–4	2216	176	105	7.9	59.7	4.7
5	839	114	86	13.6	75.4	10.3
6	920	163	98	17.7	60.1	10.7
7	1266	235	135	18.6	57.4	10.7
8	1468	337	195	23.0	57.9	13.3
5–8	4493	849	514	18.9	60.5	11.4
			Comparison Site	S		
1	3173	205	112	6.5	54.6	3.5
2	3078	257	177	8.3	68.9	5.8
3	2642	259	159	9.8	61.4	6.0
4	3214	295	197	9.2	66.8	6.1
1–4	12 107	1016	645	8.4	63.5	5.3
5	3727	374	255	10.0	68.2	6.8
6	3815	442	302	11.6	68.3	7.9
7	3932	437	285	11.1	65.2	7.2
8	4141	478	282	11.5	59.0	6.8
5–8	15615	1731	1124	11.1	64.9	7.2

Note. SSA-VA = Social Security Administration-the Department of Veterans Affairs.

tion, medical problems, psychiatric diagnoses, alcohol and drug use, and receipt of public support payments.

Application and Awards

Comparison of the proportion of veterans who applied for benefits and who received awards at intervention sites and comparison sites during the 2 years before the intervention (Table 1) reveals only 1 significant difference: intervention sites had lower application rates (6.5% vs 9.8%) at time period 3, 1 year before the intervention began. There were no significant differences in summary rates of application or award among veterans admitted to the program during the entire 2-year period before program implementation (see Table 1 rows labeled 1–4).

During the 2 years after the intervention began, application rates were significantly higher at demonstration sites at each time point (Table 1). During the 2 years of the initiative, 18.9% of the veterans at project sites applied for SSI or SSDI, compared with only 11.1% at comparison sites ($\chi^2_1 = 190.3, P < .001$).

Among veterans who applied for benefits during the 2 years of the intervention, a smaller

proportion received awards at intervention sites than at comparison sites (60.5% vs 64.9%; $\chi^2_1 = 4.7$, P < .03). However, because of the overall increase in the number of applicants at intervention sites, a significantly greater proportion of the HCHV veterans at those sites received SSI or SSDI benefits during each 6-month period after program implementation. Cumulatively, during these years, 11.4% of all veterans evaluated at project sites were awarded SSI or SSDI benefits, compared with only 7.2% at comparison sites ($\chi^2_1 = 89.9$, P < .001).

Timely Decisions

Analysis of the proportion of decisions made within 90 days of application showed a significantly higher proportion of timely decisions at intervention sites, both before and after the intervention began (20% vs 0% before the intervention, $\chi^2_1 = 26.6$, P < .001; 58% vs 34% after the intervention, $\chi^2_1 = 112.3$, P < .001).

Logistic Regression

Among all veterans with intake assessments (N = 34431), significant interaction

effects were observed for both the likelihood of application (Wald $\chi^2 = 65.5$, P < .001) and the likelihood of award (Wald $\chi^2 = 33.0$, P < .001), indicating greater increases in application and award over time among veterans entering the HCHV program at the SSA-VA Joint Outreach Initiative sites.

Interaction of site type and time in predicting the likelihood of award among those who applied for benefits had no significant effect (Wald $\chi^2 = 0.08$, P = .77). In addition, no significant interaction was found between site type and the likelihood of reaching a decision within 90 days of application (Wald $\chi^2 = 0.004$, P = .95).

Administrative Costs

We used 1992 salary rates, including fringe benefits, to estimate personnel costs for the VA social worker, part-time VA psychologist, and 2 staff members provided by the SSA and the state Disability Determination Service. Annual costs were between \$139000 and \$153000 per site.

On average, over the entire 2 years of the project, 48 more veterans received benefits per year per site at the SSA-VA sites

^aTime periods are sequential 6-month intervals beginning 2 years before the SSA-VA Joint Outreach Initiative was implemented.

bIntervention sites had significantly lower application rates at time 3 (χ^2_1 = 5.39, P < .02) but higher application rates at times 5 (χ^2_1 = 9.1, P < .001), 6 (χ^2_1 = 25.9, P < .001), 7 (χ^2_1 = 47.2, P < .001), and 8 (χ^2_1 = 113.7, P < .001) and cumulatively across times 5–8 (χ^2_1 = 190.3, P < .001).

^cAmong applicants, intervention sites had significantly lower award rates at time 7 ($\chi^2_1 = 3.9$, P < .05) and cumulatively across times 5–8 ($\chi^2_1 = 4.74$, P < .03).

^dAmong all intakes, intervention sites had significantly higher award rates at times 5 (χ^2_1 = 11.5, P < .001), 6 (χ^2_1 = 7.17, P < .007), 7 (χ^2_1 = 15.0, P < .001), and 8 (χ^2_1 = 58.4, P < .001) and cumulatively across times 5–8 (χ^2_1 = 89.9, P < .001).

than at the comparison sites (64 awarded cases per year per site at intervention sites vs 17 at comparison sites). However, during the last 6 months of the project, when staff were most experienced and working most efficiently, 81 more veterans per year received awards at the SSA–VA Joint Outreach Initiative sites than at the comparison sites (98 awarded cases per year per site at intervention sites vs 17 at comparison sites).

A sensitivity analysis that used maximum and minimum budget and productivity scenarios generated estimates of the administrative cost per additional award, which ranged from a low of \$1700 per award to a high of \$3200 per award.

Discussion

Review of Findings

Data presented in this study show that access to disability benefits among homeless persons with mental illness can be improved significantly by colocation of staff from an income support agency with clinical staff from a specialized mental health program. No significant differences in either applications or awards were found between veterans seen at the 2 types of HCHV sites during the 2 years before the SSA-VA Joint Outreach Intervention; however, during the 2 years of project operation, veterans at intervention sites were almost twice as likely as those at comparison sites to apply for benefits (18.9% vs 11.1%) and to receive awards (11.4% vs 7.2%). Although program costs were substantial, it is evident that as SSA-VA Joint Outreach Initiative teams develop experience, they operate with increasing efficiency. Presumably, their administrative efficiency can be improved with additional experience.

Although project sites showed a substantial increase in applications for benefits, the proportion of applicants who received benefits decreased significantly, and timely decisions did not increase significantly in comparison with control sites. Thus, the project encouraged applications but did not improve the award rate among applicants or the proportion of timely decisions, perhaps because the encouragement to make large numbers of referrals resulted in applications from some less impaired candidates.

Data on timely decisions are difficult to interpret for 2 reasons. First, because information on time to decision is not available on SSDI applications, our data on decision times are incomplete. Second, because SSA-VA Joint Outreach Initiative sites had a substantially lower proportion of timely decisions before the project began, interpretation of the

findings for this outcome is difficult. This difficulty in interpretation is a characteristic problem in noncomparable control group design studies.

Limitations

Several methodological limitations require comment. First, this study was based on a nonequivalent control group design, in which access to the SSA-VA Joint Outreach Initiative was based on the community in which the veteran happened to live when he or she contacted the VA rather than on random assignment. Thus, the observed differences in application and award rates may be attributable to factors other than the SSA-VA Joint Outreach Initiative, such as changes in local SSA policies or procedures or in the characteristics of veterans seen at the demonstration sites. Before the intervention began, the proportion of applicants at SSA-VA Joint Outreach Initiative sites declined for three 6-month periods and then increased, whereas at comparison sites, application rates increased steadily for three 6-month periods and then declined. The only significant difference identified was a lower rate of application at future intervention sites at one time point. Thus, although proportions of applicants differed, such differences were not statistically significant in general, and we do not believe they constitute a systematic bias. In addition, we used multivariate techniques to adjust for the influence of the modest differences in veteran characteristics that were observed between site types and over time. We cannot, however, rule out selection bias as a possible explanation for our findings.

Second, because this initiative involved a program specifically targeted at veterans, who are also potentially eligible for VA benefits, its generalizability to other populations is uncertain. An uncontrolled study of a special VA outreach program that focused on improving homeless veterans' access to VA benefits found that only about 8% of homeless veterans received new or expanded VA benefits. ¹⁰ Because veterans have access to special disability and pension benefits other than SSI and SSDI, an outreach program such as the SSA-VA Joint Outreach Initiative could yield even greater benefits for nonveterans who have fewer alternatives to SSI and SSDI.

Third, this study was conducted before the implementation of Public Law 104-121, which eliminated eligibility for SSI and SSDI on the basis of alcohol and drug disorders, in January 1997. If the effect of the VA-SSA Joint Outreach Initiative was largely a result of obtaining benefits for veterans with addictive disorders, the relevance of the study to current circumstances might be substantially reduced. We used the SSI extract file to determine that

across all time periods, only 286 awards (12%) were based on substance abuse. There was no significant difference between Joint Outreach Initiative sites and control sites in the proportion of awards granted for alcohol or drug users before the intervention (5.7% of awards at intervention sites vs 10.1% at comparison sites: $\chi^2_1 = 2.0$, P = .16). After the intervention, the proportion of such beneficiaries at comparison sites was significantly larger (9.1% of awards at intervention sites vs 14.9% at comparison sites: $\chi^2_1 = 10.4$, P = .002). Awards on the basis of addictive disorders were thus a relatively small proportion of all awards and were less common at Joint Outreach Initiative sites than at comparison sites.

Implications for Implementation of Entitlement Policy

The American public has expressed considerable ambivalence about public support programs in recent years. On the one hand, the reform of welfare for able-bodied persons has been popular, and its strict employment requirements and time-limited benefits have led to a much-celebrated decline in the rolls of the Temporary Assistance to Needy Families program (formerly known as Aid to Families of Dependent Children). 11 On the other hand, people have been consistently concerned about the plight of the homeless, and no serious attacks on the nation's disability programs for adults have occurred such as those that were launched against Aid to Families of Dependent Children.

It is especially notable that with special assistance from the SSA-VA Joint Outreach Initiative, the number of homeless mentally ill veterans found to be eligible for benefits almost doubled. These figures suggest that substantial numbers of homeless people with mental illness are entitled to income supports but do not obtain them, presumably because of the kinds of access barriers noted previously. An outcome study of the HCHV program showed that increased public support payments were associated with reduced homelessness (with no increase in substance use).6 Thus, entitlement outreach programs like the one described here show promise for alleviating the plight of some of society's most disadvantaged members by helping them access benefits to which they are legally entitled and that would otherwise be inaccessible.

Service System Integration

The project described here represents one of the few efforts at interagency service integration that has shown clear, specific benefits

at the client level. Several studies of service system integration have found that services for people with mental illness are more effective when delivered in integrated systems, ^{12,13} but only one other study, to our knowledge, has examined the effect of an initiative specifically directed at improving service system integration. ¹⁴ The current study shows that agency-specific efforts at service integration can also enhance service accessibility. In addition to the direct effect of such focused efforts on clients, such dyadic interorganizational interactions are likely to constitute the building blocks of fully integrated service systems.

Contributors

R. Rosenheck directed the study, designed and managed the study with L. Frisman, and was responsible for analyzing the data. L. Frisman also designed, implemented, and managed the program and collaborated in the data analysis and writing the paper. W. Kasprow contributed to the program management and participated in analyzing the data and writing the paper.

Acknowledgments

This project was made possible by the combined efforts of Paul Errera, MD, and Gay Koerber from the Department of Veterans Affairs (VA) and Rhoda Davis and Peter Gilmore from the Social Security Administration (SSA). We would also like to acknowledge the contributions of Mark Green, Karen Wilson, Georgina Harding, and Beverly Crawford from SSA; and Henrietta Fishman, Karen

Kopitz, Joseph Macaluso, Ellen Carter, John Barilich, William Daniels, Tim Shea, Sharon Crowder, Mavis Sandiford, and Jerry Berad from VA. Charles Scott and Mary Barbour assembled the SSA data set and provided invaluable assistance in accessing and analyzing those data. Diane Dilella, Dennis Thompson, and Donald Showalter provided data management and analytic support at the Northeast Program Evaluation Center.

References

- Bachrach LL. Deinstitutionalization: An Analytic Review and Sociological Perspective.
 Rockville, Md: National Institute of Mental Health; 1976.
- Goldman HH, Morrissey JP. The alchemy of mental health policy: homelessness and the fourth cycle of reform. Am J Public Health. 1985;75:727-731.
- Lerman P. Deinstitutionalization and the Welfare State. New Brunswick, NJ: Rutgers University; 1984.
- Rossi P. Down and Out in America: The Causes of Homelessness. Chicago, Ill: University of Chicago Press; 1989.
- Sosin MR, Grossman S. The mental health system and the etiology of homelessness: a comparison study. *J Community Psychol*. 1991; 19:337–350.
- Rosenheck RA, Frisman LK, Gallup PG. Effectiveness and cost of specific treatment elements in a program for homeless mentally ill veterans. *Psychiatr Serv.* 1995;46:1131–1139.
- 7. Federal Task Force on Homelessness and Mental Illness. Outcasts on Main Street: Report of the Federal Task Force on Homelessness and

- Mental Illness. Washington, DC: US Dept of Health and Human Services and the Interagency Council on the Homeless; 1992. Publication ADM 92-1904.
- Goldman HH, Morrissey JP, Ridgely MS, Frank RG, Newman SJ, Kennedy C. Lessons from the Program on Chronic Mental Illness. Health Aff (Millwood). 1992;11:51-68.
- Randolph FL, Blasinsky M, Leginski W, Parker LB, Goldman HH. Creating integrated service systems for homeless persons with mental illness: the ACCESS program. Access to Community Care and Effective Services and Supports. *Psychiatr Serv.* 1997; 48:369-373.
- Leda C, Rosenheck RA, Corwel L. The Pilot Evaluation of Veterans Benefits Administration's Homeless Outreach Program. West Haven, Conn: VA Northeast Program Evaluation Center; 1992.
- DeParle J. Success and frustration, as welfare changes. New York Times, December 30, 1997:A1.
- Rosenheck RA, Morrissey J, Lam J, et al. Service system integration, access to services and housing outcomes in a program for homeless persons with severe mental illness. Am J Public Health. 1998;88:1610–1615.
- Beiser M, Shore JH, Peters R, Tatum E. Does community care for the mentally ill make a difference? A tale of two cities. Am J Psychiatry. 1985;142:1047–1052.
- Lehman AF, Postrado LT, Roth D, McNary SW, Goldman HH. Continuity of care and client outcomes in the Robert Wood Johnson Foundation Program on Chronic Mental Illness. *Milbank Q*. 1994;72:105–122.

528 American Journal of Public Health April 1999, Vol. 89, No. 4