*This article addresses the Core Competency of **Practice-Based Learning and Improvement***

Implementing Coordinated Specialty Care for Early Psychosis: The RAISE Connection Program

Lisa B. Dixon, M.D., M.P.H., Howard H. Goldman, M.D., Ph.D., Melanie E. Bennett, Ph.D., Yuanjia Wang, Ph.D., Karen A. McNamara, M.S.W., Ph.D., Sapna J. Mendon, M.S.W., Amy B. Goldstein, Ph.D., Chien-Wen J. Choi, M.S., Rufina J. Lee, M.S.W., Ph.D., Jeffrey A. Lieberman, M.D., Susan M. Essock, Ph.D.

Objective: The RAISE (Recovery After an Initial Schizophrenia Episode) Connection Program Implementation and Evaluation Study developed tools necessary to implement and disseminate an innovative team-based intervention designed to promote engagement and treatment participation, foster recovery, and minimize disability among individuals experiencing early psychosis. This article describes the treatment model and reports on service utilization and outcomes. It was hypothesized that individuals' symptoms and functioning would improve over time.

Methods: A total of 65 individuals in RAISE Connection Program treatment across two sites (Baltimore and New York City) were enrolled and received services for up to two years. Primary outcomes, including social and occupational functioning and symptoms, were evaluated. Trajectories for individuals' outcomes over time were examined with linear and quadratic mixed-effects models with repeated measures.

Results: Measures of occupational and social functioning improved significantly over time, symptoms declined, and rates of remission improved. Visits were most frequent during the first three months, with a mean±SD of 23.2±11.5 unduplicated staff encounters per quarter. Such encounters decreased to 8.8±5.2 in the final quarter of year 2.

Conclusions: The overall project was successful in that the treatment program was delivered and tools useful to other clinical settings were produced. The strengths of this study lie in the demonstrated feasibility of delivering the coordinated specialty care model and the associated high rates of engagement among individuals who are typically difficult to engage in treatment. Notwithstanding the lack of a built-in comparison group, participant outcomes were promising, with improvements comparable to those seen with other successful interventions.

Psychiatric Services 2015; 66:691–698; doi: 10.1176/appi.ps.201400281

Research has demonstrated that shorter duration of untreated psychosis is associated with better treatment outcomes (1) and that the deleterious effects of psychotic illness on cognitive and social functioning are most dramatic within the first five years after the emergence of psychotic symptoms (2,3). These findings support a conceptualization of schizophrenia as a modifiable illness, with the initial onset of symptoms representing a particularly important period for the disorder and, therefore, an opportune time for intervention. Researchers worldwide have tested this conceptualization of schizophrenia, examining individual interventions such as low doses of antipsychotic medications (4,5), cognitive and behavioral psychotherapy (6–9), family education and support (10–12), and educational and vocational rehabilitation (13,14; Nuechterlein KH, Subotnik KL, Ventura J, et al., unpublished manuscript, 2014). These components have been combined into a program of early intervention to promote clinical and functional recovery in international settings and some academic settings in the United States (15–19), but they have not yet been tested in routine community mental health centers.

In the United States, this conceptualization has led to a new care model to foster recovery and prevent disability among individuals with first-episode schizophrenia (20). The National Institute of Mental Health's (NIMH's) Recovery After an Initial Schizophrenia Episode (RAISE) initiative has funded the development and testing of coordinated specialty care programs. These are team-based, multielement interventions that include evidence-based components for the care of individuals experiencing early nonaffective psychosis. The RAISE Connection Program is an example of one such coordinated specialty care program (21).

The RAISE Connection Program involved a multidisciplinary and multielement treatment team that provided a range of treatment components, including medication, supported employment and education, family support and education, psychoeducation, skills training and support based on cognitive-behavioral methods, substance abuse treatment, and suicide prevention. Teams served up to 25 individuals and included a full-time team leader, a full-time individual placement and support (IPS) worker, a half-time recovery coach, and a 20%-time psychiatrist (22).

All aspects of treatment emphasized shared decision making, recovery, and the view that disability can be minimized by treatment and community support (23). The treatment team had an ongoing focus on maintaining engagement and facilitating treatment participation, providing services in the community when needed. Frequency of contact with participants was designed to be flexible and depended on a participant's stage of treatment, needs, and preferences; there were no required program components. In addition to meetings with participants, treatment teams met together weekly for communication and coordination. The treatment model specified that, on average, participants would receive RAISE Connection Program services for up to two years. Program discharge occurred when individuals made a satisfactory transition to other services or, in rare cases, when an individual declined further contact. In those cases, individuals were informed that they were welcome to return to care (22).

The RAISE Connection Program was proposed as an eight-site randomized controlled trial comparing the Connection Program intervention to usual care enhanced by a manualized case management approach. After the initial pilot work was completed, NIMH redirected the work of the contract, requesting that the research continue not as a randomized trial but as an implementation and impact study to develop and evaluate tools necessary to implement and disseminate a multicomponent intervention for first-episode psychosis. The clinical impact of the intervention was still measured, with primary outcome analyses focused on trajectories over time for symptoms and for social and occupational functioning. We hypothesized that the RAISE Connection Program intervention would be effective and that, over time, both symptoms and functioning among individuals would improve (compared with the null hypothesis that they would stay the same). In this overview, we describe the treatment model and report on service utilization and on participants' outcomes on measures of social and occupational functioning and symptoms. Companion papers present information on the state partnerships that brought the work to fruition (24), a proposed funding model (25), findings from qualitative interviews with participants (26), and our approach to measuring fidelity and fidelity findings (27).

METHODS

Participants

A total of 65 individuals were enrolled in RAISE Connection Program services across two sites, one in Baltimore and one in New York City. Community stakeholders helped develop systematically applied strategies to identify participants, including Web-based recruitment and advertisements, and to conduct outreach to hospitals, clinicians, and community agencies. A description of recruitment and outreach strategies used in the study are described in a manual that is available online (28).

Participants were individuals ages 15–35 (≥16 in New York) who met Structured Clinical Interview for DSM-IV (SCID) criteria for a diagnosis of schizophrenia, schizoaffective disorder, schizophreniform disorder, delusional disorder, or psychosis not otherwise specified (29). Individuals who were eligible for inclusion had experienced psychotic symptoms of at least one week's duration with onset within the prior two years, were able to speak and understand English, and were available to participate in the intervention for at least one year. Individuals were ineligible if they met any of the following exclusion criteria: nonpsychiatric medical condition that impaired functioning, psychosis due solely to another condition, or developmental disability. All participants (and, for minors, the participant's parent or guardian) provided informed consent; minors provided assent. The institutional review boards of the New York State Psychiatric Institute and the University of Maryland approved study procedures. The NIMH Data and Safety Monitoring Board provided study oversight. [A CONSORT diagram and description of participant flow are included in an online data supplement to this article.]

Training

Team members received extensive training and supervision in the specific treatment modalities (described above) and in team functioning from national experts who created the intervention and manuals. An initial in-person training was followed by weekly or biweekly teleconferences supplemented by additional in-person training when needed. Detailed manuals were created for each treatment component, and fidelity to intervention components was maintained by ongoing supervision. Manuals for OnTrackNY, the New York extension of the RAISE Connection Program, are available online (30–34). The original RAISE Connection Program manuals are available from the authors on request.

Procedures

Trained clinical research interviewers completed standardized assessments at baseline and at six, 12, 18, and 24 months or until data collection ended on June 30, 2013. Study recruitment ran from July 1, 2011, through February 7, 2013. Because of the predetermined study timeline, all research interviews ended on June 30, 2013. As a result, participants had research follow-up periods of variable length. Individuals who were enrolled after February 7, 2011, or who declined further participation had shorter follow-up periods. The mean±SD length of follow-up for research assessments was 546±174 days (range 65–730 days). Completion rates for follow-up interviews ranged from 75% to 90% and were similar across sites (Table 1). (Note that individuals could continue to receive services even if they refused to participate in research assessments.)

Assessments

Domains assessed included background and demographic characteristics; social and occupational functioning, including participation in work or school; symptoms; diagnosis; neuropsychological functioning; substance use; comorbid medical

conditions; recovery; stigma; medication use and related side effects; and individuals' experience of the treatment model, including shared decision making. [A table in the online supplement lists the assessments and their timing, along with the sample's baseline values for all measures.] To streamline the recruitment process, individuals were evaluated with an abbreviated SCID—referred to as the "eligibility SCID"—before enrollment. A full SCID (27) and the Premorbid Adjustment Scale (35) were completed at three months.

Primary outcomes included social and occupational functioning, measured with the MIRECC Global Assessment of Functioning (GAF) occupational and social scales (36), with anchors adapted for individuals with early psychosis. Unlike the traditional GAF, the MIRECC GAF separates the measurement of social and occupational functioning from the measurement of symptoms. For the MIRECC GAF, on which possible scores range from 0 to 100, scores of 40 are in the dysfunctional range, with scores of 70 approaching the normal range. We assessed symptoms using the Positive and Negative Syndrome Scale (PANSS) (37). Possible scores on each PANSS item range from 1, absent, to 7, extreme. Individuals were considered to be in remission when no score on a PANSS item (delusions, conceptual disorganization, hallucinatory behavior, mannerisms and posturing, and unusual thought content) exceeded 3 (mild). We obtained interrater reliability for each primary outcome variable. Cumulative intraclass correlation coefficients ranged from .71 to .95, by site and by rater.

The number and days of hospitalizations were obtained from participant self-report and from study reports of serious adverse events. We considered two or more psychiatric hospitalizations separated by medical transfers without discharge between transfers to be one hospitalization event.

Statistical Analysis

In the primary and secondary outcome analyses, we estimated the average rate of change over time on primary measures of social and occupational functioning, on total symptoms, and on secondary measures of rate of remission and participation in work or education. In particular, we tested whether primary and secondary outcomes improved over time (compared with staying the same over time). To test this hypothesis, we used linear mixed-effects models with random intercepts and random slopes (continuous measures) or generalized linear mixed-effects models (categorical measures) to estimate the overall average rate of change over time for all participants by using all available data. Follow-up time was defined as time since baseline assessment. We examined both linear and nonlinear models (for example, quadratic models and piecewise linear models). For primary outcomes, quadratic models did not substantially improve model fit, and thus we report results from linear models. Among secondary outcomes, a piecewise linear model with a knot at month 6 provided better fit for the log-odds of remission than the linear model and thus was used. A linear model provided adequate fit for other secondary outcomes. We computed the effect sizes of primary outcomes as the mean changes over 24 months estimated from linear mixed-effects models divided by the standard deviations measured at baseline (38).

TABLE 1. Completion rates for RAISE Connection Program research interviews for each time point[a]

		Completed interview	
Follow-up month	Sample size	N	%
6	63	57	90
12	57	44	77
18	47	36	75
24	20	15	75

[a] RAISE, Recovery After an Initial Schizophrenia Episode. All 65 participants were interviewed at baseline.

Engagement

For this report, engagement was defined by service utilization. Use of services and treatment visits were aggregated by service quarter. To evaluate engagement quantitatively, we computed each participant's length of time in the study from the date of first clinical visit to either one month before the study end date (May 31, 2013), or the date of program discharge. Engagement was the percentage of time that each individual remained on the team roster, given the total possible length of treatment or time in the study. The numerator was calculated by counting the number of days between the first clinical visit to the date of clinical discharge or end of the study. The denominator was the maximum possible length of treatment or maximum participation in the study. For individuals enrolled after June 1, 2011, this was less than two years, whereas individuals enrolled before that date could have been enrolled for a full two years.

Hospitalization

We report descriptive statistics on hospitalization, including the proportion of participants who were hospitalized at least once, the total number of hospitalizations, and the median length of stay. We used survival analysis (Kaplan-Meier curve) to analyze time to hospitalization to estimate the risk of hospitalization by a given follow-up time (360 days and 720 days) after baseline.

RESULTS

Participant Characteristics

The mean±SD age of the 65 participants was 22.2±4.2, and 41 (63%) were male. Eight (12%) were under age 18. Almost all (N=63, 97%) had never been married. A total of 28 (43%) identified themselves as black, 25 (39%) as white, four (6%) as Asian or Pacific Islander, one (2%) as American Indian or Alaska Native, and one (2%) as multiracial; six (9%) did not specify a group. Sixteen participants (25%) described themselves as Latino or of Hispanic origin. Most were living with parents (N=42, 65%) or other relatives (N=7, 11%). Only two (3%) were living alone, and only two (3%) were living with a spouse or significant other. Table 2 summarizes data on other baseline characteristics of the sample. At baseline, 43% of the

TABLE 2. Baseline measures for RAISE Connection Program participants[a]

Measure	N	%
SCID diagnosis[b]		
Schizophrenia	43	66
Schizoaffective disorder	9	14
Schizophreniform disorder	4	6
Psychosis not otherwise specified (NOS)	3	5
Brief psychotic disorder	1	2
No diagnosis suggesting eligibility[c]	2	3
Unknown	3	5
Co-occurring lifetime diagnosis with SCID[d]		
Bipolar disorder NOS	2	3
Depressive disorder NOS	15	25
Panic disorder	3	5
Social phobia	2	3
Obsessive-compulsive disorder	1	2
Posttraumatic stress disorder	5	8
Anxiety disorder NOS	3	5
Substance use disorder		
Alcohol	12	20
Sedative-hypnotic-anxiolytic	1	2
Cannabis	22	37
Stimulant	1	2
Opioid	2	3
Cocaine	3	5
Hallucinogen or PCP	3	5
Employed or in school		
Neither	37	57
In school only	13	20
Employed only	9	14
Both	6	9
Rating scale (M±SD score)[e]		
MIRECC GAF occupational functioning scale	38.0±18.5	
MIRECC GAF social functioning scale	63.7±12.6	
PANSS positive symptoms	16.2±6.0	
PANSS negative symptoms	15.7±5.9	
PANSS general	32±7.1	
PANSS total	64.0±14.3	
In remission[f]	17	26
Hospitalizations in 6 months before study entry		
0	14	22
1	36	55
2	12	1
3	3	5
Health care coverage		
None	10	15
Unknown	5	8
Any health insurance	50	77
Medicare	8	12
Private plan through employer	3	5
Private plan through COBRA	2	3
Private plan through family member	23	35
Private plan through another person	2	3
Medicaid	15	23

[a] RAISE, Recovery After an Initial Schizophrenia Episode
[b] The Structured Clinical Interview for DSM-IV (SCID) was administered to 61 participants at 3 months and 1 participant at 12 months; 3 participants did not complete a SCID. All participants completed the provisional SCID at baseline, which permitted enrollment.
[c] The 2 participants had a diagnosis of psychotic mood disorder, bipolar type.
[d] For the 60 participants with a diagnosis suggesting eligibility
[e] Possible scores on the MIRECC Global Assessment of Functioning (GAF) range from 1 to 100, with higher scores indicating better functioning. Possible scores on the Positive and Negative Syndrome Scale (PANSS) range from 7 to 49, with higher scores indicating more severe symptoms. Possible PANSS general scores range from 16 to 112, with higher scores indicating more severe symptoms. Possible PANSS total scores range from 30 to 210, with higher scores indicating more severe symptoms.
[f] Individuals were considered to be in remission when no score on a PANSS item (delusions, conceptual disorganization, hallucinatory behavior, mannerisms and posturing, and unusual thought content) exceeded 3 (mild).

participants (N=28) were in school or working or both. Sites maintained fidelity to the model (27) and did not differ statistically in any outcomes.

Engagement

On average, participants met with team members most often during the first three months after entering the program (Table 3). The mean number of unduplicated staff encounters per individual in the first quarter was 23.2±11.5, which occurred on a mean of 15.1±8.0 days. In the final quarter of year 2, unduplicated staff encounters decreased over time to 8.8±5.2 on a mean of 6.3±3.4 days. Services provided by individual team members followed the same general pattern as overall service utilization. Each individual had a maximum number of days that he or she could work with the team on the basis of the individual's enrollment date and date of study completion. On average, participants received services from the teams for 91%±21% of the total time that was possible. The median time was 100%. Given the differing lengths of possible treatment exposure, only six of the 65 participants (9%) received services for less than 50% of the possible time they could be engaged.

Outcomes for Functioning and Symptoms

In the follow-up period, the score on the MIRECC GAF occupational functioning scale increased, on average, by .96 points per month (95% confidence interval [CI]=.60−1.32, p<.001), and the MIRECC GAF social functioning scale increased by .38 points per month (CI=.20–.56, p<.001). In the follow-up period, the PANSS total score decreased (improved), on average, by .54 points per month (CI=–.73 to –.35, p<.001). For every month of follow-up, the PANSS positive score decreased, on average, by .20 points (CI=–.28 to –.12, p<.001), the PANSS negative score decreased by .11 points (CI=–.20 to –.03, p=.01), and the PANSS general score decreased by .22 points (CI=–.38 to .13, p<.001). The odds of

TABLE 3. Use of services by RAISE Connection Program participants, by quarter[a]

Year and quarter	N	Team leader visit			Psychiatrist visit			IPS specialist visit[b]			Recovery coach individual visit			Recovery coach group visit			Total visits		
		M	SD	≥1 visit (%)	M	SD	≥1 visit (%)	M	SD	≥1 visit (%)	M	SD	≥1 visit (%)	M	SD	≥1 visit (%)	M	SD	≥1 visit (%)
Year 1																			
1	63	8.0	4.4	98	7.1	3.7	100	4.7	4.1	91	4.9	4.4	94	1.9	3.0	56	23.2	11.5	100
2	60	4.5	3.2	95	4.1	2.8	95	2.9	3.1	72	3.3	3.4	77	1.7	2.8	40	4.5	7.5	97
3	53	3.0	2.8	91	3.0	2.4	85	2.2	2.4	66	2.3	2.2	70	1.2	1.9	45	9.9	6.0	98
4	50	3.3	3.2	90	2.7	1.8	90	2.1	2.3	68	1.9	1.9	70	1.0	1.4	46	9.9	6.1	98
Year 2																			
1	42	2.9	2.9	74	2.9	2.4	83	2.0	2.8	69	1.8	1.9	64	.8	1.2	43	9.0	5.8	93
2	32	2.1	2.6	72	2.8	2.7	84	2.8	3.9	56	2.3	2.5	63	1.1	1.9	34	9.9	6.9	94
3	21	2.2	2.6	67	2.8	2.5	86	2.3	2.3	71	1.6	2.7	65	1.1	2.1	33	8.9	6.5	95
4	6	2.8	2.0	83	2.0	1.8	83	2.5	2.2	83	1.7	1.4	83	.7	1.2	33	8.8	5.2	100

[a] RAISE, Recovery After an Initial Schizophrenia Episode. Mean number of visits per participant and percentage of participants with at least 1 visit
[b] IPS, individual placement and support

remission increased 1.55 times (CI=1.31–1.83, p<.001) for each month from baseline to month 6. From month 6 to month 24, the odds of remission did not increase. For each participant, the odds of working or being enrolled in school increased 1.09 times (CI=1.04–1.14, p<.001) for each month in the follow-up period. Table 4 shows estimated effect sizes.

Hospitalization

Twenty-four participants (37%, CI=25%−49%) had at least one hospitalization during the study. The total number of psychiatric hospitalizations for these participants was 50, and the median duration of a psychiatric hospitalization was 28 days. On the basis of Kaplan-Meier analysis, the estimated risk of having a psychiatric hospitalization during the study period was 32% (CI=21%−45%) by day 360 and 45% (CI=2%−60%) by day 720.

DISCUSSION

The RAISE Connection Program demonstrated the feasibility of implementing a team-based service model providing a package of interventions previously demonstrated to be effective (39–43) that successfully engaged and retained individuals with first-episode psychosis in ongoing care. Participation in RAISE Connection Program services was associated with improved symptom outcomes and functional outcomes of participants. Further, the 10% rate of disengagement is lower than the 30% rate observed in a recent review of first-episode programs (44). Service utilization was highest in the first two quarters but then stabilized at a modest level over the subsequent 18 months. The large standard deviations reflect wide variation in need.

As hypothesized, improvements were found in both occupational and social functioning. Notably, MIRECC GAF occupational functioning scores approached normal levels; rates of school and work participation echoed these improvements. The study was limited by the absence of a concurrent control condition, and thus it is difficult to draw inferences about the specific impact of the program relative to an alternative. To mitigate this weakness, we compared our findings with those of published studies that implemented similar interventions. Our results were comparable to those of other international multicomponent first-episode programs. The rate of school and work participation seen with the RAISE Connection Program is consistent with that in other studies that offered supported employment and education services to individuals experiencing early psychosis (13,42,45,46). For example, the control arm of a randomized trial of IPS found a rate of employment of approximately 30% (42), a rate well exceeded in our sample. Although approximately 40% of individuals in the RAISE Connection Program were participating in work or school at study entry, roughly 80% were participating after two years. In a study in which IPS was offered to a cohort of individuals experiencing first-episode psychosis, elevated rates of school and work participation were found (46). IPS was subsequently removed, and rates of school and

TABLE 4. Impact of RAISE Connection Program on social and occupational functioning and symptoms[a]

Outcome	Mean monthly change[b]	Mean change over 24 months[c]		Effect size
		M	SD	
MIRECC GAF[d]				
Occupational functioning	.96	23.04	18.48	1.247
Social functioning	.38	9.12	12.64	.722
PANSS[e]				
Total	−.54	−12.96	14.26	−.909
Positive symptoms	−.2	−4.80	6.00	−.800
Negative symptoms	−.11	−2.64	5.95	−.444
General	−.22	−5.28	7.11	−.743

[a] RAISE, Recovery After an Initial Schizophrenia Episode
[b] Estimated from linear mixed-effects model analyses
[c] Estimated by multiplying monthly changes by 24
[d] Possible scores on the MIRECC Global Assessment of Functioning (GAF) range from 1 to 100, with higher scores indicating better functioning.
[e] Possible scores on the Positive and Negative Syndrome Scale (PANSS) range from 7 to 49, with higher scores indicating more severe symptoms. Possible PANSS general scores range from 16 to 112, with higher scores indicating more severe symptoms. Possible PANSS total scores range from 30 to 210, with higher scores indicating more severe symptoms.

work participation declined to less than 30% among clients of two separate service teams. With respect to social functioning, by the end of our study, the MIRECC GAF scores improved to 75 (SE=2.01, CI=71.06–78.96, as estimated from the model), which is slightly above the normal level of a score of 70.

Study hypotheses were also supported with respect to reduction in symptoms. Total PANSS scores and scores on each PANSS subscale improved over time, including the negative symptom subscale. Compared with previous findings, total PANSS scores were somewhat lower, both at baseline and follow-up, than scores of participants in EUFEST (European First Episode Schizophrenia Trial); EUFEST participants had baseline PANSS scores in the high 80s, whereas participants in this study had baseline scores in the mid-60s (47). At follow-up, PANSS scores of EUFEST participants dropped to the low 50s after one year, whereas the scores of RAISE Connection Program participants were estimated to drop to the high 40s after 24 months. Individuals in the RAISE Connection Program seemed to have been less symptomatic and more likely to have stabilized before enrollment in the program. Although our sample may have been less impaired than samples in other studies, the RAISE Connection Program participants improved, suggesting the value of ongoing comprehensive care.

Our study found a risk of hospitalization of 32% within a year and about 45% within two years; the confidence intervals are wide given the small sample. This rate of hospitalization is consistent with rates in other studies in which specialized early intervention services were provided (48–50), although it is not possible to assess the comparability of these samples. A meta-analysis of predictors of relapse among individuals experiencing a first episode of psychosis who did not necessarily receive specialized first-episode services found a pooled prevalence of hospital admissions of 26% (range 12%–56%) and 50% (range 41%–52%) at one- and two-year follow-ups, respectively (51). Further analyses will be required to understand how participation in the RAISE Connection Program may have affected hospitalization.

A primary goal of the revised project was to facilitate the future implementation of coordinated specialty care for early psychosis by creating materials that can be used by other service providers interested in establishing treatment programs for individuals with early psychosis. Materials developed in support of this work include the "Voices of Recovery" video series (52), which provides first-person accounts of individuals' experiences with early psychosis symptoms; treatment fidelity measures based largely on information that programs typically collect as part of routine administrative data (27); an interactive tool to help estimate the costs and staffing of treatment teams (53); an outreach and engagement manual; a guide to program implementation (including detailed descriptions of the program, clinic, and training and supervision requirements); and treatment manuals. All these materials are publicly available (practiceinnovations.org/OnTrackUSA/tabid/253/Default.aspx), and we hope that they will help increase capacity for effective treatment of early psychosis.

CONCLUSIONS

The team-based intervention for individuals with first-episode psychosis was implemented according to the model and achieved high rates of engagement and participation in treatment, including shared decision making and family involvement. Client outcomes were promising, showing improvements in both symptoms and functioning comparable to those seen in other successful interventions. Given the lack of a built-in comparison group, the primary strengths of this study are the demonstration of the feasibility of implementation of this program model and the associated high rates of engagement with these difficult-to-engage individuals.

AUTHOR AND ARTICLE INFORMATION

Dr. Dixon, Ms. Mendon, Ms. Choi, Dr. Lieberman, and Dr. Essock are with the New York State Psychiatric Institute, New York City (e-mail: dixonli@nyspi.columbia.edu). Dr. Dixon, Dr. Lieberman, and Dr. Essock are also with the Department of Psychiatry, Columbia University College of Physicians and Surgeons. Dr. Goldman, Dr. Bennett, and Dr. McNamara are with the Department of Psychiatry, University of Maryland School of Medicine, Baltimore. Dr. Wang is with the Division of Biostatistics, Mailman School of Public Health, Columbia University, New York City. Dr. Goldstein is with the Division of Services and Intervention Research, National Institute of Mental Health, Bethesda, Maryland. Dr. Lee is with the Silberman School of Social Work, Hunter College, City University of New York, New York City. This article is part of a special section on RAISE and other early intervention services. Marcela Horvitz-Lennon, M.D., M.P.H., served as guest editor of the special section.

This project was funded in part with federal funds from the American Recovery and Reinvestment Act of 2009, from the National Institute of Mental Health under contract HHSN271200900020C (Dr. Dixon, principal investigator), and from the New York State Office of Mental Health and the Maryland Mental Hygiene Administration. The authors thank the RAISE Connection Program investigators, RAISE clinicians and program staff, and participants of the RAISE Connection Program.

Dr. Dixon, Ms. Mendon, Dr. Lee, and Dr. Essock are offering training and consultation to help others provide the type of first-episode psychosis services described here. They do not expect to receive compensation for this training other than that received as part of work done for their employers. Dr. Lieberman serves on the advisory boards of Clintara, Intracellular Therapies, and Pear Therapeutics and receives grant support from Alkermes, Biomarin, EnVivo/Forum, Genentech, Novartis, and Sunovion. He holds a financial interest in and a patent from Repligen. The other authors report no financial relationships with commercial interests.

Received June 23, 2014; revision received October 30, 2014; accepted December 22, 2014; published online March 16, 2015.

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Datapoints encourages the rapid dissemination of relevant and timely findings related to clinical and policy issues in psychiatry. National or international data, especially from large representative databases, are preferred. The editors are particularly interested in data that can be accessed by other researchers. Topics may include differences or trends in diagnosis and practice patterns or in treatment modalities, especially across different care settings or in the context of new policies or payment sources. The analyses should be straightforward, so that the data displayed tell a clear story. The text should follow the standard research format and include a brief introduction, description of the methods and data set, description of the results, and comments on the implications or meanings of the findings.

Datapoints columns must include one figure or table, and because the column is limited to one printed page, it is therefore limited to 350–400 words. Submissions with multiple authors are discouraged because of space constraints.

Inquiries or submissions should be directed to the column editors: Amy M. Kilbourne, Ph.D., M.P.H. (amykilbo@umich.edu), or Tami L. Mark, Ph.D. (tami.mark@truvenhealth.com).