

Outcomes of a Brief Program, REORDER, to Promote Consumer Recovery and Family Involvement in Care

Lisa B. Dixon, M.D., M.P.H.

Shirley M. Glynn, Ph.D.

Amy N. Cohen, Ph.D.

Amy L. Drapalski, Ph.D.

Deborah Medoff, Ph.D.

Li Juan Fang, M.S.

Wendy Potts, M.S.

Deborah Gioia, Ph.D., L.C.S.W.

Objective: The Recovery-Oriented Decisions for Relatives' Support (REORDER) intervention is an innovative, manualized protocol utilizing shared decision-making principles with persons who have serious mental illnesses to promote recovery and encourage consideration of family involvement in care. This study compared REORDER to enhanced treatment as usual in a randomized design. **Methods:** Participants included 226 veterans with serious mental illness whose relatives had low rates of contact with treatment staff. REORDER involved up to three consumer sessions followed by up to three relative educational sessions if the consumer and relative

consented. Individuals were assessed at baseline and six months later. **Results:** Eighty-five percent of the 111 randomly assigned REORDER participants attended at least one REORDER consumer session; of those, 59% had at least one family session. REORDER participants had significantly reduced paranoid ideation and increased recovery at follow-up. **Conclusions:** Participation in REORDER led to marked increases in family participation and improved consumer outcomes. (*Psychiatric Services* 65: 116–120, 2014; doi: 10.1176/appi.ps.201300074)

When appropriate treatments are matched to consumer preferences, use of and adherence to the treatments are enhanced, and consumer satisfaction and outcomes improve (1,2). However, consumer preferences in mental health care are not consistently solicited, despite an emerging emphasis on consumer-centered care (3). Underutilization of evidenced-based practices, such as family psychoeducation, may arise from a mismatch between consumer and family preferences and services offered (4–6).

It is important to develop efficient and standardized approaches that help individuals consider and express their

preferences for level and type of family involvement in care (7,8). The Recovery-Oriented Decisions for Relatives' Support (REORDER) intervention is an innovative, manualized protocol that uses a shared decision-making process to consider this involvement. REORDER is personalized by attending to consumer preferences for family involvement, focusing on the mental health recovery goals of the consumer, and exploring how family members could join with the consumer to meet those goals (9). This study compared REORDER to enhanced treatment as usual in a randomized design. We hypothesized that REORDER would produce improved consumer outcomes related to recovery and symptoms and increase family involvement in the consumer's mental health care.

Methods

Study participants included consenting veterans who had diagnoses of serious mental illnesses. One or more relatives of each veteran also participated if the veteran gave permission and the relative consented. Individuals were recruited from outpatient mental health programs at three large medical centers in two Veterans Integrated Service Networks and were identified through clinician referrals, systematic review of clinic and program

Dr. Dixon is affiliated with the Department of Psychiatry, Columbia University, and with New York State Psychiatric Institute, New York City (e-mail: dixonli@nyspi.columbia.edu). Dr. Glynn and Dr. Cohen are with the Mental Illness Research, Education and Clinical Center (MIRECC), Department of Veterans Affairs (VA) Greater Los Angeles Healthcare System, Los Angeles. Dr. Drapalski and Ms. Potts are with the MIRECC, VA Maryland Healthcare System, Baltimore. Dr. Medoff and Ms. Fang are with the Department of Psychiatry, University of Maryland School of Medicine, Baltimore. Dr. Gioia is with the University of Maryland School of Social Work, Baltimore.

rosters, and recruitment flyers posted in participating clinics. A partial HIPAA waiver was obtained to allow review of charts to confirm eligibility before consent. Eligible individuals were approached at their clinic appointments. At two of the three sites, if research staff were unable to approach individuals at appointments, letters indicating the individual's potential eligibility to participate in the study were sent. These letters invited the individual to contact study staff directly or to return a postcard giving study staff permission to contact him or her directly. At first contact, research assistants provided an initial description of the study. If interested in participating, eligible individuals then met with study staff, who obtained written informed consent. The study was approved by the University of Maryland School of Medicine and the Greater Los Angeles Department of Veterans Affairs (VA) Healthcare Center Institutional Review Boards.

Eligible consumers were 18 to 75 years of age; had a chart diagnosis of schizophrenia, schizoaffective disorder, bipolar disorder of any type, major depression with psychotic features, or psychotic disorder not otherwise specified; and had at least two outpatient mental health visits and contact with a family member or caregiver in the past six months. Exclusion criteria included a history of a significant traumatic brain injury or homelessness or having a relative who was already in contact with the treatment team (for example, at least monthly contact with the participant's clinician in the past six months). Participation required only a willingness to discuss family involvement.

A total of 232 (67%) of the 345 eligible individuals approached provided written informed consent. Participants completed an initial 90-minute in-person interview between October 2007 and November 2010 and a comparable interview six months later. A research assistant who was blind to treatment assignment conducted both interviews. During or just after the initial interview, six individuals were determined to be ineligible and were withdrawn. A total of 111 participants were randomly assigned to REORDER, and 115 were randomly assigned to enhanced treatment as

usual. Assignment was done by using randomly varying sizes of permuted blocks. Follow-up rates were 80% in both conditions. Individuals were paid \$25 for completing each interview.

REORDER has two phases, each comprising up to three individual 50-minute sessions over approximately three to four months (9). In phase 1, the trained REORDER clinician works with consumers to help them define their recovery goals and, using principles of shared decision-making, arrive at an informed choice concerning if and how they would like their relative to be involved in meeting those goals. Consistent with shared decision making, REORDER outlines a clear choice, incorporates decision-making preferences, and facilitates the capacity of individuals to consider the evidence for various alternative courses in the context of the treatment sessions. REORDER also helps consumers carry out their choice.

If interested, the consumer invites one or more relatives to participate in the REORDER program. The relative phase of REORDER begins if the relative agrees. Notably, relatives do not need to be related by blood; rather, the consumer defines who family is. The primary goal of this phase is to provide the relative with support, education, and strategies for helping promote the consumer's recovery goals. Clinicians were trained in the manualized REORDER curriculum and provided weekly supervision throughout the project. REORDER clinicians should be individuals with experience with consumers with serious mental illness and their families and who are willing to be trained and follow a manualized intervention. [Details of the intervention and the supervision and fidelity monitoring are available in an online data supplement to this report.]

Enhanced treatment as usual consisted of usual care enhanced by written information about the availability of family support services in the VA and surrounding community. All participants at two sites had access to a specialized family intervention team that provided evidence-based behavioral family therapy, family consultation, and family education to all referred and interested consumers. At a third site, a small cadre of clinicians

was trained in formal family-based approaches, but organization of these services was informal and access was much more restricted than at the other two sites. None of the study clinics had a systematic policy requiring or monitoring such contact.

Family-clinician contact that did not include the REORDER clinician was measured via chart review. A trained research assistant read all notes six months before and after randomization and extracted verbatim any mention of non-REORDER clinicians' contact with relatives or any mention of family issues or relationships. All potential references to treatment condition were expunged from the note, and two blinded reviewers rated whether there was evidence for phone or in-person contact between family and clinician. Ratings were then combined, and any disagreements were discussed and a consensus was obtained. Contact between family and REORDER clinicians was assessed separately by using REORDER intervention notes.

We measured recovery attitudes and beliefs with the Mental Health Recovery Measure (MHRM), a 30-item self-report measure that has a total score and eight subscale scores. The internal consistency of the 30-item MHRM is good (Cronbach's $\alpha = .95$) (10). We measured symptom outcomes with the psychoticism and paranoid ideation subscales of the Brief Symptom Inventory (BSI). The BSI is a 53-item multidimensional self-report inventory designed to measure the degree of distress due to various psychiatric symptoms over the past week. Items are rated on a 5-point scale, from "not at all" to "extremely" (11). We also measured depression with the Beck Depression Inventory-II. The second edition of the BDI (BDI-II) is a 21-item self-report measure of depressive symptom severity with good test-retest reliability and convergent stability (12).

Baseline characteristics were compared across conditions by using independent *t* and chi square tests. A Fisher's exact test was used for comparisons of ethnicity. Independent *t* and chi square tests were used to compare baseline values between participants who completed the six-month assessment and those who were lost to follow-up.

To compare outcomes a generalized estimating equation model (SAS version 9.2, Proc Genmod) was used with time (baseline and six months), treatment group (REORDER and enhanced treatment as usual) and time \times treatment group as independent variables. We included site and all interactions with site in the model initially, but because no site effects or interactions with site were found, the final models did not include site. For the count variables, a negative binomial distribution was specified. All tests were two-tailed, and alpha was .05.

Results

Most study participants were male ($N=190$, 84%). The mean \pm SD age was 51.5 ± 9.1 , and participants had completed 13.4 ± 2.1 years of education. A total of 130 (58%) participants were African American, 82 (36%) were Caucasian, six (3%) reported multiple races, three (1%) were American Indian or Alaska Native, two ($<1\%$) were Asian, one ($<1\%$) was a Pacific Islander, and two ($<1\%$) did not report racial background. Eight participants (4%) reported that they were of Spanish, Hispanic, or Latino origin. One question asked whether the participant lived with family; 99 (44%) reported that they lived with family. Another question asked how often individuals spoke with family, and 165 (73%) reported talking to family on the phone at least weekly. At baseline, individuals assigned to REORDER and enhanced treatment as usual did not differ on most demographic characteristics or on the primary outcome measures. However, participants assigned to enhanced treatment as usual were less likely to be living with family at baseline, and they also had higher baseline MHRM scores on overcoming stuckness ($t=2.32$, $df=224$, $p=.021$), an indicator of greater recovery, and higher BSI psychoticism scores ($t=2.69$, $df=223$, $p=.008$), indicating greater severity of psychotic symptoms. Individuals who received follow-up interviews were older than those who did not ($t=2.45$, $df=56$, $p=.017$); however, no significant interactions were noted at baseline between treatment allocation and follow-up for any outcome variable.

Eighty-five percent ($N=94$) of the 111 participants assigned to REORDER

participated in at least one REORDER consumer session ($M \pm SD = 1.80 \pm .36$, mode = 2). Of those who did, 59% ($N=55$) had at least one family session ($M \pm SD = 2.24 \pm .12$, mode = 3). When contact with REORDER clinicians was excluded, chart reviews revealed no differences between treatment conditions with respect to percentage of participants whose family member had any contact with clinicians during the six-month study period compared with the six months before the study (Table 1). When contact with REORDER clinicians was excluded, chart reviews also showed that the number of in-person family contacts was significantly greater for the REORDER group than for those who received enhanced treatment as usual. When contact with REORDER clinicians was included, REORDER participants had significantly more contact with clinicians (both phone and in-person) during the six-month study period, compared with the six months before the study.

At six-month follow-up, REORDER participants had significantly lower scores on the BSI paranoid ideation subscale and greater improvements on the MHRM overcoming stuckness subscale. No differences were found on other subscales and in symptoms of depression.

Discussion

This study introduced shared decision-making principles into the overall process of engaging families in the mental health care of persons who had diagnoses of serious mental illnesses. Even though participants were not committed to family involvement in their care at study enrollment, 85% of veterans assigned to REORDER participated in at least one session, and 50% of those veterans had a REORDER family session. The finding that family members of half the veterans assigned to REORDER had no contact with the REORDER clinician also underlines the reality that numerous factors, including consumer and family preference or family availability, may appropriately inhibit or facilitate such involvement.

Assignment to REORDER was also associated with two indicators of consumer improvement at follow-up.

REORDER participants showed statistically significant improvement in the overcoming stuckness subscale of the MHRM. This scale includes such concepts as asking for help when not feeling well and taking risks to enhance recovery, which are logical consequences of the REORDER intervention. REORDER participation was also associated with reduced paranoid ideation. This brief intervention focused on helping consumers understand and make choices regarding family involvement in care led to reduced paranoia, which underscores the fact that critical aspects of care processes can influence symptoms. The nature of a shared decision-making process may allow consumers to voice paranoid ideas that might be involved in considerations of family involvement.

One objective of this trial was to increase the low level of baseline contact between relatives and mental health clinicians if the consumer desired it. When we determined the amount of overall contact between relatives in the REORDER condition and any mental health clinician (REORDER clinician or member of the consumer's treatment team), we found that the intervention had a robust impact on family involvement in care, leading to a fourfold increase over the six-month study period (52% vs. 13%). The low level of contact between relatives and mental health clinicians in enhanced treatment as usual is especially noteworthy because mental health consumers at two of the three study sites, which included the large majority of participants, had access to a strong existing family services program.

Although the REORDER intervention increased any contact between family and clinician, it had limited impact on the low level of contact between family members and the regular treatment team, with one exception: the absolute number of in-person clinician visits by relatives of REORDER participants increased among the few relatives who had any visits. The study findings suggest that the consumer phase of REORDER substantively contributed to consumers' decisions to invite families to meet with the REORDER clinician.

Table 1

Results on outcome measures for participants in REORDER and in enhanced treatment as usual, baseline and six-month follow-up^a

Measure	REORDER				Enhanced treatment as usual				Test for interaction coefficient			
	Baseline		Follow-up		Baseline		Follow-up					
	N	%	N	%	N	%	N	%	β	SE	z	p
Chart review not including contacts with REORDER clinicians ^b												
Any in-person family contact	8		7	13	12	10	11	10	.63	.50	1.27	.204
In-person family contacts (M±SD)	.1±.4		.4±1.6		.2±.6		.2±.9		.86	.39	2.21	.027
Any phone or in-person family contact	11	10	16	14	20	17	15	13	.76	.44	1.75	.080
Phone or in-person family contacts (M±SD)	.4±2.0		.5±2.0		.3±.9		.3±1.0		.11	.43	.25	.804
Chart review including contacts with REORDER clinicians												
Any in-person family contact	8	7	38	34	12	10	11	10	2.00	.50	4.00	<.001
In-person family contacts (M±SD)	.1±.4		1.1±2.0		.2±.6		.2±.9		1.97	.42	4.65	<.001
Any phone or in-person family contact	11	10	58	52	20	17	15	13	2.64	.45	5.86	<.001
Phone or in-person contacts (M±SD)	.4±2.0		1.6±2.3		.3±.9		.3±1.0		1.26	.51	2.49	.013
Mental Health Recovery Measure (M±SD score) ^{c,d}												
Total	75.6±17.3		80.2±18.7		77.0±19.1		79.9±20.4		1.09	1.94	.56	.575
Overcoming stuckness	10.6±2.5		11.4±2.6		11.4±2.5		11.3±2.3		.89	.40	2.25	.026
Self-empowerment	9.7±3.3		10.2±3.2		9.7±3.4		10.3±3.6		-.11	.43	-.25	.800
Learning and self-redefinition	11.6±2.3		12.2±2.3		11.7±3.1		12.1±3.1		.22	.38	.58	.564
Basic functioning	9.0±3.1		9.6±3.3		9.3±3.2		9.4±3.3		.29	.39	.73	.466
Overall well-being	9.7±3.2		10.4±3.4		9.6±3.9		10.2±3.6		-.14	.39	-.35	.724
New potentials	10.2±3.1		10.8±3.1		10.5±3.3		10.8±3.2		.15	.36	.42	.672
Spirituality ^e	5.7±2.1		5.7±2.2		5.7±2.0		5.9±2.1		-.09	.26	-.34	.736
Advocacy and enrichment	9.2±2.7		9.8±2.9		9.3±3.0		9.7±3.2		.13	.35	.39	.698
Brief Symptom Inventory (M±SD score) ^{d,f}												
Psychoticism	10.0±4.3		9.9±4.1		11.7±4.9		11.7±5.1		-.29	.62	-.47	.639
Paranoid ideation	11.4±4.8		10.3±4.6		12.0±5.4		12.7±5.5		-1.80	.62	-2.91	.004
Depression scale (M±SD score) ^{d,g}	16.8±12.5		15.2±11.8		19.5±13.8		19.6±14.2		-.96	1.47	-.65	.513

^a REORDER, Recovery-Oriented Decisions for Relatives' Support

^b For chart review outcomes: REORDER baseline and follow-up samples, N=111; enhanced treatment as usual baseline and follow up samples, N=115

^c Possible total scores range from 0 to 120, with higher scores indicating better recovery. Possible subscale scores, except for spirituality, range from 0 to 16, with higher scores indicating better recovery.

^d For participant interview outcomes: REORDER baseline sample, N=111, and follow-up sample, N=89; enhanced treatment as usual baseline sample, N=115, and follow-up sample, N=92

^e Possible scores range from 0 to 8, with higher scores indicating better recovery.

^f Possible scores on the two subscales range from 5 to 25, with higher scores indicating more severe symptoms.

^g Possible scores range from 0 to 63, with higher scores indicating more severe depression symptoms.

However, we saw little evidence that the increased involvement extended beyond the REORDER clinician. The minimal impact of REORDER on contact between family members and regular clinicians could have occurred because REORDER met the preferences of families and consumers, leaving no need for further contact. Our baseline survey of REORDER consumers indicated that 61% wanted their family to be provided with written information on their mental health treatment and care, which was offered as part of the REORDER

intervention (13). Other explanations for the limited impact of REORDER on contacts with regular clinicians include skill deficits on the part of treatment team or limited time for the regular clinicians to work with families.

The study had several limitations, including its restriction to a VA sample and its limited six-month duration. Because we followed individuals only for six months, we have no way to know if the REORDER intervention had an impact on relative-clinician contact during a subsequent period of

need. These weaknesses are balanced by the study's novel intervention, randomized design, large sample, and overall applicability to practice.

Conclusions

This study requires replication; however, the findings suggest the value of REORDER in improving consumer outcomes and increasing family contact with the system. However, increasing family contact with a consumer's regular clinician may require that clinician to conduct REORDER. The intervention could have an even greater impact

if the consumer has an ongoing relationship with the REORDER clinician. On the other hand, it is possible that consumers appreciated the privacy resulting from the separation between their regular care and the family program and were more inclined to invite their relative into care when there was a clear distinction between the two.

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The authors report no competing interests.

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