

Integrating Personal Medicine Into Service Delivery: Empowering People in Recovery

Kim L. MacDonald-Wilson

Community Care Behavioral Health Organization and
University of Pittsburgh School of Medicine

Patricia E. Deegan

Pat Deegan, PhD & Associates, LLC, and Dartmouth College

Shari L. Hutchison and Nancy Parrotta
Community Care Behavioral Health Organization

James M. Schuster
Community Care Behavioral Health Organization and
University of Pittsburgh School of Medicine

Objective: Illness management and recovery strategies are considered evidence-based practices. The article describes how a web-based application, CommonGround, has been used to support implementation of such strategies in outpatient mental health services and assess its impact. The specific focus of this article is Personal Medicine, self-management strategies that are a salient component of the CommonGround intervention. **Method:** With support from counties and a not-for-profit managed care organization, CommonGround has been introduced in 10 medication clinics, one Assertive Community Treatment (ACT) team, and one peer support center across Pennsylvania. Methods include analysis of data from the application's database and evaluation of health functioning, symptoms, and progress toward recovery. **Results:** Health functioning improved over time and use of self-management strategies was associated with fewer concerns about medication side effects, fewer concerns about the impact of mental health medicine on physical health, more reports that mental health medicines were helping, and greater progress in individuals' recovery. **Conclusions and Implications for Practice:** Using Personal Medicine empowers individuals to work with their prescribers to find a "right balance" between what they do to be well and what they take to be well. This program helps individuals and their service team focus on individual strengths and resilient self-care strategies. More research is needed to assess factors that may predict changes in outcomes and how a web-based tool focused on self-management strategies may moderate those factors.

Keywords: personal medicine, shared decision making, self-care, illness management, CommonGround

There is a growing awareness of and knowledge about strategies that support recovery from serious mental health conditions, including pursuit of meaningful activities and self-care strategies. The field is noticing a shift from professionally directed treatment of illness to a focus on wellness and person-directed management of health. Research reveals that individuals who are engaged and active in their own health care have better health and functioning, report higher quality of life, and are more satisfied with their care (Hibbard et al.,

2007, 2005). Collaborative models, such as shared decision making facilitated with decision aids, may increase engagement (Adams & Drake, 2006; Deegan & Drake, 2006; Deegan, Rapp, Holter, & Riefer, 2008; Mistler & Drake, 2008; Mueser & Drake, 2011). Decision aids can provide resources to educate individuals about treatment options, solicit individual preferences for treatment, track and communicate outcomes, and promote healthy activities that advance good care. They also hold promise for improving quality, reducing unwarranted variation in care, and improving an individual's satisfaction with care (Stacey et al., 2011).

The activities and strategies people use for self-care—their "Personal Medicine"—are often not well integrated into behavioral health services. One barrier to integrating existing self-care strategies is the common divide between "psychosocial" and "treatment" services, which results in limited collaboration and integration of approaches. Another barrier is that professionals lack strategies for capitalizing on the powerful synergies among Personal Medicine, "pill medicine" (prescribed or over-the-counter medications), and psychosocial treatment to support recovery. This article reports data collected from users of a peer-supported, computerized web application to support recovery and shared decision making, *CommonGround*, which was designed to overcome these barriers. The *CommonGround* web application to support recovery and shared decision making is described in detail elsewhere (Dee-

Kim L. MacDonald-Wilson, Community Care Behavioral Health Organization and Department of Psychiatry, University of Pittsburgh School of Medicine; Patricia E. Deegan, Pat Deegan, Ph.D. & Associates, LLC, and Geisel School of Medicine, Dartmouth College; Shari L. Hutchison and Nancy Parrotta, Community Care Behavioral Health Organization; James M. Schuster, Community Care Behavioral Health Organization, Department of Psychiatry, University of Pittsburgh School of Medicine.

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Patricia E. Deegan is the owner of the CommonGround web application.

Correspondence concerning this article should be addressed to Kim L. MacDonald-Wilson, Community Care Behavioral Health Organization, 1 E. Uwchlan Avenue, Suite 311, Exton, PA 19341. E-mail: macdonaldwilsonkl@ccbh.com

gan, 2010). A foundational construct of the web application as described by Deegan (2005) is the call for a broader understanding of the meaning of “medicine” and sound communication tools that can unify the services care team and help the individual to achieve noticeable gains in perceived wellness, mental health, and functioning.

Mueser et al. (2002) define “illness management” as a broad set of strategies designed to help individuals diagnosed with major mental disorders collaborate with professionals, reduce their susceptibility to the illness, and cope effectively with their symptoms. According to the authors, “recovery occurs when people with mental illness discover, or rediscover, their strengths and abilities for pursuing personal goals and develop a sense of identity that allows them to grow beyond their mental illness” (p. 1272). Noordsy et al. (2000) urge professionals to “emphasize the patients’ power to take charge of their life through illness self-management and lifestyle changes, thereby making their illness less powerful” (p. 26).

People living with mental illness often seek their own approaches to illness management, with or without the blessing of a practitioner. When Carr (1988) surveyed people diagnosed with schizophrenia who lived in the community in 1988, he found that his 200 respondents had 350 unique coping strategies that he had not thought to include on his questionnaire. More recently, Deegan’s qualitative study of how people with serious mental health conditions use pill medicine in their daily lives yielded an unexpected abundance of information on how they used “Personal Medicine,” which Deegan defines as “self-initiated, nonpharmaceutical self-care activities that served to decrease symptoms, avoid undesirable outcomes such as hospitalization, and improve mood, thoughts, behavior, and overall sense of wellbeing” (2005, p. 31). For example, a participant diagnosed with bipolar disorder found that solving complex mathematics problems was a powerful mood stabilizer, while another diagnosed with major depression reported that volunteering in the community gave her life a sense of purpose. Usually, such healing activities were not discussed with health care providers, in part because the providers did not express interest in them.

When pill medicine interfered with Personal Medicine, Deegan found that people often stopped taking the pill medicine. For example, a woman with psychotic depression stopped taking medication that made her drowsy and interfered with caring for her children, the Personal Medicine that best supported her recovery. She resumed medication when prescribed a regime that enabled her to be a good mother. Deegan concluded that for many, the pathway into recovery is finding the right balance between Personal Medicine (what you do) and pill medicine (what you take).

CommonGround is a web application that recognizes and reinforces the individual’s own capacity to move toward recovery, not solely through the use of prescribed medicine but also through their own resources and strategies. Individuals are assisted in using the application by well-trained peer support specialists who meet with service users prior to their appointments with professionals, help them navigate the application, and support them as they prepare to engage with the professional in reaching a shared decision about next steps. This approach is consistent with the increasing emphasis on personal empowerment and choice as key themes in recovery—a revolution that is transforming the tradition of hierarchical decision making in psychiatric treatment (Meyer &

Mueser, 2011). Based on an analysis of first person accounts of recovery, Ridgway notes that “recovery involves a resurgence of a sense of responsibility for one’s own state of being and the return to active self-help” (Ridgway, 2001, p. 338). Through a variety of specific strategies, the web application seeks to encourage this impulse and integrate it in therapeutic relationships.

Community Care, a not-for-profit, provider-owned managed behavioral health organization collaborated with Pat Deegan, PhD and Associates, LLC (PDA) to enhance recovery-oriented, person-centered care throughout its network of care. Community Care is responsible for administering behavioral health services through HealthChoices, the mandatory Medicaid program in Pennsylvania, in 39 of Pennsylvania’s 67 counties. One initiative, supported by Community Care and several counties, established peer-staffed Decision Support Centers using the *CommonGround* web application in 12 behavioral health agencies, usually in the clinic where medication management services are provided. Agencies typically provided space for computers by converting their waiting rooms to decision support centers where the application was used, with support from peer specialists, in the 30 minutes prior to an appointment with a prescriber. This initiative is intended to support individual self-determination, increase access to resources and peer support, empower individuals in their use of medication as a tool in the recovery process, and develop truly collaborative relationships between practitioners and people in recovery. PDA developed the web application, trained Community Care staff to provide technical assistance to the agencies using *CommonGround*, and supported implementation.

CommonGround offers three primary ways for individuals to exercise self-care: identification and communication of Personal Medicine (the primary focus of this article), development of a Power Statement, and generation of a summary health report. Peer support specialists help each individual identify his or her unique Personal Medicine and its essential “active ingredient” (i.e., how it helps). The top three Personal Medicines for an individual are entered into the web application and at each visit, the person reports on whether or not they have been using it between appointments.

Peer support staff also assist each person in identifying a Power Statement. A Power Statement does three things. First, from the perspective of the individual, it tells the doctor who I am as a *person*, not as a “patient.” Second, it says how I want psychiatric medicine to help me. And finally, a Power Statement invites the doctor to work with me to find treatments to support my recovery goal. The following is an example: “The most important thing in my life is working at Pizza Hut. I want my medication to help me feel less depressed so I can work at Pizza Hut. I want you to work with me to stay out of depression and the hospital, so I can continue to work at Pizza Hut” (Deegan, 2010).

The Power Statement places the use of medication within the context of recovery and invites the prescriber as well as other practitioners into a collaborative relationship with the person (Deegan, 2007). To amplify the voice of the person in recovery and convey the same critical information to both prescribers and practitioners, in the 30 minutes prior to each appointment, the person also provides key information (e.g., “how I have been doing since the last appointment” and “my concerns about prescribed psychiatric medicines”). The one-page health report generated from these

questions is intended to allow prescriber and individual to make the most of their limited time together.

Combined, the Power Statement, Personal Medicine, and the short health report offer a way to integrate the full resources of the individual into the service process and ensure that medications and Personal Medicine work together to nurture a sense of purpose, one of the hallmarks of recovery (Roe & Chopra, 2003), as well as self-efficacy and hope. The proof that the voice of the individual has been heard lies in the written shared decision about "medicine" (both pill and personal) generated at the conclusion of each appointment with the prescriber.

The current investigation was a retrospective study of responses from *CommonGround* health reports generated by persons in recovery at all 12 agencies. The objective of this study was to describe how persons in recovery used self-management strategies to enhance self-care and communication with providers. Special attention is paid to how the use of Personal Medicine correlates with the perception of wellness and symptom improvement. Individual-reported outcomes such as functioning, symptoms, and medication concerns are also examined to determine how they may change over time. Finally, authors examined the relationship among self-care strategies and individual-reported outcomes to begin to better understand the recovery process from the individual's perspective.

Method

Data Source

Sample characteristics were obtained from an administrative database of paid service claims. *CommonGround* report data were obtained from the *CommonGround* report database, which houses all information collected from the web application. Selected variables were extracted and imported for analyses. A dictionary of variables and codes for response items was provided by Pat Deegan, PhD and Associates, LLC.

The *CommonGround* report database contained information from every health report started and/or completed by adult behavioral health service users from March 2008 through January 2013 at 12 behavioral health agencies throughout Pennsylvania. Provider agencies implemented *CommonGround* with staggered "go live" start dates from spring 2008 to winter 2012. Ten providers offered *CommonGround* in peer-run Decision Support Centers (DSCs) operated in outpatient mental health clinics and one was established at a peer support center. One other agency offered *CommonGround* through mobile technology to individuals receiving Assertive Community Treatment (ACT). All agencies continued to use *CommonGround* after implementation.

Procedures

Persons in recovery were encouraged to complete health reports before appointments in which their medications will be reviewed. All information entered into the web application was automatically stored and date/time stamped. For incomplete reports, all information was stored until the service user ended their *CommonGround* session. For analyses, responses from the first and the most recent reports for each individual were compared. This interval was chosen to maximize the ability to discern changes over time.

Measures

Health functioning. A total Health Functioning score was calculated from the following ratings: ability to fulfill responsibilities, rating of physical health, rating of mental health, and rating of current living situation. All items were completed on a scale from 1 = "poor" to 5 = "excellent" for a total score between 4 and 20. The Health Functioning items were grouped as the first four items in the "How I am doing" section of the web application.

Symptoms. A total Symptoms score was calculated from responses in which service users were asked to rate the level at which they experienced any of the following: hallucinations, too low energy, too high energy, disturbing thoughts, trouble concentrating, racing thoughts, nervous or anxious, and good sleep. The response scale ranged from 1 = "all of the time" to 5 = "none of the time." Good sleep was reverse scored to be consistent with the other items. Total Symptoms scores range between 8 and 40, with a higher score indicating a lower intensity or frequency of symptoms. The Symptoms items are grouped on the web application as consecutive items in the "How I am doing" section.

Progress toward recovery, personal medicine, and medication concerns. Respondents were asked to indicate their progress toward recovery by rating their general level of recovery from mental illness on a scale ranging from 1 = "I am the best I have ever been," to 3 = "I am the same," to 5 = "I am the worst I have ever been." Not knowing where individuals start on this recovery continuum makes interpretation of some responses difficult, thus it was decided to identify individuals who clearly state a lack of progress in recovery for analyses. Two responses indicating poor recovery (getting worse or the worst) were grouped together and defined as a lack of progress toward recovery.

Data on whether or not respondents were using their Personal Medicine was obtained from a question asking whether they had used their stated Personal Medicine since their last appointment. Possible responses were 0 = "no," 1 = "sometimes," or 2 = "yes." The person's perspectives about their mental health medications were assessed in three areas: concern about medication side effects, concern about how medication was affecting physical health, and whether the respondent believed that the medication was helping. All medication items are scored 0 = "no" and 1 = "yes."

Statistical Analysis

Univariate analysis was used to describe responses by individuals on first and most recent report completions. Change in total Health Functioning and Symptoms scores was assessed through paired-samples *t* tests. Change in the proportion of individuals reporting use of Personal Medicine, lack of progress toward recovery, and medication concerns was assessed by χ^2 tests. Finally, the relationships between use of Personal Medicine, having medication concerns, level of Health Functioning, Symptoms, and progress toward recovery were assessed through Spearman rank order correlations (r_s) for ordinal variables. All analyses were performed using IBM SPSS Statistics 20.0.0 (IBM Corporation, 2013).

Results

CommonGround Report Completions

Across the 12 provider organizations, 35,590 *CommonGround* reports were started and 33,162 reports were fully completed. The percentage of service users completing at least one *CommonGround* report at DSCs varied between 59% to 95%, with an average of 85%. Reports from individuals with at least two report completions were identified. Four individuals had survey completions less than 1 week apart and were eliminated from analyses resulting in data from 5,584 unique individuals. On average, individuals had five report completions. Time between first and most recent completions ranged between 1 and 255 weeks with an average of 51 weeks, or just under 1 year, between report completions. Sixty-two percent of the resulting sample was female. Ninety-seven percent of the sample was non-Hispanic; 81% was European American, 13% African American, and 6% was "other race." The average age of the sample was 41.9 years ± 12.8 years. Twenty-six percent of the sample had an identified substance use disorder, and 24% of the sample was identified with comorbid mental health and substance use disorders. Most commonly identified mental health disorders in the sample were depression (62%), anxiety (24%), bipolar (21%), schizophrenia/schizoaffective (20%), adjustment (7%), attention-deficit/hyperactivity (6%), and conduct (6%). Fifty-nine percent of the sample used antidepressant medication, 42% antipsychotics, 32% mood stabilizers, 14% stimulants, and 46% opiate-agonists.

Change Over Time

Total Health Functioning scores increased from first to most recent report completions, 13.1 vs. 13.7, $t(5,582) = -15.68$, $p < .001$. Likewise, report of Symptoms lessened between report completions, 28.0 vs. 29.6, $t(5,581) = -23.10$, $p < .001$ (where higher scores indicate less frequently experiencing symptoms). Changes over time for average scores and individual items in the Health Functioning and Symptoms scales are shown in Table 1.

As shown in Table 2, individuals reporting use of Personal Medicine increased over time, $\chi^2(4, N = 4,788 = 282.38$, $p < .001$. At first report completion, 75% of service users responded "yes" and 8% of service users responded "sometimes" to using Personal Medicine, compared with 83% and 10% at the most recent report completion. The percent of individuals reporting a lack of progress toward mental health recovery also decreased from first to most recent completion, 16% v. 14%, $\chi^2(16, N = 5,583) = 1,448.31$, $p < .001$. The percentage of individuals with concerns about the side effects of their mental health medication reduced over time, from 28% vs. 19%, $\chi^2(1, N = 5,584) = 278.79$, $p < .001$, and the percentage who were concerned that their medications were adversely affecting their physical health was also reduced, from 27% vs. 18%, $\chi^2(1, N = 5,584) = 463.08$, $p < .001$. Likewise, the percentage of individuals who believed that their mental health medication was helping increased from 56% to 64%, $\chi^2(1, N = 5,584) = 708.85$, $p < .001$.

Table 1
Average Responses in Health Functioning and Symptoms at First and Most Recent Report Completions

	First report			Most recent report		
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>N</i>	<i>M</i>	<i>SD</i>
Health functioning^a						
Total score	5,583	13.07	3.28	5,583	13.71	3.26
Fulfilling responsibilities	5,583	3.24	1.06	5,584	3.42	1.05
Physical health	5,583	3.20	1.05	5,584	3.32	1.03
Mental health	5,583	3.07	1.05	5,584	3.28	1.01
Housing	5,583	3.55	1.03	5,584	3.69	0.97
Symptoms^b						
Total score	5,582	27.99	6.38	5,582	29.64	6.27
Hallucinations	5,583	4.58	0.89	5,583	4.64	0.83
Low energy	5,583	3.08	1.26	5,584	3.27	1.25
High energy	5,583	4.32	0.99	5,584	4.38	0.95
Distressing beliefs	5,583	3.56	1.29	5,584	3.93	1.21
Trouble concentrating	5,583	3.17	1.30	5,584	3.42	1.28
Racing thoughts	5,583	3.40	1.39	5,584	3.67	1.33
Anxiety	5,583	3.01	1.27	5,584	3.26	1.28
Good sleep	5,583	3.12	1.31	5,584	2.92	1.28
95% CI						
	<i>t</i>	<i>df</i>	<i>p</i>	<i>LL</i>	<i>UL</i>	Cohen's <i>d</i>
Health functioning^a						
Total score	-15.68	5582	<.001	-0.72	-0.56	0.19
Symptoms^b						
Total score	-23.10	5581	<.001	-1.78	-1.50	0.26

Note. CI = confidence interval; LL = lower limit; UL = upper limit.

^a Scale: 1 = poor to 5 = excellent. ^b Scale: 1 = all of the time to 5 = none of the time.

Table 2
Endorsement of Personal Medicine, Recovery, and Medication Concerns at First and Most Recent Report Completions

	First report		Most recent report		N	χ^2	df	p
	N	%	N	%				
Personal medicine					4,788	282.38	4	<.001
No/none	5,584	17.2	5,584	7.7				
Yes	5,584	74.9	5,584	82.6				
Sometimes	5,584	7.9	5,584	9.8				
Recovery progress					5,583	1,448.31	16	<.001
Best ever been	5,583	8.5	5,584	10.5				
Getting better	5,583	39.9	5,584	39.6				
Same	5,583	35.7	5,584	35.7				
Getting worse	5,583	13.1	5,584	12.5				
Worst ever been	5,583	2.9	5,584	1.7				
Medication concerns								
Side effects	5,584	28.4	5,584	19.3	5,584	278.79	1	<.001
Negative impact on health	5,584	27.1	5,584	17.6	5,584	463.08	1	<.001
Meds are helping	5,584	55.8	5,584	64.4	5,584	708.85	1	<.001

Associations of Interest

Analyses assessing the relationship between use of Personal Medicine and medication (or pill medicine) concerns showed a significant association. Individuals who reported using Personal Medicine on the most recent report completion were more likely to report no concern for medication side effects, $r_s(5,462) = -.07$, $p < .001$; were more likely to report no concern that the medication was affecting their physical health, $r_s(5,462) = -.07$, $p < .001$; and were more likely to report that their mental health medication was helping, $r_s(5,462) = .17$ ($p < .001$). This association was evident on both initial and most recent report completions.

Analysis assessing the relationship between use of Personal Medicine and outcomes showed a significant association. Individuals who reported using Personal Medicine on the most recent report completion were more likely to report higher total scores in Health Functioning, $r_s(5,462) = .22$, $p < .001$, and Symptoms, $r_s(5,462) = .19$, $p < .001$, indicating better health functioning and symptom improvement, and were less likely to endorse lack of progress in mental health recovery, $r_s(5,462) = -.18$, $p < .001$. These associations were true using information from both initial and most recent report completions.

Discussion

With over 40 randomized controlled studies, illness management and recovery has been recognized as an evidence-based practice in behavioral health. However, it is not clear how many people benefit from illness management and recovery strategies. In a recent federal report (Brown et al., 2012), it was found among people diagnosed with schizophrenia or bipolar disorder who are Medicaid beneficiaries, only 5% receive a supply of evidence-based medications, medication level monitoring, screenings for medication side effects and evidence-based psychosocial services such as illness management and recovery. In some states, less than half the Medicaid beneficiaries received evidence-based psychosocial services such as illness management and recovery.

The results of the current investigation support *CommonGround* and its use to promote recovery, functioning, and symptom man-

agement in Medicaid-enrolled individuals with mental illness. Individuals who participate in *CommonGround* report improvements in progress toward recovery, better health functioning, and fewer negative illness symptoms over time. Participation in *CommonGround* also lends support to the use of Personal Medicine, as a higher percentage of individuals who use *CommonGround* endorse using Personal Medicine over time. In addition, individuals who use *CommonGround* may benefit from the resources on pharmacotherapy and medications integrated in the program, as reports of medication side effects and concerns also improve over time.

The advantage of the *CommonGround* web application as a tool for supporting illness management and recovery is that it is implanted within the routine care workflow of medication clinics in the public sector where the majority of people receive behavioral health services. Rather than sitting in waiting rooms idly passing time before seeing the psychiatrist, individuals use the application to discover or monitor their use of Personal Medicine, prepare a Power Statement, and complete a health report. The data reported here suggests that the fundamentals of self-care, illness management, recovery, and empowerment can be conveyed and activated through such a web-based application, supplemented by peer support, reaching a majority of service users and engaging them actively in their behavioral health services.

There are limitations to this study. Although this study is an important first look at the power of a web application to extend illness management and recovery practice to a majority of people receiving services, it remains descriptive. There is no comparison population in this study. In addition, while shared decision making is an important component to illness management, the degree to which shared decision making occurs between individuals and practitioners as a result of participating in *CommonGround* remains to be explored. More research is needed to assess factors that may predict changes in outcomes and how a web-based tool focused on self-management strategies may moderate those factors.

In summary, this program helps individuals and their service team focus on individual strengths and resilient self-care strategies.

Activities such as Personal Medicine and Power Statements can help to change the conversation between individuals and prescribers. They help to shift the locus of control from professionally mediated care, to self-care which is so integral to recovery. When such a shift occurs, individuals are empowered to work with their prescribers to find a “right balance” between what they *do* to be well and what they *take* to be well. As this balance is achieved, people do better in terms of overall symptoms and daily functioning. They endorse that psychiatric medications are helpful, they experience fewer side effects, and they are less concerned about the effect of psychiatric medications on their health. And when people become empowered, find the right balance between what they do and what they take to be well, and do better in terms of symptoms and functioning, they begin to forge a path toward recovery.

References

- Adams, J. R., & Drake, R. E. (2006). Shared decision-making and evidence-based practice. *Community Mental Health Journal, 42*, 87–105. doi:10.1007/s10597-005-9005-8
- Brown, J. D., Barrett, A., Ireys, H., Caffery, E., & Hourihan, K. (2012). *Evidence-based practices for Medicaid beneficiaries with schizophrenia and bipolar disorder*. Prepared for Office of Disability, Aging and Long-Term Care Policy, Office of the Assistant Secretary for Planning and Evaluation, U.S. Department of Health and Human Services, Contract #HHSP23320095642WC. http://aspe.hhs.gov/_office_specific/daltcp.cfm, HHS/ASPE
- Carr, V. (1988). Patients' techniques for coping with schizophrenia: An exploratory study. *British Journal of Medical Psychology, 61*, 339–352. doi:10.1111/j.2044-8341.1988.tb02796.x
- Deegan, P. E. (2005). The importance of personal medicine: A qualitative study of resilience in people with psychiatric disabilities. *Scandinavian Journal of Public Health, 66*, 29–35. doi:10.1080/14034950510033345
- Deegan, P. E. (2007). The lived experience of using psychiatric medication in the recovery process and a shared decision-making program to support it. *Psychiatric Rehabilitation Journal, 31*, 62–69. doi:10.2975/31.1.2007.62.69
- Deegan, P. E. (2010). A web application to support recovery and shared decision making in psychiatric medication clinics. *Psychiatric Rehabilitation Journal, 34*, 23–28. doi:10.2975/34.1.2010.23.28
- Deegan, P. E., & Drake, R. E. (2006). Shared decision-making and medication management in the recovery process: From compliance to alliance. *Psychiatric Services, 57*, 1636–1639. doi:10.1176/appi.ps.57.11.1636
- Deegan, P. E., Rapp, C. A., Holter, M., & Riefer, M. (2008). A program to support shared decision making in an outpatient psychiatric medication clinic. *Psychiatric Services, 59*, 603–605. doi:10.1176/appi.ps.59.6.603
- Hibbard, J. H., Mahoney, E. R., Stock, R., & Tusler, M. (2007). Self-management and health care utilization: Do increases in patient activation result in improved self-management behaviors? *Health Services Research, 42*, 1443–1463. doi:10.1111/j.1475-6773.2006.00669.x
- Hibbard, J. H., Mahoney, E. R., Stockard, J., & Tusler, M. (2005). Development and testing of a short form of the patient activation measure. *Health Services Research, 40*, 1918–1930. doi:10.1111/j.1475-6773.2005.00438.x
- IBM Corporation. (2013). *IBM SPSS Statistics, version 20.0.0*. IBM Corporation.
- Meyer, P. S., & Mueser, K. T. (2011). Resiliency in individuals with serious mental illness. In S. M. Southwick, B. T. Litz, D. Charney, & M. J. Friedman (Eds.), *Resilience and mental health: Challenges across the life span* (pp. 276–288). Cambridge, United Kingdom: Cambridge University Press.
- Mistler, L. A., & Drake, R. E. (2008). Shared decision making in antipsychotic management. *Journal of Psychiatric Practice, 14*, 333–344. doi:10.1097/01.pra.0000341889.97759.54
- Mueser, K. T., Corrigan, P. W., Hilton, D. W., Tanzman, B., Schaub, A., Gingerich, S., . . . Herz, M. I. (2002). Illness management and recovery: A review of the research. *Psychiatric Services, 53*, 1272–1284. doi:10.1176/appi.ps.53.10.1272
- Mueser, K. T., & Drake, R. E. (2011). Treatment of co-occurring substance use disorders using shared decision making and electronic decision support systems. In A. Rudnick & D. Roe (Eds.), *Serious mental illness: Person centered approaches* (pp. 213–231). London, England: Radcliffe Press.
- Noordsy, D. L., Torrey, W. C., Mead, S., Brunette, M., Potenza, D., & Copeland, M. E. (2000). Recovery-oriented pharmacology: Redefining the goals of antipsychotic treatment. *Journal of Clinical Psychiatry, 61*, 22–29.
- Ridgway, P. (2001). Restorying psychiatric disability: Learning from first person recovery narratives. *Psychiatric Rehabilitation Journal, 24*, 335–343. doi:10.1037/h0095071
- Roe, D., & Chopra, M. (2010). Beyond coping with mental illness: Toward personal growth. *American Journal of Orthopsychiatry, 73*, 334–344. doi:10.1037/0002-9432.73.3.334
- Stacey, D., Bennett, C. L., Barry, M. J., Col, N. F., Eden, K. B., Holmes-Rovner, M., . . . Thomson, R. (2011). Decision aids for people facing health treatment or screening decisions. *Cochrane Database of Systematic Reviews, 10*.

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