

# Psychological Services

## Provider and Consumer Perspectives of Community Mental Health Services: Implications for Consumer-Driven Care

Erin L. Kelly, Lisa Davis, Sapna Mendon, Holly Kiger, Lezlie Murch, Laura Pancake, Leslie Giambone, and John S. Brekke

Online First Publication, May 3, 2018. <http://dx.doi.org/10.1037/ser0000244>

### CITATION

Kelly, E. L., Davis, L., Mendon, S., Kiger, H., Murch, L., Pancake, L., Giambone, L., & Brekke, J. S. (2018, May 3). Provider and Consumer Perspectives of Community Mental Health Services: Implications for Consumer-Driven Care. *Psychological Services*. Advance online publication. <http://dx.doi.org/10.1037/ser0000244>

# Provider and Consumer Perspectives of Community Mental Health Services: Implications for Consumer-Driven Care

Erin L. Kelly

University of Southern California and University of California,  
Los Angeles

Lisa Davis

Didi Hirsch Community Mental Health Center,  
Culver City, California

Sapna Mendon and Holly Kiger  
University of Southern California

Lezlie Murch  
Exodus Recovery, Culver City, California

Laura Pancake  
Pacific Clinics, Arcadia, California

Leslie Giambone  
Mental Health America Los Angeles, Long Beach, California

John S. Brekke  
University of Southern California

Public mental health services in the community are broad and continue to expand to address the multiple issues faced by those with serious mental illnesses. However, few studies examine and contrast how helpful consumers and providers find the spectrum of services. The present study examines the services at community mental health service clinics (CMHCs) from the perspectives of providers and consumers. There were 351 consumers and 147 providers from 15 CMHCs who rated and ranked the helpfulness of 24 types of common services. All of the agencies were participating in a Practice-Based Research Network (PBRN). Social support was the highest rated service by both types of respondents, and the creation of a welcoming environment was the highest ranked service by both. There were also areas of disagreement. Consumers identified traditional mental health services (individual therapy and medication services) as being most helpful to them whereas providers selected longer-term services that promote self-reliance (e.g., securing housing, and promoting self-sufficiency) as the most helpful. Understanding how consumers and providers perceive the range of CMHC services provided in usual care is important to develop new targets for intervention. A welcoming milieu and providing social support appear important to both, but significant differences exist between these groups regarding other aspects of services. This holds implications for the design and implementation of consumer-driven services.

*Keywords:* practice-based research network, community mental health services, serious mental illness, consumer-centered care, recovery

Erin L. Kelly, Suzanne Dworak-Peck School of Social Work, University of Southern California and Department of Psychiatry and Biobehavioral Sciences, University of California, Los Angeles; Lisa Davis, Department of Research and Evaluation, Didi Hirsch Community Mental Health Center, Culver City, California; Sapna Mendon, Suzanne Dworak-Peck School of Social Work, University of Southern California; Holly Kiger, RWJ Research Project Coordinator, University of Southern California; Lezlie Murch, Exodus Recovery, Culver City, California; Laura Pancake, Pacific Clinics, Arcadia, California; Leslie Giambone, Mental Health America Los Angeles, Long Beach, California; John S. Brekke, Suzanne Dworak-Peck School of Social Work, University of Southern California.

The study was funded with internal funding from the University of Southern California. All procedures performed in studies involving human

participants were in accordance with the ethical standards of the Institutional Review Board of the University of Southern California, the internal committees of the participating agencies, the Human Subjects Research Committee of the Department of Mental Health in Los Angeles County, and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards. The study was deemed exempt and all participants were provided a study information sheet. The authors thank the many clinical staff, administrative staff, peers, and consumers who participate in the Recovery Oriented Care Collaborative, a registered practice-based research network.

Correspondence concerning this article should be addressed to Erin L. Kelly, Suzanne Dworak-Peck School of Social Work, University of Southern California, 1149 Hill Street, Suite 360, Los Angeles, CA 90089. E-mail: elkelly@mednet.ucla.edu

Consumer<sup>1</sup> centered care is a primary principle of recovery oriented mental health services, which is one of the main guiding philosophies of federal, state, and local mental health policy reforms in the United States over the last two decades (Braslow, 2013; President's New Freedom Commission on Mental Health, 2003). According to the process model of recovery, consumer empowerment and self-determination are critical ingredients to developing each person's unique path to reaching her or his full potential (Substance Abuse and Mental Health Services Administration [SAMHSA], 2012). Decades of literature have asserted the importance of collecting consumers' perspectives about mental health services, reasoning that such perspectives can inform policies, identify which services are most helpful, improve retention in services, and facilitate a person-centered framework to understand how to improve the development and delivery of services in private and public sectors (Gonzalez, Butler, & England, 2015; Howard, El-Mallakh, Kay Rayens, & Clark, 2003). These are critical goals for ensuring quality mental health services and are central to the shared decision-making approach to service delivery (SAMHSA, 2010). However, the perception of what constitutes quality care can vary between providers and recipients of care (Barbato et al., 2014; Mason et al., 2004; Shumway et al., 2003), and there is some debate whether consumer satisfaction is the best metric to evaluate mental health services (Hopkins, Loeb, & Fick, 2009). To our knowledge, few studies (Crane-Ross, Roth, & Lauber, 2000; Fischer, Shumway, & Owen, 2002; Mason et al., 2004) include the perspectives of both clinicians and consumers about community mental health services and these did not evaluate the helpfulness of services. The goal of the present study was to compare how these stakeholders perceive the helpfulness of services delivered in mental health agencies rather than satisfaction with services. This will identify areas of agreement and divergence between these two groups, which could have implications for how mental health services are planned, delivered, and utilized.

### Perceptions of Satisfaction and Helpfulness of Services

Historically, consumer perceptions of health care services have been captured by consumer satisfaction measures, and these ratings did not include individuals with serious mental illness because of the assumption that they lacked the insight to appropriately rate services (Chamberlin, 2005). However, there has been increasing recognition that consumers are able to evaluate their services, and that their ratings correlate with indices of improvement in their functioning (Ruggeri, 2010). Consumer satisfaction ratings of mental health services are generally high in research studies and are typically higher in community settings than in inpatient settings (Boardman, Hodgson, Lewis, & Allen, 1999; Henderson, Phelan, Loftus, Dall' Agnola, & Ruggeri, 1999). Some researchers have questioned whether these high ratings represent a true satisfaction with services or are the result of methodological flaws, such as omitting domains of interest to consumers, excluding more difficult consumers, or framing questions that are biased to reflect providers' perspective rather than consumers' (Clark, Scott, Boydell, & Goering, 1999; Paludetto, Camuccio, Cutrone, Cocchio, & Baldo, 2015). However, studies that have specifically tested various measurement methods and strategies have generally still found high satisfaction with services (Clark et al., 1999; Paludetto et al., 2015), which minimizes some concerns that high ratings are

a methodological artifact. For example, Paludetto and colleagues (2015) were concerned about sampling bias favoring the inclusion of those voluntarily receiving services over those involuntarily committed to services. However, they did not find differences in the mean satisfaction ratings of participants by voluntary status when they examined this issue. Clark and colleagues (1999) investigated if there was response bias because of who administered the survey, a service provider or a client. They also did not find significant differences based on the administrator.

Another issue with consumer satisfaction evaluations is that satisfaction connotes an evaluation of emotional contentment with services (Crow et al., 2002), and most measure aspects of service delivery like wait times, physical aspects of the agency, and how people are greeted at the agency. However, an evaluation of the *helpfulness* of services connotes a measurement of their impact on one's recovery and well-being and the degree to which the services are useful to their lives, rather than if they are content with how services are delivered. Perceptions of helpfulness or usefulness of services are also more informative when evaluating the relative merit of various types of services. Prior research has highlighted discrepancies between providers and consumers about how they prioritize services and treatment outcomes (Fischer et al., 2002) and identified disagreement between consumers and their case managers about what they need help with and how much help they received (Crane-Ross et al., 2000). These findings suggest that differences in how much benefit or help that each group perceives service domains have are critical to identify.

Perceptions of service benefits have been more widely used in physical health services research and generally concern the intention to use health services (Dohan & Tan, 2013; Rosenstock, 2005). To capture how well services benefited mental health consumers in the present study the term helpfulness was used to ensure that participants were focused on the experience of actual service impacts rather than their intended utility or satisfaction with services.

### Consumer and Provider Perception of Services

CMHCs are the main providers of long-term outpatient services to individuals with serious mental illnesses and there were 2636 CMHCs in the United States in 2016 (SAMHSA, 2016a). CMHCs provide numerous services beyond psychotherapy and medication support, and service mandates for these agencies are increasing over time to reflect treatment of the whole person (SAMHSA, 2016b). Many CMHCs offer social support, integrated physical health care, assistance with benefits and housing, substance use treatment, and help building connections in the community. These routinely offered services are often called "usual care services" and controlled studies are often done in comparison with "usual care services." Most studies of usual care services focus on issues such as rates or consequences of treatment nonadherence (Ascher-Svanum et al., 2006) or indicators of service quality (Druss, Rosenheck, & Stolar, 1999). Understanding how consumers and

<sup>1</sup> Although patient satisfaction is a term used in medical settings and is used in previous literature, the recovery model endorses the use of consumer instead, and in this article we will use the term consumer rather than patient. However, we will still use the term outpatient services to describe services that occur in the community.

providers of mental health services view their helpfulness may provide insights into how to improve usual care and to evaluate how new services might be received by consumers and providers. As the consumer voice is being increasingly valued in the evaluation of services, divergence between consumers and providers about the helpfulness of different CMHC services could have important implications for service planning, delivery, and outcomes. Individuals who receive services at CMHCs also come from a broad range of backgrounds and can differ in their demographic composition from their providers. The ages, gender, race/ethnicity, mental health diagnoses, and treatment program (level of care) of these groups may all influence service perceptions. However, evidence for clear demographic differences in consumer perceptions of services is equivocal (Ruggeri et al., 2007).

It has also been argued that mental health services should be consumer driven, based on consumer preference and self-perceived needs (SAMHSA, 2012). This can be at odds with the perspective that favors the practitioner’s judgments about which services will be most beneficial for a consumer and how to organize those services. The primary aim of the present study was to examine how helpful a range of usual care services were viewed by consumers and providers in CMHCs in Los Angeles County. A second goal was to identify whether there were subpopulations that differentially perceived the helpfulness of services, which could inform whether services might need to be tailored according to preferences by gender, age, race, and ethnicity.

**Method**

**Participants**

In 2012, four large mental health agencies in Southern California created a practice-based research network (PBRN) focused on integrated health care for individuals with serious mental health issues, called the Recovery Oriented Care Collaborative (Kelly, Davis, & Brekke, 2015). PBRNs are ongoing collaborations between researchers and providers to complete research on topics that are of interest to and have practical significance for practitioners. All of the participating agencies collaborated in the development of the current study and selected 2–6 clinics within their agencies to administer the survey. The models of care differed somewhat at each agency, though all provided some similar core services such as Full Service Partnerships (FSP), and Wellness Centers (described below). All of the agencies are recovery-oriented and assist those with serious mental illnesses living in the community.

Consumer participants were drawn from 15 clinics and provider participants were drawn from 13 of those 15 clinics. The majority of consumer and provider participants were drawn from FSP programs (53%), followed by Wellness (43%). There were 147 provider participants out of 256 employed at those 13 agencies (57% participation rate). The types of providers who completed the survey included those in administrative positions (21%), therapists (19%), case managers (33%), peers (14%), and medical positions (12%). The average number of years of employment at their agencies were 4.89 years (*SD* = 4.61). Details of the provider demographics of the participating providers and the full demographics of all staff at participating clinics are presented in Table 1. Using  $\chi^2$  and z score comparison tests, we examined if there were any signif-

Table 1  
*Provider Characteristics for Those Who Participated and of All Those Employed at the 13 Participating Sites*

Variables	Participating providers		All providers at participating agencies	
	<i>n</i>	%	<i>n</i>	%
Providers	147		256	
Agency				
Didi Hirsch	29	19.7%	36	14.1%
Exodus Recovery	52	35.4%	90	35.2%
Mental Health America	33	22.4%	75	29.3%
Pacific Clinics	33	22.4%	55	21.5%
Gender				
Male	42	28.6%	83	32.4%
Female	104	70.7%	173	67.6%
Race/ethnicity				
Caucasian	48	32.7%	84	32.8%
African American	23	15.6%	69	27.0%
Latino	44	29.9%	63	24.6%
Other	32	21.8%	40	15.6%
Program				
FSP	90	61.2%	182	71.1%
Wellness	42	28.6%	56	21.9%
Other	15	10.2%	18	7.0%
Positions				
Case managers	48	32.7%	85	33.2%
Therapeutic staff	28	19.0%	46	18.0%
Psychiatrists/nurses/medical	18	12.2%	37	14.4%
Peer position	20	13.6%	31	12.1%
Administrators	31	21.1%	57	22.3%
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Age (in years)	39.81	11.83	n/a	n/a

Note. FSP = Full Service Partnerships.

icant differences between the participating providers from the total providers employed at the participating agencies. Compared with all employees at participating clinics, the provider participants did not differ in their proportions by agency, gender, race/ethnicity, program, or position.

There were 351 consumer participants. The most frequent primary mental health diagnoses of consumers were mood disorders (57%). Approximately 50% of the adults with serious mental illness receiving FSP outpatient services funded by the Los Angeles County Department of Mental Health (LACDMH) in 2015 received services from the four agencies that participated in this study. We examined the representativeness of our consumer sample in three ways, in comparison with all consumers at their agencies, in comparison with those county-wide receiving services, and to the all those receiving FSP services in LA County. Compared with the 4,960 consumers at the participating clinics (see Table 2), the consumer participants did not differ in their proportions by agency, gender, race/ethnicity, program, or mental health diagnosis.

To examine how representative the consumer participants in this study were to all those treated in FSP and in LA County, we compared the proportions of our consumer participants to available descriptives on gender and race/ethnicity from LACDMH using z score proportion comparisons. The gender distribution of our sample was similar to the proportion receiving outpatient services

Table 2  
*Characteristics of Consumers Who Participated and Total Receiving Services at 15 Participating Sites*

Variables	Participating consumers		Total consumers	
	<i>n</i>	%	<i>n</i>	%
Consumers	351		4960	
Agency				
Didi Hirsch	99	28.2%	923	18.6%
Exodus Recovery	100	28.5%	1034	20.8%
Mental Health America	65	18.5%	642	12.9%
Pacific Clinics	87	24.8%	2361	47.6%
Gender				
Male	185	55.7%	2283	46.0%
Female	150	42.7%	2676	54.0%
Race/ethnicity				
Caucasian	85	24.2%	1049	21.1%
African American	134	38.2%	2098	42.3%
Latino	81	23.1%	1314	26.5%
Other	44	12.5%	499	10.1%
Program				
FSP	178	52.7%	2396	48.3%
Wellness	146	43.2%	2260	45.6%
Other	14	4.1%	136	2.7%
Primary diagnosis				
Depression	115	32.8%	1477	29.8%
Schizophrenia/schizoaffective	115	32.8%	1703	34.3%
Bipolar	86	24.5%	802	16.2%
Other diagnoses	17	4.8%	978	19.7%
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Age (in years)	46.03	12.04	n/a	n/a

Note. FSP = Full Service Partnerships.

county-wide in 2015 (Kay, 2016). County-wide in 2015, 56.9% of children and adults treated in outpatient facilities ( $n = 196,984$ ) were primarily Latino (51.8%), followed by African Americans (25.2%), Caucasians (16.5%), and Asian/Pacific Islanders (6%). Although Latinos were the largest group who needed services, in terms of the penetration rates (ratios of those who need services to those who received services) African Americans relatively received the most services (147%), followed by Caucasians (97%), Latinos (51%), and Asian/Pacific Islanders (43%).

There are approximately 4,700 adult FSP slots in Los Angeles according to a LACDMH report (LACDMH, 2017). For FSP services, in 2017, African Americans (32%) were the largest group served, followed by Caucasian (29%) and Latino clients (28%). Another 12% are from Asian, American Indian and other races but the county did not identify those belonging multiple races/ethnicities in their report (LACDMH, 2017). Our sample had disproportionately more African Americans compared with those in all outpatient treatment settings ( $z = 5.60, p < .001$ ) and those treated in FSP programs in 2017 ( $z = 2.50, p = .01$ ). Our sample had disproportionately fewer Latinos compared with those in all outpatient treatment settings ( $z = -10.75, p < .001$ ) but it did not differ from those treated in FSP programs in 2017 ( $z = -1.84, p = .07$ ). There were no proportion differences between Caucasians in our sample from those in all outpatient services in 2015 or those in FSP programs in 2017.

Comparing provider and consumers in this study, providers were significantly younger than consumer participants,  $t(473) =$

5.19,  $p < .001$ . In a  $2 \times 2 \chi^2$  comparison of gender and respondent type, providers were more likely to be female (71% and consumer respondents were more likely to be male (56%),  $\chi^2(1,481) = 28.56, p < .001$ . African Americans were the most common race/ethnicity represented in the consumer sample, followed by Caucasians, Latinos/Latinos, and other/mixed race, which reflects the penetration rate of outpatient service use in LA County (described above). Across providers and consumers, there were significant differences in their racial/ethnic compositions. There were significantly more African Americans in the consumer sample (38%) than in the provider sample (16%,  $\chi^2(1,491) = 26.91, p < .001$ ). There were no other significant race/ethnicity differences between providers and consumers.

## Procedure

The Institutional Review Board of the University of Southern California, the internal committees of the participating agencies, and the Human Subjects Research Committee of Los Angeles County approved all procedures. Participants received a \$5 gift card as a thank you for their participation. Mental health providers and consumers were recruited from four large mental health agencies to complete a short survey about the helpfulness of community mental health services over two months in 2015. Providers were sent an e-mail by their agency heads explaining the study with a link to the study information sheet and survey. After completing the survey, another link that was unattached to the study response, was provided so that providers could enter their e-mail addresses for a gift card. Consumers were offered an envelope (with a study flyer on the outside), with a study information sheet and survey inside, either in the lobbies of the clinics or while receiving services. Surveys could be completed at the agency after completing services for the day or in the community. Completed surveys could be sealed and returned to the front desk of the agency in the sealed envelope (and they received their gift card), or they could hand their sealed survey to their provider and turn in a code to the front desk for their gift card the next time they came into the agency. A phone number for study staff was provided if they needed help with understanding any items. Consumers could complete the survey in English or Spanish. The Spanish translation was completed by a professional translation service.

**Treatment programs.** All the agencies provided Full Service Partnership (FSP) services, Wellness programs, and other services (e.g., integrated health programs). FSP programs are based on the Assertive Community Treatment model and are the most intensive outpatient public mental health programs in California. In Los Angeles County, FSPs have a provider to client ratio of 1:15. Treatment teams are composed of a psychiatrist/prescribing clinician, case manager, other mental health providers (usually social workers), housing and employment specialists, and client advocates. Designed to be time-limited, consumers transition from FSP programs to less intensive Wellness programs over time (that is termed graduation from services as people flow to less intensive services). Wellness programs help consumers who are further along in their recovery and require less intensive support. Wellness includes recovery-oriented groups such as stress reduction, mindfulness, nutrition, exercise, cooking skills, and money management, as well as individual case management (linkage to housing, primary care, employment, community, and school opportunities).

## Measures

**Demographics.** All participants reported their age, gender, race/ethnicity, and treatment program (FSP, Wellness, or Other). All the participating agencies provided clinic-wide data on the gender, race/ethnicity, and treatment program of the providers and consumers at participating agencies.

**Consumer characteristics.** Consumers reported their primary mental health diagnoses for descriptive purposes and for testing whether responses to services related to mental health diagnosis. Clinics provided descriptives of the mental health diagnoses of those treated in participating agencies.

**Provider characteristics.** Providers identified their position title (administrative, clinical, case manager, and peer) and length of employment. Clinics also provided descriptives of all position titles for providers employed at participating agencies.

**Perceived helpfulness of services.** A 24-item categorization of mental health services was created for this study. Items were developed from a list of services provided at each agency from agency heads and then refined through four focus groups, two with providers and two with consumers (one per agency). Thirty-one providers participated in the focus groups and 19 consumers did. Focus group participants rank ordered services provided in a list, identified the five most useful services, the five least useful, and participated in a 1–2 hr discussion about their experiences with the services at their agencies. Participants in these groups used the terms useful and helpful interchangeably and we determined to use the term helpful in our survey as it was considered a more accessible term to our participants. Although we did not operationally define helpfulness for the participants, the discussion from both providers and consumers often centered on which services were helpful to functional aspects of consumers' lives like maintaining a living situation and having friends, as well as to coping with the challenges of having a mental illness. It was often implied that helpfulness was related to their recovery goals.

Based on these efforts, we generated a list of the common services found across all four agencies. Items reflected the range of services delivered according to the perceptions of both providers and consumers, and asked for rating of their helpfulness. The four community mental health agency executives who are members of the PBRNs executive committee reviewed the items to confirm whether the items reflected their core services accurately. Items were pilot tested at one agency with 15 providers to determine ease of administration and clarity of items. Based on the pilot feedback, instructions were modified to improve accurate completion of the survey. Very importantly, the service items in the survey largely reflected treatment domains of individual and group therapy, medications, rehabilitative and supportive services as outlined by SAMHSA (2016b), which suggests that our measure reflects the foci of national treatment programs.

Participants rated each service item on a 5-point scale (1 = *very unhelpful* to 5 = *very helpful*). Participants could also identify services as "not applicable." Nine subscales, based on distinct service domains, were created in consultation with the agencies before and after the items were developed. Subscales included social support, building of self-sufficiency, attending to physical health needs, mental health treatment, building connections in the community, help with gaining benefits, assistance with gaining and keeping housing, substance use treatment, and building life

skills and structure. A total average score across all 24 items was calculated. Items grouped by subscale are presented in Figure 1. In addition, participants selected the four services that they found most helpful of those 24 services. The scale exhibited excellent reliability for providers, (Cronbach's  $\alpha = .96$ ), consumers (Cronbach's  $\alpha = .97$ ) and the full sample (Cronbach's  $\alpha = .97$ ).

**Analyses.** Data were inspected for outliers and normality of distributions. There was significant negative skew and kurtosis in the ratings of services. We used an exponential transformation to address issues of negative skewness and kurtosis. Demographics comparisons using independent *t* tests, correlations, and analysis of variance (ANOVA) were conducted across and within respondents to test whether any control variables were needed. To compare whether there were differences in the percentages of consumers and providers who selected each of the services as their top four, we conducted a series of z-score proportion comparisons. We used paired *t* tests for comparisons of ratings within consumers and providers. To test whether there were significant between group differences between providers and consumers, we conducted multivariate analysis of variance (MANOVA) comparisons. The basis of the selection of MANOVA analyses was because of the correlations between the dependent variables. All demographic variables that were significantly different between consumers and providers were included as controls in multivariate analysis of variance (MANOVA) comparisons. As there were a large number of subscale comparisons, we adjusted our *p* values for multiple comparisons for each type of analysis. For our z-score comparisons of ratings, we used a correction of  $.05/24 \text{ items} = .002$ . Bonferroni corrections were used for within group (.05/36 comparisons = .001) and between group ratings comparisons (.05/10 comparisons = .005). There were two exceptions to use of these standards, when exploring possible control variables we did not want to overcorrect and drop important variables (Armstrong, 2014), and we used the standard of  $p < .01$  for the MANOVA comparisons.

## Results

### Rank Orders of Service Helpfulness

A graph of the four most helpful services selected by consumers and providers is presented in Figure 1. The top four most helpful services selected by consumers included: (a) the creation of a welcoming environment, (b) staff listening and offering support, (c) psychiatric medications, and (d) individual therapy. Among providers, the top ranked services were: (a) creating a welcoming environment, (b) building self-efficacy, (c) a sense of hope and healing, and (d) learning to cope with things.

In terms of services that were not highly valued, services selected by less than 10% of both consumers and providers included reminders for appointments and tasks, preparation for graduation, finding opportunities in the community, help with lifestyle, and substance use treatment. Six percent of consumers chose living skills as helpful and only 3% of consumers chose community connections. Less than 10% of providers chose physical health care services, outreach, or building structure as among the most helpful.

To compare whether the differences in the proportions that providers and consumers chose specific services as valuable, we conducted a series of z score proportion comparisons (percentages

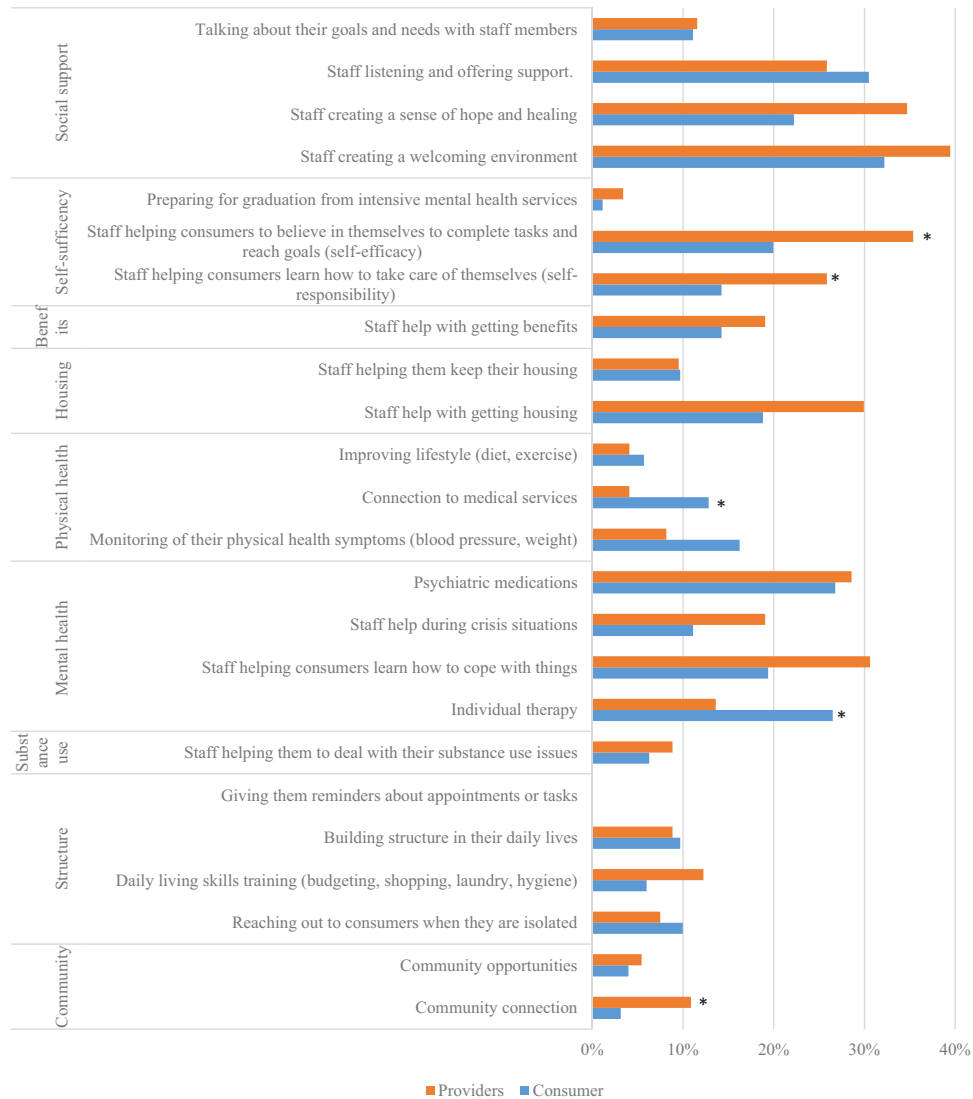


Figure 1. Percentages of consumers' and providers' selections of the four most helpful services. \*  $p \leq .002$ . See the online article for the color version of this figure.

are presented in Figure 1). As there were a large number of comparisons, only comparisons at  $p = .002$  (family wise correction  $.05/24 = .002$ ) or below were included as significant. After adjusting for multiple comparisons, providers valued services related to self-efficacy ( $z = -3.55$ ,  $p < .001$ ), self-responsibility ( $z = -3.21$ ,  $p = .001$ ), and community integration ( $z = -3.62$ ,  $p < .001$ ) more often than consumers did. Conversely, consumers valued individual therapy ( $z = 3.13$ ,  $p = .002$ ) and medical assistance ( $z = 3.01$ ,  $p = .002$ ) more than providers did.

### Ratings of Service Helpfulness

The raw means of the service ratings are presented in Figure 2. Overall, 86% of providers and 70% of consumers rated services as helpful or highly helpful (average scores of 4 or higher for the total). Across the subscales, mean ratings by providers ranged from 4.23 to 4.63 (substance use to staff support) and among consumers mean

subscale ratings ranged from 4.07 to 4.43 (substance use to staff support). After the exponential transformation of scores to address the nonnormal distribution of the variables, among providers scores ranged from 95.11 to 124.49 (physical health care to staff support) and among consumers the mean scores ranged from 89.19 to 112.63 (substance use to staff support). Exploratory analyses were completed to determine whether there were differences within respondent type (consumer or provider) or between the respondents. To explore whether there were demographic differences in service perceptions by providers and consumers, demographic comparisons were completed within and between these groups.

### Differences in Service Helpfulness Within Providers

To test whether there were any differences in how helpful services were perceived among providers, a series of paired  $t$  tests were conducted. Because of the large number of comparisons, only

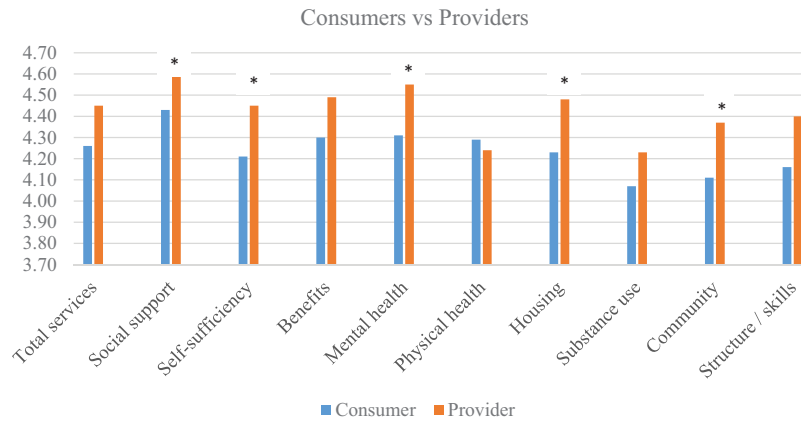


Figure 2. Average provider and consumer ratings of service helpfulness ratings. \*  $p \leq .001$ . See the online article for the color version of this figure.

significance ratings at .001 or below were included as significant. Mean service rating differences are presented in Table 3. Among providers, social support was significantly more helpful than all other service subscales other than mental health services. Self-sufficiency, benefits, housing, mental health, and daily living structure, were more important than physical health services. Mental health services also were rated as more helpful than substance use, community integration, or daily living structure. Self-sufficiency was rated higher than substance use services.

### Differences in Service Helpfulness Within Consumers

To test whether there were differences within consumers in their perceptions of helpful services, we conducted a series of paired  $t$  tests across the subscales (see Table 4). Only comparisons at  $p = .001$  or below were included as significant. Among consumers, social support was more important than every subscale. Mental health services and benefits were rated higher than substance use, community integration, or daily living structure. Mental health services were rated higher than physical health care, housing, and self-sufficiency.

### Comparing Providers' and Consumers' Ratings

As there were significant differences between the providers and consumers in terms of age, gender, and race/ethnicity composition, we first explored whether these variables were associated with ratings of service helpfulness. Using independent  $t$  tests it was found that male providers rated benefits as significantly more helpful than female providers,  $t(92.94) = 3.12, p = .002$ . There were no gender differences in service ratings among consumers. Pearson correlations were used to test the associations of age with service ratings. There were no significant correlations between the age of providers or consumers and perceptions of services. In ANOVA comparisons of race/ethnicities and ratings of the helpfulness of services among providers, Latino providers rated benefits ( $p = .025$ ; Games-Howell post hoc tests), housing ( $p = .045$ ; Games-Howell post hoc tests), physical health care ( $p = .046$ ; Scheffé post hoc tests), and structure in daily living ( $p = .04$ ; Scheffé post hoc tests) as more helpful than Caucasian providers did. Across race/

ethnicity, African Americans consumers rated substance use services ( $p = .016$ ; Scheffé post hoc tests) and daily structure services ( $p = .029$ ; Scheffé post hoc tests) more highly than Caucasian consumers.

To explore whether the type of program that participants (FSP/FCCS, Wellness, or other) related to their ratings, we completed ANOVA comparisons for all the subscales and the total scale. There were no significant differences related to the type of program for how providers or consumers rated services' helpfulness on any subscale or the total scale, with the exception of housing among consumers. Participants in Wellness services rated housing services as significantly less helpful ( $p < .002$ ) than those in FSP services.

As neither consumers' nor providers' ratings were associated with age, and only one subscale was associated with gender among providers and program was only related to housing among consumers, these variables were dropped from subsequent analyses. There were significant differences for providers and consumers with race/ethnicity and these variables were retained for subsequent analyses. A MANOVA was conducted with the nine subscales with participants (provider vs. consumer) and dummy coded race/ethnicity variables (with Caucasians as the reference group). The interactions of respondents by race/ethnicity were tested and none were significant, so only main effects of the MANOVAs are presented.

A one-way MANOVA revealed a significant multivariate main effect for respondent, Wilks'  $\lambda = .914, F(9, 380) = 3.96, p < .001, \eta_p^2 = .086$ . Power to detect the effect was .995. Significant main effects were also found for African Americans (Wilks'  $\lambda = .936, F(9, 380) = 3.96, p < .001, \eta_p^2 = .064, \text{power} = .964$ ) and Latinos (Wilks'  $\lambda = .954, F(9, 380) = 3.96, p = .034, \eta_p^2 = .046, \text{power} = .861$ ). To adjust for multiple comparisons, only  $p$  values of  $< .01$  will be interpreted. Using this standard, providers rated support ( $p = .008$ ), self-sufficiency ( $p < .001$ ), housing ( $p = .001$ ), mental health ( $p = .007$ ), and community ( $p = .007$ ) as more helpful than did consumers. The subscales of substance use services ( $p = .034$ ) and structure ( $p = .019$ ), benefits ( $p = .05$ ) and physical health ( $p = .792$ ) were not significantly different between providers and consumers. There were also significant, but limited, relationships between race/ethnicity and service ratings. African



**Table 3**  
*Mean Differences in Paired t Tests of Providers' Ratings of the Helpfulness of Services Subscales*

Variables	1	2	3	4	5	6	7	8
	M (SD)	M (SD)	M (SD)	M (SD)	M (SD)	M (SD)	M (SD)	M (SD)
1. Staff support								
2. Self-sufficiency	-.19 (.41)	<.001						
3. Benefits	-.15 (.56)	.001	ns					
4. Housing	-.16 (.66)	.001	.01 (.65)	ns				
5. Physical health	-.39 (.63)	<.001	-.24 (.77)	<.001				
6. Mental health	-.08 (.32)	ns	.06 (.55)	ns	.32 (.58)	<.001		
7. Substance use	-.40 (.80)	<.001	-.27 (.91)	<.001	.02 (.77)	ns		
8. Community	-.26 (.65)	<.001	-.11 (.82)	ns	.13 (.63)	ns	.14 (.66)	ns
9. Structure	-.24 (.54)	<.001	-.09 (.70)	ns	.16 (.60)	.001	.18 (.62)	ns

*Note.* Analyses were completed with an exponential transformation but are presented as the raw means for ease of interpretation. *M* = the raw mean difference between the exponent adjusted means of the subscales in paired *t* tests. To correct for the family wise error, only *p* values of = .001 or below were included as significant. In each column, the valence of the mean difference reflects the row mean relative to the column mean.

**Table 4**  
*Mean Differences in Paired t Tests of Consumers' Ratings of the Helpfulness of Services*

Variables	1	2	3	4	5	6	7	8
	M (SD)	M (SD)	M (SD)	M (SD)	M (SD)	M (SD)	M (SD)	M (SD)
1. Staff support								
2. Self-sufficiency	-.22 (.56)	<.001						
3. Benefits	-.14 (.75)	<.001	ns					
4. Housing	-.32 (.93)	<.001	-.18 (.91)	ns				
5. Physical health	-.23 (.71)	<.001	-.08 (.79)	ns	.07 (.89)	ns		
6. Mental health	-.12 (.46)	<.001	-.02 (.71)	ns	.20 (.84)	<.001		
7. Substance use	-.35 (.93)	<.001	-.17 (.85)	<.001	-.11 (.65)	<.001		
8. Community	-.31 (.77)	<.001	-.12 (.80)	<.001	.14 (.84)	ns	.06 (.79)	ns
9. Structure	-.26 (.65)	<.001	-.07 (.89)	<.001	.02 (.56)	ns	.11 (.80)	ns

*Note.* Analyses were completed with an exponential transformation but are presented as the raw means for ease of interpretation. *M* = the mean difference between the exponent adjusted means of the subscales in paired *t* tests. To correct for the family wise error, only *p* values of = .001 or below were included as significant. In each column, the valence of the mean difference reflects the row mean relative to the column mean.

Americans and Latinos rated substance use services higher than Caucasians ( $p < .001$  and  $p = .001$ , respectively). African Americans also rated self-sufficiency ( $p = .002$ ), physical health ( $p = .003$ ), and structure ( $p = .007$ ) higher than Caucasians. No other race/ethnicity scales were significantly different at the  $p = .01$  level.

## Discussion

Comparisons of how mental health consumers and their providers assess the helpfulness of services provided in usual care are rare but offer important insights into how well consumer-centered care is delivered in practice. All the services included in this study are considered common services in CMHCs, which means that they all have some inherent value, but there were clear indications from this study that not all services deliver value equally. There are several findings suggesting the importance of studies like this for service delivery, planning and evaluation. First, providers and consumers have generally high ratings for the helpfulness of mental health services, but providers rated more than half of the services as more helpful than consumers did. Second, both groups viewed social support-related processes as among the most important aspects of care. Third, providers were more likely to select self-responsibility, self-sufficiency, and community integration as top ranked services than consumers were, whereas consumers ranked individual therapy and medical services assistance as more helpful. Fourth, providers and consumers rated community integration services and substance use services as among the least helpful. Finally, there is some indication that racial/ethnic minority groups might differentially value usual care services, as African Americans and Latinos found some services more helpful than non-Hispanic Caucasians. From these findings, it appears that further efforts to develop shared service priorities between consumers and providers are needed to more effectively include the consumer voice in the design and delivery of mental health services. These issues are addressed in more detail below.

Although central tenets of recovery-oriented care are consumer empowerment and autonomy, mental health providers viewed services aimed at promoting self-sufficiency and obtaining and keeping housing as more helpful than consumers did. Similarly, consumers did not value a step-down from higher to lower intensity services (called graduation from services) relative to other services. These discrepancies may reflect ideological as well as pragmatic and funding-related issues in community mental health settings. Intensive training initiatives for providers in the recovery model may mean that providers have learned to value consumers' self-sufficiency and independence from services more than consumers themselves, who are often subject to a poor quality of life in the community (reviewed by Davis, Fulginiti, Kriegel, & Brekke, 2012). Contractual obligations and county funding mandates reinforce this pressure on providers to move consumers to lower levels of service intensity and discharge them out into the community efficiently. However, the results of this study suggest that consumers are less invested than providers in this aspect of the recovery model, and this could cause friction over treatment goals. In previous research of prioritization preferences for mental health outcomes tracking that including housing among seven outcome priorities, consumers ranked housing third and providers ranked it sixth (Fischer et al., 2002). It is unlikely that consumers truly see

housing as less beneficial than providers do but that there is a lack of access to clean, safe, and affordable housing in many areas, which may be reflected in consumers' relatively lower rankings of housing's helpfulness. However, it is also possible that the lower rankings of the helpfulness of housing services by those in Wellness services reflects a lesser need to address this issue by those requiring less intensive services.

The devaluing of community integration by consumers and providers in their ratings and their rank orders relative to other services is a potential concern. Both groups rated community integration related services, such as developing connections in the community and finding employment/volunteer opportunities, as significantly less helpful than many other types of services. An interesting find was that consumers rated and ranked community integration as less helpful than providers did. These attitudes may reflect long-standing barriers to community integration that persist for people with serious mental illness (reviewed by Davis et al., 2012). For example, while 70% of people diagnosed with a SMI identify work as a primary goal, fewer than 15% are employed (Leff & Warner, 2006) and only 15% live independently in the community (Frank & Glied, 2006). Poor employment status and resultant poverty (Frank & Glied, 2006), lack of affordable housing (Hogan, 2008), poor health and health care (Parks, Svendsen, Singer, Foti, & Mauer, 2006), and social exclusion (Yanos & Moos, 2007) all severely undermine quality of life and opportunities for community participation among this population. It may be that social determinants thwarting community integration overwhelm the efficacy of clinic-based services designed to help consumers develop connections and actively participate in community life. Present findings support national calls for social and economic policy interventions to help improve community integration for this population (Davis et al., 2012), such as expansion of Medicaid benefits to cover widespread access to evidence-based vocational rehabilitation programs and allowing employment without threat of losing public assistance benefits. Concerns about mental health stigma from the broader community may also contribute to consumers and providers devaluing community integration and reflect their frustration over the lack of meaningful change in public attitudes about serious mental illnesses (Schomerus et al., 2012). It is also possible that individual or group interventions for consumers could be developed to focus on the challenges and opportunities for community integration starting with a clear understanding of what this means for consumers. Overall, these findings suggest that efforts to increase community integration of consumers receiving mental health services need considerable attention.

Physical health services are a relatively new component of care in CMHCs (Enthoven, 2009) and perceptions of integrated care were mixed within this study, especially among consumers. Providers rated physical health care services as the least helpful and less than 10% of providers included any aspect of physical health among their top four services. However, consumers included linkage to medical services in their top four significantly more often than providers did and consumers rated physical health above more long-standing services, such as substance use services and daily structure. Previous research also found that consumers may perceive a need for assistance with physical health services that may be unrecognized by case managers (Crane-Ross et al., 2000). Consumers may be experiencing benefits from early efforts to address physical health needs in mental health settings that their

providers do not yet fully recognize. It is also notable that African Americans reported particular benefit from integrated services. African Americans have disproportionately high rates of disease, injury, death, and disability compared with non-Hispanic Caucasians (Centers for Disease Control and Prevention, 2005), and it is encouraging that African American clinicians and consumers found more benefit from these services given the high need for them. These results do not support any particular form of integrated care, as these varied across the agencies in this study including mobile clinics, peer health navigation, and colocated primary health care providers, and were the focus of a previous study with this PBRN (Kelly et al., 2015). Rather it appears that perhaps staff could benefit from more training and feedback about the benefits of these services to their consumers so that they can perceive the value of integrated care more clearly.

Substance use services ratings were lower than most other services and less than 10% of either group included it as among the most helpful. It is widely recognized that bifurcated mental health and substance abuse treatment systems in the United States have given rise to fragmented and inadequate care for individuals diagnosed with serious mental illness and comorbid substance use disorders (e.g., Drake et al., 2001). The results of the present study may reflect that substance use services are still a neglected area for those with serious mental illness. According to the 2015 National Survey on Drug Use and Health (SAMHSA, 2016c), there are about 2.3 million people in the United States with comorbid serious mental illnesses and substance use disorders and only 11% of these individuals receive treatment for both conditions, despite repeated national calls for integrated mental health and substance abuse services. All the participating agencies provided substance use services but the form of substance use services varied across agencies. Future research should further examine whether variations in the types of services provided affected their perceived helpfulness and identify areas for service improvements.

The differences between consumer and provider valuations of specific mental health services could have implication for models of shared decision making in mental health (SAMHSA, 2012). These models seek to arrive at commonly agreed upon goals and outcomes for individual consumer services. Given the differences found in the perceptions of the helpfulness of distinct mental health services, shared decision-making could be more difficult. Providers may be inclined to devalue services that are time intensive, newer, or expensive because they are considering the availability of resources, their comfort with delivering new services, and the impact of services across all their consumers. Conversely, consumers are likely to value resources relative to their own perceived need with little consideration of the competing needs of other consumers' at their agencies. Therefore, efforts to better understand and align the perceptions of mental health services between consumers and providers are needed so that shared priorities can more easily develop. Further, mental health providers and consumers may benefit from additional explorations about the aspects of the recovery model that each stakeholder finds helpful to facilitate partnerships in treatment decision making.

More important, there were also areas of agreement between providers and consumers. Social support was the most helpful and important aspect of services found in usual care mental health settings in both item rankings and ratings for consumers and providers, which is consistent with findings in previous research of

consumer satisfaction with services and perceived areas of need by consumers and providers (Crane-Ross et al., 2000; Mason et al., 2004). These findings align with social-psychological frameworks, such as a social resources model of coping (Moos & Holahan, 2003), which posit that processes involving emotional support, feedback, and guidance from others can promote positive self-appraisals and enhanced coping, as well as indirectly leading to improved functioning and well-being. Social support is positively associated with enhanced coping and motivation for people with serious mental illness (Cohen et al., 2017; Davis & Brekke, 2014; Hultman, Wieselgren, & Ohman, 1997). However, this finding could also reflect consumer reliance on providers for support because of the interpersonal impairments characteristic of this population (reviewed by Kurzban, Davis, & Brekke, 2010). In light of consumers' lower ratings of the helpfulness of services around integration into the community, these results could reflect a need to address both issues of stigma mentioned above, as well as the underlying social deficits that can interfere with the development of social relationships and social networks outside of mental health providers (Bromley et al., 2013).

### Limitations

This study has several limitations. All data were based on self-reports. Future studies should include official service records, such as administrative and billing databases, to allow comparisons of subjective valuations of services with actual service utilization. The present study was cross-sectional, which limited possible comparisons across the treatment courses of participants. However, participants were from a range of different stages of recovery as indicated by their treatment program (FSP vs. Wellness) and there was a lack of differences in ratings across these groups. The lack of program differences in client and provider ratings of service utility is consistent with findings in other studies (Bjørngaard et al., 2007) and diminishes concerns that this is a significant limitation to this study. While we did not select agencies or participants randomly, we would argue that these results are generalizable to other CMHCs that are attempting to implement a continuum of recovery-oriented services in urban environments with ethnically and racially diverse providers and consumers. Nonetheless, there could be regional differences in race and ethnicity that should be examined in future studies. It is possible that our findings might be less generalizable to rural settings with fewer resources to address consumers' health holistically but that should be explored in future research.

Another limitation is that since we did not operationally define helpfulness for the participants, the term may not have been interpreted the same by all participants. Although we emphasized that we were interested in the degree that services impacted consumers in practice rather than in principal, there could be different ways that participants evaluated their helpfulness. For example, across participants housing services could have been interpreted as helpful in terms of addressing basic needs and to others it may have been in relation to clinical symptomology. It is also possible that the demographic differences noted between African Americans and Caucasians could have reflected cultural differences in defining helpfulness. Based on our experience with this study, we would suggest an operational definition of helpfulness related to both functional aspects of life such as housing or friends, and

aspects of dealing with a mental illness such as symptoms. These are particularly relevant domains for both consumers and providers of mental health services for serious mental illnesses. It would also be useful to explore how consumers and providers differ in their interpretation of helpfulness, although our focus groups seemed to imply that for both groups it was related to recovery issues. Nonetheless, future research needs to carefully define helpfulness in studies on consumer and provider perceptions of mental health services. Future studies could also examine how these services impact different outcome domains with more precision.

The participating agencies in Los Angeles are four of the largest agencies providing services to those with serious mental illnesses. Our sample did not differ from those treated in LA County in terms of the gender proportions; but it did not fully represent the demographics of the county in terms of African Americans and Latinos treated county-wide. However, these differences in part may be because of imperfect comparisons as the demographics from the county report of 2015 demographics (Kay, 2016) reflected those that included children, whereas our sample was all adults. Our sample more closely resembled the race/ethnicities of those treated in FSP programs county-wide (our sample overrepresented African Americans), which is reasonable as 71% of our sample were drawn from FSP programs. Latino participants were not underrepresented in this study compared with those participating in FSP programs county-wide (LACDMH, 2017), which reflects a larger issue of underutilization of mental health services by Latinos that has been noted in several previous studies (Aguilera & López, 2008; Alegria et al., 2002; Vega, Kolody, Aguilar-Gaxiola, & Catalano, 1999). Greater efforts are required to actively engage Latinos in treatment and in mental health services research and should continue to be a greater focus in research.

Providers' ratings of services were generally higher than those of consumers, which could reflect a slight, but real bias from providers to view their work as more efficacious (Walfish, McAlister, O'Donnell, & Lambert, 2012) or to miss failing cases (Hannan et al., 2005). Providers' ratings could also reflect socialization by agency management to be invested in recent mental health initiatives, such as the Housing First program and the drive for consumers to be less dependent on CMHCs. Both interpretations suggest CMHCs need to increase their efforts to develop shared priorities with consumers. An unequal number of items were used for each subscale, which was because of the iterative method that we used to develop the measure of service helpfulness. It is possible that some domains' ratings may have been influenced by the number of items used to assess them, but as all the ratings were high on average and the internal reliability of the scale was excellent (Cronbach's  $\alpha = .97$ ), it is unlikely that this was a serious methodological confound.

## Suggestions and Conclusions

Community mental health services have improved in quality and scope over time. Overall, providers and consumers have positive views about community mental health care. There were few differences related to the demographics of the providers or the consumers, which could suggest that services are being tailored appropriately to meet the needs of subgroups of their consumers, or that these differences are not driving judgments about the helpfulness of services. The results of this study suggest that it may take

time for newer services to become fully accepted by all stakeholders, but also that some newer service initiatives are making meaningful headway. There is also a need to further explore the notable differences between provider and consumer valuations of services, and how these differences might impact the character and outcomes of services. It appears that efforts to better understand and align the perceptions of mental health services between consumers and providers are needed so that shared priorities can develop in the design and delivery of services. Mental health providers and consumers may benefit from additional exploration about the aspects of the recovery model that each stakeholder finds helpful to facilitate partnership in treatment decision making. Given the perceived value of these services to consumers, there is also a need to improve access to usual care services so that more of those who need them are able to access them.

## References

- Aguilera, A., & López, S. R. (2008). Community determinants of Latinos' use of mental health services. *Psychiatric Services, 59*, 408–413. <http://dx.doi.org/10.1176/ps.2008.59.4.408>
- Alegria, M., Canino, G., Ríos, R., Vera, M., Calderón, J., Rusch, D., & Ortega, A. N. (2002). Mental health care for Latinos: Inequalities in use of specialty mental health services among Latinos, African Americans, and non-Latino Whites. *Psychiatric Services, 53*, 1547–1555. <http://dx.doi.org/10.1176/appi.ps.53.12.1547>
- Armstrong, R. A. (2014). When to use the Bonferroni correction. *Ophthalmic & Physiological Optics, 34*, 502–508. <http://dx.doi.org/10.1111/opo.12131>
- Ascher-Svanum, H., Faries, D. E., Zhu, B., Ernst, F. R., Swartz, M. S., & Swanson, J. W. (2006). Medication adherence and long-term functional outcomes in the treatment of schizophrenia in usual care. *The Journal of Clinical Psychiatry, 67*, 453–460. <http://dx.doi.org/10.4088/JCP.v67n0317>
- Barbato, A., Bajoni, A., Rapisarda, F., D'Anza, V., De Luca, L. F., Inglese, C., . . . D'Avanzo, B. (2014). Quality assessment of mental health care by people with severe mental disorders: A participatory research project. *Community Mental Health Journal, 50*, 402–408. <http://dx.doi.org/10.1007/s10597-013-9667-6>
- Bjørngaard, J. H., Ruud, T., Garratt, A., & Hatling, T. (2007). Patients' experiences and clinicians' ratings of the quality of outpatient teams in psychiatric care units in Norway. *Psychiatric Services, 58*, 1102–1107. <http://dx.doi.org/10.1176/ps.2007.58.8.1102>
- Boardman, A. P., Hodgson, R. E., Lewis, M., & Allen, K. (1999). North Staffordshire Community Beds Study: Longitudinal evaluation of psychiatric in-patient units attached to community mental health centres. I: Methods, outcome and patient satisfaction. *The British Journal of Psychiatry, 175*, 70–78. <http://dx.doi.org/10.1192/bjp.175.1.70>
- Braslow, J. T. (2013). The manufacture of recovery. *Annual Review of Clinical Psychology, 9*, 781–809. <http://dx.doi.org/10.1146/annurev-clinpsy-050212-185642>
- Bromley, E., Gabrielian, S., Brekke, B., Pahwa, R., Daly, K. A., Brekke, J. S., & Braslow, J. T. (2013). Experiencing community: Perspectives of individuals diagnosed as having serious mental illness. *Psychiatric Services, 64*, 672–679. <http://dx.doi.org/10.1176/appi.ps.201200235>
- Centers for Disease Control and Prevention (CDC). (2005). Health disparities experienced by black or African Americans—United States. *Morbidity and Mortality Weekly Report, 54*, 1–3.
- Chamberlin, J. (2005). User/consumer involvement in mental health service delivery. *Epidemiology and Psychiatric Sciences, 14*, 10–14. <http://dx.doi.org/10.1017/S1121189X00001871>
- Clark, C. C., Scott, E. A., Boydell, K. M., & Goering, P. (1999). Effects of client interviewers on client-reported satisfaction with mental health

- services. *Psychiatric Services*, 50, 961–963. <http://dx.doi.org/10.1176/ps.50.7.961>
- Cohen, A. N., Hamilton, A. B., Saks, E. R., Glover, D. L., Glynn, S. M., Brekke, J. S., & Marder, S. R. (2017). How occupationally high-achieving individuals with a diagnosis of schizophrenia manage their symptoms. *Psychiatric Services*, 68, 324–329. <http://dx.doi.org/10.1176/appi.ps.201600031>
- Crane-Ross, D., Roth, D., & Lauber, B. G. (2000). Consumers' and case managers' perceptions of mental health and community support service needs. *Community Mental Health Journal*, 36, 161–178. <http://dx.doi.org/10.1023/A:1001842327056>
- Crow, R., Gage, H., Hampson, S., Hart, J., Kimber, A., Storey, L., & Thomas, H. (2002). The measurement of satisfaction with healthcare: Implications for practice from a systematic review of the literature. *Health Technology Assessment*, 6, 1–244. <http://dx.doi.org/10.3310/hta6320>
- Davis, L., & Brekke, J. (2014). Social support and functional outcome in severe mental illness: The mediating role of proactive coping. *Psychiatry Research*, 215, 39–45. <http://dx.doi.org/10.1016/j.psychres.2013.09.010>
- Davis, L., Fulginiti, A., Kriegel, L., & Brekke, J. S. (2012). Deinstitutionalization? Where have all the people gone? *Current Psychiatry Reports*, 14, 259–269. <http://dx.doi.org/10.1007/s11920-012-0271-1>
- Dohan, M. S., & Tan, J. (2013, August). *Perceived usefulness and behavioral intention to use consumer-oriented web-based health tools: A meta-analysis*. Proceedings of the Nineteenth Americas Conference on Information Systems, Chicago, IL.
- Drake, R. E., Essock, S. M., Shaner, A., Carey, K. B., Minkoff, K., Kola, L., . . . Rickards, L. (2001). Implementing dual diagnosis services for clients with severe mental illness. *Psychiatric Services*, 52, 469–476. <http://dx.doi.org/10.1176/appi.ps.52.4.469>
- Druss, B. G., Rosenheck, R. A., & Stolar, M. (1999). Patient satisfaction and administrative measures as indicators of the quality of mental health care. *Psychiatric Services*, 50, 1053–1058. <http://dx.doi.org/10.1176/ps.50.8.1053>
- Enthoven, A. C. (2009). Integrated delivery systems: The cure for fragmentation. *The American Journal of Managed Care*, 15(Suppl.), S284–S290.
- Fischer, E. P., Shumway, M., & Owen, R. R. (2002). Priorities of consumers, providers, and family members in the treatment of schizophrenia. *Psychiatric Services*, 53, 724–729. <http://dx.doi.org/10.1176/appi.ps.53.6.724>
- Frank, R., & Glied, S. (2006). *Better but not well: Mental health policy in the United States since 1950*. Baltimore, MD: Johns Hopkins University Press.
- Gonzalez, M. L., Butler, A. S., & England, M. J. (Eds.). (2015). *Psychosocial interventions for mental and substance use disorders: A framework for establishing evidence-based standards*. Washington, DC: The National Academies Press.
- Hannan, C., Lambert, M. J., Harmon, C., Nielsen, S. L., Smart, D. W., Shimokawa, K., & Sutton, S. W. (2005). A lab test and algorithms for identifying clients at risk for treatment failure. *Journal of Clinical Psychology*, 61, 155–163. <http://dx.doi.org/10.1002/jclp.20108>
- Henderson, C., Phelan, M., Loftus, L., Dall'Agnola, R., & Ruggeri, M. (1999). Comparison of patient satisfaction with community-based vs. hospital psychiatric services. *Acta Psychiatrica Scandinavica*, 99, 188–195. <http://dx.doi.org/10.1111/j.1600-0447.1999.tb00975.x>
- Hogan, M. F. (2008). Transforming mental health care: Realities, priorities, and prospects. *Psychiatric Clinics of North America*, 31, 1–9. <http://dx.doi.org/10.1016/j.psc.2007.12.001>
- Hopkins, J. E., Loeb, S. J., & Fick, D. M. (2009). Beyond satisfaction, what service users expect of inpatient mental health care: A literature review. *Journal of Psychiatric and Mental Health Nursing*, 16, 927–937. <http://dx.doi.org/10.1111/j.1365-2850.2009.01501.x>
- Howard, P. B., El-Mallakh, P., Kay Rayens, M., & Clark, J. J. (2003). Consumer perspectives on quality of inpatient mental health services. *Archives of Psychiatric Nursing*, 17, 205–217. [http://dx.doi.org/10.1016/S0883-9417\(03\)00096-7](http://dx.doi.org/10.1016/S0883-9417(03)00096-7)
- Hultman, C. M., Wieselgren, I. M., & Ohman, A. (1997). Relationships between social support, social coping and life events in the relapse of schizophrenic patients. *Scandinavian Journal of Psychology*, 38, 3–13. <http://dx.doi.org/10.1111/1467-9450.00002>
- Kay, R. (2016). Quality improvement work plan evaluation report calendar year 2015 and quality improvement work plan calendar year 2016. *County of Los Angeles Department of Mental Health*, 1–123.
- Kelly, E. L., Davis, L., & Brekke, J. S. (2015). PBRN Findings: Integrated care for individuals with serious mental illnesses. *Psychiatric Services*, 66, 1253. <http://dx.doi.org/10.1176/appi.ps.201500075>
- Kelly, E. L., Kiger, H., Gaba, R., Pancake, L., Pilon, D., Murch, L., . . . Brekke, J. S. (2015). The recovery-oriented care collaborative: A practice-based research network to improve care for people with serious mental illnesses. *Psychiatric Services*, 66, 1132–1134. <http://dx.doi.org/10.1176/appi.ps.201500076>
- Kurzban, S., Davis, L., & Brekke, J. S. (2010). Vocational, social, and cognitive rehabilitation for individuals diagnosed with schizophrenia: A review of recent research and trends. *Current Psychiatry Reports*, 12, 345–355. <http://dx.doi.org/10.1007/s11920-010-0129-3>
- Leff, J., & Warner, R. (2006). *Social inclusion of people with mental illness*. New York, NY: Cambridge University Press. <http://dx.doi.org/10.1017/CBO9780511543937>
- Los Angeles County Department of Mental Health. (2017). Adults Full Service Partnership (FSP) summary of referrals authorized by County-wide Administration as of 2/13/2017. Los Angeles, CA: Los Angeles County Department of Mental Health.
- Mason, K., Olmos-Gallo, A., Bacon, D., McQuilken, M., Henley, A., & Fisher, S. (2004). Exploring the consumer's and provider's perspective on service quality in community mental health care. *Community Mental Health Journal*, 40, 33–46. <http://dx.doi.org/10.1023/B:COMH.0000015216.17812.ed>
- Moos, R. H., & Holahan, C. J. (2003). Dispositional and contextual perspectives on coping: Toward an integrative framework. *Journal of Clinical Psychology*, 59, 1387–1403. <http://dx.doi.org/10.1002/jclp.10229>
- Paludetto, M., Camuccio, C. A., Cutrone, F., Cocchio, S., & Baldo, V. (2015). Can we have routine measurement of patient satisfaction in acute psychiatric settings? A cross sectional study. *Archives of Psychiatric Nursing*, 29, 447–453.
- Parks, J., Svendsen, D., Singer, P., Foti, M. E., & Mauer, B. (2006). *Morbidity and mortality in people with serious mental illness*. Alexandria, VA: National Association of State Mental Health Program Directors (NASMHPD) Medical Directors Council.
- President's New Freedom Commission on Mental Health. (2003). *Achieving the promise: Transforming mental health care in America. Final Report. DHHS Publication Number SMA-03-3832*. Rockville, MD: Substance Abuse and Mental Health Services Administration.
- Rosenstock, I. M. (2005). Why people use health services. *Milbank Quarterly*, 83. <http://dx.doi.org/10.1111/j.1468-0009.2005.00425.x>
- Ruggeri, M. (2010). Mental health outcomes measures. In G. Thornicroft & M. Tansella (Eds.), *RCPsych publication* (3rd ed., pp. 220–228). London, UK: Royal College of Psychiatrists.
- Ruggeri, M., Lasalvia, A., Salvi, G., Cristofalo, D., Bonetto, C., & Tansella, M. (2007). Applications and usefulness of routine measurement of patients' satisfaction with community-based mental health care. *Acta Psychiatrica Scandinavica*, 116, 53–65. <http://dx.doi.org/10.1111/j.1600-0447.2007.01093.x>
- Schomerus, G., Schwahn, C., Holzinger, A., Corrigan, P. W., Grabe, H. J., Carta, M. G., & Angermeyer, M. C. (2012). Evolution of public attitudes about mental illness: A systematic review and meta-analysis. *Acta Psy-*

- chiatrca Scandinavica*, 125, 440–452. <http://dx.doi.org/10.1111/j.1600-0447.2012.01826.x>
- Shumway, M., Saunders, T., Shern, D., Pines, E., Downs, A., Burbine, T., & Beller, J. (2003). Preferences for schizophrenia treatment outcomes among public policy makers, consumers, families, and providers. *Psychiatric Services*, 54, 1124–1128. <http://dx.doi.org/10.1176/appi.ps.54.8.1124>
- Substance Abuse and Mental Health Services Administration. (2010). *Shared decision-making in mental health care: Practice, research, and future directions*. HHS Publication Number SMA-09–4371. Rockville, MD: Substance Abuse and Mental Health Services Administration.
- Substance Abuse and Mental Health Services Administration. (2016a). *National directory of mental health treatment facilities*. Retrieved from <https://www.samhsa.gov/data/sites/default/files/2016%20National%20Directory%20of%20Mental%20Health%20Treatment%20Facilities.pdf>
- Substance Abuse and Mental Health Services Administration. (2016b). *Behavioral health treatments and services*. Retrieved from <http://www.samhsa.gov/treatment>
- Substance Abuse and Mental Health Services Administration. (2016c). *Key substance use and mental health indicators in the United States: Results from the 2015 national survey on drug use and health*. Retrieved from <https://www.samhsa.gov/data/sites/default/files/NSDUHFFR1-2015/NSDUH-FFR1-2015/NSDUH-FFR1-2015.pdf>
- Substance Abuse and Mental Health Services Administration. (2012). *SAMHSA's working definition of recovery*. Rockville, MD: U. S. Department of Health and Human Services. Retrieved from <https://blog.samhsa.gov/2012/03/23/definition-of-recovery-updated/#.WNK4wzvystI>
- Vega, W. A., Kolody, B., Aguilar-Gaxiola, S., & Catalano, R. (1999). Gaps in service utilization by Mexican Americans with mental health problems. *The American Journal of Psychiatry*, 156, 928–934. <http://dx.doi.org/10.1176/ajp.156.6.928>
- Walfish, S., McAlister, B., O'Donnell, P., & Lambert, M. J. (2012). An investigation of self-assessment bias in mental health providers. *Psychological Reports*, 110, 639–644. <http://dx.doi.org/10.2466/02.07.17.PR0.110.2.639-644>
- Yanos, P. T., & Moos, R. H. (2007). Determinants of functioning and well-being among individuals with schizophrenia: An integrated model. *Clinical Psychology Review*, 27, 58–77. <http://dx.doi.org/10.1016/j.cpr.2005.12.008>

Received April 20, 2017

Revision received January 16, 2018

Accepted February 3, 2018 ■