

Evaluation of a Patient Activation and Empowerment Intervention in Mental Health Care

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Background: Evidence suggests that minority populations have lower levels of attendance and retention in mental health care than non-Latino whites. Patient activation and empowerment interventions may be effective in increasing minority patients' attendance and retention.

Objectives: This study developed and evaluated a patient self-reported activation and empowerment strategy in mental health care.

Research Design: The Right Question Project–Mental Health (RQP-MH) trainings consisted of 3 individual sessions using a pre/post test comparison group design with patients from 2 community mental health clinics. The RQP-MH intervention taught participants to identify questions that would help them consider their role, process and reasons behind a decision; and empowerment strategies to better manage their care.

Subjects: A total of 231 participated, completing at least the pretest interview (n = 141 intervention site, 90 comparison site).

Measures: Four main outcomes were linked to the intervention: changes in self-reported patient activation; changes in self-reported patient empowerment; treatment attendance; and retention in treatment.

Results: Findings show that intervention participants were over twice as likely to be retained in treatment and over 3 times more likely than comparison participants to have scheduled at least 1 visit during the 6-month follow-up period. Similarly, intervention participants demonstrated 29% more attendance to scheduled visits than comparison patients. There was no evidence of an effect on self-reported patient empowerment, only on self-reported patient activation.

Conclusions: Results demonstrate the intervention's potential to increase self-reported patient activation, retention, and attendance in mental health care for minority populations. By facilitating patient-provider communication, the RQP-MH intervention may help minorities effectively participate in mental health care.

Key Words: retention, attendance, mental health, patient activation, ethnic minorities

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Our capacity to diminish racial/ethnic disparities in mental health is hampered by low levels of service utilization and retention in care of minority populations.^{1,2} For effective treatment, clients must establish a collaborative relationship with providers. However, patients rarely state their concerns during medical visits^{3,4} and usually refrain from asking for information.⁵

Minority patients are less likely than whites to have a collaborative relationship with providers,⁶ and might not be as informed about diagnosis and prognosis.⁷ Consequently, minority patients may think that they lack needed information,⁸ may be less compliant with treatment,⁹ and more likely to drop out of care than whites.¹⁰ Increasing minority patients' activation and empowerment in mental health treatment may prevent premature termination when services do not fulfill expectations.

This article evaluates an activation and empowerment strategy for increasing minority patients' attendance and retention in mental health care. *Activation* in our study is defined as developing experience with question formulation and building information-seeking skills that results in increased collaboration with the health care provider. This definition of patient activation relates closely to Hibbard and colleagues' initial stage of activation.¹¹ It focuses on patients being able to tell their concerns to health care providers; to manage symptoms (emotional or mental health); to get information to make decisions about treatment; to take an active role in care (such as contacting the provider if they are not feeling well); to discuss treatment options with the provider; to discuss side effects of medication; and to know how to avoid emotional triggers. However, given the short intervention, we did not include other aspects of Hibbard and colleagues' definition of activation, such as achieving knowl-

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edge of lifestyle changes or knowledge of the nature and causes of health conditions. A more intensive chronic management program might be necessary to achieve these aims, but might be hard to provide within the limited time of our intervention.

For our definition of *empowerment*, we modified Staples' definition (the ongoing capacity of individuals or groups to act on their own behalf to achieve a greater measure of control over their lives and destinies¹²) to make it applicable to health care and health and to view it as a capacity-building process rather than a state. We specifically focus on the capacity-building process whereby individuals increase their belief that they play an active role in their care (ie, taking action to solve their problems), participate in decision-making (seeing themselves as capable in making decisions and feeling confident of the decisions they make) and manage their care to achieve a greater measure of control over their health and their health care process (ie, being able to accomplish what they set out to do, making their plan work). This definition is consistent with previous descriptions of the process of empowerment of mental health patients discussed by Chamberlain and Schene¹³ and Linhorst and Eckert.¹⁴

Patient activation and empowerment interventions could benefit minorities because Latinos and other minorities avoid hostile confrontation¹⁵ due to normative expectations which value politeness even when dealing with disappointment. Minorities may also hold traditional role expectations of being passive recipients in the clinical encounter.^{16,17} Assessments of patients with chronic conditions^{18,19} indicate that greater self-perceived activation and empowerment can augment satisfaction with care,²⁰ improve health care processes,^{21,22} ensure receipt of appropriate treatments,²³ and enhance health outcomes.²⁴ A review of interventions in patient-provider communication²⁵ showed inconclusive results around the effectiveness of these interventions. Most studies of patient activation and empowerment in health care have not been conducted with minority populations or in a language other than English. This article presents the results of such an evaluation.

Description of the Right Question Project–Mental Health Intervention

The basic assumption behind Right Question Project–Mental Health (RQP-MH) is that as patients practice strategies for obtaining information from providers, they become active participants in care and clarify expectations of treatment, thereby increasing patient-provider dialogue that allows for greater patient involvement and decision-making. Methods for the RQP-MH intervention include a Question Formulation Technique (QFT) and a Framework for Accountable Decision-Making (FADM). The QFT consists of asking patients to generate and revise questions to obtain more informative answers from their providers. We used this methodology because it is a culturally-supported intervention.²⁶ Rather than present individuals with questions others might believe are important, RQP-MH developers found it more meaningful for individuals to formulate their own questions to providers. The FADM teaches participants to identify questions that will help them consider their role in a

decision, reveal the decision-making process, and the reasons behind a decision (see Appendix for an example).

Emphasis on patient-provider interaction is associated with beneficial outcomes.²⁷ Meta-analyses carried out in the past 2 decades^{28,29} have confirmed that the nature of patient-provider interaction is associated with termination status regardless of treatment modality. We hypothesize that increased question-asking and decision-making could improve patient-provider interaction. Enhanced interaction may signal to patients that their opinions are important to providers,²³ thereby augmenting satisfaction³⁰ and retention in care (Fig. 1).

We assessed attendance to scheduled visits and retention in care as outcomes reflective of increased patient-provider communication and collaboration. Attendance and retention differ both conceptually and empirically. Conceptually, attendance, defined as the proportion of visits attended of those scheduled,³¹ deals primarily with the choice that patients have of scheduling and keeping their appointments. It is also important for the health care organization, as increased attendance can reduce resources and therefore provide further incentive for the organization to adopt patient activation and empowerment interventions.³² Retention is defined as remaining in treatment and ensuring proper monitoring for treatment to be effective.³³ Empirically, we find that although these constructs are related, they measure different phenomena. For example, if a patient goes to the only visit he has scheduled, but has not completed treatment, he obtains a 100% attendance score and a zero for retention. We selected no fewer than 4 visits over a 6-month period for follow-up or medication monitoring as the criterion for retention (unless care had been completed according to the patient) based on evidence-based treatment guidelines which find that this is the recommended number of visits for acute and continuation phases of depression, which is the most common diagnosis in our patient population.³⁴ Given the importance of retention as a measure of quality of care³⁵ and the distinction between these 2 outcomes, we decided to retain both as outcome measures.

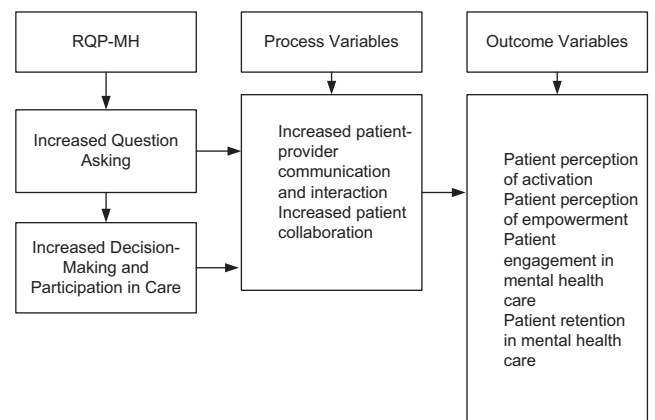


Figure adapted from Lisa A. Cooper and Neil R. Powe in "Disparities in Patient Experiences, Health Care Processes, and Outcomes: The Role of Patient-Provider Racial, Ethnic, and Language Concordance"; July 2004: The Commonwealth Fund.

FIGURE 1. RQP-MH intervention model.

METHODS

Study Design

To evaluate this intervention, we used a pre/post test comparison group design with patients from 2 community mental health clinics that serve primarily Latino and other minority patients. Practical considerations made randomization of patients unfeasible, given limited resources to simultaneously offer the intervention in 2 sites. We also opted for a pre/post design because of concerns regarding patient contamination. Given the long waiting periods, patients assigned to usual care could potentially receive the intervention from intervened patients in the same settings. The risk of contamination of this type of intervention is higher if individuals, rather than facilities, are randomized. However, because the number of facilities required to adequately power our study using randomization of facilities was prohibitively expensive, we opted for a pre/post test comparison group design.

The intervention site, Clinic A, serves approximately 500 adult outpatients per year with 11 providers: 5 psychiatrists, 4 psychologists, and 2 social workers. The patients are primarily Spanish speaking (83%); Medicaid recipients or uninsured (65%), and have mood disorders (67%). Clinic B, the comparison site, serves over 1500 adult and child outpatients per year with 24 providers: 7 psychiatrists, 5 psychologists, and 12 social workers. Slightly less than half of patients in this clinic are Spanish speaking (45%), but most are on Medicaid or uninsured (62%), and with mood disorder diagnoses (45%). In both clinics, waiting time for an appointment ranged between 3 weeks to 4 months. See Table 1 for characteristics of study participants, which closely match those of the clinics.

The patients sampled at both clinics were predominately female, foreign-born, and unemployed. There were no significant differences across the sites in age distribution, education level, or referral source. Although many patients at both clinics were Latino, the ethnic distributions varied significantly, as did the language of interview and length of time in care before enrollment.

RQP-MH Coaching to Care Managers

RQP-MH coaching for research staff and BA-level care managers (CMs) consisted of two 4-hour workshops addressing RQP's fundamental beliefs, principles, and values, and how these relate to an individual's participation in life decisions.³⁰ It also included practicing with prompts to illustrate how to generate questions about important decisions and select questions which focus on the individual's role, process, and reason. RQP developers also offered ongoing consultation, meeting approximately once a month with CMs and the CM Supervisor to observe CMs conducting the intervention.

RQP-MH Trainings for Patients

We modified standard RQP protocol to adapt and standardize it for a mental health intervention. We increased the number of patient trainings from 1 to 3 to provide additional opportunities for practice, problem-solving, and feedback. RQP-MH trainings took place at the clinic and lasted 30 minutes each. A manual with written guidelines for each

session was developed with corresponding patient materials (available from the authors).

Sessions emphasized shared patient-provider decision-making (empowerment) and preparation for appointments by formulating questions to get information (activation) about patients' mental illnesses, treatments, and relationships with providers. Participants were scheduled for second and third trainings after they had attended at least 1 appointment with a provider after the first training.

During trainings, hypothetical scenarios were presented to elicit discussion about decision-making in care and patient-provider interactions. Participants were encouraged to identify an issue or decision related to their care to explore further with their provider and to generate potential questions that would better inform them. We included strategies of cognitive-behavioral mental health interventions, including role-plays and homework assignments, to increase participants' comfort level with asking questions. The trainings also incorporated cultural components³⁶ that could influence minority patients' experiences when taking an active role in care. CMs were trained to reframe patients' questioning or information-seeking not as a lack of respect for providers, but as a way to get answers without offending providers' professional abilities. CMs also handled patients' hesitance to probe providers by assuring them that asking questions is a way to understand providers' choices, be helpful to providers, and develop mutual trust. See Appendix for a condensed script of a prototypical training session.

Treatment Adherence and Fidelity Checks

All RQP-MH trainings were audio-recorded. The CM Supervisor listened to randomly-selected trainings to monitor the degree to which patients understood trainings and CMs followed protocol and addressed barriers to implementation, and provided feedback during weekly supervision. Adherence was formally monitored by an independent evaluator rating recordings from 15 randomly-selected participants (N = 45 recordings) using a 20-point adherence checklist. 60% of participants received an adherence rating of "High" (80% or more) and 40% of "Medium" (60–79%). No trainings were rated as "Low" (59% or less).

Data Collection

Patient recruitment occurred from October 2004 through January 2006. CMs were available on-site 3 days a week in both clinics. Recruitment was done primarily by asking clinicians or administrative staff to inform patients about the study. CMs also met individually with providers to ask them to refer potential participants who met basic study eligibility (eg, were not in crisis and met age criteria). Flyers were posted at clinics so that interested patients could contact study staff directly. Finally, CMs identified weekly intake slots and met with patients before clinical appointments. After potentially eligible participants approached CMs, they were screened for eligibility and, if eligible, underwent informed consent and were enrolled in the study.

Research staff contacted 342 patients referred for participation [229 at the intervention site (Clinic A) and 113 at the comparison site (Clinic B)]. Of these, 231 were eligible,

TABLE 1. Demographic and Clinical Characteristics Across Intervention and Comparison Sites*

	Clinic A Intervention Site (N = 141)		Clinic B Comparison Site (N = 90)		χ^2 P Value
	N	%	N	%	
Sex					
Male	30	21.28	15	16.67	0.388
Female	111	78.72	75	83.33	
Age, yr					
18–34	36	25.53	35	38.89	0.100
35–49	63	44.68	33	36.67	
50 or more	42	29.79	22	24.44	
Race/Ethnicity					
White	5	3.55	18	20.00	<0.001
Latino	117	82.98	68	75.56	
African American	10	7.09	1	1.11	
Other	9	6.38	3	3.33	
Language of interview					
English	35	24.82	34	37.78	0.036
Spanish	106	75.18	56	62.22	
Nativity					
US-Born	34	24.11	31	34.44	0.079
Non US-Born	107	75.89	58	64.44	
Education					
11 yr or less	53	37.86	31	34.44	0.600
12 yr or more	87	62.14	59	65.56	
Employed					
Employed	42	30.00	19	21.11	0.163
Nonemployed	98	70.00	69	76.67	
Insurance status					
Public only	76	53.90	41	45.56	0.169
Private only	11	7.80	6	6.67	
Free care only	38	26.95	21	23.33	
Multiple public	2	1.42	1	1.11	
Combined public & private	4	2.84	3	3.33	
Free care & other	5	3.55	11	12.22	
No insurance	5	3.55	7	7.78	
Time in treatment before enrollment					
Novice (6 mo or less)	51	36.43	52	57.78	0.001
Veteran (6 mo or more)	89	63.57	38	42.22	
Referral source					
Doctor	73	52.52	55	61.11	0.358
Nondoctor	30	21.58	14	15.56	
Self	36	25.90	20	22.22	
Diagnosis category					
Depressive	87	62.14	36	40.00	0.001
Bipolar	11	7.86	6	6.67	
Anxiety	26	18.57	24	26.67	
Psychotic	6	4.29	2	2.22	
Other	10	7.14	22	24.44	
	Mean	SE	Mean	SE	t Test P Value
Total number of disability days (work)	6.82	9.26	8.76	10.58	0.149
Total number of disability days (in bed)	4.31	6.48	6.84	8.92	0.013

*Total sample size N = 231, except when data are missing.

agreed to participate, and completed at least the pretest interview (intervention site: $n = 141$; comparison site: $n = 90$). Excluded from participation were those younger than 18 or older than 65; in crisis or actively psychotic; and with significant comprehension difficulties. Patients in Clinic A received 3 RQP-MH trainings and 4 assessments (1 baseline and 3 follow-up). The first training was conducted immediately after baseline assessment, whereas the second and third trainings were preceded by at least 1 appointment with a provider and a follow-up assessment. Patients at Clinic B served as the comparison group, receiving treatment as usual. The patients in Clinic B were assessed by repeated measures at baseline and after 6–8 weeks. In both settings, we tracked all mental health and medical visits. Changes in self-reported activation and empowerment were compared with evaluate intervention effects. Participants were given gift cards for participation: a total of \$75 at the intervention site and \$50 at the comparison site.

Measures

Four main outcomes were linked to the intervention: changes in self-reported patient activation; changes in self-reported patient empowerment; treatment attendance (defined by the proportion of visits attended divided by the number of visits scheduled); and retention in treatment (defined as 4 or more visits during the 6-month follow-up period). A modified version of the Empowerment Scale³⁴ was used to evaluate changes in patient empowerment resulting from the intervention. The scale includes 10 items ($\alpha = 0.83$ in Spanish and $\alpha = 0.82$ in English using baseline data; representative item: “I am usually confident about the decisions I make”). Participants rated these items using a 10-point scale from “none of the time”¹ to “all of the time.”¹⁰ To create an empowerment score, we first summed each subject’s response to the 10 individual items that comprised the scale. In the baseline period, we averaged this summed response across all participants and sites (intervention and comparison sites) and calculated the standard deviation. For each subject, we then subtracted from their summed response the sample mean, and divided the difference by the standard deviation. Each empowerment score could thus be interpreted as the number of standard deviations the subject’s response is above (or below) the sample baseline mean. Increasing values correspond to more patient empowerment. Changes in patient empowerment were calculated as the empowerment measure at the last follow-up assessment subtracted from empowerment at baseline.

We used a modified version of the Patient Activation Scale^{36,37} that included a total of 9 items ($\alpha = 0.82$ in Spanish and $\alpha = 0.75$ in English using baseline data; representative item: “I have discussed my treatment options with my care provider”). Participants used a scale with response categories ranging from “none of the time”¹ to “all of the time.”¹⁰ The same strategy used for the empowerment scale score was used to obtain the activation scale scores. Items for which the subject did not respond were minimal (only 5 cases for a few items), so we used mean case substitution for missing items. Changes in patient activation were calculated as the activation measure at the last follow-up assessment subtracted from the activation measure at enrollment.

Treatment attendance was assessed first by creating a binary variable indicating whether the subject had at least 1 scheduled visit within 6 months after the last follow-up assessment, and second, by a ratio of the number of visits kept over those that were scheduled for participants who had at least 1 scheduled visit. Retention was measured as a binary variable, assuming a value of 1 if the participant had 4 or more visits within 6 months or completed treatment after the post-test; 0 otherwise. The questionnaire also included questions about the participant’s age, gender, ethnicity, and education.

Administrative data were obtained from each clinic to describe outpatient populations. For those enrolled in the study, consent to retrieve mental health diagnosis, length of treatment, and scheduled and attended appointment data was obtained to assess attendance and retention.

Statistical Analysis

We computed means and frequencies of outcome variables and characteristics for all participants, and then stratified by intervention status and by “novice” or “veteran” status. T tests or χ^2 tests were used to test for differences between participants at the intervention and comparison sites for continuous and discrete-valued variables. All models included a binary variable indicating if the subject was assigned the intervention and several demographic variables including age at study entry, sex, race/ethnicity, and educational status. Despite the language of interview difference between intervention and comparison groups, this variable was highly correlated with participant’s race/ethnicity and not included as an additional covariate. Our approach to inclusion of covariates was based on both clinical and statistical considerations (eg, variability in the covariate). We avoided a purely empirical approach that would include in the model only those covariates observed to have a statistically-significant bivariate relationship with the outcome. Because we conjectured that effectiveness of the intervention for patients new to the mental health system (“novices”) may be different than that for patients having experience in their respective clinics (“veterans”), we determined whether there was an interaction between novice and intervention. Finally, we reestimated all outcome models including both diagnosis and disability status. The point and interval estimates of our main effect of interest, the intervention-time interaction, did not change. Moreover, diagnosis category was not statistically significant (when including all other covariates) with the smallest P value of 0.51. For reason of parsimony we did not include these 2 variables in the models.

For the analysis of activation and empowerment, each subject contributed a minimum of 2 observations, 1 at baseline and 1 postintervention, permitting us to account for potential baseline floor and ceiling effects. Because of repeated measurements in these analyses, we also included the time of subject’s measurement (measured as months from baseline) and the interaction of time of measurement with the intervention indicator. To determine if difference in the rates of change between intervention and comparison participants was significantly larger or smaller between novices and veterans, we also included the interaction between novice, time of intervention, and the intervention indicator. We esti-

TABLE 2. Random Regression Model to Evaluate the Effects of RQP-MH Across Patient Empowerment and Activation Adjusting for Other Covariates

	Estimate	SE	P
Patient empowerment scale (n = 231) coefficient			
Intercept	0.032	0.353	0.928
Time in months since baseline	0.06	0.036	0.092
Clinic (reference = comparison/clinic B)			
Intervention (Clinic A)	0.207	0.185	0.264
Intervention × Time (intervention effect)	0.066	0.046	0.151
Intervention × Novice	-0.182	0.238	0.445
Age (yr)	-0.003	0.005	0.552
Sex (reference = male)			
Female	-0.136	0.144	0.344
Race/ethnicity (reference = white)			
Latino	-0.073	0.206	0.722
African American	-0.144	0.328	0.662
Other	0.172	0.314	0.586
Education (reference = 11 yr or less)*			
12 yr or more	0.064	0.124	0.606
Veteran (reference) [†]			
Novice	0.341	0.183	0.064
Patient activation scale (n = 231) coefficient			
Intercept	-0.148	0.371	0.69
Time in months since baseline	0.111	0.035	0.002
Clinic (reference = comparison/clinic B)			
Intervention (Clinic A)	0.3	0.192	0.119
Intervention × Time (intervention effect)	0.088	0.045	0.049
Intervention × Novice	-0.43	0.251	0.088
Age (yr)	0.001	0.005	0.85
Sex (reference = male)			
Female	0.145	0.151	0.34
Race/ethnicity (reference = white)			
Latino	-0.245	0.218	0.263
African American	-0.743	0.346	0.033
Other	-0.224	0.332	0.502
Education (reference = 11 yr or less)*			
12 yr or more	0.068	0.13	0.603
Veteran (reference) [†]			
Novice	0.324	0.194	0.095

*Reference group includes 0–11 years education and missing.
[†]Reference group includes veteran and missing.

mated random regression models that included participant-specific intercepts that corresponded to baseline outcome and participant-specific slopes that corresponded to monthly rates of change in outcomes to account for heterogeneity between participants. A statistically significant interaction term would indicate the intervention was associated with changes in reported empowerment or activation. Our estimate of the intervention effect was the average difference in monthly rate of change in empowerment (or activation) for intervention subjects compared with comparison subjects.

To assess effectiveness of the intervention on treatment attendance, we first estimated a logistic regression model linking the probability of having any scheduled follow-up treatment as a function of intervention status and patient demographic characteristics. For patients having at least 1 scheduled visit, we

next estimated a regression model linking number of scheduled visits attended to the logarithm of the total number of scheduled visits, intervention status, and demographic characteristics. This provided a method to estimate treatment attendance rate ratios adjusted for baseline characteristics for the intervention group compared with the comparison group. We assumed the number of scheduled visits followed a Poisson distribution. For patient retention, a logistic regression model of the probability of having 4 or more visits during the 6-month period post-baseline was linked to patient characteristics and intervention status. In all analyses regarding attendance and retention, we focused on the size and statistical significance of the coefficient for the intervention indicator. We estimated adjusted odds for treatment attendance in the intervention group relative to the comparison group; difference in rates of treatment

attendance between the intervention group and the comparison group for those having scheduled visits; and adjusted odds of treatment retention in the intervention group relative to the comparison group. All models were estimated using the SAS software system.³⁷

RESULTS

At the intervention site, 94% of participants completed the first follow-up interview, 82% completed the second, and 76% completed the third. At the comparison site, 97% completed the only follow-up interview. Overall, 231 people completed the pretest, of whom 10 withdrew or were lost to follow-up before a post-test interview, resulting in 221 participants completing at least 1 post-test: 134 from Clinic A and 87 from Clinic B. The average length of time between baseline and last follow-up assessment was 74.1 days (SD = 35.2) at Clinic A and 70.9 days (SD = 35.7) at Clinic B.

Activation and Empowerment

Baseline raw activation (Clinic A: mean = 7.17, SE = 0.13; Clinic B: mean = 7.21, SE = 0.17) and empowerment scores (Clinic A: mean = 6.66, SE = 0.14 and Clinic B: mean = 6.65, SE = 0.17; data not shown) were similar in the 2 clinics. Postintervention empowerment showed significant increases among intervention patients' scores (Clinic A: mean = 7.28, SE = 0.13; Clinic B: mean = 6.89, SE = 0.16) but not activation scores (Clinic A: mean = 8.03, SE = 0.13; Clinic B: mean = 7.71, SE = 0.17). After adjusting for patient's age, sex, race/ethnicity, educational and novice status, we found a statistically significant effect of the inter-

vention on self-reported patient activation ($P = 0.049$), with an estimated monthly increase in activation of 0.09 standard deviations in intervention participants over comparison participants. There was no statistically significant interaction among novice, intervention, and time for patient empowerment. Eliminating the interaction term from the model, there was no statistically significant effect of the intervention on patient empowerment ($P = 0.151$) (Table 2). The estimated monthly rate of change in empowerment, although small, 0.07 of a standard deviation, was larger in the intervention group than the comparison group. African Americans had lower baseline patient activation compared with whites ($P = 0.05$, Table 2).

Treatment Attendance and Retention

After adjusting for age, sex, race/ethnicity, education, and novice status, intervention participants were over twice as likely (Table 3) to be retained in treatment (adjusted OR = 2.78, 95% CI = 1.33–5.79). In terms of attendance, intervention participants were over 3 times more likely than comparison participants (adjusted OR = 3.42, 95% CI = 1.02–11.41) to have at least 1 scheduled follow-up visit. Race/ethnicity is not included in Table 3 because all non-Latino patients, except 1, had at least 1 visit scheduled during the 6 months after final assessment. Intervention participants were 29% more likely to attend their scheduled visits than comparison participants (OR = 1.29, 95% CI = 1.16–1.43). We evaluated whether adherence in the RQP-MH trainings was related to changes in activation and empowerment. Greater

TABLE 3. Regression Models to Evaluate the Effects of RQP-MH on Patient Retention and Attendance

Coefficient	Retention Analyses		Attendance Analyses			
	Four or More Visits During 6-Mo Period After Final Assessment (n = 188)*		At Least 1 Visit Scheduled During 6-Mo Period After Final Assessment (n = 188)*		Visits Attended Out of Total Scheduled During 6-Mo Period After Final Assessment (n = 171)†	
	Odds Ratio	95% CI	Odds Ratio	95% CI	Rate Ratio	95% CI
Clinic (reference = comparison/clinic B)	1		1		1	
Intervention (clinic A)	2.78	(1.33–5.79)	3.42	(1.02–11.41)	1.29	(1.16–1.43)
Age (yr)	1.01	(0.98–1.04)	1.03	(0.98–1.08)	1	(1.00–1.01)
Sex (reference = male)	1		1		1	
Female	0.50	(0.19–1.36)	0.63	(0.13–3.10)	0.94	(0.84–1.05)
Race/ethnicity (reference = white)	1		Perfect Prediction‡		1	
Latino	0.55	(0.15–1.96)			1.18	(1.01–1.38)
African American	0.44	(0.05–3.72)			1.04	(0.79–1.36)
Other	0.98	(0.13–7.53)			1.17	(0.92–1.50)
Education (reference = 11 yr or less)	1		1		1	
12 yr or more	1.60	(0.76–3.35)	2.28	(0.76–6.85)	1.09	(0.99–1.20)
Veteran (reference)	1		1		1	
Novice	0.41	(0.20–0.85)	0.19	(0.05–0.72)	1.03	(0.93–1.13)

*Analyses included completers only (those with baseline and final assessment interviews); Data on attendance were not available for 6 cases (1 from Clinic A and 5 from Clinic B).
 †Patients without any scheduled appointments during follow-up were excluded from the analyses.
 ‡Perfect Prediction as all non-Latino patients, except 1, had at least 1 visit scheduled during the 6-month period after final assessment.

pre/post changes were evident in the High adherence group than the Medium group (data not shown).

DISCUSSION

Our results illustrate the promise of the RQP-MH intervention for increasing patient activation, attendance, and retention in mental health care of minorities. Studies suggest that patient communication trainings can change the patient-provider interaction.²⁵ The fact that patient activation did not vary with novice status suggests that changing the dynamics of patient-provider interaction is possible even in established patient-provider relationships that might be typically seen as resistant to modification.

The RQP-MH training prepares patients to ask questions during appointments and get information from providers leading to improved attendance and retention in care. These findings are consistent with work that found that a collaborative relationship is related to treatment retention for drug abuse,^{38,39} alcohol abuse,⁴⁰ and family therapy.⁴¹ Implementing such interventions in safety net hospitals can help decrease the problems of no-shows and increase retention in care of minority populations that have been linked to service disparities. However, our assumption that most providers would welcome patient activation and empowerment did not prove entirely true. Some providers found increased questioning by patients challenging, because they did not always have answers. Some patients reported feeling discouraged when providers inquired why patients were asking questions now, after years in treatment. These findings lead us to recommend adding a provider component to the intervention to facilitate receptivity of patient activation and empowerment.

There are several limitations to the study. We did not screen patients for cognitive impairment. The intervention's effectiveness might be enhanced by such screening. Including more visual aids of key concepts might facilitate skill retention, particularly when cognitive processing problems exist. We also did not randomize patients because of practical considerations and risk of patient contamination, although this could have imposed threats to internal validity, leading to unidentified differences across sites or patients. We undertook analysis to include observable differences across sites to minimize threats to internal validity. However, future evaluations of the RQP-MH intervention require random assignment of participants under a more resource-intensive design. Finally, due to financial constraints we were unable to conduct the same number of follow-up assessments in Clinics A and B. This difference in contact with research staff may confound intervention effects. However, even with 4 assessments, patients at Clinic A dropped out, suggesting other considerations beyond contact intensity.

Our findings do not show evidence of an effect of the intervention on patient empowerment. Upon reviewing the intervention components, we saw that the intervention had a limited focus in developing patients' confidence in decision-making and feelings of control regarding their care. Levinson and colleagues^{8,16} found that patient decision-making and empowerment was linked to greater educational attainment and perceived "excellent" health status. This was not the case

for our patient population, which had poor health status and low educational attainment. We propose to enhance the intervention by including elements of illness self-management and more practice in decision-making to help increase patients' confidence in managing illness and in deciding about health care.

We hypothesize that patients were unable to increase empowerment mainly due to limited health literacy. Minority patients may be at greater risk of assuming that they cannot challenge a provider's decision. Increasing the length and/or number of sessions in the RQP-MH intervention may provide support for practicing respectful approaches that do not compromise patient-provider relationships. Asking for this affective shift in empowerment for patients that suffer from mental illness might be challenging, and less dependent on the intervention itself. Although we found that diagnosis and disability status was not significant in explaining changes in activation or empowerment, certain symptoms—such as hopelessness and feeling a lack of control over one's circumstances—could play a role in patient cognition and assertiveness, and should be investigated further. Including behavioral measures of empowerment is recommended for future studies, as well as evaluating whether hopelessness and lack of control predict who will benefit from the intervention. Future studies focusing on the providers' response to patient questions as part of quality care are also needed. Similarly, the value of providing incentives to restructure the clinical encounter for more collaborative interchanges should be investigated as a way to encourage patient activation for patients to better manage their care and to promote utilization and retention.

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APPENDIX

Condensed RQP-MH Training Illustrating the Question Formulation Technique and the Framework for Accountable Decision-Making

- The Care Manager (CM) begins the training by asking the patient about her thoughts about the previous training.
- The patient responds that she thinks the last training was very good because she was able to not fear the providers as much. She gives an example about a recent change in providers. Her new doctor (primary care physician) seems very "serious and upset" and only speaks English. The patient doesn't feel comfortable and is even afraid of the new doctor and has a difficult time expressing herself. She says her new doctor "doesn't give her freedom to express herself" and that she goes to the appointments but doesn't feel sure of herself. She says the training gave her the opportunity to have more courage to speak up.
- CM explains that today they will go over some more concepts related to making decisions in care and practice using them.
- The patient proceeds to talk about her son and how she is dealing with his emotional and learning problems. The patient complains that her therapist, who was assigned to work with the patient, has instead devoted a large part of the meetings to discussing her child's problems. The patient would like to shift the focus away from her son's problems to deal with her own problems. The therapist also talks on the phone during sessions and shortens the scheduled time of the session. The patient decides that she wants to focus on these issues with her therapist next time she sees her.
- CM goes over the Framework for Accountable Decision Making. He tells her that asking questions can help to make more informed decisions in care. Also, that there are ways to ask the questions that help obtain information to make better decisions. In every decision one must recognize one's role in the decision, understand the steps/process that were taken to make the decision, and understand the reasons why the decision was taken. CM focuses on each of these 3 elements of a decision that are part of the Question Formulation Techniques (role, process, and reason), illustrating each. CM asks the patient to come up with a question that she would like to ask her therapist to address the concerns she has about her care.

- The questions that the patient comes up with during this brainstorming session include: What can I do to cope with my mental health problem? How can you help me with my problems?
- CM asks the patient if there are other concerns or questions she has about her mental health care with this or any other provider she may have.
- The patient explains that she would like to know if a psychiatrist might be of help to her. She thinks that maybe the therapist can tell her if she needs to see a psychiatrist, because she can only get a psychiatrist through her therapist.
- CM asks whether the patient believes that seeing a psychiatrist is a decision that can be shared between her and her therapist.
- The patient tells the CM that she thinks the therapist is the professional that tells you if you need one or not.
- CM suggests that this is a decision that she could get more information and better understand if she needs a visit with the psychiatrist.
- The patient then says that she has heard that only people who are “crazy” or very ill are the ones who see the psychiatrist and get medication. She wants to understand how providers determine when someone needs a psychiatrist.
- CM encourages the patient to come up with questions for her therapist and to use the concepts of role, process and reason to come up with these questions.
- The patient decides to ask the following question: How do I decide if I need a psychiatrist? How do I know if I need to take medication recommended by the psychiatrist?
- CM highlights that the question includes a role for the patient and that hopefully the patient will learn more about what psychiatrists do and the choices that are made about whether or not to give someone medication.
- The patient says that she would like to resolve her problems but that it would be even better without having to take medication. She says that she would like to know if the therapist can help her instead. The patient explains again that the therapist is only focusing on the child’s problem and not on hers.
- CM asks the patient to come up with other questions that address this concern.
- After another brainstorming session, the patient comes up with several other questions, such as: How do you decide that it is time to talk about my problems? Why cannot I meet with you more often and regularly? Could you recommend someone for my son and work with me?
- CM then gives the patient a copy of the list of questions that she has identified and asks her to do a role-play to practice. CM will pretend to be the therapist and the patient will ask one or more of the questions. CM explains that this will help her practice so that she feels more comfortable asking the questions when meeting with her therapist. CM and patient go through the role-play, in which the CM pretends to be busy and interested in hearing about the patient’s son and less so about the patient.
- The patient attempts to ask the questions and has a difficult time.
- CM gives the patient feedback and suggests that she ask the question sooner and to make sure the question is not phrased as a statement. CM and patient attempt another role-play which goes much better. CM gives the patient additional feedback and encouragement. CM talks about the homework assignment for the patient, which includes selecting 1 or 2 of the questions and asking the therapist during her next meeting, much like she did during the role-play. CM then asks the patient to summarize what she learned today.
- The patient talks about learning about the doubts she had about her psychiatrist and about the option of having a separate therapist for her son. She says she also learned to have more confidence to ask the questions that “need an answer.”
- CM adds that the session was also about realizing that the providers do not have to make all the decisions for the patient and that the patient can contribute to making the decisions about her care.