PARTNER-MH, a Peer-Led Patient Navigation Intervention for Racial and Ethnic Minority Veterans in Veterans Health Administration (VHA) Mental Health Services: A Mixed-Methods Randomized Controlled Feasibility Trial Study Protocol

Johanne Eliacin (✉ Johanne.eliacin@va.gov)

Roudebush VA Medical Center <https://orcid.org/0000-0001-8027-2935>

Diana J. Burgess

Minneapolis VA Health Care System

Angela L. Rollins

Roudebush VA Medical Center: Richard L Roudebush VA Medical Center

Scott Patterson

Roudebush VA Medical Center: Richard L Roudebush VA Medical Center

Teresa Damush

Roudebush VA Medical Center: Richard L Roudebush VA Medical Center

Matthew J. Bair

Roudebush VA Medical Center: Richard L Roudebush VA Medical Center

Michelle P. Salyers

Indiana University Purdue University Indianapolis

James E. Slaven

Indiana University School of Medicine

Caitlin E. O'Connor

Roudebush VA Medical Center: Richard L Roudebush VA Medical Center

Kiara Walker

Roudebush VA Medical Center: Richard L Roudebush VA Medical Center

John Akins

Roudebush VA Medical Center: Richard L Roudebush VA Medical Center

James Miller

Roudebush VA Medical Center: Richard L Roudebush VA Medical Center

Marianne S. Matthias

Roudebush VA Medical Center: Richard L Roudebush VA Medical Center

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Abstract

Background: Mental healthcare disparities are persistent and have increased in recent years. Compared to their White counterparts, racial and ethnic minority groups have less access to mental healthcare. Minority groups also have lower engagement in mental health treatment and are more likely to experience ineffective patient-provider communication, which contribute to negative mental healthcare experiences and poor mental health outcomes. Interventions that embrace recovery-oriented practices to support patient engagement and empower patients to participate in their mental healthcare and treatment decisions may help to reduce mental healthcare disparities. Designed to achieve this goal, PARTNER-MH is a peer-led, patient navigation intervention that aims to engage minority patients in mental health treatment, support them to take a greater role in their care, and facilitate their participation in treatment shared decision-making.

Methods: This pilot study evaluates the feasibility and acceptability of PARTNER-MH in a VHA mental health setting using a mixed-methods, randomized controlled trial study design. PARTNER-MH is tested under real-world conditions, using certified VHA peer support specialists (peers), selected via usual VHA hiring practices and assigned to the mental health service. The peers provide PARTNER-MH and usual peer support services. The study compares the impact of PARTNER-MH versus a wait-list control group on patient activation, patient engagement, and shared decision-making, as well as other patient-level outcomes. PARTNER-MH also examines organizational factors that could impact its future implementation in VHA settings.

Results: Participants (N=50) were veterans who were mostly male (62%), self-identified as non-Hispanic Black (70%), with a median age in the 45-54 group. Most had at least some college education, and 32% completed 4 or more years of college. Randomization produced comparable groups in terms of characteristics and outcome measures at baseline, except for gender.

Discussion and Conclusion: Rather than simply documenting health disparities among vulnerable populations, PARTNER-MH offers opportunities to evaluate a tailored, culturally-sensitive system-based intervention to improve patient engagement and patient-provider communication in mental healthcare for racial and ethnic minorities.

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1. Introduction

Low patient engagement in care and ineffective patient-provider communication are two major contributors to healthcare disparities¹⁻⁶. Minority patients are less likely to be engaged in care, particularly in mental healthcare⁵⁻⁷, which often leads to lower health service utilization⁸⁻¹⁰ high

treatment drop-out rates,^{5,11,12} and worse clinical outcomes¹³. Reasons for low engagement in mental health care vary but include perceived futility of treatment, inadequate access to care, lack of culturally-sensitive treatment, low self-efficacy, and lack of trust in healthcare systems¹⁴⁻¹⁶. Minority patients are also more likely to experience poor patient-provider communication^{1,17} and to be excluded from treatment decisions¹⁸. Studies have found patient-provider interactions to be marked by conflicts, perceptions of discrimination, and provider dominance¹⁸. Ineffective patient-provider communication perpetuates racial healthcare disparities by contributing to poor care experiences¹⁹⁻²¹, low treatment adherence²², and negative health outcomes²³.

Recovery-oriented practices that prioritize person-centered care, patient autonomy, and empowerment may help to reduce healthcare disparities by engaging patients in services and supporting them to play an active role in their care and treatment decisions^{6,14}. Peer support specialists (peers) have been effective at engaging vulnerable populations at risk for treatment dropout, such as patients with serious mental illness, by serving as role models of patients in recovery, addressing stigma associated with mental illness, and providing support^{24,25}. Moreover, health services interventions that are tailored to meet the unique needs of minority patients by providing culturally-sensitive care and addressing patients' social contexts may have substantial impact^{14,26}. One such intervention, patient navigation, is a well-established care model that is effective in reducing barriers to care for minority groups by providing personalized navigation services and addressing patients' barriers to care²⁷⁻²⁹.

1.1 Addressing Mental Healthcare Disparities: Piloting the PARTNER-MH Intervention

To maximize the potential benefits of a culturally-sensitive and recovery-oriented approach to patient engagement and communication for minority groups, we developed a peer-led, patient navigation program, **P**ro-**A**ctive, **R**ecovery-oriented **T**reatment **N**avigation to **E**ngage **R**acially Diverse Veterans in **M**ental **H**ealthcare (PARTNER-MH). This manuscript describes the study protocol for a randomized controlled trial to assess PARTNER-MH's feasibility and acceptability, and organizational factors that could impact PARTNER-MH's implementation in Veteran Health Affairs (VHA) settings. PARTNER-MH incorporates peer support and patient navigation care models to deliver a manualized patient activation, engagement, and communication intervention to racial and ethnic minority veterans in VHA outpatient mental health clinics. The aims of PARTNER-MH are to: 1) engage racial and ethnic minority patients in mental healthcare, 2) increase patient activation by giving patients the tools to become active collaborators in their care, and 3) improve patients' communication skills and participation in shared treatment decision-making (SDM).

1.2 Conceptual Model

Area of Focus 1. Patient Activation and Patient Engagement

As depicted in Figure 1, PARTNER-MH is designed to reduce mental health disparities by activating and engaging racial and ethnic minority patients in VHA mental health services. Although patient activation is

closely related to patient engagement and both are often used interchangeably in the literature, they are slightly distinct concepts³⁰. Patient activation is an intrapsychic state or cognitive process that is a prerequisite for engagement in care. It is defined as understanding one's role in the care process, and having the knowledge, skills, and confidence to manage one's health and healthcare^{30,31}. Patient activation has been linked to positive health outcomes and healthcare experiences, and decreased healthcare costs. Activated patients actively self-manage their health, collaborate with care providers, make decisions that affect their health and healthcare costs, have the ability to navigate the healthcare system, obtain preventive care, and participate in proactive behaviors such as regular physical exercise to maintain their health³⁰. Patient engagement is the behavioral manifestation of the activated person working in partnership with their care providers to improve their healthcare experiences and health outcomes. Patient engagement includes patient behaviors demonstrating active participation in care that are shaped by patient-provider relationships and the care environment¹⁶. In PARTNER-MH, patient engagement involves a continuous and evolving process that begins with treatment seeking, followed by various indicators of ongoing participation in direct care as well as organizational factors that address barriers to care, such as access to services.

To increase patient activation, PARTNER-MH uses a peer support care model to create early and ongoing relationship with patients, to develop trust, and to empower patients to take charge of their health and healthcare. PARTNER-MH peers provide education to raise awareness of available services, address patient-level barriers to care, such as self-stigma or negative beliefs associated with mental illness and treatment and provide individualized mental health treatment navigation services to assist with care coordination^{6,24,25}. Peers also help patients understand their role in their care, how they can actively partner with care providers to manage their health, and how to make the most of their participation in mental health services.

PARTNER-MH seeks to facilitate patient engagement by addressing patients' social contexts, such as their racial and social identities, living environment, and lived experiences that shape their health and healthcare experiences. PARTNER-MH's approach to patient engagement also involves addressing negative social determinants of health, such as unmet social needs that might be preventing their engagement in care. These may include food and housing insecurity, legal issues, and social isolation. Addressing patients' unmet social needs also serves as catalyst to engage them in conversations about what matters to them, as well as social and cultural experiences that may affect their health and healthcare.

Area of Focus 2. Patient Communication

Another objective of PARTNER-MH is to improve patients' communication with their providers by identifying and addressing barriers to effective patient-provider communication. This area of focus also includes helping patients prepare for their mental health visits by identifying goals, preparing questions for providers, supporting collaborative relationships with providers, and participating in shared treatment decision-making.

1.3 Study Objectives

Aim 1 (primary aim): To assess the feasibility and acceptability of PARTNER-MH in a VHA mental healthcare setting.

Aim 2: To evaluate the preliminary effects of PARTNER-MH on patient activation, patient engagement, and shared decision-making (SDM). We hypothesize that patients randomized to the PARTNER-MH intervention will report greater patient engagement, patient activation, and SDM compared to patients randomized to the control group.

Aim 3: To examine patient-perceived barriers and facilitators to engagement in PARTNER-MH, as well as contextual factors, using the Consolidated Framework for Implementation Research (CFIR),³² that may inhibit or promote the integration, sustainability and scalability of PARTNER-MH.

2. Methods

2.1 Design Overview

This pilot study used a convergent mixed-methods design³³ that involves a randomized

controlled trial comparing the PARTNER-MH intervention to a wait-list control group with a sample of 50 racial and ethnic minority veterans. Outcomes are assessed at baseline, 3, 6 (primary endpoint), 9, and 12 months. It also included qualitative interviews to evaluate participants' experience of the intervention and organizational factors that may impact its future implementation, and the integration of the quantitative and qualitative data.

2.2 PARTNER-MH Interventionists

The interventionists for this pilot study are certified VHA peer support specialists, selected via usual VHA hiring practices and assigned to the mental health service line, who completed the PARTNER-MH training program. The training program consists of 40 hours of didactic sessions that cover topics such as patient navigation, patient engagement, social determinants of health, diversity and racial discrimination in healthcare, effective communication, and professional development. In addition, peers receive weekly supervision to reinforce training information, address challenges, and provide support (see Aim 1).

Fidelity assessment was conducted quarterly using a sample of 12 patients in the active group (40%) stratified by 2 peers. Two clinical psychologists from the study team used the PARTNER-MH fidelity 17-item check list and audio-recorded intervention sessions or conducted live participant observations to assess fidelity. Fidelity assessment outcomes were then discussed with the peers as well steps needed to reinforce or correct deviations from study procedures.

2.3 PARTNER-MH Intervention Structure

PARTNER-MH is a six-month intervention that consists of individualized sessions with an assigned peer. Sessions are delivered in person, over the phone, or via video-teleconference, depending on the patient's preference. Due to the COVID-19 pandemic and restrictions to in-person visits, most of the sessions were delivered via telehealth. PARTNER-MH sessions were delivered weekly for the first month, bi-weekly for the second and third months, then monthly thereafter. Peers and patients also met more often as needed. The sessions lasted about an hour and were tailored to meet patients' goals and needs related to engagement, access to services, care coordination, healthcare communication and personal support. Peers also used the PARTNER-MH handbook to guide and organize their sessions, but also had flexibility to use their lived experiences and training to inform the sessions. The PARTNER-MH patient handbook includes worksheets and information about VHA mental health services, engagement in treatment, goal settings, mental health visit preparation, effective patient-provider communication, and shared decision-making.

2.4 Participants

PARTNER-MH was offered to racial and ethnic minority veterans receiving mental health services from the outpatient mental health clinic at a large VHA Medical Center in the Midwest and associated community-based outpatient clinics. The program targeted veterans across psychiatric diagnostic categories who were relatively new to the broad array but somewhat complicated configuration of VHA outpatient mental health programs, often requiring help to navigate mental health services. To be eligible for the study, participants must 1) belong to a racial/ethnic minority group, 2) be ≥ 18 years of age, and 3) had a new medication management or therapy appointment scheduled within 12 months prior to enrollment in the study or had recently re-established treatment after an absence of 2 years. Excluded were veterans who 1) have mental or cognitive impairments that limit their ability to give consent (e.g., have acute psychotic symptoms, or are cognitively impaired during the consent or interview process), 2) have hearing difficulties that prevent participation in the interviews, or 3) received medication management services at the clinic for more than 12 months prior to enrollment in the study.

2.5 Recruitment and Randomization

Participant recruitment for PARTNER-MH is completed. Multiple strategies were used to recruit participants to capture a diverse group of racial and ethnic minority patients. They included inviting eligible patients identified via the electronic health record and sending them an introductory letter informing them about the study. The letter gave the participants a method for opting out of further contact. In the absence of such notification, 10 days after the letter receipt was expected, study staff called the patient to explain the study in more detail, conduct initial screening, and ask eligible patients if they wished to participate. Other recruitment strategies included clinician referrals, patient self-referrals, direct advertisements, and snowball sampling (i.e., asking enrolled participants to refer others).

All eligible patients were given a research packet that includes an invitation letter and study information sheet. Participants then completed baseline assessment prior to being randomized into the study arms to ensure balance and reduce selection bias. Allocation to treatment arm was carried out by a computer-

generated randomization list with randomly varying block sizes of 4 and 8 to maximize allocation concealment. Furthermore, while blinding is not feasible for this project due to the study's limited staffing and the need to collect participant feedback on the intervention's feasibility and acceptability, study personnel involved in screening and enrollment were masked to the computer-generated randomization assignment and were not included in delivering the intervention. Participants' enrollment in the study was recorded in their medical records, which peer navigators have access to. Study participants were compensated with a \$35 gift card for each assessment except for the primary endpoint (at 6 months), for which they received a \$50 gift card. In addition, due to COVID-19 in-person visit restrictions, participants received a \$10 gift card for each month they remained enrolled in the study to facilitate access to telehealth delivery of the intervention.

2.6 Wait-list control structure and overview

Participants in the wait-list control group received regular VHA mental health services (e.g., individual or group psychotherapy, consults, and medication management) for the 6 months after enrollment. To overcome potential issues of contamination where a peer navigator could deliver PARTNER-MH services to control group participants, participants in the control group were encouraged not to use peer services unless they dropped out of the study. Chart reviews were conducted to assess contamination.

2.6 Primary outcome measures for Aims 1 and 2

Aim 1: To assess the feasibility and acceptability of PARTNER-MH in a VHA mental healthcare setting.

Feasibility of PARTNER-MH was determined based on participants' recruitment, enrollment, and retention rates. Program acceptability for participants was evaluated using session attendance, and the number of contacts with the peer navigators, as well as using the Patient Satisfaction Survey with Patient Navigator Program (PSS), which is a 10-item questionnaire rated on a 5-point Likert scale ranging from agree to disagree. Participants' feedback from qualitative interviews were also used to inform PARTNER-MH's feasibility and acceptability.

Aim 2: To evaluate the preliminary effects of PARTNER-MH on patient engagement, patient activation, and shared decision-making (SDM). Aim 2 has 3 primary outcome measures: patient activation, patient engagement, and SDM. The patient activation measure for mental health (PAM-MH)³⁴ is a 13-item questionnaire that measures an individual's perceived ability to manage his or her illness and health behaviors. PAM-MH is reliable, valid, sensitive to change, and correlates with measures of improved self-management and health outcomes. The questions are rated on a 4-point Likert-type scale and then converted using RASCH analysis to a 100-point scale. PAM-MH has strong test-retest reliability and internal consistency (α .91).

Patient engagement was assessed using the Altarum Consumer Engagement (ACE) measure, a 12-item measure that consists of 3 subscales to reflect patients' commitment to everyday health behaviors, navigation skills in using healthcare services and informed choice in treatment decisions^{35,36}. The ACE is

administered as a 5-level Likert scale. The subscale scores range from 5 to 25, and the total engagement score is computed by adding the 3 subscale scores and multiplying the sum by 4/3 to obtain a possible range score of 20-100. Higher scores represent higher patient engagement.

Lastly, we administered the SDM-Q-9, a widely used 9-item patient-reported shared decision-making measure that focuses on the decisional process by rating providers' behaviors in medical encounters. For this study, we asked participants to think of their most recent visit with their mental health provider. The scale shows good internal consistency ($\alpha = .94$) and high face and structural validity.^{37,38} The SDM-Q-9 is rated on a 6-point Likert scale. The items are scored from 0 to 5 on a six-point Likert scale as "completely disagree" (0) to "completely agree" (5). A simple sum-score with possible values between 0 and 45 is obtained. Item means ranged from 2.9 to 3.81, and the mean sum of SDM-Q-9 is 3.15 (SD=0.9).³⁹ In addition to the SDM-Q-9, we added four questions to evaluate patient's participation in treatment decision-making: 1) To the extent that shared decision-making took place during your visit how much did you drive the process? 2) Thinking about your goal for the visit (what you wanted to be done), how much do you feel you accomplished? 3) How much do you feel heard during your discussion with your provider? 4) Did you experience any barriers that kept you from speaking up or participating in shared decision-making during that visit?

Other measures: Demographic data and secondary patient-level health outcome measures

Other measures including socio-demographic data (e.g., age, sex, race/ethnicity, education, and marital status) were collected at baseline. Secondary health outcomes were also assessed at all time points and are listed below.

- a. CollaboRATE is a 3-item survey that assesses patients' participation in shared decision-making. The survey evaluates patients' perceptions of being informed and involved in decision-making steps over the course of several visits. It has been used in diverse clinical care settings^{40,41} and shown to be valid, reliable, and sensitive to change.^{42,43} For this study, we asked participants to evaluate their latest interaction with their mental health provider. Moreover, we dichotomized their scores into yes and no because we only had one measure at baseline.
- b. Perceived Efficacy in Patient-Physician Interaction scale (PEPPI-5) measures patients' self-efficacy in obtaining medical information and attention to their chief health concern from a physician.⁴⁴ The PEPPI-5 is 5-item scale scored on a 5-points Likert scale ranging from 1 (not confident at all) to 5 (very confident). Higher scores indicate higher level of self-efficacy. PEPPI-5 has internal consistency ($\alpha = 0.92$) and adequate test-retest reliability.
- c. Working Alliance Inventory -Short Revised (WAI-SR) evaluates three key aspects of the therapeutic alliance between patients and their mental health providers: 1) Agreement on the tasks of therapy, 2) Agreement on the goals of therapy, 3) Development of an affective bond^{45,46}. The WAIS-SR includes 12 items rated on a 5-point Likert scale ranging from 1= never to 5= always. It shows good

psychometric properties in both outpatient and inpatient populations with reliability $\alpha > 0.90$ and convergent validity with the helping alliance questionnaire ($r > 0.064$).

- d. Patient Health Questionnaire (PHQ-9). measures severity of depressive symptoms. The PHQ-9 includes 9- items and demonstrates high internal consistency, reliability (Cronbach's alpha 0.89) good sensitivity, and specificity for identifying cases of depression and assessment of depression symptom severity. ⁴⁷
- e. Veterans Rand 12-item Health Survey (VR-12). measures physical function, social function, role limitations due to physical and emotional problems, mental health, energy and vitality, bodily pain, and general perception of health. VR-12 uses five- point ordinal response choices and provides two scores: Physical Component Summary Score and the Mental Health Summary Score. ⁴⁸.
- f. Perceived Discrimination in Healthcare Questionnaire is a 7-item questionnaire that assesses a respondent's overall healthcare experiences rather than a specific experience based on their racial background. Respondents are asked to rate their experience on a 5-point Likert type scale, with answers ranging from 0 (never) to 4 (always). This questionnaire has shown excellent reliability in diverse patient populations ⁴⁹.
- g. Veterans' trust in the VA is assessed using a 3-item questionnaire. Responses range from Strongly Disagree to Strongly Agree.
- h. Lastly, patients' no-show rates and enrollment in mental health treatment programs were assessed using administrative data.

2.7 Statistical power

Power calculations are provided, but as a pilot, this study is powered only to detect large differences between groups. With a sample of 22 participants in the intervention group and 15 in the wait-list control group, we have 80% power at a .05 significance level to detect an effect size of 0.965 for tests between groups using two-sided two-sample t-tests. With an estimated standard deviation of 14 for PAM-MH based on previous studies this sample size will allow detection of a PAM-MH difference of 13.5 between the two groups. Within the intervention group, the study can detect an effect size of 0.626 for tests between time points using two-sided paired t-tests, for a difference of 8.8 for PAM-MH changes. Similarly, in the wait-list control group, the study can detect an effect size of 0.778 and a difference of 10.8 for PAM-MH changes. To account for 25% attrition during follow-up, the study enrolled 30 intervention participants and 20 wait-list control participants. See Figure 2 for participant flow.

2.8 Statistical analyses for Aims 1 & 2

Internal consistency of each scale for primary and secondary outcomes will be verified in this study sample using Cronbach's alpha. Distributions of the scale scores will be examined to determine if transformation of the data or nonparametric tests are required for the analyses. Two-sample t-tests and Fisher's exact tests for continuous and categorical variables, respectively, will be used to compare demographic and baseline data between participants with and without complete data. Repeated

measures analysis of variance (RMANOVA) for the scale scores will be used to compare among the assessments over time. The RMANOVAs will allow different correlations between each assessment time and will allow for the appropriate covariance structure to model the intra-participant correlations; they will also include a random effect for peer to account for correlation among participants with the same peer. In this intent-to-treat analysis, the RMANOVAs will provide unbiased estimates under the missing at random assumption. A 5% significance level will be used for each test.

1. Aim 3 procedures

3.1 Mixed- methods analysis for Aims 1 & 2

This study used a convergent mixed-methods design,³³ which involves simultaneously collecting quantitative and qualitative data, and giving equal weight to these data in analyses for the purposes of gaining breadth and depth of understanding (i.e., complementarity), identifying if the qualitative and quantitative data provide the same answer to the same question (i.e., convergence), and using qualitative data to expand on unexpected quantitative findings (explanatory)⁵⁰⁻⁵². Mixed data analysis involved merging and comparing quantitative and qualitative data in parallel to interpret and explain the findings (QUAL + QUAN). This approach enabled us to triangulate our data by incorporating themes from the semi-structured interviews and results from the self-report measures to validate our findings, especially in the context of this feasibility study. Many of the constructs assessed in the quantitative measures were also explored in the qualitative interviews, such as intervention characteristics (patient engagement and patient activation, and communication). Moreover, we used an explanatory mixed-methods approach consistent with randomized controlled trial to better understand the quantitative findings, the process of the intervention, and participants' experiences. The qualitative data enhanced the quantitative analyses by laying the groundwork to better understand the mechanisms of the intervention and facilitate its future implementation.

Aim 3: To examine patient-perceived barriers and facilitators to engagement in PARTNER-MH, as well as contextual factors, using the Consolidated Framework for Implementation Research (CFIR),³² that may inhibit or promote the integration, sustainability and scalability of PARTNER-MH.

We used domains of the Consolidated Framework for Implementation Research (CFIR)³² to collect and analyze data to inform Aim 3. CFIR offers an overarching typology of five domains affecting intervention development and implementation: 1) intervention characteristics, 2) inner setting, 3) outer setting, 4) characteristics of individuals, and 5) the implementation process.³² Briefly, intervention characteristics include evidence for the intervention and its adaptability. Implementation takes place within an inner setting—or the program providing the service. Inner setting is affected by the outer setting—the broader treatment system. Characteristics of individuals, such as their skills level, also affect intervention delivery and implementation. The implementation process involves different strategies and tools that are employed in putting a new practice into place.

Data collection for Aim 3 was guided by the CFIR using semi-structured interviews. We conducted interviews with patients and providers to obtain their perspectives about the intervention and experiences participating in the PARTNER-MH program. Interviews also assessed organizational factors, such as time and other resources that may have affected the delivery and content of the intervention, as well as impact of the program on veteran outcomes.

3.2 Aim 3 study participants

We invited all 30 veterans from the intervention group to participate in a qualitative interview. In addition, we included a purposeful sample of 5 mental health staff members (prescribing and non-prescribing clinicians) who had experience working with the peer navigators and with patients enrolled in the program.

3.3 Aim 3 qualitative data analysis

Interviews from Aim 3 were transcribed, de-identified, and entered into NVIVO, a qualitative analytical software program, to help organize the data. To facilitate completion of qualitative data coding and analysis in a short timeframe, we incorporated several features recommended in rapid qualitative assessment.⁵³ First, we imposed some structure on the data being analyzed. The interviews reflected CFIR constructs, which allowed for easier access to apply coding. Second, we incorporated selected codes *a priori*, based on our prior research to provide initial structure to the coding process but also allowed for expansion of the code list in which other meaningful ideas may emerge. We used an inductive, interpretive approach that borrows concepts from grounded theory to identify and explore emerging areas not covered by interview guidelines.

Through an iterative, consensus-building process, we reviewed transcripts to identify emergent themes consistent with techniques of immersion and crystallization.⁵⁴ We independently read a few selected documents to identify possible areas of pursuit. We created episode profile for each transcript to facilitate in-depth understanding of each case and identify emerging themes for cross-transcripts comparison. We met to discuss our findings and develop a working set of codes to add to the structural codes listed above. We repeated this process on fresh sets of documents until we had a set of defined codes that are stable and consistent. We then coded individual transcripts independently.

To facilitate rigor of the data analysis process, we held regular meetings with the coding team to examine coding across analysts, resolved differences in coding, identified and resolved coding drift, and conducted iterative refinement of code definitions, and collaborated on the development of themes. We maintained memos of our coding processes, coding decisions, and analyses. We also continually assessed and maintained consistency and consensus in our coding practices^{50,55}.

3. Results

Figure 3 shows the results of screening, eligibility determination, enrollment and randomization of participants which were conducted from 8/17/2020 to 4/12/2021. To recruit participants, we mailed letters to 191 potential participants. In addition, 5 patients were referred by clinicians or self-referred through study advertisements or word of mouth. Of these participants, 55 were not able to be reached to screen for eligibility, 33 were found ineligible, and 31 declined to participate. Of interested participants, 73 met eligibility criteria. However, 14 of these participants either cancelled or did not show up for their baseline after rescheduling, 4 declined to participate in the study, and 4 were deemed ineligible due to changing circumstances such as relocating to a different state or transferring health services outside the VHA. Overall, 50 participants were enrolled in the study, with 30 randomized to PARTNER-MH and 20 randomized to the waitlist control group.

Participants' demographics are presented in Table 1. Participants are mostly men (62%), self-identified as Black (70%), and non-Hispanic (88%). Participants were almost evenly distributed across three age groups: 25-34 (25%), 45-54 (28%), and 55-64 (24%), and 48% had some college education. Randomization produced comparable groups with regard to baseline characteristics of age, race, ethnicity, and education. However, the waitlist control group had more female participants (55%) compared to the active intervention group (27%), ($p=.0432$). The two groups were also comparable on the outcome measures at baseline (See Tables 2 & 3).

Discussion

Mental healthcare disparities are persistent and contribute to increased comorbidities, mortalities, and healthcare cost expenditures among individuals of racial and minority backgrounds^{56–58}. Minority patients experience lower activation, lower engagement, and lower participation in shared decision-making, which all have been implicated in negative healthcare experiences and healthcare outcomes for these groups^{59–61}. Improving patient engagement, activation, or participation in shared decision-making may lead to improved minority groups' mental health outcomes and mental health equity.

To move beyond documentation of disparities, PARTNER-MH is designed to leverage the potential of peer support and patient navigation care models to effectively improve patient engagement, activation, and participation in shared decision-making in mental healthcare among patients of racial and ethnic minority backgrounds. PARTNER-MH uses a social determinant healthcare framework by assessing patients' unmet social needs to engage them in care and learn about their lived experiences and social contexts. PARTNER-MH's additional focus on improving patients' communication self-efficacy and participation in shared decision-making may contribute to improved satisfaction with services, treatment adherence, and outcomes. The program's delivery over six months may also increase the percentage of patients who become engaged in care and achieve all targeted goals.

This feasibility trial will also help identify potential unanticipated challenges in the program and its implementation. For instance, it may help identify patients who may benefit the most from this intervention and the optimal length of the intervention to facilitate sustained engagement in the program.

PARTNER-MH's feasibility is further tested under real-world conditions, such as using existing VHA hiring procedures and assigning study peers to the mental health organizational chart with mixed roles to provide PARTNER-MH and usual peer support services. This aspect of the study approach should provide rich implementation information for future consideration.

A limitation of this study is that participants were not blinded to the study conditions, which may have affected their behaviors and study outcomes. However, PARTNER-MH represents a novel approach that may help advance health equity for minority patients and that could represent a new system-based model to create sustained engagement of minority groups in mental healthcare. In addition, because PARTNER-MH focuses on patient engagement, activation, and patient-provider communication, issues that are cross-cutting among other disease populations, lessons learned in this study could be applied to minority patients with other chronic health conditions in other settings. PARTNER-MH also offers the potential to advance the field of peer support and patient navigation by creating a training program for VHA peer support specialists to deliver peer-led navigation services in outpatient mental health clinics over six months.

Declarations

Availability of data and materials: Data from this study are available from the authors [JE] with the permission of the Veterans Health Administration.

Competing interests: Not applicable.

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Tables

Table 1. PARTNER-MH participants baseline characteristics.

	Overall (n=50)	Intervention Group (n=30)	Wait-List Control Group (n=20)	p- value
Age				
18-24	1 (2.0)	0 (0)	1 (5.0)	.3093
25-34	12 (24.0)	8 (26.7)	4 (20.0)	
35-44	9 (18.0)	7 (23.3)	2 (10.0)	
45-54	14 (28.0)	6 (20.0)	8 (40.0)	
55-64	12 (24.0)	7 (23.3)	5 (25.0)	
65-75	2 (4.0)	2 (6.7)	0 (0)	
Race				
White	3 (6.0)	3 (10.0)	0 (0)	.2135
Black	35 (70.0)	20 (66.7)	15 (75.0)	
Asian	1 (2.0)	0 (0)	1 (5.0)	
Other	5 (10.0)	2 (6.7)	3 (15.0)	
Multi	6 (12.0)	5 (16.7)	1 (5.0)	
Hispanic	6 (12.0)	4 (13.3)	2 (10.0)	.7223
Gender				
Male	31 (62.0)	22 (73.3)	9 (45.0)	.0432*
Female	19 (38.0)	8 (26.7)	11 (55.0)	
Education				
HS/GED ¹	10 (20.0)	3 (10.0)	7 (35.0)	.0730
Some college/2 years	24 (48.0)	17 (56.7)	7 (35.0)	
4 years college degree	9 (18.0)	7 (23.3)	2 (10.0)	
>4 years college	7 (14.0)	3 (10.0)	4 (20.0)	

1. GED: General Education Development

Table 2. Baseline Primary Outcome Measures

	Overall (n=50) (range)	Intervention Group (n=30), (range)	Wait-List Control Group (n=20), (range)	p- value 95% CI
Altarum Consumer Engagement (ACE) Commitment to everyday health behavior subscale	14.1 (9.4, 18.8)	12.5 (9.4, 18.8)	14.8 (7.8, 18.8)	.9046
Altarum Consumer Engagement Informed choice subscale	9.4 (6.3, 15.6)	9.4 (6.3, 14.1)	10.2 (6.3, 15.6)	.8887
Altarum Consumer Engagement Navigation subscale	15.6 (12.5, 18.8)	15.6 (12.5, 18.8)	15.6 (12.5, 16.4)	.4139
Patient Activation Measure (PAM) Activation scores	34.7 (32.2, 40.1)	34.7 (32.2, 37.3)	34.7 (32.2, 41.7)	.3756
Shared Decision-Making-9 (SDM-Q-9)	27 (22, 35)	27 (21, 35)	30.5 (23, 36)	.2332
SDM-Q-9 Q10 To the extent that shared decision-making took place during your visit, how much did you drive the process? Not at all A little Some A lot N/A				
	10 (20.0)	6 (20.0)	4 (20.0)	.8620
	10 (20.0)	6 (20.0)	4 (20.0)	
	10 (20.0)	4 (13.3)	5 (25.0)	
	9 (18.0)	10 (33.3)	5 (25.0)	
	15 (30.0)	4 (13.3)	2 (10.0)	
	6 (12.0)			
SDM-Q-9 Q11 Thinking about your goal for the visit (what you wanted to be done), how much do you feel you accomplished? Nothing at all A little Some				
	7 (14.0)	5 (16.7)	2 (10.0)	.9098
		9 (30.0)	7 (35.0)	

A lot	16 (32.0)	7 (23.3)	5 (25.00)	
Every goal set	12 (24.0)	6 (20.0)	5 (25.0)	
	11 (22.0)	3 (10.0)	1 (5.0)	
	4 (8.0)			
SDM-Q-9 Q11				
How much do you feel heard during your discussion with your provider?)				
Not at all	4 (8.0)	4 (13.3)	0 (0)	.0631
A little	4 (8.0)	0 (0)	4 (20.0)	
Some	9 (18.0)	5 (16.7)	4 (20.0)	
A lot		14 (46.7)	8 (40.0)	
Completely	22 (44.0)	7 (23.3)	4 (20.0)	
	11 (22.2)			
SDM-Q-9 Q13				
Did you experience any barriers that kept you from speaking up or participating in shared decision-making during that visit?				
Yes				
No	16 (32.0)	10 (33.3)	6 (30.0)	.9682
Unsure	29 (58.0)	17 (56.7)	12 (60.0)	
	5 (10.0)	3 (10.0)	2 (10.0)	

Table 3. PARTNER-MH baseline secondary participants health outcome measures

	Overall (n=50)	Intervention Group (n=30)	Wait-list Control Group (n=20)	p- value
	N, (range)	n, (range)	m, (range)	95%CI
CollaboRATE (yes answers, %)	14 (28.6)	6 (20.7)	8 (40.0)	.1414
Perceived Discrimination in Healthcare Questionnaire	7 (3, 11)	7.5 (3, 12)	6.5 (0, 9.5)	.2955
Patient Health Questionnaire (PHQ-9)	13.5 (8, 19)	14.5 (11, 20)	11 (7, 15)	.0531
Work Alliance Inventory-Short Revised (WAI-SR)	42 (29, 52)	40 (25, 54)	45 (36, 51)	.3887
Veterans Rand 12-item Health Survey (VR-12) Physical Health	36.0 (31.6, 42.5)	36.0 (31.7, 41.1)	35.8 (30.8, 44.3)	.8919
Veterans Rand 12-item Health Survey (VR-12) Mental Health	32.9 (24.9, 38.6)	30.1 (24.4, 35.3)	37.4 (28.9, 43.9)	.0613
Perceived Efficacy in Patient-Physicians Interaction Scale (PEPPI-5)	37 (30, 43)	36 (30, 43)	40 (30.5, 44)	.6128

Figures

Figure 1

PARTNER-MH Conceptual Model

Figure 2

Joint Display for Mixed Methods Data Collection and Analysis

Figure 3. Recruitment and enrollment consort diagram

¹did not call back after 5 voicemails or attempts to reschedule appointment.

² Of those found ineligible, 12 did not meet criteria for “new” patients, 9 did not identify as a racial or ethnic minority Veteran, 7 no longer received services in the clinics, and 5 were not available during the study hours.

³ residing out of town or otherwise away and not available for follow up.

⁴ switched to mental health services outside Indy VA, availability changed before baseline appointment.

Figure 3

See image above for figure legend