



A Qualitative Analysis of Stakeholder Attitudes Regarding Personalized Provider Selection and Patient-Therapist Matching

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Abstract

This study explored mental health care patients and therapists' perspectives on using therapists' measurement-based and problem-specific effectiveness data to inform case assignments – a type of treatment personalization that has been shown to outperform non-measurement-based case assignment as usual (Constantino et al., 2021). We conducted semi-structured qualitative interviews with 8 patients (75% women; *M* age = 33.75 years) and 8 therapists (75% women; *M* age = 47.50 years). The interview protocols were unique to stakeholder group. Recorded responses were transcribed and qualitatively analyzed by four judges using a blend of consensual qualitative research and grounded theory methods. Derived patient domains included preferred characteristics of a provider, and experiences and suggestions regarding provider selection. Within the domains, most patients expressed an interest in accessing more specific provider information online. Additionally, most patients indicated that both provider outcome track records and personal preference information (e.g., therapist characteristics) should be considered in the therapist selection process. All patients endorsed being comfortable with having the ability to select a provider based on a list of empirically well-matched recommendations. Derived therapist domains included using routine outcomes monitoring for patient-provider matching, referral source and direct patient use of preferred provider lists, and improvements to the provider selection process. Within the domains, all therapists remarked that outcome data would be useful for matching patients to providers; however, most also indicated that outcome data should not be the only factor used in provider selection. All therapists expressed a willingness to be included in preferred provider lists that incorporate track record data. Overall, both patients and therapists held generally positive views toward using therapist effectiveness data to help personalize mental health care. Yet, both stakeholder groups acknowledged that other personalization factors should be considered alongside these data. Based on these results, our team is in the process of implementing patient-therapist match strategies in larger and more diverse mental health care contexts.

Keywords Personalization · Patient-therapist matching · Stakeholder attitudes · Measurement-based care

Responsiveness in psychotherapy refers to behavior that is influenced by emerging context (Stiles & Horvath, 2017), which can involve different levels and timescales. For example, a therapist might be responsive when they select

the most appropriate treatment for a given new patient, as well as when they adjust their treatment plan during therapy based on routine outcomes monitoring (ROM) and feedback information (Constantino et al., 2013, 2020). These therapist-level responsive practices are inherently forms of *treatment* personalization, with individualized treatment selection being the subtype that has received the most attention in psychotherapy research (e.g., Schwartz et al., 2021).

In contrast to personalization actions taken by therapists, relatively less attention has been devoted to mental health care (MHC) system-level responsiveness and how such systems can create structures and incentives to facilitate data-informed personalized and precision care practices. Moreover, the full realization of personalized MHC must

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also consider the patient's context and role in treatment decision making. This is particularly relevant for decisions regarding therapist selection (beyond a type of treatment they offer) and the suitability of patient-therapist referrals and case assignments. Such personalized *provider* selection has only recently begun to receive more empirical attention.

MHC has traditionally assumed that most therapists function as the same social stimulus for all patients. However, research has consistently demonstrated significant variability in skill and outcomes among providers in both naturalistic and controlled settings (Wampold & Owen, 2021). The outcome variability attributable to therapist differences is even more pronounced for patients who present with higher initial severity and impairment (Boswell et al., 2021; Johns et al., 2019). Thus, research underscores that substantive improvements in MHC outcomes can occur not just by promoting the use of evidence-based *interventions* and personalized intervention selection, but also by harnessing evidence-based *therapists* and personalized therapist selection (see Constantino & Muir, *in press*).

Notably, adopting information on global/unidimensional therapist outcome differences (e.g., some therapists appear to be more effective than others in reducing general symptoms or distress) to support evidence-based therapist selections and patient-therapist assignments would be an innovation (see Imel et al., 2015). However, such matching to global effectiveness differences presents a rather minimal degree of personalization, especially given research demonstrating that therapists also have meaningful effectiveness differences *within their own practice* (Kraus et al., 2011). For example, multidimensional outcome assessments can elucidate within-therapist effectiveness strengths and weaknesses when treating patients with different types of presenting mental health problems (see Coyne, *in press*).

Our research team has conducted a series of practice-oriented research studies to better understand between- and within-therapist outcome differences and their implications for data-informed personalized therapist selection and patient-therapist matching (Kraus et al., 2011, 2016). Across these large naturalistic samples, we have investigated therapist outcome patterns over multiple problem domains with a multidimensional outcomes monitoring tool (Treatment Outcome Package, TOP; Kraus et al., 2005). Results have consistently demonstrated a differential pattern of therapist effectiveness depending on the problem domain; for example, some therapists demonstrate substantial effectiveness in depression reduction, but not in treating substance abuse. Others might be effective in treating depression and substance misuse, but not sleep problems. Overall, our data indicate that many therapists demonstrate effectiveness over several of the TOP's 12 problem domains, yet none demonstrate reliable effectiveness across

all domains. A small, but notable 4% of therapists fail to demonstrate positive outcomes on *any* domain. In addition, therapist domain-specific outcome track records tend to be stable over time (Kraus et al., 2016). Convergent findings have emerged from other research teams. For example, Delgadillo et al. (2020) examined a large sample of routinely presenting patients with ROM and case-mix data and found that specific subgroups of therapists were more or less able to help specific subgroups of patients (e.g., defined by initial severity or employment status).

Based on these findings, we conducted a double-masked randomized controlled effectiveness trial that prospectively compared outcome-based patient-therapist matching to case assignment as usual (CAU) prior to naturalistic therapy in a large MHC system (Constantino et al., 2021). Results demonstrated that patients in the personalized empirical match condition experienced a steeper rate of improvement in global impairment and better posttreatment severity outcomes than patients who were assigned pragmatically in the CAU condition. Furthermore, the benefit for the match effect on outcome was more pronounced both for patients with higher baseline severity and for those with an under-represented racial/ethnic identity (Boswell et al., 2021).

Despite these demonstrated differences in effectiveness both among MHC therapists and within their own practices, and the promise of purposefully leveraging such differences, patients and other relevant stakeholders rarely have direct access to this information to inform personalized care decisions. Functionally, the choice of an MHC therapist is often random (e.g., the first one to return a call), based on convenience, and/or limited by insurance coverage. Without systematically collecting, analyzing, and communicating therapist-level outcome information, stakeholders lack vital information on which to base personalized MHC choices and referral decisions. Although routine patient-reported outcomes data are the lynchpin of "patient-focused research," the utilization of these data to inform treatment personalized decision-making is a relatively new practice (Lutz et al., 2019). Importantly, health care systems are beginning to devote more attention to provider (and system) effectiveness measurement and the alignment of payment models and resource allocation with outcome indicators (Rousmaniere et al., 2020); however, patient and therapist perspectives on the value of these initiatives and the harnessing of outcome data are lacking (Henderson & Henderson, 2010). The input of patients and therapists, among other stakeholders, will be critical for any future dissemination and implementation efforts in routine clinical settings. Implementation strategies that run counter to patient and therapist beliefs and preferences are less likely to be sustainable (Youn et al., 2023).

Passive dissemination of therapist outcome information (in the absence of an identified patient's needs or

communication with therapists or administrators who manage referrals and case assignments within an organization) has the potential to be confusing and overwhelming to patients (Adams & Drake, 2006; Walton, 2007). It is possible that a more coordinated system of using therapist outcomes data to optimize patient-provider matching is needed, in the service of rendering patient-centered outcomes more interpretable and actionable. MHC decision-making is complex, and to account for this complexity, patients, therapists, and other key stakeholders need to contribute to the development and testing of novel personalization strategies. The promise of personalized mental health care is unlikely to be realized in the absence of stakeholder informed experiences and perspectives on its implementation. MHC stakeholder involvement may increase the odds of identifying mutually beneficial, feasible, replicable, and sustainable strategies for making empirically based, personalized patient-therapist matching relevant and useful.

Current Study

The broader project associated with the aforementioned Constantino et al. (2021) trial adopted a multimethod approach to the study of outcome-based patient-therapist matching. As noted, patient and therapist stakeholder perspectives on outcome-based personalized matching have been relatively absent in the literature. Regarding patients, some survey-based and qualitative research has demonstrated that patients are interested in learning more about therapist outcome information and that a high proportion of patients endorse the belief that such information is likely to be of value when making treatment decisions (Boswell et al., 2018, 2021). However, less is known about patient perspectives and preferences regarding the *implementation* of outcome-based matching to enhance personalized care decision making, which is critically important information if such matching is to be feasible in routine practice settings. Regarding therapists, we are unaware of published findings that highlight their perspectives on outcome-based matching and the implementation of personalized therapist selection based on ROM data. Consequently, we conducted semi-structured individual interviews with a subset of volunteering patient and therapist participants who participated in the Constantino et al. match trial (though who were unaware as to whether they were matched empirically or via usual means; thus, their perspectives were on the general topics of personalized care and measurement-based matching vs. a known lived experience). Patients and therapists were interviewed separately with different question protocols, yet the overlapping aim was to generate initial stakeholder ideas

about and perspectives on the implementation of outcomes-based therapist selection and matching.

Method

Participants

Participants were 8 patients and 8 therapists who took part in the Constantino et al. (2021) trial and also volunteered to participate in semi-structured interviews. These numbers equaled our target sample size for each participant type, which is considered to be the minimally suitable number for interview-based qualitative designs (Hill, 2012). To be eligible for an interview, the individual must have completed their trial activities. For patients, this meant that they were no longer completing study measures during their acute treatment. For therapists, this meant that they were no longer accepting new trial patients. The average age of the patient participants was 33.75 years ($SD=12.16$). All patients identified as White; six were female, and two were male. Six patients reported being employed full time; one reported being employed part-time and one reported being unemployed and looking for work. Patient reported family income ranged from \$10,000 to \$200,000. All patient participants completed at least high school. All but one patient endorsed being heterosexual. The following clinical domains were the most elevated/severe among the patients, based on the trial's baseline assessment: depression, substance abuse, social functioning, life quality, sexual functioning, and anxiety. The average age of the therapist participants was 47.5 years ($SD=9.30$). Six therapists identified as White, one as Black, and one as Hispanic. Six of the therapists were female, and two were male. All therapists were licensed MHC providers.

As noted, the trial design was double-masked; patients and therapists were only informed that the project was testing different ways to optimize the assignment of patients to therapists. Although unaware of their match status, therapists treated patients in both trial arms. As part of patient recruitment for the present study, we did not set out to stratify participants by condition; rather, we recruited on a rolling basis upon participant trial completion. Based on study records, five of the present subsample patients had been assigned to the empirical match condition and three to the CAU condition.

Materials and Methods

All interviews, which were conducted and recorded on the GoToMeeting video conference platform, were approximately 45 min in length. Each interview was conducted

by one of two research assistants (female clinical psychology doctoral students) who had training in human subjects' research and interview-based assessment. The audio from each completed interview was transcribed by a research assistant for subsequent analysis and any identifying information was removed. Analyses were conducted primarily on the interview transcripts, yet judges also had access to raw audio if necessary.

The interviewers followed a semi-structured protocol that was geared to each stakeholder group. These protocols, which can be found in the online Supplemental Information, were developed collaboratively with input from an advisory board of mental health care stakeholders, including patients and therapists. For patients, the interview items covered: experience with finding a therapist; relevant factors for selecting a therapist, including access to therapist effectiveness information; use of outcome monitoring tools to inform personalized matching; how to disseminate and implement outcome-based matching; and concerns about outcome-based matching. For therapists, the interview items covered: attitudes regarding outcome-based track record generation and matching; beliefs about their own relative pattern of effectiveness, ineffectiveness, or personal fit with certain patients; factors that inform patient selection; beliefs about potential uses of routine outcomes data/practice-based evidence; attitudes and preferences regarding the implementation of outcomes-based personalized provider lists; and concerns about outcome-based matching.

Procedure

The present study was approved as part of a broader institutional review board-approved protocol connected to the Constantino et al. (2021) parent trial. At the time of providing consent for the trial, patient and therapist participants also indicated whether they would be willing to be contacted for the present exit interviews. We followed the Standard for Reporting Qualitative Research (SRQR; O'Brien et al., 2014). We recruited both participant types (of those who had agreed to be contacted for the interviews) through convenience sampling. On a rolling basis, potential interview participants were approached sequentially after completing their participation in the parent trial. Individuals who remained interested were then directed to complete a supplemental online consent form specific to the interview process. After consenting, participants engaged in the interview on a first-come, first-served basis.

A total of 10 out of the first 10 patients (from the effective trial sample of 218) who were contacted opted into an interview, and all 10 scheduled an interview. However, two of these individuals did not follow through with the interview and were ultimately not reachable. The remaining eight

individuals completed interviews and were included in the analysis. These patient interviews were conducted between January 2019 and September 2019. A total of eight out of the first eight therapists (from the effective trial sample of 48) who were contacted opted into an interview, and all eight scheduled and completed an interview. These therapist interviews were conducted between July 2019 and September 2019. Individuals in both participant groups were compensated \$100.00 for their time.

Data Analysis

Data were analyzed according to a blend of consensual qualitative research (CQR; Hill et al., 2021) and grounded theory methods (GTA; Glaser & Strauss, 1967; Strauss & Corbin, 1990). These inductive and constructivist methods allow investigators to gain a rich understanding of participants' perceptions of the target phenomena. Four doctoral research assistants served as qualitative judges, including the two interviewers. The judges otherwise had no prior relationship with the interview participants. All four judges identified as White females and were doctoral students in clinical psychology research labs. Judges had varying levels of experience with qualitative analysis (described in more detail below). All judges had experience with observational coding and three of the judges had at least some prior experience with CQR. Consistent with CQR recommendations, prior to analysis, the judges discussed potential biases and expectations. All four judges had interests in and favorable views regarding measurement-based care. However, they did not report strong preconceived notions about interview participants' views on the implementation of outcomes-based therapist selection and matching. Prior to evaluating the data, the principal investigators (PIs) trained all judges on CQR and grounded theory methods, including with a mix of readings, practice transcripts, and discussion. All analyses were conducted between December 2019 and June 2020.

The four judges first independently identified broad content domains (unique topic areas; Hill, 2012) from several transcripts until domain saturation was achieved (Lepper & Riding, 2006). Any discrepancies in domain formation were settled via discussion and consensus among the coding team. After the initial content domains were established, they were sent to one of the PIs for auditing (a White, male clinical psychologist). Upon receiving feedback from the auditor, the judges finalized the domains. Next, the judges independently constructed core ideas, or concise summaries of participants' complete thoughts about the focal domains. The construction of core ideas represented the primary exploration of the data through a process of discussion and constant comparison to participant responses. Discrepancies were settled via discussion and consensus among the coding

team. As part of this construction phase, core ideas were successively sorted into their representative categories and subcategories that represented commonalities both within and between transcripts (Lepper & Riding, 2006). This process continued across transcripts, with modifications being made to the data structure, as needed. As another layer of consensual coding to reduce bias and increase reliability, a data auditor also provided feedback on the core idea and categorization phases. Next, judges engaged in cross-analysis to review the dataset as a whole and to determine which core ideas and categories/subcategories belonged under which specific domains. Back-and-forth between coders and auditors continued until consensus was achieved (reflexivity and member checking). As a final step, we adopted a slightly modified CQR classification approach to characterizing the representativeness of categories/subcategories for each stakeholder group. When a category/subcategory emerged for 7 or 8 participants, we classified it as *general*. When a category/subcategory emerged for 4 to 6 participants, we classified it as *typical*, given its relevance to at least half of the sample. Categories/subcategories that emerged for 2 to 3 participants were classified as *variant*, while categories/subcategories that emerged for 1 participant were classified as *rare*.

Results

Patient Stakeholders

Six content domains were derived from the eight interviews and cut across interview topics: (1) Experience navigating MHC system; (2) Preferred factors in an MHC provider; (3) Provider selection process in MHC; (4) Systems use and implementation of therapist effectiveness track records;

(5) Beliefs regarding improvement to personalized therapist selection processes; and (6) Experience completing routine measures. As noted, patients were asked a range of questions pertaining to the collection and implementation of outcome data for MHC decisions. Questions pertaining to the experience of completing routine outcome measures were asked both to “break the ice” and to provide context for subsequent questions about the clinical harnessing of such outcome data. Given this, and that the primary focus of the present report is on attitudes and suggestions for provider selection and matching, our summary of the patient interview results does not focus on the more basic ROM attitudes captured in domain 6. However, full results for this domain can be found in Table S1 in the online Supplement Information. A summary of the primary findings by domain of interest is provided below. Example quotes from *general* and *typical* categories/subcategories are provided to contextualize the core ideas.

Domain 1: Experience Navigating MHC System

Full results for patient domain 1 are reported in Table 1, including categories and subcategories. Patients provided varied information about their experiences navigating the MHC system. Regarding the referral process, the most typical referral source was a family member or friend, rather than a professional. In addition, most patients indicated that they are typically unaware of important information about therapists and how to navigate finding a good-fitting therapist. For example: “*I don’t really know a lot about specific therapists at any of the psychological practices around the area. In general, you don’t know anything specific about the particular providers who are at each location to make an informed decision.*”

Table 1 Patient stakeholder domain 1: experience navigating MHC system

| Category | Subcategory | Number of core ideas (total = 31) | Number of cases (total = 8) |
|--|------------------------|-----------------------------------|-----------------------------|
| Received referral to mental healthcare | | 13 | 8 (G) |
| | By physician | 5 | 3 (V) |
| | By advisor | 1 | 1 (R) |
| | By family or friend | 5 | 5 (T) |
| | Self-referral | 2 | 2 (V) |
| Seeks mental healthcare through personal research | | 2 | 2 (V) |
| Uncertainty regarding how to seek mental healthcare | | 5 | 4 (T) |
| | Easier with a referral | 1 | 1 (R) |
| Difficulty finding a good fitting provider | | 3 | 2 (V) |
| Unaware of important information about providers and selection process | | 8 | 5 (T) |
| Positive experience | | 7 | 4 (T) |
| Negative experience | | 10 | 6 (T) |

Note: G = General, T = Typical, V = Variant, R = Rare. The number of core ideas in a category reflects the total number of core ideas in its respective subcategories and the number of core ideas that only fit at the broader category level

Domain 2: Preferred Factors in a MHC Provider

Full results for patient domain 2 are reported in Table 2, including categories and subcategories. Although patients indicated interest in knowing about some provider identity characteristics when finding a therapist, it was not typical for them to identify consistently strong *a priori* preferences for specific ones. Instead, most participants expressed preferences for providers who are more patient-centered and with whom they will be able to establish a strong rapport. For example: “[Based on experience] what matters most is listening ... just listening and getting good feedback and advice; trustworthiness as well.”; “I think it’s the initial session and the rapport and ease of conversation. Feel like we are communicating effectively. So, I think really the relationship between me and my therapist.” Therapist practice logistics were also mentioned, including the importance of flexible scheduling.

Domain 3: Provider Selection Process in MHC

Full results for patient domain 3 are reported in Table 3, including categories and subcategories. Most patients indicated that they would like therapist information available on a searchable website to help make care decisions. For example: “I think it would be nice to have at least the focused areas [of expertise] on the website. Maybe patient experiences with specific therapists are included. It can help find somebody who is a good fit. It would be nice to look through and see therapists that would be available. And I think it would be nice for referring physicians and referring practices to have that information out there ...” Regarding the desired therapist information, most patients expressed interest in knowing about specialization. For example: “It would be nice on the website to say something like, ‘I’ve

been working for twenty years with ADHD,’ or ‘I’ve been working these many years with this problem.’”

Patients were also asked about their relative weighting of personal preferences and therapist outcome track record information in the therapist selection process. Half articulated that personal preferences and therapist outcome information should be considered/weighted similarly. All patients indicated that they would be comfortable selecting a therapist based on a list of empirically matched providers. In addition, most patients expressed a preference to select a particular therapist from such a match list, rather than having a specific match dictated by some other entity. For example: “I’d prefer to be able to choose from the whole list. That way I could pick and choose.” Most patients also indicated that additional information should be included with any list of well-matched therapists, including basic therapist characteristics (e.g., demographics), insurance coverage, and outcome track record information. For example: “I would absolutely want to see [outcome track record] information ... I would like to have outcome-based information on what a therapist has been successful in treating.” In addition, most patients indicated that they would be willing to wait for a well-matched therapist if their current issues were not too urgent.

Domain 4: Systems Use and Implementation of Therapist Effectiveness Track Records

Full results for patient domain 4 are reported in Table 4, including categories and subcategories. Most patients believed that therapist outcome track records should be used to inform personalized referrals (including from primary care physicians) and case assignments (made by clinics/clinic administrators). For example: “[outcome track records] should also be available to other physicians ...

Table 2 Patient Stakeholder Domain 2: Preferred Factors in a MHC Provider

| Category | Subcategory | Number of core ideas (total = 14) | Number of cases (total = 8) |
|-----------------------------------|---------------------------------|-----------------------------------|-----------------------------|
| Provider identity characteristics | | 13 | 4 (T) |
| | Provider gender preference | 4 | 3 (V) |
| | Provider age preference | 6 | 3 (V) |
| | Provider lifestyle preference | 1 | 1 (R) |
| | Indifferent | 2 | 1 (R) |
| Provider therapeutic style | | 16 | 7 (G) |
| | Patient-centered | 7 | 6 (T) |
| | Strong provider-patient rapport | 7 | 5 (T) |
| | Directive treatment approach | 2 | 2 (V) |
| Provider logistics | | 10 | 5 (T) |
| | Flexible schedule | 5 | 4 (T) |
| | Convenient location | 2 | 2 (V) |
| | Covered by one’s insurance | 1 | 1 (R) |
| | Effective track record | 2 | 2 (V) |

Note: G = General, T = Typical, V = Variant, R = Rare. The number of core ideas in a category reflects the total number of core ideas in its respective subcategories and the number of core ideas that only fit at the broader category level

Table 3 Patient Stakeholder Domain 3: Provider Selection Process in MHC

| Category | Subcategory | Number of core ideas (total = 18) | Number of cases (total = 8) |
|--|---|-----------------------------------|-----------------------------|
| Provider information online | | 13 | 6 (T) |
| | Want provider information available on a website | 11 | 6 (T) |
| | Difficulty trusting provider information online | 2 | 2 (V) |
| Helpful to receive provider recommendations | | 3 | 3 (V) |
| Physician referral | | 5 | 3 (V) |
| | Wary of a physician referral | 3 | 2 (V) |
| | Would like a physician referral | 2 | 1 (R) |
| Information desired | | 27 | 8 (G) |
| | Provider characteristics | 3 | 2 (V) |
| | Provider availability, location, and insurance coverage | 4 | 3 (V) |
| | Provider specialization | 8 | 5 (T) |
| | Provider track record information | 4 | 2 (V) |
| | Provider therapeutic approach | 3 | 3 (V) |
| | Does not desire additional information | 2 | 2 (V) |
| Clinics should survey patients' preferences to inform recommendations | | 8 | 3 (V) |
| Provider selection based on research and meeting with potential providers | | 3 | 2 (V) |
| Personal preferences vs. provider track record selection process | | 20 | 8 (G) |
| | Values personal preferences over provider track record | 3 | 2 (V) |
| | Values provider track record/specialty over personal preferences | 4 | 3 (V) |
| | Personal preferences and provider track record should be considered equally | 5 | 4 (T) |
| | Stakeholders should not unilaterally dictate weight of personal preferences vs. provider track record in matching | 4 | 2 (V) |
| | Logistics should be prioritized before matching | 4 | 3 (V) |
| Comfortable selecting a provider based on a list of matched providers | | 8 | 8 (G) |
| List of provider options vs. specific recommendation | | 12 | 8 (G) |
| | Prefers selecting a provider from a list rather than receiving a specific recommendation | 11 | 7 (G) |
| | Prefers receiving a recommendation to a specific provider | 1 | 1 (R) |
| Want additional information to be included with the list of matched providers | | 28 | 8 (G) |
| | Provider characteristics | 7 | 6 (T) |
| | Provider availability, location, and insurance coverage | 6 | 4 (T) |
| | Provider therapeutic approach and experience | 3 | 2 (V) |
| | Provider track record information | 5 | 5 (T) |
| | Uncertain/disagree that track record information should be included | 4 | 4 (T) |
| | Patient reviews | 2 | 2 (V) |
| Willingness to wait for a matched provider depends on severity of current issues | | 5 | 4 (T) |
| Willingness to wait for a matched provider | | 9 | 8 (G) |
| | Willing to wait up to a month for a matched provider if issues are not urgent | 6 | 6 (T) |
| | Willing to wait more than one month | 2 | 2 (V) |
| | Others should not have to wait for a matched provider | 1 | 1 (R) |

Note: G=General, T=Typical, V=Variant, R=Rare. The number of core ideas in a category reflects the total number of core ideas in its respective subcategories and the number of core ideas that only fit at the broader category level

Table 4 Patient Stakeholder Domain 4: Systems Use and Implementation of Therapist Effectiveness Track Records

| Category | Subcategory | Number of core ideas (total = 197) | Number of cases (total = 8) |
|---|--|------------------------------------|-----------------------------|
| Should be used to inform referrals generally | | 10 | 5 (T) |
| Primary care physician referrals | | 10 | 7 (G) |
| | Should be used by primary care physicians to inform referrals | 8 | 5 (T) |
| | Concerns about track records being used by primary care physicians | 2 | 2 (V) |
| Should be used by clinic administrators to inform referrals | | 5 | 4 (T) |
| Insurance company referrals | | 4 | 4 (T) |
| | Should be used by insurance companies to inform referrals | 3 | 3 (V) |
| | Insurance companies should not have access to track records | 1 | 1 (R) |
| Should be used to match patients to providers | | 35 | 8 (G) |
| | Direct assignment by clinic to a specific provider | 8 | 4 (T) |
| | Clinics provide a list of recommended providers | 7 | 4 (T) |
| Should be considered alongside additional information for matching | | 9 | 6 (T) |
| Hiring and firing decisions | | 6 | 6 (T) |
| | Should be used to inform hiring or firing decisions for providers | 4 | 4 (T) |
| | Concern about track records being used to inform hiring or firing decisions | 2 | 2 (V) |
| Should be used to help identify ineffective providers and retrain/redirect them | | 4 | 3 (V) |
| Should be used to inform resource allocation | | 2 | 2 (V) |
| Should influence how providers are advertised | | 5 | 3 (V) |
| Should be used by providers themselves to assess progress with their patients | | 2 | 2 (V) |
| Use by patients to evaluate providers | | 10 | 7 (G) |
| | Should be used by patients to evaluate potential providers | 9 | 6 (T) |
| | Concern about track records being used by patients to evaluate potential providers | 1 | 1 (R) |
| Should be maintained by clinics that employ providers | | 1 | 1 (R) |
| Should be maintained by a separate independent party | | 1 | 1 (R) |
| Concern about other stakeholders maintaining track records | | 2 | 2 (V) |
| Should be disseminated by primary care physicians/other stakeholders | | 1 | 1 (R) |
| Dissemination by providers themselves | | 3 | 3 (V) |
| | Should be disseminated by providers themselves | 2 | 2 (V) |
| | Should not be disseminated by providers themselves | 1 | 1 (R) |
| Should be disseminated by the clinic employing the provider | | 9 | 8 (G) |
| Dissemination by insurance companies | | 4 | 3 (V) |
| | Should be disseminated by insurance companies | 2 | 1 (R) |
| | Should not be disseminated by insurance companies/regulators | 2 | 2 (V) |
| Sharing track record information | | 20 | 8 (G) |
| | Should be shared publicly on a website | 7 | 3 (V) |
| | Should not be shared publicly on a website/should be shared privately | 10 | 5 (T) |
| | Should be made available only to patients who request them | 3 | 2 (V) |
| Should be transparent about their track records | | 3 | 2 (V) |

Table 4 (continued)

| Category | Subcategory | Number of core ideas (total = 197) | Number of cases (total = 8) |
|--|--|------------------------------------|-----------------------------|
| Establishing track records should be optional or suggested practice | | 6 | 5 (T) |
| Establishing track records should be mandatory | | 2 | 2 (V) |
| Establishing track records is unnecessary | | 1 | 1 (R) |
| Track records will raise the therapeutic profession to a higher standard | | 2 | 1 (R) |
| Concerns about track records | | 16 | 7 (G) |
| | Matching on track records alone may result in missing out on a good personality fit between patient and provider | 2 | 2 (V) |
| | Patients might get hung up on numbers if they had access to track records | 1 | 1 (R) |
| | Track records may not be an accurate measurement of a provider | 13 | 5 (T) |
| Concerned about potential harm to therapists with bad track records | | 8 | 6 (T) |
| Clinics should follow up with patients with negative feedback about their provider to confirm accuracy | | 2 | 1 (R) |
| Records should be based on a large dataset ensure accuracy | | 2 | 2 (V) |
| Does not see downsides of using track record information for patients | | 2 | 2 (V) |

Note: G=General, T=Typical, V=Variant, R=Rare. The number of core ideas in a category reflects the total number of core ideas in its respective subcategories and the number of core ideas that only fit at the broader category level

to make personalized recommendations. If there was some way or sort of system people could type in my symptoms and a list [of matched therapists] would pop up. I think that would be very beneficial.” Most patients also indicated that outcome track records should be used to match patients to therapists. For example: “I think [outcome track record information] could help pairing therapists to patients. It’s daunting to find the right therapist. And the idea of you, possibly jumping around, and going through getting to know each other over again. I think the idea of this information of better fitting therapists for particular patients could be helpful.” Most patients suggested that clinics should use outcome track record information to inform referrals and case assignments, yet patients were more mixed on how much they would prefer being directly assigned to a specific therapist by clinic personnel or being provided with a short list of best-fitting therapists from which to choose.

Most patients expressed the belief that therapist outcome track records should be considered alongside additional information for the purposes of personalized matching. For example: “Yeah, I think some details alongside [outcome track record information]. It’s a combination of factors. I don’t think an outcome track record could sum up everything about the therapist or about the relationship that they may or may not have with you.” All patients expressed the opinion that clinics should disseminate outcome track record information for therapists in their setting. Patients

were more mixed about the approach of making “raw” provider-level outcome track record information publicly available on a website. An additional concern about using outcome track records for personalized matching was measurement accuracy. For example: “For therapists, I can see a potential situation where it’s if you have a bad outcome track record, it might be hard to escape negative evaluations if that information is constantly following you around, which might make it hard for therapists to [reestablish their practice].”

Domain 5: Beliefs Regarding Improvement to Personalized Therapist Selection Process

Full results for patient domain 5 are reported in Table 5, including categories and subcategories. Patients provided suggestions for improving the therapist selection process. Half called for improvements to the information dissemination process, as it relates to services generally. For example: “I feel like I still just don’t know what else is available out there for me to take advantage of. I feel like having a more widely available knowledge base of available therapists. I feel like even more general information on the outset would’ve been helpful.” Half of patients also remarked on the need for more information on individual therapists. For example: “Knowing the focus of the particular practitioner would be the most helpful thing, and I think putting that out

Table 5 Patient Stakeholder Domain 5: Beliefs Regarding Improvement to Personalized Therapist Selection Process

| Category | Subcategory | Number of core ideas (total = 45) | Number of cases (total = 8) |
|---|--|-----------------------------------|-----------------------------|
| Remove stigma of seeking psychotherapy | | 2 | 2 (V) |
| Improve dissemination of information about and accessibility of mental healthcare services | | 9 | 4 (T) |
| Improve affordability and insurance coverage of mental healthcare | | 4 | 2 (V) |
| Improve dissemination of information about providers themselves | | 5 | 4 (T) |
| Standardize the mental healthcare referral system | | 4 | 1 (R) |
| Consider patients' preferences when matching to provider | | 7 | 4 (T) |
| Consider patients' primary presenting problems and providers' track records when matching to provider | | 5 | 3 (V) |
| Allow patients to use general information about providers, along with their track records, to select their own provider | | 4 | 2 (V) |
| Place greater emphasis on the fit between patient and provider early on in the process | | 3 | 2 (V) |
| | Allow patients to speak to potential providers first | 1 | 1 (R) |
| Adjust routine outcome monitoring to be more personalized to patients | | 2 | 1 (R) |

Note: G = General, T = Typical, V = Variant, R = Rare. The number of core ideas in a category reflects the total number of core ideas in its respective subcategories and the number of core ideas that only fit at the broader category level

so the public would see it whether it's on the website or whatever and letting referring professionals know about better fitting providers based on their track records." In addition, half of the patient sample noted the importance of considering patient preferences when matching to a therapist.

Therapist Stakeholders

Seven content domains were derived from the eight interviews and cut across interview topics: (1) Use of ROM for personalized patient-therapist matching; (2) Referrer use of preferred personalized providers list; (3) Patient use of preferred personalized providers list; (4) Impact of track record use on therapists; (5) Improvements to MHC provider selection process; (6) Additional important factors for provider selection; and (7) Impact of ROM on treatment. As noted, therapists were asked a range of questions pertaining to ROM and the use of outcome data for MHC decisions. Questions pertaining to the perceived impact of ROM on treatment were asked both to "break the ice" and to provide context for subsequent questions about the clinical harnessing of such outcome data for personalized therapist selection and matching. Given this, and that the primary focus of the present report is on attitudes and suggestions for provider selection and matching, our summary of the therapist interview results does not focus on the more basic ROM attitudes captured in domain 7. However, full results for this domain can be found in Table S2 in the online Supplement Information. A summary of the primary findings by domain of interest is provided below. Example quotes from *general*

and *typical* categories/subcategories are provided to contextualize the core ideas.

Domain 1: Use of ROM for Patient-Therapist Matching

Full results for therapist domain 1 are reported in Table 6, including categories and subcategories. All therapists remarked that ROM would be useful for personalized matching of patients to therapists. The suggestion that ROM data be used to establish therapist outcome strengths and weaknesses to inform matching was a *typical* response. For example: *"You don't want to waste the patient's time. Why stick a patient with me when I'm not going to do well with them, or get them to a place that they're supposed to be? That's a waste of money."* In addition, half of the therapists mentioned that ROM data should not be the only factor that informs personalized matching; other factors, such as personality style matching, should also be considered. Some therapists expressed concerns about measurement validity for ROM-informed matching. For example: *"Who is deciding that the problem is [major depressive disorder; MDD], for example. What might look like [MDD] on a screener might actually be PTSD. The exact nature of the problem might not be discoverable until the client has an opportunity to come into see someone and dig deeper."*

Table 6 *Therapist Stakeholder Domain 1: Use of ROM for Patient-Therapist Matching*

| Category | Subcategory | Number of core ideas (total = 24) | Number of cases (total = 8) |
|---|------------------------------------|-----------------------------------|-----------------------------|
| ROM is useful for | | 19 | 8 (G) |
| | Any referral situation | 8 | 6 (T) |
| | Specific referral situations | 3 | 3 (V) |
| | No referral situations | 2 | 2 (V) |
| | Therapist strengths and weaknesses | 6 | 5 (T) |
| ROM should not be the only factor for matching Validity concerns | | 6 | 4 (T) |
| | | 8 | 4 (T) |
| | Measurement issues | 6 | 4 (T) |
| | Data quantity | 2 | 2 (V) |

Note: G = General, T = Typical, V = Variant. The number of core ideas in a category reflects the total number of core ideas in its respective subcategories and the number of core ideas that only fit at the broader category level

Table 7 *Therapist Stakeholder Domain 2: Referrer Use of Preferred Personalized Providers List*

| Category | Subcategory | Number of core ideas (total = 13) | Number of cases (total = 8) |
|--|--|-----------------------------------|-----------------------------|
| Willing to be on a list Referrer should interpret track records | | 8 | 8 (G) |
| | | 7 | 7 (G) |
| | Only if trained/qualified | 3 | 3 (V) |
| | When other factors are also considered | 1 | 1 (R) |
| | | 3 | 3 (V) |
| Benefits of referral list use Concerns with referral list use | | 2 | 2 (V) |
| | Positive for providers | 1 | 1 (R) |
| | Positive for clients | 5 | 4 (T) |
| | Validity concerns with measures | 3 | 2 (V) |
| | Therapist should make final decision | 2 | 2 (V) |

Note: G = General, T = Typical, V = Variant, R = Rare. The number of core ideas in a category reflects the total number of core ideas in its respective subcategories and the number of core ideas that only fit at the broader category level

Domain 2: Referrer Use of Preferred Personalized Providers List

Full results for therapist domain 2 are reported in Table 7, including categories and subcategories. All therapists indicated their willingness to participate in a referral program that lists preferred therapists as a function of outcome track records. Most therapists indicated that a qualified referral source should interpret the therapist outcome track record information. For example: “*Personally, I would love [being on an outcome-based provider list] as a therapist who is often in a position to make recommendations to patients ... because I don’t always know who’s good at what. I can go on a website and it says ‘oh, Joe Blow in [city], says he’s good at this therapy, or family therapy, or couples.’ But are they really good, or are they just saying that? So, I would love to be able to have more information to say, ‘I know Joe Blow in [city] is a really good fit for you and your problems, so I’m going to send you to [city] to see Joe Blow.’ Because we have that information; we can now have the data. It’s not just something [Joe Blow] says that he’s good at. Even assigning patients to therapists this way [in my clinic], that*

would be hugely helpful.” However, half of the therapists also expressed concerns about the use of such a referral list, including problems with placing too much weight on an existing/static list and taking some of the decision-making power away from the therapist.

Domain 3: Patient Use of Preferred Personalized Providers List

Full results for therapist domain 3 are reported in Table 8, including categories and subcategories. All therapists indicated their willingness to participate in a list of preferred therapists based on outcome track records that is directly used by patients. This domain also included categories related to patients’ willingness to wait to see a preferred therapist versus seeing the first available therapist who may not be scientifically matched. Half of the participants indicated that it should ultimately be the patient’s choice whether or not to wait. For example: “*I think it should be the client’s discretion. They could be offered, [this therapist] works really well with this population, but he’s busy. Would you be willing to wait, or do you want to see somebody sooner?*”

Table 8 *Therapist Stakeholder Domain 3: Patient Use of Preferred Personalized Providers List*

| Category | Subcategory | Number of core ideas (total=23) | Number of cases (total=8) |
|--|-------------------------|---------------------------------|---------------------------|
| Willing to be on a list for patients | | 8 | 8 (G) |
| | With other information | 3 | 3 (V) |
| Patients' choice whether to wait based on list | | 4 | 4 (T) |
| Benefits of waiting for preferred provider on list | | 3 | 2 (V) |
| Barriers to waiting for preferred provider on list | | 7 | 6 (T) |
| | Crisis situations | 4 | 4 (T) |
| Predictions of patient willingness to wait | | 8 | 8 (G) |
| | Patients will wait | 1 | 1 (R) |
| | Some patients will wait | 5 | 5 (T) |
| | Patients will not wait | 2 | 2 (V) |

Note: G=General, T=Typical, V=Variant, R=Rare. The number of core ideas in a category reflects the total number of core ideas in its respective subcategories and the number of core ideas that only fit at the broader category level

Table 9 *Therapist Stakeholder Domain 4: Impact of Track Record Use on Therapists*

| Category | Subcategory | Number of core ideas (total=13) | Number of cases (total=8) |
|-------------------------------------|-----------------------------------|---------------------------------|---------------------------|
| Track records are useful | | 7 | 6 (T) |
| | For training | 3 | 3 (V) |
| | For matching | 1 | 1 (R) |
| | In combination with other factors | 2 | 2 (V) |
| | Contract negotiation | 1 | 1 (R) |
| Concerns with track record matching | | 9 | 8 (G) |
| | Measurement issues | 6 | 5 (T) |
| | Unfair caseloads | 3 | 2 (V) |

Note: G=General, T=Typical, V=Variant, R=Rare. The number of core ideas in a category reflects the total number of core ideas in its respective subcategories and the number of core ideas that only fit at the broader category level

Give the clients that power." Most of the interviewed therapists indicated that there could be barriers to waiting for a preferred therapist, such as in a crisis situation. Overall, therapists predicted that some patients would be willing to

Table 10 *Therapist Stakeholder Domain 5: Improvements to the MHC Provider Selection Process*

| Category | Subcategory | Number of core ideas (total=9) | Number of cases (total=8) |
|---------------------------------|-------------|--------------------------------|---------------------------|
| Satisfied with current process | | 3 | 3 (V) |
| Suggested specific improvements | | 6 | 5 (T) |
| | Matching | 3 | 3 (V) |
| | Other | 3 | 3 (V) |

Note: G=General, T=Typical, V=Variant. The number of core ideas in a category reflects the total number of core ideas in its respective subcategories and the number of core ideas that only fit at the broader category level

wait, whereas others would not. For example: *"Personally, yes, I've waited for therapists for my kids because I knew they were good. I think part of the dilemma [is]... to be very sensitive to people in pain. They want to see somebody right now, and they need to deal with the crisis ..."*

Domain 4: Impact of Track Record Use on Therapists

Full results for therapist domain 4 are reported in Table 9, including categories and subcategories. Most therapists remarked that outcome track records would be useful to therapists, including to inform personalized training and contract negotiation. For example: *"Yes, I would absolutely hope that [outcome track records] could be part of the conversation that I would be having with our intake department and other people ... this is what the [outcome track record] data are showing. If the feedback is showing that I'm ineffective, then let's do something to address that. It's an ongoing conversation between clinicians and the folks who are referring, so that we're all clear on who does what well."* However, all clinicians expressed some concern about the impact of outcome track record use for patient matching. The most typical concern related to measurement issues, such as the limitations of patient self-report data. For example: *"I just don't think an outcome track record gives a full picture of a therapist's skill and rapport. In some cases, it might, depending on what the issues are, but there are many factors. Therapy is a human relationship, and it is complicated to say this is the factor or that is the factor. So, I think that's a potential weakness of that."*

Domain 5: Improvements to the MHC Provider Selection Process

Full results for therapist domain 5 are reported in Table 10, including categories and subcategories. Only a few therapists clearly indicated they are satisfied with the current

process of therapist selection for patients. Most suggested improvements, yet the nature of the improvements varied. Several therapists noted that more systematic and data-informed matching would be an improvement. For example: *“I think for places to match [patients to therapists] ... coming out of community mental health is like cases are just given to whoever ... the client is given to whoever just because there are so many clients who need services that it’s just you fill in whoever and then you’re just stuck. I think then you’re not going to get the outcome you are looking for. So, I think there needs to be a process at the treatment initiative level to ... to do a personalized match.”*

Domain 6: Additional Factors that are Important for Therapist Selection

Full results for therapist domain 6 are reported in Table 11, including categories and subcategories. Although varied in representativeness, therapists suggested some additional factors that may be important to consider in the provider selection process, beyond outcome track record-based matching. Half mentioned the importance of patients’ expressed preferences, such as those for a therapist with similar demographic characteristics. For example: *“I think [clients] should have the opportunity to have that decision. If I, as a client, were asked, ‘what exactly are you looking for? Would you like a list of the top five therapists in our practice who work specifically with that? Are you looking for male or female, are you looking for a therapist of a specific race?’ I think the client should have that opportunity, just as much as I believe the client also could have the opportunity to say ‘no, I’ve already looked and this is exactly who I want to see’ or ‘no, I don’t care who I see, just assign me to someone.”*

Table 11 Therapist Stakeholder Domain 6: Additional Factors that are Important to Provider Selection

| Category | Subcategory | Number of core ideas (total = 10) | Number of cases (total = 8) |
|-----------------------|-------------|-----------------------------------|-----------------------------|
| Diagnosis | | 2 | 2 (V) |
| Demographics | | 4 | 4 (T) |
| Patient preferences | | 4 | 4 (T) |
| Scheduling | | 1 | 1 (R) |
| Therapist factors | | 4 | 4 (T) |
| All factors are equal | | 1 | 1 (R) |
| Therapist preferences | | 1 | 1 (R) |

Note: G = General, T = Typical, V = Variant, R = Rare. The number of core ideas in a category reflects the total number of core ideas in its respective subcategories and the number of core ideas that only fit at the broader category level

Discussion

Personalization in MHC has largely focused on what treatment type is most likely to work best for whom. Complementary and multilevel forms of MHC personalization exist and have begun to receive more attention. For example, psychotherapy research has moved beyond the statistical observation that some therapists achieve better global outcomes with their patients than other therapists, toward trying to understand the nuance and contextual factors that will allow for greater precision in harnessing therapist effectiveness differences (Constantino & Muir, [in press](#)). In the context of an RCT that tested an empirical patient-therapist match intervention, the present study solicited patient and therapist perspectives on the collection and dissemination of therapist outcome track records/profiles for personalized provider selection, as well as the process of implementing outcome-based patient-therapist matching.

Consistent with previous research, patients described mixed experiences navigating the MHC system. Regarding finding a therapist, several patients described a lack of access to any systematic information to guide decisions about personally well-suited therapists. The importance of a particular therapist characteristic varied among the participants, yet scheduling availability and the ability to establish a strong rapport were mentioned, alongside information about therapist areas of specialization and outcome track records. Interestingly, although many patients appear to be unfamiliar with online therapist databases (Boswell et al., [2018](#)), therapist areas of specialization and/or expertise are already commonly included in therapist profiles. However, such listings generally rely on therapists’ non-measurement-based self-assessments of their problem-specific effectiveness or experience areas. Unfortunately, research has demonstrated that therapists are often inaccurate judges of their own measurement-based and problem-specific effectiveness, which spotlights a significant public health issue (Constantino et al., [2023](#)). Importantly, when observed across the derived interview domains and categories, patients appear to distinguish between identified specialization and experience level and outcome track record information, while perceiving value in having access to both types of information.

In addition, patients provided nuanced perspectives on the dissemination and implementation of therapist outcome track record information and its use for provider referrals and selection. For example, many patients expressed an interest in therapist outcome track record information being searchable on a website of potential therapists. If available, patients endorsed a preference for being able to choose among empirically well-suited providers, rather than being assigned or suggested a single, particular therapist. However, in the context of being assigned a therapist in a

particular treatment context (versus exploring online), more patients expressed a willingness to have a specific empirically well-suited therapist suggested to them. Regardless, most patients endorsed the belief that therapist outcome track records should be used to inform personalized referrals, as well as direct case assignments within the service delivery context. Astutely, though, patients cautioned that no index of a therapist's effectiveness should be considered in isolation. Patients mentioned the importance of other qualities, such as relationship building, that should be considered alongside outcomes-centered track records. Although speculative, it might even be the case that patients would tolerate lower levels of a therapist's effectiveness in one or more given outcome domains if the therapist has high levels of certain other qualities or skills. This notion would be consistent with prior research showing that patients might "discount" some level of an intervention's effectiveness in order to experience a certain therapist quality (such as a high-quality therapeutic alliance; e.g., Swift & Callahan, 2010).

Patients also described some concerns about the dissemination and use of therapist outcome track record information. For multiple reasons, patients were less enthusiastic about making "raw" therapist outcome data publicly available. First, they were concerned that more direct negative evaluations could adversely affect therapist careers. Although a therapist might not be a good personal fit, patients do not wish to have therapists generally "written off" by others seeking treatment. Indeed, patients seem to believe that therapists can work to re-establish an effective practice, and perhaps knowing one's track records can help therapists deliberately practice both to maintain strengths and redress weaknesses (i.e., training that is personalized to the provider; see Boswell et al., 2022; Coyne, *in press*). Second, patients were concerned about having to sift through large amounts of publicly available data across a population of therapists in order to choose a particular therapist. Such an approach is akin to passive therapist performance dissemination strategies, which have received little empirical support and have been critiqued for their potential to be confusing and overwhelming to patients (Adams & Drake, 2006; Walton, 2007). Rather, patients are mostly interested in learning, with assistance and in a digestible form, about who is a good fit for them. Moreover, they would like to have options, and an automated online process that presents such options would be especially valued.

Regarding the therapist stakeholders, all endorsed the belief that more personalized and evidence-informed patient-therapist matching strategies are needed; in addition, all therapists expressed the opinion that ROM data would be useful for driving such personalized matching. Consistent with the patient perspective, therapists noted

that other factors (e.g., therapist personality style match) should also be considered alongside outcome track record-informed patient-therapist matching. In addition, all therapists expressed a willingness to participate in referral and case-assignment programs that list preferred/well-matched therapists based, at least in part, on their historical outcome track records. In other words, the interviewed therapists expressed a willingness to be listed on the proposed websites in which the interviewed patients expressed interest. Interestingly, most therapists noted that disseminated outcome information should be mediated by qualified sources. Once again, this is quite consistent with patient concerns about being responsible for reviewing large amounts of therapist-level outcome data without assistance.

Most therapists described how their own outcome track record information could be used outside of personalized patient-therapist matching. For example, and as noted previously, knowledge of problem domains in need of relative growth could inform personalized training activities. For example, if a therapist becomes aware that they are not achieving the same level of positive outcomes in the domain of substance use problems, then they can seek out training in that particular area. This degree of personalized feedback and informed professional development activity is rather different from the status quo continuing education opportunity (see Boswell et al., 2022; Coyne, *in press*).

Similar to patients who expressed a preference for being given therapist options from which to choose, therapists expressed concerns about an overly static outcome-based referral list and removing some of their own decision-making autonomy about with whom to work in psychotherapy. In addition, consistent with patients, therapists noted the importance of valuing other patient preferences for certain therapist characteristics. In addition to valuing multiple decision-making inputs, some therapists remarked on the limitations of patient self-report data.

The information obtained across the patient and therapist interviews possessed a striking degree of overlap and several implications seem readily apparent. First, therapist outcome-domain track records represent valued information that should be integrated into the therapist selection and patient-therapist match process. Second, patients and therapists see merit in the use of outcome-based matching at multiple points of decision-making, including use by online platforms, direct referral sources, and clinic staff/administrators when making case assignments in a service delivery setting. Third, therapist outcome-domain track record information should be properly vetted and integrated in a way that is more easily interpretable and usable by stakeholders (i.e., not simply posting raw outcome data and relying on passive dissemination to patients). Finally, because decision-making is complex and no single source of information

is perfect, therapist outcome-domain track record information should be considered alongside other valued factors in the therapist selection and assignment process; however, the relative valuing of other factors (e.g., preferences) is likely to vary by the patient. Relatedly, therapist autonomy must also be considered.

These results and implications must be considered in the context of several limitations. First, although generalizability as it is typically considered in quantitative research was not the goal, and the sample sizes for each interview group met the minimum recommendations for the adopted qualitative methods (Hill, 2012), the small stakeholder samples may limit generalizability. Second, participants in both groups volunteered and were sampled from convenience rather than randomly. Third, and related to this, the patient and therapist samples were recruited from the broader match intervention RCT. It is possible that a therapist who is willing to participate in such a trial is more open to the idea and potential implementation of larger scale outcome-based matching than the general population of therapists. Fourth, the patient sample included a mix of experimental and control condition participants. Although patients were unaware of their condition assignment, it is still possible that study condition may have impacted patients' responses. Fifth, both interview groups were demographically homogeneous, thus further limiting generalizability. Finally, other potentially relevant stakeholders were not interviewed for the present study, including intake staff and clinic administrators.

With these limitations in mind, results from these interviews can begin to inform future efforts to disseminate, implement, and scale empirically derived personalized patient-therapist matching. It will be important to continue to involve diverse MHC stakeholders in this process, including MHC staff and administrators. In addition, it will be important for future work to problem solve and continue to refine optimal methods for blending outcomes data with other patient and therapist preference factors to fully realize responsive personalized matching.

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Declarations

Conflict of interest This report followed the Standard for Reporting Qualitative Research (SRQR; O'Brien et al., 2014) guidelines. Dr. Kraus is the founder, president, and chief scientific officer of Outcome Referrals, Inc, which owns and processes the Treatment Outcome Package. No other known conflicts of interest or competing interests are reported.

Ethical Approval This report followed the Standard for Reporting Qualitative Research (SRQR; O'Brien et al., 2014) guidelines. Dr. Kraus is the founder, president, and chief scientific officer of Outcome Referrals, Inc, which owns and processes the Treatment Outcome Package. No other known conflicts of interest are reported. This study involved human subjects. The study was reviewed and approved by a university institutional review board (IRB) and all participants provided informed consent prior to participation.

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