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ORIGINAL RESEARCH

Communication strategies to facilitate the implementation of new clinical practices: a qualitative study of community mental health therapists

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Abstract

Although communication is widely observed to be central to the implementation process, the field of implementation science has largely overlooked the details of *how* communication may best be utilized to facilitate implementation. This paper draws on relevant insights from Rogers' Diffusion of Innovations Theory, which laid the foundation for explicitly attending to the role of communication as a mechanism for implementation strategies to exert their effects. To offer empirically-derived and theory-informed recommendations regarding communication processes to support the effective introduction of new clinical practices. This investigation leverages data from 61 therapists poised to undergo implementation of measurement-based care (MBC) for depressed adults receiving psychotherapy in community mental health settings. Data were collected via focus groups across 12 sites. Themes emergent in the data analysis suggest five practices to facilitate effective communication in the introduction of new clinical practices like MBC: the communication of a clear rationale for the new practice; the provision of necessary procedural knowledge; communication about the change via multiple methods; sufficient lead time to prepare for the change; and the opportunity for bidirectional engagement. In addition to indicating several best practices to improve communication prior to implementation, our results suggest that the current conceptualization of implementation strategies may not yet be complete. Components and/or methods of effective communication about new practices should be included among the growing set of implementation strategies. Existing implementation strategies might also benefit from more temporal specificity, with more attention to the exploration and preparation phases. (Trial Registration: Clinicaltrials.gov NCT02266134. Registered 12 October 2014.)

Keywords

Communication, Implementation, Strategies, Diffusion, Clinical practice change

INTRODUCTION

Within the field of implementation science, communication and the channels through which it occurs are widely observed to be fundamental to the implementation process [1–5]. Communication has been explicitly or implicitly incorporated into multiple implementation frameworks as a process necessary for the delivery and spread of an innovation within or beyond an organization. Indeed, of

Implications

Implications for researchers: Components and/or methods of effective communication about new practices should be included among the growing set of implementation strategies, and more attention should be given to the exploration and preparation phases of implementation.

Implications for practitioners: To facilitate effective communication in the introduction of new clinical practices: (1) a clear rationale for the new practice should be communicated, (2) necessary procedural knowledge should be provided, (3) multiple methods should be used to communicate the change, (4) sufficient lead time should be provided to prepare for the change, and (5) bidirectional engagement should be encouraged.

Implications for policymakers: Because top-down initiatives are often delivered ineffectively and, thus, met with resistance, new mandates regarding clinical practice should be supported by guidance that recognizes the organizational constraints within which practitioners work.

Lay summary

There has been a great deal of attention recently to the study of implementation, or how something (e.g., a new clinical practice or initiative) is actually put into effect. Many studies have found a number of barriers to and facilitators of the implementation process. But despite this increased attention, the field of implementation science may not have paid enough attention to the role of communication. Although communication is generally acknowledged as important, precisely *how* it impacts implementation—and, importantly, the ways it might be improved—is typically unexplored. This study conducted focus groups with mental health therapists in 12 clinics which were about to implement a new clinical practice: measurement-based care for depressed adults receiving psychotherapy. What these therapists shared about their perspectives and experiences suggest that there are at least five ways to facilitate effective communication when introducing a new clinical practice: communicating a clear rationale for the new practice, providing necessary procedural knowledge, using multiple methods to communicate about the change, giving sufficient lead time to prepare for the change, and providing the opportunity for bidirectional engagement.

the 27 implementation models identified in a recent systematic review of communication theory in implementation science [6], communication is mentioned explicitly (though not typically defined) in 15 models' core components and, in 11 additional models, the centrality of communication is implied in discussions of other components or facilitators of the model (e.g., establishing ongoing collaboration, building trust, decision-making) and/or it is mentioned throughout the framework.

The role of communication in organizational change has also been observed in numerous fields outside of implementation science, particularly industrial–organizational psychology, human resources, management and business, public relations and communications, and sociology. These literatures have long recognized the key role that communication plays in the effective facilitation and management of change [7, 8]. Communication shapes attitudes [9], impacts shared beliefs [7], and enables an organization's ability to transform and implement new knowledge in ways that increase its efficiency and effectiveness [10]. Internal communication is particularly important when managing change within an organization because it prepares workers for both positive and negative impacts of the change, promotes an understanding of the new system, and may reduce confusion and resistance to the change [11]. Effective internal communication is especially essential in large organizations, where decision-making typically occurs at the top and is transmitted down the administrative hierarchy across numerous sites and stakeholders. In such organizations, middle managers often serve as the conduit through which communication flows from leadership to frontline staff, and thus play a crucial role in diffusing and synthesizing information [12].

Amidst these insights, Rogers' Diffusion of Innovations Theory [13] is unique in the field in its nuanced and multifaceted understanding of the functions and attributes of communication, and of how communication can influence adoption of new practices. Of all existing implementation models and frameworks, only Rogers' provides a definition of communication that spans two dominant communication paradigms, acknowledging it as both a transformational process responsible for causing change and a transactional process responsible for information exchange [6]. The theory offers an empirically- and theoretically-driven perspective on how new ideas and practices spread through various communication channels over time among members of a social system [8]. According to Rogers, adoption of new practices does not occur in a vacuum; instead, individuals' decisions to adopt are influenced by the type of information being shared, the way the information is delivered, the types of relationships they have with those communicating the change, and the ongoing interactions they have with peers. The purpose of communication is to engage with others to reach a mutual understanding of the information, often with the goal of changing attitudes, beliefs, or behaviors, and the way that individuals perceive the communication surrounding a new practice helps shape their decision to reject or adopt.

Importantly, Rogers' innovation-decision process describes how individuals may be differentially influenced by various personal and social factors, and thus may adopt or reject new practices at different rates over time. In this theory, the process starts with the knowledge stage, during which individuals are exposed to the existence of the new practice and seek to understand how it functions. Rogers' theory highlights three types of knowledge: (1) awareness-knowledge (i.e., information that the practice exists), (2) how-to knowledge (i.e., necessary information needed to properly use the practice), and (3) principles-knowledge (i.e., information on the underlying principles of the practice). Change agents, the individuals who drive the new practice change, tend to focus on communicating awareness-knowledge when introducing a new practice; however, if individuals do not perceive the new practice as being relevant to their needs and inconsistent with their attitudes and beliefs, awareness-knowledge may have little effect. Having clear information on the relative advantage, compatibility, and complexity of a new practice is particularly important as these characteristics impact individuals' perceptions toward the new practice, which in turn impact how they communicate with their peers about the new practice. Thus, a focus on communicating how-to knowledge when introducing a new practice is critical for individuals to be able to use the practice.

However, despite the insights generated by Diffusion of Innovation Theory, and despite a general recognition that communication is important in the implementation process, the field of implementation science has largely left unexcavated the details of *how* (i.e., the strategies by which) communication may be best utilized to facilitate implementation, thus leaving it "hiding in plain sight." Of the 73 implementation strategies identified in a recent compilation by Powell et al. [14], for instance, communication was not explicitly included. Indeed, existing implementation models and frameworks typically treat communication as a straightforward exchange, or delivery, of information, neglecting the more complex and specific dynamics involved in knowledge construction, attitude formation, and behavior change [6]. While the field has rightly noted that social relationships and the key players within them (e.g., the role, status, and position of the person delivering an innovation, such as an opinion leader or change agent) are important for implementation, a more nuanced examination of the ways in which an innovation may be more or less effectively communicated across time, space, and organizational tiers has been overlooked.

One recently published study that prospectively and systematically tracked implementation strategies used by implementation teams revealed that at least 15% of all strategies used involved communication [2]. In another recent implementation tracking study operationalizing the Powell et al. compilation, two new strategies (i.e., "obtain worker feedback" and "plan for outcome evaluation") emerged, both of which accounted for 7% of all strategies used and involved formal and informal communication as a central component. The findings of these two studies reaffirm the theorized importance of communication. More explicit attention and guidance should be given to its role in the implementation process to lead to robust strategies to support effective implementation of future interventions. This paper advances this area of research by analyzing focus group (FG) data with therapists for insights into communication strategies that might benefit the introduction of new clinical practices. At the time of data collection, the therapists participating in this study were poised to implement measurement-based care (MBC), an evidence-based practice for depressed adults receiving psychotherapy in community mental health settings [15]. MBC is the systematic evaluation of patient symptoms before or during an encounter to inform behavioral health treatment [16]. MBCs critical components include administering a self-report measure, reviewing score trajectories, and collaboratively re-evaluating the treatment and/or session plan informed by this data. MBC is touted as the minimal intervention needed for change [17], and support for its implementation comes from national-level value-driven incentives [18] and, as because of this, local-level mandates.

The data reported here, collected prior to MBC implementation, offer a critical window into "implementation as usual" [19], during which organizations typically introduce interventions in a top-down fashion with little attention to maximizing the effectiveness of their communication strategies. In identifying problems with the ways that new clinical practices are often introduced, the community mental health therapists who participated in these FGs not only drew on their experiences regarding the introduction of MBC into their clinical practice but also on their previous experiences with the introduction of other new clinical practices. As such, these data underscore the usefulness of not just communication generally, but *effective* communication specifically, in the context of implementation of new clinical practices. This paper aims to characterize those therapists' experiences in order to generate and synthesize empirical and theory-informed recommendations regarding communication strategies supportive of successful implementation.

METHODS

Study design

The clinics participating in this study are part of Centerstone, one of the largest not-forprofit behavioral health provider networks in the United States. Fifty Centerstone sites in Tennessee and Indiana were examined for eligibility. Of these, 12 clinics were selected to maximize diversity on three characteristics: number of therapists, number of adult depression diagnoses, and urban versus rural status [15]. The characteristics of each participating site are presented in Table 1; detailed information about conditions is presented elsewhere [20].

To launch the study, therapists attended a brief informational session about MBC, which centered on the Patient Health Questionnaire (PHQ-9), a nine-item self-report questionnaire designed to screen for the presence and severity of depression. Therapists then immediately completed a large battery of quantitative surveys and a subset were invited to engage in FGs to explore their prior experience with clinical program changes and factors and processes associated with facilitating or inhibiting their ability to implement new practices like MBC. This paper focuses specifically on data collected from 61 therapists across the 12 sites, to characterize implementation

Table 1 | Clinic characteristics

Site #	Study condition	State	Urban	Clinic size
1	Tailored	TN	No	Small
2	Standard	TN	Yes	Medium
3	Standard	IN	No	Small
4	Standard	TN	Yes	Small
5	Tailored	TN	Yes	Large
6	Tailored	IN	Yes	Small
7	Standard	IN	No	Small
8	Standard	TN	Yes	Medium
9	Tailored	IN	Yes	Large
10	Tailored	IN	No	Medium
11	Standard	TN	Yes	Medium
12	Tailored	IN	Yes	Large

Note: Clinic size based on number of therapists employed at the time of cohort assignment. Small < 15, Medium 15–20, Large >20.

as usual and factors that may influence its success or failure.

Demographics and training background of participating therapists are presented in Table 2. Semistructured FGs were conducted with 60 therapists at 11 sites. At the remaining site (site 9), scheduling difficulties made convening a FG impossible, so individual interviews were conducted; however, due to a recording error, only one interview was recorded. Therapists were recruited to participation via email. This study was approved by the Indiana University Institutional Review Board; the qualitative data reported here follow guidelines included in the Standards for Reporting Qualitative Research (SRQR) checklist [21].

Data collection

Data were collected with 61 therapists across the study sites. Eleven FGs (FG Ns = 3, 3, 4, 4, 4, 5, 5, 8, 8, 8, 8) and one interview were conducted between June 2015 and October 2016.

A semistructured FG guide was used to facilitate data collection with each group and was adapted for the single interview. The guide was structured around the core domains of the context of diffusion in Mendel and colleagues' (2008) Framework for Dissemination and Implementation in Health Services Research [22] (see Table 3).

Therapists were identified through purposive sampling [23] for variation in collaboration with the clinic director, who nominated a representative group who embodied both positive and negative attitudes toward change. Six FGs were conducted in person and on location; five FGs and the single interview were conducted via a web-based platform.

Data collection was conducted by members of the study team trained in qualitative methods. Each FG lasted approximately 1 hr; the interview lasted approximately 45 min. All were digitally recorded and transcribed verbatim. Each therapist received $25 for their participation.

Table 2 | Focus group participant demographics and training background

	N	%
Gender		
Female	45	76.27
Male	14	23.73
Ethnicity		
Hispanic/Latinx	1	1.69
Race		
White/Caucasian	49	83.05
Black/African American	7	11.86
Native American	1	1.69
Multiracial	1	1.69
Highest Degree Attained		
Bachelor's Degree	4	6.78
Master's Degree	53	89.83
Doctoral Degree	2	3.39
Primary Theoretical Orientation		
Cognitive Behavioral Therapy	29	49.15
Eclectic	12	20.34
Interpersonal	5	8.47
Integrated	4	6.78
Other	11	18.64
Licensure		
Currently Licensed	36	61.02
Experience Using MBC	28	47.46
Frequency of MBC Use		
'Not at All'	19	32.20
'A little'	26	44.07
'Moderate'	7	11.86
'A Lot'	4	6.78
'Every Session with Depressed Clients'	2	3.39
	M	*SD*
Age	47.76	12.8

Note. Two participants did not complete the demographics and background questionnaire.

Table 3 | Structure of focus group guide, based on Mendel et al. (2008)

Domain	Definition	Example questions
Descriptive norms	Perception of what colleagues in the agency are doing with respect to identified provider behaviors.	What is the norm here with respect to MBC (routinely measuring client outcomes prior to session to inform care?) Do you notice other people in your organization using MBC? How so?
Injunctive norms	Perception of what individual thinks that colleagues believe they should be doing with respect to identified provider behaviors.	What do you suppose your colleagues think about the role of MBC in your clinic? Do you feel social pressure from others to use MBC? How so?
Attitudes	Beliefs and values that may affect the receptivity of individual and organizational stakeholders to adopt or adhere to a new practice.	How do you feel about new practices like MBC? What do you dis/like about it?
Structure and process of organizational operations	Set of contextual factors relating to the structure and way an organization operates, including differences in mission, size, decision-making process, and services offered.	What effect does operations [or mission, size, decision-making processes, or services delivered] have on implementing a new practice like MBC? Are there mandates, or is it more supportive and encouraging?
Policies and incentives	Incentives or disincentives embedded in regulatory policies, funding and reimbursement programs, and rules and policies of adopting organizations themselves that alter the costs and benefits supporting new behaviors.	How do you think that policies (e.g., regulations, funding and reimbursement programs, and rules) affect the implementation of a new practice like MBC? Can you give me examples of what incentives work?
Networks and linkages	Relationships among organizations and other stakeholders that enable social support and flows of information within a community or healthcare system.	How do staff discussions help or hurt using new practices like MBC? How do other stakeholder (managers, directors) discussions help or hurt using new practices like MBC?

Data analysis

Analysis occurred in an iterative and team-based process involving a directed qualitative content approach and reflexive team analysis [24, 25]. Transcripts were independently read multiple times by three qualitative analysts on the study team to achieve immersion prior to code development. Codes were derived both deductively and inductively. Deductive *a priori* codes (e.g., current norm use of MBC, impact of organizational operations) were based on the aforementioned core domains of context diffusion that informed the FG guide [26]. Inductive codes (e.g., cost of MBC, ideas for implementation of PHQ-9) were wholly emergent from the data. Codes were independently applied by each analyst to 10% of the transcripts. Inter-coder reliability was then assessed and, following the resolution of any disagreements through discussion, the remaining transcripts were each coded by two analysts using the final coding schema [24]. Throughout the analytic process, team members met regularly to discuss emergent codes and themes and to assess the preliminary results [27]. Careful attention was given to the presence or absence of new and emerging themes throughout analysis, and thematic saturation was achieved. Throughout the analytic process, the qualitative data software program ATLAS.ti version 7.0 was used for data organization and management.

RESULTS

Three themes emerged through analysis of the data which together indicate problems in the ways in which new clinical practices are introduced. First, the failure of clinic leadership to communicate a clear rationale for using new practices left many therapists feeling unclear about the appropriateness of fit with their clients and with the perception that the change was perhaps motivated by financial, rather than therapeutic, reasons. Second, therapists strongly desired more procedural knowledge (i.e., training or guidance) on how to appropriately use the new practice and how to effectively integrate the new practice into their clinical work within the pressures of the productivity requirements under which they worked. Third, therapists perceived the communication they received regarding the introduction of new practices such as MBC to be unsatisfactory because it was typically delivered (a)

through a single delivery method, which could be easily missed, rather than via multiple methods, (b) without enough lead time to allow therapists to adequately prepare for the change, and (c) without the opportunity for bidirectional engagement (i.e., feedback and input from therapists about the introduction of the new practice).

Each of these themes is discussed in more detail below.

Failure to communicate rationale

While therapists reported a general openness to new practices, they indicated a number of specific concerns about the ways in which new practices were typically introduced for implementation. One of their primary concerns focused on the lack of rationale communicated to them about new practices. Many therapists reported that, historically, clinic leadership had not introduced new practices with a clear explanation of why they were to be adopted, leaving them feeling resentful and, often, disrespected. Therapists noted that it was common for corporate upper management to simply make the decision and then dictate it to individual sites, without providing adequate information about the utility of and empirical support for the new practice.

As one therapist explained:

> *I think often times what happens is it's a large organization and decisions are made centrally. It is, "This is what you will all do," rather than, "Here are some ideas that the research says is helpful. We offer this information to integrate into what you already do with your practice." And to have it centrally decided, universally decided, triggers an awful lot of sometimes conscious, sometimes unconscious resistance to whether this is the way I want to go about doing it. [Site 2]*

Another therapist put it in the following way:

> *I think communication helps if…people know why. Yes, this is something that Centerstone has decided we're going to do, but if people know why we're going to do it and how it can benefit our clients and our work that we're doing, [then] there's some intentional, more personal buy-in… If you understand why you're doing it, why it can be helpful, you have that buy-in to do it. I know, personally, when I'm told I have to do something there's that potential for a negative reaction to it just because I'm an adult and someone's telling me, "You have to do this." [Site 5]*

Therapists' remembrances about past failures to communicate a clear rationale for new practices extended to current concerns about the introduction of the PHQ-9. In the absence of explanatory information, therapists expressed uncertainty about why the PHQ-9 was chosen to be the instrument used. Were there other scales that might be easier or better to use? How would it benefit the therapeutic process? Therapists were similarly uncertain of the PHQ-9's appropriateness of fit for their clients. As one said: "I wonder [about] the norms it's standardized on, based on. Are they representative of our population, our clientele?" [Site 3] Without a clear and justifiable rationale, many therapists concluded that the introduction of the PHQ-9 was really for insurance purposes and, thus, for the community mental health system to make revenue, rather than for the improvement of client care:

> *I feel like really the PHQ-9 data is going to justify getting some money somewhere, where "We had a 40% increase in this question over this amount of time." I feel like it's just about big data, really. It's kind of my cynical side. Because that's really all that it is. We don't have to talk about it. Even if they make us do it… it just feels like another way to collect data to be used against somebody in insurance or something. [Site 1]*

Failure to communicate necessary procedural knowledge

Another theme related to the implementation of new practices like MBC focused on the lack of training typically provided. Therapists reported that they were often not adequately trained on how to appropriately use new practices, and indicated that they would welcome such training:

> *I think it makes a big difference to have the training. I love training, I love to go somewhere and [have] somebody explain why it matters and what this can do. I like to tell people, "I'm so excited, we got this new thing, we may not want to fill out paperwork but… this is its benefits." [Site 10]*

However, they also reported a lack of financial support for external trainings generally and/or other relevant professional development. Explaining that therapists often had to pay for the trainings they wanted to pursue, one therapist said:

> I feel like I don't have the approach yet that I'm specialized in because, financially, I can't support my own training. I've got the basics under my belt but… financially you have to support your own and, in my situation, I'm still owing college…. I would like to have more trainings [provided]. [Site 6]

Instead, they reported that the PHQ-9 had simply been added to their list of "forms" in the electronic health record without any clear indication that training would be made available. The frustration related to this is evident in the following exchange:

> *Participant 1: We didn't know, I didn't know exactly what PHQ was, it just appeared on our progress note. There was not communication saying, you know, "This is what's happening, and this is what this is all about and don't worry," you know.*
> *Participant 2: [Yes, there was no] "we're going to have you trained on it." (Sarcastically)*
> *Oh, training, that would be handy. [Site 12]*

Similarly, some therapists expressed that it was particularly troubling to figure out how to implement new practices given the productivity (i.e., face-to-face care delivery) requirements of the community mental health settings in which they worked. Therapists strongly desired guidance about how to effectively implement new practices like MBC within the constraints of productivity standards, since they perceived that those standards limited the time available to meaningfully integrate new tools within each clinical encounter. In the words of one therapist:

> *Learning everything is so much, and every day we get another email [from leadership] saying "Now can you do this? Now can you do this?"... Every day it's like "I need this. Now I need this." We're just trying to function. [Site 2]*

Many therapists were particularly concerned about client resistance to the PHQ-9 and worried that implementing the new tool would distract from the therapeutic process and/or reduce the quality of the therapeutic relationship, especially given that therapeutic time with clients already felt so limited. They repeatedly expressed the desire for training or guidance that would support effective use of the tool in practice.

Lack of effective communication delivery

A final theme emergent in the FG data was therapists' dissatisfaction with the typical method and timing of the communication they received regarding use of new practices. Therapists reported that new policies were often not communicated effectively. That is, therapists are often informed via email or The Source, an internal news platform accessible via therapists' home screen of their office computer. Many therapists perceived both of these to be inadequate methods of communication, partly because the information could be easily missed through these channels. As one put it:

> *With Centerstone talking about implementing the PHQ-9 and putting it on The Source on the main page, if you don't check that every day or if you don't really talk about that much, you may have missed it and then somebody else talks about it and you're like, "Wait a second. What? I didn't see that." [Site 3]*

Because of this, many therapists often felt like they were always playing catch-up with information they were supposed to already know:

> *I find out [information] and I'm like, "Oh I was supposed to do this." I had no idea and I hate that e-mail... I don't know because I'm just literally learning something every day that I feel like I'm expected to do, but I had no idea I was expected to do it. [Site 11]*

As another therapist observed, "Clinic leadership should take time to make sure everybody knows, not just sending a random email, because at the top it's easy to just [say] 'Do this form.

Do it by the end of the day.'" [Site 8]

The timing of communication delivery was also perceived as problematic, because therapists did not feel they were allowed adequate lead time to prepare for change. As one put it: "I think sometimes [news about a new practice] is just kind of given to us and we're expected go with it kind of out of nowhere." [Site 9] Another explained:

> *I feel like a lot of times, they just say, "Here's what I want you to do," but there's no time for implementation of it. We're all like, again, how do we do this? Especially when you're coming on new and you don't even know the basics and then, they're throwing another form at you and telling you to do this, and you still don't even know how to do basics, and you don't even know how to do the form, that's very difficult. [Site 5]*

The desire for communication delivery with enough time to prepare is also evidenced in the following exchange:

Participant 1:	*You want [enough time for the change] to be familiar enough, not so alien. So that it's not so new that you're thinking, "Okay, what am I doing wrong?" In other words, make it easy to integrate into our own style.*
Participant 2:	*Where it feels confident, rather than having to do it exactly this way, have some discretion. [Site 1]*

Finally, therapists expressed dissatisfaction about the top-down approach of the communication regarding use of new practices like the PHQ-9. Therapists noted that most policies are set by clinic leadership without the opportunity for feedback or input from clinical staff.

> *It's very much a top-down strategy... Generally speaking a lot happens on Mount Olympus and we get an "Okay, here's what we're starting to do," whether it's a new progress note system or what have you... That's basically it. Yeah. The buy-in I think would be a factor there because I'd like to think that if there's more grassroots input -and I recognize it's not going to be all from that direction- but the more you get [of] that, the more of buy-in and ownership of it you get [the better], rather than just being handed down to folks. [Site 7]*

Many therapists reported frustration that clinical opinion did not appear to matter for anything (e.g., productivity requirements, policies) outside the therapy session. Instead, administration and management set policies that had clinical implications without consulting frontline clinical staff, leaving therapists without a voice in policy-related decisions. As one noted, "You can ask a question [of leadership] but you can't give input." [Site 3]

IMPLICATIONS FOR BEHAVIORAL HEALTH

Suggestions and theoretical support for improving communication

Our results highlight several problems in the ways that use of MBC was communicated to therapists participating in this study. Analysis of these problems suggests several best practices that could improve communication prior to implementation (see Table 4). Each of the five practices suggested by our data to facilitate improved communication is supported by theoretical insights, particularly those offered by Rogers' Diffusion of Innovation Theory [19]. In this theory, individuals' perceptions are critical influences on adoption decisions; including perceptions of the new practice, the individuals or organization promoting the new practice, previous change efforts, and the way the new practice is communicated.

Therapists reported uncertainty about the rationale for using new practices like MBC. This suggests that providing a clear and transparent rationale about the purpose of the new practice would likely facilitate more effective implementation. Providing access to research that explains and validates the use of the new practice could strengthen therapist buy-in. However, it is not always the case that therapists value research evidence [28, 29]. Thus, having an opinion leader or other change agent, such as an external facilitator, emphasize the clinical rationale may be most compelling, a strategy explicitly supported by Rogers' Diffusion of Innovation Theory [19]. Potential adopters need to understand why the new practice is being introduced. Diffusion of Innovation Theory emphasizes that change agents must communicate the relative advantage, compatibility, and complexity of the new practice, and explain why the new practice is better than existing practices, how it fits in with adopters' existing values and needs, and how to integrate this practice into their work. Change agents should also be transparent in communicating why the organization decided to make the change, who this change will impact, and the potential consequences of adoption or rejection.

Therapists also indicated a strong desire for training on how to appropriately use new practices like MBC but, given their clinic's productivity requirements, often felt that they could not take time out for training. This suggests that the provision of more training opportunities, along with productivity coverage, to support the understanding and integration of new practices would be helpful to effective implementation. This point, of course, is already amply covered among compilations of implementation strategies such as that of Powell et al. [14]. Such training opportunities would likely be particularly helpful if they were tailored to staff position and role in care delivery; if the time needed to attend them was covered by the organization; and if they were conducted by trainers familiar with the practice and/or have themselves used it in clinical work so that they personally understand the challenges and benefits of use. Particular attention should be paid to providing concrete information about how to actually use and integrate the new practice into a busy work schedule, especially if it has the potential to be perceived as added paperwork that could take time beyond the clinical session. The importance of adequate training is also supported by Diffusion of Innovation Theory. If potential adopters are not given appropriate and accurate how-to and principles-knowledge, adoption is not likely to occur. The less information individuals have about a new practice, the more uncertainty they feel toward the new practice, which reduces their likelihood of adopting the new practice [13, 30]. The theory suggests that change agents might host demonstrations to show potential adopters what the practice looks like in action, provide training to all staff, and/or train a subset of key staff who can then train their peers.

Therapists also reported dissatisfaction with the method and timing of communication about new

Table 4 | Practices to improve communication in the introduction of new practices

Theme from which practice emerged	Practice	Practice definition
Failure to communicate rationale	Communicating a clear rationale for the new practice	Explain with clarity and transparency the reason for the introduction of the new practice.
Failure to communicate necessary procedural knowledge	Providing necessary procedural knowledge	Provide adequate training on how to appropriately use the new practice in a way that is feasible within the constraints and resources of the work environment.
Lack of effective communication delivery	Communicating about the change via multiple methods	Communicate change using a combination of targeted media methods and interpersonal channels so that the information is not missed.
Lack of effective communication delivery	Providing sufficient lead time to prepare for the change	Communicate information with enough advance notice to allow for change preparation.
Lack of effective communication delivery	Providing the opportunity for bidirectional engagement	Provide the opportunity for therapists to give feedback and input about the upcoming change in practice.

practices. Their concern that the information was communicated to them in a way that could be easily missed (e.g., in a single email message) suggests that using a multimethod approach to communicating new practices would help to ensure thoroughness and knowledge throughout the staff. For instance, information might be shared through initial announcement emails, several reminder emails, paper postings throughout the clinic, and/or question and answer sessions with middle managers at each site. Therapists also noted that they often do not receive the relevant information within an adequate time frame. This suggests that best practices for communication might include communicating significantly ahead of the anticipated start date to allow therapists enough time to prepare for the integration of the new practice into their clinical work.

Communicating information about the new practice via multiple methods of delivery, is supported by Diffusion of Innovations Theory's observation that individuals within an organization are often heterogenous in terms of the rate at which they adopt new practices. Thus, multiple methods of communication delivery are necessary to engage potential adopters across the various stages of diffusion. Change agents should provide them with the appropriate information they need to form opinions and make decisions on the new practice. Using a combination of mass media message delivery at the initial introduction of a new practice and then using opinion leaders to help deliver messages to their peers can help accelerate the rate of adoption. Similarly, communicating about the change with sufficient lead-time to adequately prepare is supported by the theory's insight that individuals vary in the time it takes them to move through the innovation-decision process. Thus, when organizations introduce change, they should provide staff with enough time to seek out information, consult with peers, try out the new practice, and provide feedback before it becomes integrated into daily operations. For more complex changes, having time to communicate with multiple areas of an organization and tiers of staff is critical to the spread of information and success of adoption.

Finally, therapists expressed frustration about the perceived top-down directive from clinic leadership regarding new practices, an issue that has been documented as problematic elsewhere [1, 31]. While clinic leadership may themselves be experiencing directives from executive leadership which operate as a constraining contextual factor, therapists' frustration suggests that more effective implementation would likely be facilitated if clinical staff were given the opportunity to provide feedback and input prior to the change, such as through interactive sessions with leadership where they could voice their opinions and concerns, ask questions, offer suggestions, and feel heard. Such clinical feedback might also help tailor new tools to better fit the client population, which would likely allay therapists' fears that they might not be appropriate for their clients. Providing the opportunity for bidirectional engagement (i.e., feedback and input from therapists about introduction of the new practice) is also supported by Diffusion of Innovations Theory. The importance of adopters' perceptions in the adoption of new practices cannot be overstated. When organizations decide to implement new practices that are not compatible with potential adopters' values and needs, successful adoption is not likely to occur. This can be circumvented by engaging potential adopters in the decision-making process, as they are the ones who will be most impacted by the change and are expected to change their behavior.

Implications for future research

Based on these results and the extant literature, it is clear that communication plays a central role in implementation and, if executed well, may be best viewed as the process or vehicle through which effective implementation strategies are deployed. Given that many researchers and stakeholders in the field consider recently published compilations of implementation strategies [14] as menus from which select discrete strategies for deployment [32], we considered whether communication ought to be conceptualized as a new cluster or set of strategies. However, upon careful review of Powell et al.'s [14] recent compilation, it became obvious that communication was implicitly embedded within most, if not all, of the 73 strategies (e.g., supervision, team meetings, local consensus discussions). To ensure that the impact of these strategies is optimized, we call for explicit attention to the supportive role that communication may play in each. In some cases, such as in the case of the strategy "Mandate Change," it may be that the strategy is *only* effective if coupled with multimethod, multichannel, bidirectional communication with training.

These results also suggest that existing implementation strategies might benefit from more temporal specificity, as they underscore the critical role of communication early in an implementation effort. Within the field of implementation science, there seems to be a disproportionate focus on the active implementation period, with significantly less attention given to activities that may occur prior to the active period (e.g., exploration and preparation) [33] but which may set the stage for more effective implementation. Our data suggest that multimethod, multichannel, bidirectional communication to introduce new practices may prevent barriers to successful implementation and promote more widespread adoption.

Limitations

There are several limitations to this study. Data were collected only from therapists working in one large community behavioral health provider network in

one region of the United States and thus may not be generalizable to those working in other settings, including other geographic regions and other clinic types. However, the therapist and client populations of this network are quite representative of the broader behavioral health field, and our results are consonant with therapist concerns reported elsewhere [26, 34]. Also, as with most qualitative work, the sample size of this study was relatively small. Thus, although the inclusion of 61 therapists far exceeds the sample sizes of many qualitative studies, it is impossible to determine the representativeness of the data reported here. However, the qualitative design of this study allowed for a richer and more nuanced exploration of themes not generally possible with surveys or other data collection techniques, including the contextualization of findings using participants' own words, and the analysis suggests several novel aspects that warrant further study.

Future research should further investigate the insights generated from these data to examine whether similar themes are consonant with therapists in different settings and whether/how these results may be applicable to other populations. Future research should also explore additional ways in which the communication problems highlighted in our data may inform the development of implementation strategies. The data reported here informed an ongoing study evaluating standardized versus tailored approaches to implementing MBC in a community mental health setting. Future work should take into account the perspectives emergent in these data and consider greater adoption of evidence-based methods to improve communication prior to implementation efforts.

CONCLUSIONS

Communication among providers, teams, middle managers, and leadership is necessary (though not always sufficient) for successful implementation. However, the details of executing communication effectively have been largely been overlooked, with little guidance on best practices in recent years. Emergent themes in these data revealed five practices that may facilitate effective communication in the introduction of new practices: the communication of a clear rationale for the new practice; the provision of necessary procedural knowledge (i.e., adequate training); communication about the change via multiple methods; sufficient lead time to allow therapists to prepare for the change; and the opportunity for bidirectional engagement (i.e., for therapists to provide feedback and input about the upcoming change). In addition to suggesting several best practices to improve communication prior to implementation, our results indicate that the conceptualization and compilation of implementation strategies may not yet be complete.

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Compliance with Ethical Standards

Conflict of Interest The authors have no conflicts of interest to report.

Authors' Contributions Karen Albright led the writing and analysis for this manuscript, with support from Elena Navarro (writing and analysis) and Iman Jarad (analysis). The larger study from which these data are drawn was conceptualized, directed, and supported by Cara Lewis; she and Meredith Boyd also collected the qualitative data analyzed here. Byron Powell contributed to the writing and provided critical review and conceptualization of the argument. All authors participated in conceptualizing, editing, and reviewing of the manuscript.

Ethics/IRB Approval and Consent to Participate This study was approved by the Institutional Review Board of Indiana University (IRB00000222, Study #1407578183) and meets all criteria for ethical involvement with human participants. Participants were fully informed about the study procedures, risks, and benefits of participating, and they provided verbal consent to participate in the focus groups. IRB granted a waiver of written documentation of informed consent as "the research presents no more than minimal risk of harm to subjects and involves no procedures for which written consent is normally required outside of the research context." Participants were informed verbally and in writing about the nature of the study and that their participation was voluntary.

Informed Consent Informed consent was obtained from all individual participants included in the study.

Human Rights All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards. This study was approved by the Indiana University Institutional Review Board, and all procedures performed were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.". Participants were fully informed about the study procedures, risks and benefits of participating, and they provided verbal consent to participate in the focus groups.

Welfare of Animals This article does not contain any studies with animals performed by any of the authors.

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