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Expert Prioritization of Evidence-Based Mental Health Research Findings for End-User Dissemination

Omonyêlé L Adjognon-Bancolé[1,2]*, Jacey Greece[3], Sarah Lipson[2], Jennifer Beard[4], Emily Treichler[5,6,7], Bo Kim[1,8], Christopher J Miller[1,8] and Jennifer L Sullivan[9,10]

[1]*Center for Health Optimization and Implementation Research, VA Boston Healthcare System, Boston, MA, United States*

[2]*Department of Health Law, Policy and Management, Boston University School of Public Health, Boston, MA, United States*

[3]*Department of Community Health Science, Boston University School of Public Health, Boston, MA, United States*

[4]*Department of Global Health, Boston University School of Public Health, Boston, MA, United States*

[5]*Mental Illness Research, Education, and Clinical Center, Jennifer Moreno VA Healthcare System, San Diego, CA, United States*

[6]*San Diego Department of Psychiatry, University of California, San Diego, La Jolla, CA, United States*

[7]*Dissemination and Implementation Science Center, University of California, San Diego, La Jolla, CA, United States*

[8]*Department of Psychiatry, Harvard Medical School, Boston, MA, United States*

[9]*Transformative Health Systems Research to Improve Veteran Equity and Independence Center of Innovation, VA Providence Healthcare System, Rhode Island, United States*

[10]*Health Services, Policy & Practice, Brown University, Providence, Rhode Island, United States*

***Corresponding author**

Omonyêlé L Adjognon-Bancolé, DrPH, ScM, Center for Health Optimization and Implementation Research, VA Boston Healthcare System, Boston, MA, United States

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Abstract

Background: Health research dissemination is essential to optimize the sustained use of evidence-based practices. Gaps exist to prioritize, package, and disseminate findings with end-users following study completion. The Behavioral Health Interdisciplinary Program—Collaborative Chronic Care Model (CCM) is an evidence-based practice implemented in the U.S. Department of Veterans Affairs (VA) to improve outcomes for patients with complex mental health conditions. This project describes a method used to identify CCM findings for active dissemination with mental health teams (i.e., staff and providers) and patients.

Methods: In July 2024, VA researchers with CCM expertise independently used a prioritization matrix to rate CCM findings from 13 peer-reviewed publications for dissemination. Prioritization criteria were *relevance* (of interest), *actionable* (useful for care provision or to shape behavior), and *prime for dissemination* (for their immediate added value to CCM implementation and sustainment). CCM findings were rated on a 3-point Likert scale (1 = not, 2 = somewhat, 3 = very) for each criterion. Participants met to discuss discordant scores and reached consensus using nominal group voting.

Results: Five VA researchers engaged in the prioritization process. Mean CCM finding ratings varied from 4 to 8 (range = 3-9). Of 13 CCM findings, 3 had mixed ratings, and 10 had consensus ratings: 7 were inadequate, and 3 were prioritized for dissemination by end-user group.

For mental health teams, *the sustainability of CCM, effectiveness of CCM* and *CCM impact on one-year all-cause mortality* were prioritized for dissemination.

For patients, *the effectiveness of CCM* was prioritized for dissemination.

Conclusions: CCM findings published in peer-reviewed journals have limited reach and are not always easily understood by non-research audiences (e.g., mental health teams treating patients with CCM) intended to benefit from this new evidence. Prioritizing CCM findings for dissemination is an important steppingstone for knowledge transfer to end-users, which can optimize the sustained use of CCM and other evidence-based practices.

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ABBREVIATIONS

BHIP: Behavioral Health Interdisciplinary Program;

BHIP-CCM: Behavioral Health Interdisciplinary Program – Collaborative Chronic Care Model;

CCM: Collaborative Chronic Care Model;

D4DS: Designing for Dissemination and Sustainability;

NGT: Nominal Group Technique;

VA: U.S. Department of Veterans Affairs;

U.S.: United States

CONTRIBUTIONS TO THE LITERATURE

- While the science of dissemination and implementation has made great strides to bridge the health evidence-to-practice gap, these efforts have focused on implementation while dissemination has been neglected.
- Dissemination of health evidence through scientific publications does not reach the end-users who need and can readily use the health evidence. However, health researchers are ill-equipped to engage in more effective dissemination, including knowing what piece(s) of evidence to share with end-users.
- This manuscript provides health researchers with an initial "how to" guidance for selecting critical health evidence for dissemination with the end-users who are poised to translate that knowledge into practice.

BACKGROUND

On average, it takes 17 years for health research evidence to reach practice and benefit patients or end-users [1-3]. Dissemination and implementation research has introduced participatory (e.g., action research) and system-based (e.g., randomized studies) methods to better align and apply evidence in policy and practice [4]. Educating implementation partners remains the most common strategy for sustaining evidence-based practices [5]. Still, efficiently translating research into practice remains a challenge [4]. Researchers often rely on passive dissemination methods (e.g., reports, presentations, peer-reviewed articles) that have limited reach [6,7], and are "largely ineffective in influencing practice" [8]. In contrast, active dissemination meets the needs and preferences of end-users and is a best practice for widespread adoption of evidence into routine practice [8,9]. As a result, valuable findings remain unknown to end-users delivering or receiving care—healthcare teams, patients, caregivers, and communities [6,7].

Barriers to knowledge translation include researchers' limited dissemination skills, lack of time, and insufficient organizational support. Many U.S. health researchers are not trained in active dissemination to study participants after study completion [7], and spend less than 10% of their time on dissemination efforts [9]. They also report a need for institutional capacity, including dedicated health communication expertise [9]. These challenges hinder the transfer of evidence to participants and end-users, despite its importance for successful implementation, scalability, and sustainability [4,6].

Designing for Dissemination and Sustainability (D4DS) is a 4-phase process model created to address these dissemination challenges [10]. To select health research evidence for dissemination (D4DS Conceptualization), health researchers can prioritize the knowledge they perceive most impactful for policy or practice among research findings, along with the audience likely to quickly use or apply this knowledge (i.e., end-users). Health researchers can then engage these end-users in active dissemination of this knowledge for policy or practice change (D4DS Design, D4DS Dissemination). Last, an evaluation can ascertain this dissemination impact on the implementation, scalability, and sustainability of the evidence-based policy or practice (D4DS Impact) [10].

One example of a project ready for dissemination to end-users is the Behavioral Health Interdisciplinary Program using the Collaborative Chronic Care Model (BHIP-CCM) in the U.S. Department of Veterans Affairs (VA). In 2013, VA launched BHIP to deliver interdisciplinary, team-based care in outpatient mental health clinics [11]. By 2015, BHIP teams adopted the evidence-based CCM, aligning care practices with its core elements [11]. BHIP-CCM is a team-based approach to improve outcomes for Veterans with complex mental health needs, particularly those at high risk for suicide [11,12]. Since implementation, CCM has been evaluated in 13 peer-reviewed studies. However, these findings have not been formally disseminated to BHIP-CCM end-users—mental health teams and patients receiving CCM-based care. Methodologically, there is an initial need to select among *all* published CCM findings the ones most appropriate for active dissemination (D4DS Conceptualization) [10]. This project's goal is to have CCM experts identify and prioritize CCM findings as the first of a four-step method for active dissemination of CCM evidence with end-users, toward adoption into practice.

MATERIALS AND METHODS

Design

This project is aligned with the D4DS Conceptualization phase [10]. The project combines two consensus techniques, a prioritization matrix [13] and nominal group voting [14], to select CCM findings (i.e., knowledge) for dissemination. CCM findings are summary results taken verbatim from the abstracts of all 13 peer-reviewed publications available on evidence-based behavioral health CCM. This project is the first step toward active dissemination, where researchers select among *all* CCM findings those appropriate for two groups of end-users: mental health teams and patients. This project was deemed non-research by the local VA Research and Development Committee.

Use of a Prioritization Matrix Technique: Originally designed for setting priorities among health problems [13], this prioritization matrix was adapted to offer three rating criteria—*relevant, actionable*, and *prime for dissemination*—on a 3-point Likert scale (1 = not, 2 = somewhat, 3 = very) for CCM finding prioritization. *Relevant* is the degree to which a rater perceives that a CCM finding can be of interest to or resonate with the end-user receiving it. *Actionable* is the rater's perception of the end-user's ability to act on that knowledge, either for care provision or to shape or inform behavior change. *Prime for dissemination* refers to the rater's perception of the urgency for disseminating this knowledge to the end-user, based on its added value to CCM implementation and sustainment, and/or mental health decision-making. The prioritization score (S_j) for each rater (j) is the sum of the three criteria (C_i,) such that $S_j = \sum_{i=1}^{3} C_{ij}$, and the mean prioritization score across raters is $\bar{S} = \frac{1}{n}\sum_{j=1}^{n} S_j$, where n is the number of raters. The prioritization matrix for this project was created using Microsoft Excel. Information on peer-reviewed publications was organized chronologically across rows, while preferred end-users, rating criteria, and rater's comments were in separate columns [Figure 1]. The project lead and senior author agreed on *a priori* preferred end-user group(s) assigned to each publication in the matrix.

The Nominal Group Technique: The Nominal Group Technique (NGT) is a flexible consensus method used in research to problem-solve, generate ideas, and set priorities [14]. In this project, the NGT was used in combination with the prioritization matrix to select CCM findings for dissemination. First, raters provided their individual ratings using the matrix. Next, they met as a small group to discuss CCM findings with discordant ratings across raters (i.e., NGT clarification stage). Last, raters synchronously voted on discussed findings (i.e., NGT voting/ranking stage) to reach consensus [14].

Participants

A panel of VA researchers with deep collaborations and prolonged experience with the multisite Behavioral Health Interdisciplinary Program using CCM (BHIP-CCM) was recruited via email to be Prioritization and NGT raters. Some of these VA researchers have provided facilitation for the implementation of BHIP-CCM at early adopting sites, and are aware of end-users' needs. Raters were guided by a neutral project lead (not previously embedded in BHIP-CCM) through all the steps in the prioritization process.

Data Collection and Analysis

Integrated data collection and analyses occurred in five steps.

***Step 1: Independent rating*:** Raters used the matrix to rate each CCM finding for 13 peer-reviewed publications. They assessed 3 criteria: how *relevant, actionable*, and *prime for dissemination* CCM findings were perceived to be, on a 3-point Likert scale (1= not; 2 = somewhat; 3 = very). Total summary ranking by rater for each CCM finding auto-populated in the *rating total* column (range: 3-9) (See Table 1).

***Step 2: Inter-rater comparison*:** This step was completed by the project lead. For each rater's *rating total* column, the top two CCM findings with the highest scores were shaded green, and the bottom two CCM findings with the lowest scores were shaded red. CCM findings that consistently received high or low scores saw their row's *rating totals* completely green or red across raters on this expanded matrix, while CCM findings with inconsistent ratings presented a mix of colors: green (high), white (medium), and red (low).

Step 3: Member checking: The project lead and senior author with previous experience with the BHIP-CCM project met to review prioritization matrix findings. They agreed that consensus discussion should focus on CCM findings with discordant ratings.

***Step 4: Consensus discussion*:** Raters met virtually for one-hour facilitated group discussion to review CCM findings that received inconsistent or discordant ratings across raters. For these findings, each rater shared rationale for their independent ratings. The group then discussed each discordant finding to come to consensus

Table 1: Prioritization Matrix Template.

Publication order	First author's last name	Publication year	Publication title	Mental health CCM findings	Preferred End-User for dissemination	Exemplar dissemination product	Relevance to End-User 1= Not relevant 2= Somewhat relevant 3= Very relevant	Actionable by End-User 1= Not actionable 2= Somewhat actionable 3= Very actionable	Prime for Dissemination to End-User 1= Not prime to disseminate 2= Somewhat prime to disseminate 3= Very prime to disseminate	Rating total (automated)	Rater's comments
1	Riendeau	2018	Factor structure of the Q-LES-Q short form in an enrolled mental health clinic population	1. The English version of the Q-LES-Q-SF is a valid, reliable self-report instrument for assessing quality of life. 2. The Q-LES-Q-SF factor structure can be best described as one strong psychosocial factor. Differences in underlying factor structure across studies may be due to limitations in using exploratory factor analysis on Likert scales, language, culture, locus of participant recruitment, disease burden, and mode of administration.	Mental health teams	A "How To" resource on how to use the Q-LES-Q-SF					
3	Bauer	2019	Effectiveness of Implementing a Collaborative Chronic Care Model for Clinician Teams on Patient Outcomes and Health Status in Mental Health: A Randomized Clinical Trial.	1. Facilitation was associated with improvements in Team Development Measure subscales for role clarity (53.4%-68.6%; δ = 15.3; 95%CI, 4.4-26.2; P = .01) and team primacy (50.0%-68.6%; δ = 18.6; 95%CI, 8.3-28.9; P = .001). The percentage of CCM-concordant processes achieved varied, ranging from 44% to 89%. 2. Mental health component score (MCS) improved in veterans with 3 or more treated mental health diagnoses compared with others (β = 5.03; 95%CI, 2.24-7.82; P < .001). 3. Mental health hospitalizations demonstrated a robust decrease during facilitation (β = −0.12; 95%CI, −0.16 to −0.07; P < .001); this finding withstood 4 internal validity tests.	Patients	Information about CCM and its effectiveness on outpatient mental health outcomes					
10	Miller	2020	An Economic Analysis of the Implementation of Team-based Collaborative Care in Outpatient General Mental Health Clinics	1. Collaborative care implementation cost about $40 per patient and was associated with a significant decrease in inpatient costs and a nonsignificant increase in outpatient mental health costs. 2. This implementation was associated with $78 in cost savings per patient. Monte Carlo simulation suggested that implementation was cost saving in 78% of iterations.	Mental health teams	1-pager summary of economic analysis of CCM					

13	Ruderman	2023	One-year all-cause mortality and delivery of the Collaborative Chronic Care Model in general mental health clinics	1. After adjustment for site-level factors, patients treated with the CCM experienced a reduction in all-cause mortality relative to patients in the control cohort (hazard ratio=0.76, 95% CI=0.60–0.95).	1. Patients 2. Mental health teams	1. Short video explaining survival analysis with CCM to patients 2. One-pager summary of survival analysis with CCM for care teams					

CCM: Collaborative Chronic Care Model

Note: The Prioritization Matrix used in this project had 13 rows: one row for each of the 13 peer-reviewed publications. Select rows are presented here for illustration.

on the *relevant*, *actionable*, and *prime for dissemination* criteria for preferred end-users (i.e., mental health teams, patients). Thereafter, NGT voting was used, asking each rater to decide if each discordant CCM finding should be disseminated and was rated as "yes", "maybe", or "no" [14].

***Step 5: Final analysis*:** The project lead and senior author met to review both the decisions from Step 2, and the results from the consensus discussion in Step 4. All ratings and voting outcomes were combined in this step to complete the prioritization process and identify CCM findings that met the prioritization criteria, (i.e., mostly *relevant*, *actionable*, and *prime for dissemination)*.

RESULTS

Participant Characteristics

Five raters representing diverse mental health and research expertise (clinical psychology, implementation science, qualitative methods) engaged in the project (Table 2). One rater did not participate in *Step 4: Consensus discussion* but met with the project lead separately to complete that step. The project lead used the consensus discussion notes to convey what was discussed with that rater, who then proceeded to NGT voting asynchronously.

Table 2: Participant Characteristics.

Participants (raters)	Frequency, n (%)
All	5 (100%)
Clinical expertise*	**Frequency, n (%)**
Clinical Psychology	2 (40%)
Clinical Mental Health Counseling	1 (20%)
Research expertise*	**Frequency, n (%)**
Implementation Science	5 (100%)
Gerontology	1 (20%)
Health Systems Engineering	1 (20%)
Qualitative Methods	1 (20%)

*Participants have more than one expertise; totals do not add to 100%.

Prioritization of CCM Findings

Step 1: Independent rating: Raters rated CCM findings from 13 peer-reviewed publications with pre-assigned preferred end-users. Mean ratings ($\bar{s}$) across raters varied from 4.4 to 7.6 (range = 3-9, lowest to highest). Table 3 provides a summary of mean ratings ($\bar{s}$), ranges, and decisions by analytic step.

Step 2: Inter-rater comparison: Raters reached consensus on the dissemination status of eight CCM findings. Six were labeled "do not disseminate" due to low scores (mean rating $\bar{S}$ ≤6.0, with at least 4 of 5 raters scoring them low), while two were labeled "disseminate" based on high scores (mean rating $\bar{S}$ ≥6.0, with at least 3 high and no low individual ratings). The first prioritized finding for dissemination to mental health teams is CCM's sustainability [15], which showed that evidence-based psychotherapies and measurement-based care were maintained or expanded three years post-implementation. The second is CCM's effectiveness [16], initially identified for dissemination to patients receiving team-based outpatient care. This finding includes reduced hospitalization rates and improved health among patients with complex mental health conditions (i.e., ≥3 diagnoses). Three raters also recommended sharing this evidence with mental health teams.

Step 3: Member checking: The project lead and senior author reviewed the 13 CCM findings together. They confirmed the decision thresholds, i.e., "do not disseminate" for CCM studies with $\bar{S}$ ≤6.0 and at least 4 low ratings, and "disseminate" for CCM studies with $\bar{S}$ ≥6.0 and at least 3 high and no low ratings. Upon review, 8 CCM studies had concordant ratings, with initial decisions: "do not disseminate" or "disseminate." CCM studies with mean ratings $\bar{S}$ that did not meet threshold were categorized as "discordant" (see Table 3). The team agreed that the consensus discussion should focus on 5 CCM studies with discordant ratings, and end-user review for one concordant CCM finding per raters' comments (e.g., only patients vs. adding mental health teams).

Step 4: Consensus discussions addressed the 5 remaining CCM findings with discordant ratings. Using NGT voting, two findings received unanimous votes—either 5 "yes" (disseminate) for a specific end-user group or 5 "no"

Table 3: Summary Ratings and Decisions by Analytic Step.

Peer-reviewed publications on evidence-based mental health Collaborative Chronic Care Model (CCM)		Step 1: Independent rating	Step 2: Inter-rater comparison	Step 3: Member checking	Step 4: Consensus discussion	Step 5: Final analysis
Author & Year	**CCM* Findings**	**Mean rating ($\bar{s}$) (Range: 3-9)**	**Agreement level among raters: high, medium or low ratings (n = 5 raters)**	**Initial Decision**	**Nominal group voting result**	**Final decision (end-user group)**
Riendeau et al. 2018	Quality of life instrument validation in mental health	4.4 (3-7)	5 low	Do not Disseminate		Do not Disseminate
Kim et al. 2020	Cross-site variations in CCM implementation processes	4.8 (3-6)	1 medium, 4 low	Do not Disseminate		Do not Disseminate
Ruderman et al. 2021	Effect of CCM implementation on psychiatric hospitalization rates	4.8 (4-7)	5 low	Do not Disseminate		Do not Disseminate
Kim et al. 2022	Time-motion involved to implement CCM in mental health	5.4 (3-7)	1 high, 4 low	Do not Disseminate		Do not Disseminate
Connolly et al. 2020	Perceived facilitation skills needed for CCM implementation	5.2 (3-9)	1 high, 4 low	Do not Disseminate		Do not Disseminate
Bauer et al. 2021	Clinical effects of CCM post active implementation support	5.4 (4-6)	1 medium, 4 low	Do not Disseminate		Do not Disseminate
Miller et al. 2019	Guidance for CCM-consistent care delivery in mental health	6.0 (4-8)	1 high, 2 medium, 2 low	**Discordant - discuss**	5 "no"	Do not Disseminate
Miller et al. 2023	Sustainability of CCM in mental health	6.6 (4-9)	3 high, 2 medium	Disseminate		**Disseminate (mental health teams)**
Bauer et al. 2019	Effectiveness of CCM in mental health	7.6 (5-9)	3 high, 2 medium	Disseminate; **discuss end-users**	5 "yes" to add mental health teams	**Disseminate (patients; mental health teams)**
Ruderman et al. 2023	CCM in mental health impact on one-year all-cause mortality	7.4 (6-9)	3 high, 1 medium, 1 low	**Discordant - discuss**	5 "yes" - mental health teams 4 "no", 1 "yes" - patients	**Disseminate (mental health teams)**
Kim et al. 2023	Lessons from providers' experiences of implementing CCM	5.8 (3-9)	1 high, 1 medium, 3 low	**Discordant - discuss**	3 "yes", 2 "maybe"	Medium priority
Sullivan et al. 2021	Cross-site elements for CCM implementation progress	6.4 (3-9)	2 high, 3 low	**Discordant - discuss**	2 "yes", 3 "no"	Medium priority
Miller et al. 2020	Cost savings from CCM implementation in mental health	7.0 (6-8)	2 high, 3 medium	**Discordant - discuss**	1 "yes", 3 "maybe", 1 "no"	Medium priority

*CCM: Collaborative Chronic Care Model

(do not disseminate). The remaining three received mixed votes ("yes," "maybe," or "no") for dissemination to a given group. The unanimously endorsed finding was CCM's impact on one-year all-cause mortality [17], which showed reduced mortality among patients treated in outpatient mental health clinics using CCM compared to those treated without.

Raters also revisited the effectiveness of CCM finding from Step 2, previously prioritized for patients. With 5 "yes" votes, they expanded the recommended end-user group to include both patients and mental health teams. This finding includes reduced hospitalization and improved health for patients with complex mental health conditions [16]. An additional element—improved care team functioning (e.g., clearer roles, team-first goals)—was also prioritized for dissemination to mental health teams only [16].

Step 5: Final analysis consolidated previous steps to complete the prioritization process from 13 CCM findings. CCM findings with consistent agreement across raters (Step 2) and those with at least 4 "yes" responses following NGT voting (Step 4) determined knowledge prioritized for dissemination. Overall, there was agreement for 10 CCM findings, including 3 labeled "disseminate" (Table 3), and 7 "do not disseminate." Three CCM findings with discordant ratings and mixed NGT voting were labeled as "medium priority" for dissemination. Three CCM findings were equally prioritized by end-user group (Table 4). *The effectiveness of CCM* [16] was selected for dissemination with both patients and mental health teams. *The sustainability of CCM* [15] and *CCM impact on one-year all-cause mortality* [17] were prioritized for dissemination with mental health teams only.

DISCUSSION

This project aimed to share a method to select evidence-

Table 4: Summary of Mental Health CCM* Findings Prioritized for Dissemination by End-User Group.

Author & Year	CCM finding selected	CCM finding - detailed evidence	End-user group selected	Potential dissemination product
Bauer et al. 2019	The effectiveness of CCM in mental health	**Declined mental health hospitalization rate** for patients treated with CCM in general mental health clinics	Patients; mental health teams	Infographic
		Improved health status for patients with complex mental health conditions (i.e., at least 3 mental health diagnoses)	Patients; mental health teams	Brief presentation summarizing evidence of improved health status and team functioning
		Improved care team functioning (i.e., better role clarity, team goals prioritized over individual goals) with supported CCM implementation	Mental health teams	
Miller et al. 2023	The sustainability of CCM in mental health	**Maintained or expanded delivery of evidence-based psychotherapies** and use of measurement-based care to guide clinic decision-making three years after CCM implementation	Mental health teams	Clinical brief summarizing evidence of maintained psychotherapies with CCM
Ruderman et al. 2023	CCM impact on one-year all-cause mortality in mental health	Patients treated with CCM in general mental health clinics experienced a **reduction in one-year all-cause mortality** compared to those treated without CCM	Mental health teams	One-pager summary of survival analysis with CCM

*CCM: Collaborative Chronic Care Model

based CCM findings for active dissemination with mental health teams and patients. The method combined a prioritization matrix technique [13] with NGT voting [14] to prioritize 3 CCM findings from 13 peer-reviewed studies. Final selections include *the effectiveness of CCM* [16] for dissemination with mental health teams and patients; *the sustainability of CCM* [15], and the *impact of CCM on one-year all-cause mortality* [17] for dissemination with mental health teams only.

All CCM findings selected for dissemination in this project inform end-users that CCM is effective, including improved clinical outcomes and impact on mortality**.** In contrast, many findings pertaining to CCM implementation processes, lessons, and cost savings were not selected for dissemination. Future work may assess if information on effectiveness *vs.* implementation is consistently prioritized for dissemination across evidence-based programs.

As health research knowledge translation aims to narrow the knowledge-to-practice gap, transferring the knowledge that CCM works is a primer for getting end-user buy-in, but helping end-users understand how to best implement or receive CCM-aligned care is also needed. For instance, knowledge that CCM works can be paired with CCM implementation support and resources for mental health teams. Patients can also be guided in ways to access and benefit from CCM care. Additional future work could be done with end-users to support ways to share information on CCM implementation approaches.

This project proposed a method that addresses some of the common barriers to knowledge translation—limited time, skills, and organizational support for dissemination to study participants and end-users [7,9]. VA researchers/raters found the matrix prioritization paired with nominal group voting simple and easy to complete, suggesting strong feasibility. Raters unanimously voted on two of five CCM findings with initially discordant ratings and added mental health teams as an end-user group for disseminating the effectiveness of CCM. A key strength of this project is its engagement process to guide dissemination with end-users. Pairing the D4DS model with two consensus techniques, the prioritization matrix and nominal group voting, offers a low-burden, structured approach for researchers to select key findings and engage experts in decision-making. Holding the consensus meeting virtually also supported feasibility.

CONCLUSIONS, LIMITATIONS & RECOMMENDATIONS

Health research dissemination with study participants and end-users is essential to optimize the implementation, scalability, and sustainability of evidence-based policies and practices [4,18]. Selecting research evidence to disseminate with end-users following study completion is possible. This project provides health researchers with a feasible process to review and prioritize findings to disseminate with end-users of evidence-based practices.

Limitations include tradeoffs from predefined selection criteria, such as focusing only on mental health teams and patients. For example, two CCM findings rated unanimously as "do not disseminate" were considered valuable for another excluded group—local leadership. Prioritization efforts should carefully define target end-users while recognizing the opportunity cost of excluding others. Local

leaders, who influence implementation decisions, should be considered as key end-users. Finally, this process did not yet include input from end-users.

In the next D4DS phases, mental health teams and patients co-developed tools to disseminate the prioritized CCM findings. In these next phases, the project has leveraged collaborations with select end-users to design and package prioritized mental health evidence in end-users preferred formats, language, and media. Ultimately, active dissemination using end-users preferred communication channels can expand the reach of BHIP-CCM, as well as health research evidence more generally, and these efforts can optimize health policy and practice.

Ethical Approval and Consent to Participate

This work was deemed non-research by the VA Boston Research and Development Committee (#1588376). No consent statements were taken from VA researchers who agreed to participate in this work.

Availability of Data and Materials

The datasets generated and/or analyzed during the current project are not publicly available due to privacy or ethical restrictions.

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Authors' contributions

O.L.A.: Funding Acquisition, Conceptualization, Methodology, Project Administration, Data Curation, Analysis Interpretation, Writing-Original Draft Preparation;

J.G.: Writing-Review and Editing;

S.L.: Writing-Review and Editing;

J.B.: Writing-Review and Editing;

E.T.: Writing-Review and Editing;

B.K.: Methodology, Writing-Review and Editing;

C.J.M.: Methodology, Writing-Review and Editing;

J.L.S.: Funding Acquisition, Conceptualization, Methodology, Data Curation, Analysis Interpretation, Writing-Review and Editing.

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