# Challenges and Opportunities in Implementing a Multicomponent Dementia Caregiver Program in a Complex Healthcare System

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#### **Abstract**

The Tailored Activity Program (TAP), an intervention for people living with dementia (PLWD) and their caregivers, has been shown to reduce behavioral symptoms for PLWD and caregiver burden. While TAP is proven as an evidence-based practice (EBP), it has yet to be implemented at scale. The Department of Veterans Affairs (VA) has prioritized the Age-Friendly Health System (AFHS) initiative, providing an opportunity to test implementation of TAP in a complex healthcare system. We conducted semi-structured pre-implementation interviews with leaders and clinicians at 6 VA Medical Centers (VAMCs) to engage key implementation partners and understand their unique implementation contexts. We utilized team-based rapid qualitative analysis to identify themes related to implementation determinants. We interviewed 65 unique informants in 58 interviews (5 VAMC leaders, 36 department leaders, and 17 frontline clinical staff). Informants identified 4 key factors critical to consider prior to implementing TAP: (1) alignment with organizational priorities; (2) perceived value and fit with existing clinical workflows; (3) competition with existing organizational and clinical priorities; and (4) considerations about the effect of caregiver burden on participation. We identified key factors to consider for successful implementation of a multicomponent intervention for PLWD and their caregivers within a complex healthcare system. As the AFHS initiative expands, there is a growing need for EBPs focused on the care of PLWD and their caregivers. These factors can guide clinicians, leaders, and implementation scientists in planning for implementation and sustainment of EBPs to bolster AFHS initiatives.

## **Trial Registration**

Registered 05 May 2021, at ISRCTN #60,657,985.

### **Reporting Guidelines**

The COnsolidated criteria for REporting Qualitative research (COREQ) checklist was used to ensure proper standards for reporting qualitative studies (see attached).

### **Keywords**

age-friendly healthcare system, age-friendly, implementation science, veterans health administration, veterans, geriatrics

### What do we already know about this topic?

The Tailored Activity Program (TAP), an intervention for people living with dementia (PLWD) and their caregivers, has been shown to reduce behavioral symptoms for PLWD and caregiver burden. While TAP is proven as an evidence-based practice, it has yet to be implemented at scale. The Department of Veterans Affairs (VA) has prioritized the Age-Friendly Health System (AFHS) initiative, providing an opportunity to test implementation of TAP in a complex healthcare system.

### How does your research contribute to the field?

VA clinical staff and leaders identified several key factors to consider in implementing TAP in a complex healthcare system. These included 1) alignment with organizational priorities, notably AFHS; 2) clinicians' perceived value and fit

with existing clinical workflows; 3) competition with existing organizational and clinical priorities; and 4) considerations about the effect of caregiver burden on participation.

## What are your research's implications toward theory, practice, or policy?

As the AFHS initiative expands, there is a growing need for evidence-based practices focused on the care of PLWD and their caregivers. To successfully implement and sustain these practices, it is vital to involve frontline staff and caregivers in the process of adapting and tailoring practices to fit their workflows and clinical priorities, while accounting for how caregiver burden may impact participation. Accounting for these factors can help guide clinicians, leaders, and implementation scientists in planning for implementation and sustainment of evidence-based practices to bolster AFHS initiatives.

### Introduction

As the United States population over age 65 continues to grow, there is an increasing need for healthcare systems to provide evidence-based, Age-Friendly care at every healthcare visit. The Age-Friendly Health Systems (AFHS) initiative, developed by the John A. Hartford Foundation and the Institute for Healthcare Improvement, addresses this need by providing a set of principles that drive high-quality healthcare for older adults, known as the "4Ms": What Matters, Medication, Mobility, and Mentation.<sup>2-4</sup>

A growing number of healthcare systems have adopted the AFHS model, including the Department of Veterans Affairs (VA), the United States' largest integrated health system.<sup>5</sup> As of 2024, 88 VA Medical Centers and Community-Based Outpatient Clinics have adopted the AFHS model, with 60 more under way. Despite substantial progress, more work is needed to identify effective strategies to implement evidence-based practices (EBPs) that align with the 4Ms into the care of older adults. In response, we developed a program to implement EBPs aligned with the 4Ms, the Safer Through Geriatrics-Informed Evidence-Based Practices Quality Enhancement Research Initiative (SAGE QUERI). The overall goal of the SAGE QUERI Program is to help older Veterans to age in place by spreading 4 EBPs across 9 medical centers in 1 of VA's regional health care networks.<sup>8</sup> The 4 EBPs each align primarily with 1 "M" of the 4Ms, and include: (1) What Matters: The Surgical Pause 9-11; (2) Medication: Eliminating Medications through Patient OWnership of End Results (EMPOWER) 12-16; (3) Mobility: The Community Aging in Place - Advancing Better

Living for Elders (CAPABLE) Program <sup>17-19</sup>; and (4) Mentation: The Tailored Activity Program (TAP).<sup>20-22</sup>

The TAP intervention addresses dementia, a major driver of healthcare needs and costs among older adults and burden among caregivers<sup>23-25</sup> and one of the foci of the AFHS "Mentation" principle, along with depression and delirium. While primarily focusing on "Mentation", TAP also addresses "What Matters" by prioritizing activities of interest, and "Medication" by providing a nonpharmacological approach address dementia-related behavioral Randomized, controlled trials (RCTs) of TAP demonstrate that engaging people living with dementia (PLWD) in meaningful activity leads to improved outcomes for both PLWD and caregivers. These include improved quality of life and decreased behavioral symptoms for PLWD; decreased time providing care, improved engagement, self-efficacy, and wellbeing for caregivers; and decreased healthcare costs for both PLWD and caregivers. 11,12,14-16 TAP includes eight 1-hour sessions delivered by a clinician over 3 to 6 months and provides clinicians with a protocol to: (1) identify interests and abilities of PLWD; (2) instruct caregivers in how to use selected, tailored activities as part of daily routines; (3) educate caregivers about dementia; and (4) teach caregivers how to manage their own stress (Figure 1).20 The 2024 Lancet Commission on dementia identified TAP as 1 of few EBPs with multiple RCTs in different countries and cultures.26

As the number of PLWD increases,<sup>27</sup> there is a growing need for EBPs that support quality of life of PLWD and their caregivers in VA and non-VA settings. However, there is lack of evidence for how to successfully implement a complex,

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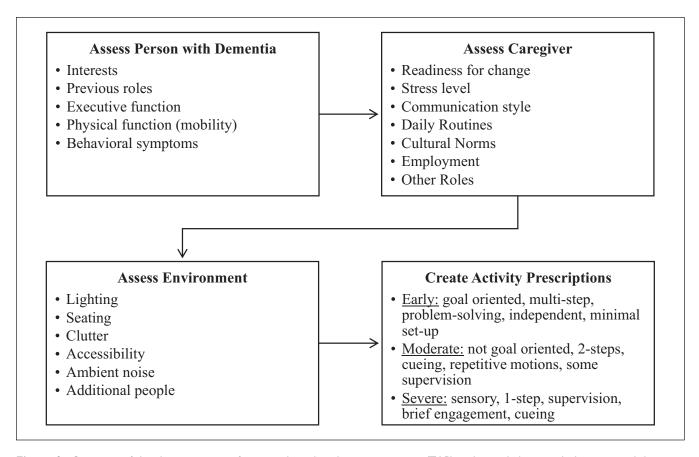


Figure 1. Overview of the clinician process for using the tailored activity program (TAP) with people living with dementia and their caregivers.

Note. Figure adapted from Gitlin et al, Gerontologist, 2009.

home-based intervention for PLWD and their caregivers, such as TAP, in large healthcare systems. The objective of the current analysis was to identify the factors that will influence implementation of TAP prior to its widespread roll-out as part of an AFHS.

### **Methods**

# Context: SAGE QUERI

We conducted pre-implementation interviews as part of the SAGE QUERI hybrid type III effectiveness-implementation trial<sup>28</sup> with the goal of understanding unique needs in VA Medical Centers (VAMCs) to successfully implement TAP. The pre-implementation phase began 6 months before the 12-month implementation phase. SAGE QUERI staff conducted key informant interviews with VAMC leadership, department leadership, and frontline clinical staff to learn more about each VAMC's context and culture prior to TAP implementation. This project was determined to be operations activities and not human subject research necessitating consent according to the provisions of VHA Program Guide

1200.21.8 The study adheres to the COnsolidated criteria for REporting Qualitative research (COREQ) guidelines for reporting qualitative research.<sup>29</sup>

### Informants and Setting

We used purposive and snowball sampling, beginning with each VAMC's leadership team, to identify key informants from the first 6 VAMCs participating in TAP rollout. Department leaders and frontline clinical staff were selected for interviews based on their role at the medical center (eg, Chief of Geriatrics) or referred by another informant. SAGE QUERI staff emailed prospective informants and invited them to participate in an interview. We sent follow-up emails after 1 and 2 weeks; if the prospective informant did not reply, they were not contacted further. Interviews were scheduled based on informants' availability. All informants were VA employees and worked in departments related to TAP (eg, geriatrics). Following VA policy, informants were not compensated for their time participating in interviews during their contracted working hours.

Table I. Informant Characteristics Across VA Medical Centers (VAMCs).

		VAMC-A	VAMC-B	VAMC-C	VAMC-D	VAMC-E	VAMC-F
Role, n							
	VAMC leadership	1	1	0	3	0	0
	Department chiefs	8	4	8	7	7	7
	Frontline staff	1	3	2	3	7	3
Gender, n							
	Man	2	3	3	6	4	2
	Woman	8	5	7	7	10	8
Years at VA, mean							
	VAMC leadership	2.3	16	_	12.5	_	_
	Department chiefs	10.8	5.3	14.2	17.8	21	13.8
	Frontline staff	10	15.8	10	13.8	8.9	15.7
Discipline <sup>1</sup> , n							
•	Medicine	0	3	2	4	3	3
	Nursing	5	1	2	3	0	1
	Rehabilitation	1	1	2	2	2	4
	Social work	2	1	3	2	0	I
	Psychology	2	1	0	1	7	1
	Other	0	1	1	1	2	0

### **Data Collection**

From 2021 to 2022, virtual semi-structured interviews were conducted via videoconference (30-60 min). Interviews were conducted by an occupational therapist and implementation facilitator for TAP (CMW) and 2 master's-level project managers. All interviewers were trained in qualitative interviewing by a PhD-trained qualitative methodologist and helped to develop the interview guide. The interview guide was developed using the Practical, Robust Implementation and Sustainability Model (PRISM) framework which provides guidance for conceptualizing, assessing, and addressing key contextual factors important to consider prior to implementation.<sup>30</sup> Interviews focused on the following domains: (1) informants' initial impressions of TAP after a brief, 2-minute overview of the EBP by the interviewer, accompanied by a slide presentation; (2) perceived facilitators and barriers to implementing TAP locally; and (3) potential adaptations that may be required for implementation based on existing processes and workflows. Interview guides were pilot-tested and refined based on feedback. All interviews were audio-video recorded with permission granted by the informant. A master's-level research coordinator acted as silent notetaker to capture important themes and suggestions given by the informant that required follow-up after the interview. Interviewers had regular meetings with the implementation scientist methodologist (LEA) to discuss information learned from interviews and to identify data saturation (ie, no new information being learned from interviews<sup>31</sup>). Interviews were transcribed verbatim by a third-party service and proofread for accuracy by the qualitative team.

### **Analysis**

We used a team-based rapid qualitative analysis approach, <sup>31,32</sup> a technique that is well-suited to health services research<sup>33</sup>

and allows for the reduction of a large qualitative dataset while retaining key information.34 The analysis team included an occupational therapist and implementation facilitator for TAP (CW), a PhD social worker and implementation scientist (LEA), a PhD gerontologist and qualitative methodologist (AP), a PhD candidate in health services research (OG), a PhD nurse and health services researcher mixed methodologist (KMP), a geriatrician and health services researcher (RTB), a neurologist, and a PhD nursing student. First, we developed a summary template in word processing software with key domains, or topics, using the interview guide, the PRISM framework, and an initial transcript to guide our work. The summary template was refined through 2 rounds of team members individually summarizing the same transcript, then meeting to compare and discuss our summaries, modifying the template and domains as needed. When we reached consensus on the summary template, each of the remaining 29 transcripts were assigned to individual analysts to summarize, with a second analyst reviewing each completed summary and transcript to ensure all information was captured. During regular team meetings, questions and disagreements were brought to the larger group for review and consensus. During analysis, the team monitored for and discussed data saturation; once the group agreed that saturation was reached, we stopped summarizing transcripts. After transcript summaries were completed, we analyzed the domain data by reviewing, comparing, and reorganizing summary points from all transcripts within each domain. Individual analysts wrote narrative summaries, or analytic memos, for each domain, which we reviewed as a group during team meetings to make comparisons within and across domains to identify themes and subthemes. At this step we reviewed our findings to check for alignment with PRISM.<sup>30</sup>

Table 2. Implementation Determinant Domains, Definitions, and Sub-Domains.

Determinant domain	Definition	Sub-domain		
Alignment with organizational priorities	Extent to which TAP fits with existing organization or clinician goals	Organization-Level		
Perceived value and fit with existing clinical workflows	Extent to which TAP is perceived to add value to Veteran care and can be integrated into clinician workflows	<ul><li>Clinician-Level</li><li>Improving Veteran care</li><li>Time-savings and efficiency</li><li>Decreased workload</li></ul>		
Competition with existing organization and clinician priorities	Extent to which TAP directly competes for resources with other organization or clinician goals	Organization-Level     Funding allocations     Funding incentives     National initiatives and programs     Research and QI projects Clinician-Level     Large caseload     Daily responsibilities     Time allocated to other new initiatives		
Considerations about the effect of caregiver burden on participation	Extent to which caregiver burden, as perceived by informants, may affect caregiver enthusiasm for and participation in TAP	<ul><li>Caregiver-Level</li><li>Time commitment required</li><li>Fit with Veteran and caregiver needs</li><li>Burnout</li></ul>		

### Results

# Characteristics of Respondents

We requested interviews with 93 informants from 6 VAMCs. Twenty-eight declined to participate due to perceived irrelevance of TAP to their position, scheduling conflicts, or a lack of response to email recruitment attempts. We performed 58 interviews, 1-on-1 and in groups, with 65 unique informants. These included 5 interviews with VAMC leaders (Medical Center Director, Chief of Staff, Associate Director of Patient Nursing Services), 36 with department leaders (Behavioral Health, Caregiver Support, Connected Care, Geriatrics and Extended Care, Home-Based Primary Care (HBPC), Primary Care, Rehabilitation, Social Work, Whole Health), and 17 with frontline clinical staff (geriatricians, occupational therapists, psychologists, social workers, quality improvement specialists). See Table 1 for additional informant characteristics.

# Identification of Key Factors That Influence Implementation

We identified 4 key factors that may influence implementation of TAP within the VA healthcare system: (1) alignment with organizational priorities; (2) perceived value and fit with existing clinical workflows; (3) competition with existing organizational and clinical priorities; and (4) considerations about the effect of caregiver burden on participation (Table 2).

# 1. Alignment with organizational priorities, including AFHS, promotes TAP implementation.

Informants frequently highlighted that aligning TAP with existing VA organizational priorities sets the stage for successful implementation at a system-level. Informants identified several organizational priorities that aligned with TAP, including AFHS and Whole Health, II as well as with geriatrics department III programs, including HBPC. IV For example, after listening to a description of TAP, an HBPC provider responded that TAP's focus on improving care and outcomes for PLWD and their caregivers "would align with [the] broader goals of HBPC and priorities of [the] Geriatrics and Extended Care [department]" (Medical Director of HBPC, VAMC-C).

Informants emphasized the importance of leveraging resources and leadership support from complementary initiatives to enhance TAP's uptake and success. Informants with experience implementing AFHS noted that it was particularly promising as a context for implementing TAP, as several site departments were obtaining their AFHS recognition. Informants cited the importance of VAMC leadership support in implementing AFHS and emphasized how this support fostered an environment that welcomed new interventions such as TAP:

He's [Associate Chief of Staff] very supportive of the geriatric 4Ms, anything that can improve the care. And obviously our mission is to keep people in their home safely as long as possible and out of the hospital and out of the emergency room and nursing home. (Medical Director of HBPC, VAMC-C)

At VAMCs not currently engaged in AFHS implementation, leadership was still focused on growing and improving VA geriatrics programs. Like AFHS implementation, informants viewed the growth of geriatrics programs as an opportunity to hire additional staff to implement programs such as TAP. As 1 leader noted:

I'd love to see geriatrics grow. . . And we must grow the impact — we could take on more patients, but not with. . . the number of staff that I have. . . [We] just got approved for Gerofit program [an exercise program for older Veterans], as well as a virtual Geriatric Evaluation and Management program for the [VA regional network]. So, we're going to hire another half-time geriatrician. We're going to try to grow that program and hopefully have the resources available to allow us to do a good job for facilities in the [region] that don't have a geriatrician on their staff. (GEC Director, VAMC-E)

Informants also highlighted that positioning TAP to fit with the existing Whole Health initiative could increase TAP's uptake and success. Informants noted that Whole Health has robust leadership support, existing resources, and familiarity with clinical staff:

I think it's going to fit nicely with the model of the VA right now with Whole Health being pushed very heavily. And I think that you could piggyback off that. . . our Whole Health implementation program – they're really pushing hard on that right now to implement here, so you might want to see how they can encapsulate [TAP] with the Whole Health education they're doing and maybe work with you to get [TAP] implemented as well. (Associate Chief Nurse of Outpatient Services, VAMC-A)

# 2. <u>Informants' perceived value of TAP and fit within</u> workflows may influence implementation success.

Overall, clinicians expressed positive attitudes toward TAP, emphasizing its potential alignment with existing clinical responsibilities and Veteran and caregiver needs. Informants recognized the potential benefits of TAP based on its core components and adaptability to the needs of Veterans and caregivers:

I can see how that could help reduce the stress [for the caregiver] because it's like you don't have to plan it out. It's already set for you and — as the caregiver — you just follow the steps. And then see if that [activity prescription] works for that person. And if it doesn't, you just adapt it [the activity prescription]. (Outpatient Occupational Therapist, VAMC-E)

Along with TAP's benefits for Veterans and caregivers, informants in geriatrics clinical settings noted that TAP aligns with current staff workflows and focus. One HBPC occupational therapist highlighted the meaning of TAP for their work and advantages of TAP's adaptability for fitting

into workflows, including the ability to deliver TAP virtually:

I think it's workable, yeah, especially being that you can do it virtually. I feel like [TAP] could be scheduled right along with other visits. And you're not really taking too much extra time, because even with TAP, you are still finding out more information about the patient, which is really what you are supposed to be doing, which is. . .the way you can serve them better. (HBPC Occupational Therapist, VAMC-F)

Informants also discussed the ability to integrate TAP into existing work, minimizing the effort for implementation. Clinical staff thought TAP could be used to expand their repertoire of clinical strategies, as opposed to using it as a rigid, manualized program:

I personally think what you're providing here might be another evidence-based therapy that could be used in conjunction with others in [providing care for Veterans with dementia]. I don't want to consider this a program; this could be just another tool that we have. (HBPC Psychologist, VAMC-F)

# 3. Competing priorities and finite resources may hinder TAP implementation.

Although informants noted that VAMCs were prioritizing the expansion of AFHS and geriatrics programing, they also noted a lack of time, funding, and staff to support this growth. As 1 informant stated, "We have explored the idea of hiring a dementia coordinator, and we got pretty far with it. . .but we didn't get the approval for the [hire] yet [from leadership]" (Chief of Social Work, VAMC-E). Similarly, another informant reflected that when considering TAP implementation, it is important to look not only at alignment with priorities, but also whether existing infrastructure could handle the demands of a new program:

It's just a matter of having time to do it. I think the VA has lots of great programs. . .And it's just having the staff and the time to do that, because we're all usually wearing so many different hats. . .You just want to be able to do what you're supposed to be able to do, and then they add more on. I feel like then you can't do anything well. . .I think everyone wants to do more and gets excited about certain programs. And I think our leadership supports those things, it's just having the staff and the time to be able to do it and do it right. (Medical Social Work Supervisor, VAMC-A)

Informants identified competing priorities within their VAMCs that could make it challenging to implement TAP, including falls prevention programs, caregiver support initiatives, and other implementation/research programs. Informants noted that these competing priorities typically had dedicated resources, like funding and staff, that TAP cannot utilize. For example, multiple informants discussed that

falls prevention is a priority across departments, and HBPC specifically has instituted education, programs, and metrics to decrease falls, leaving little time for new initiatives. One HBPC Nurse Manager said, "We are currently working very hard to decrease the falls. We had a spike in falls last spring and we were tasked by leadership to look at what we could do to decrease the falls" (Nurse Manager of HBPC, VAMC-D). In their view, implementation of TAP would be hindered by the current focus and time spent on falls prevention.

Informants also viewed VA caregiver support programming as an initiative that would compete with TAP for priority. Caregiver Support provides support to VA caregivers of Veterans with and without dementia; however, it does offer dementia-specific programing, including, Resources for Enhancing All Caregivers Health VA Program (REACH-VA), a nationally mandated program that provides caregivers with 1-on-1 and group coaching to learn about dementia, practice stress and mood management techniques, and participate in care planning. Because this program supports caregivers of PLWD and thus overlaps with the focus of TAP, some informants noted that they were "unsure if TAP" REACH-VA would complement (Outpatient Neuropsychologist, VAMC-E). Other informants had a difficult time distinguishing TAP from the services already offered by Caregiver Support. As 1 HBPC psychologist reflected, "how it's described, TAP is really kind of what Caregiver Support does" (Psychologist, VAMC-D). Thus, the similarities between TAP and other programs were viewed as a potential barrier to uptake.

Informants also noted that because of the robust research programs at the VA, VAMCs are frequently offered opportunities to participate in new research and implementation projects. VAMCs must choose which projects to take on, with participation decisions influenced by factors such as opportunities to have new programs supported by additional revenue. As 1 geriatric social worker described, "Leadership tends to be in support of programs if it somehow brings in extra revenue or receives a higher VERA [Veterans Equitable Resource Education] reimbursement" (Social Worker, VAMC-D).

Competing priorities were also apparent at the clinicianlevel. Some informants were concerned about the time required to implement TAP and how this could add to clinical staff's already large workload. Some department leaders were protective of their staff's time and resources:

That's my concern because I don't want to strap my staff, my OTs or anyone. . .I don't want to sign up for this program and then have them all quit on me. . .So that's my only concern with the program. .It isn't the program itself, it's just the matter of having the staff to do it. (Director of Physical Medicine and Rehabilitation, VAMC-B)

Another concern that some clinical staff raised was the amount of training required to implement TAP in clinical practice and whether it would be feasible to complete with current staff caseloads. Perceptions varied based on the informant's VAMC; leadership level did not seem to have a bearing on these perceptions. As 1 supervisor noted, "one of the challenges is getting people to be able to put aside their clinical work long enough to attend trainings" (Social Work Supervisor, VAMC-D). Another supervisor noted that "the training is not a barrier, but time needs to be carved out for the clinician to complete the trainings" (Rehabilitation and Sensory Supervisor, VAMC-F).

# 4. Caregiver burden may decrease participation in and uptake of TAP among caregivers.

Despite the benefits of TAP for Veterans with dementia and their caregivers, some informants discussed uncertainties regarding caregiver receptiveness and the potential for a new EBP to increase stress. As 1 HBPC psychologist reflected, "The caregivers sometimes drag their feet. They're like, we don't have time, I'm so busy caregiving" (HBPC Psychologist, VAMC-D). Similarly, another director noted that "Staff may have reservations about TAP because it is hard to get caregivers to do anything" (Director of HBPC, VAMC-A).

Informants also discussed the competing demands that caregivers face when considering whether to participate in a new program such as TAP. Informants noted that for many caregivers, providing care to a Veteran with dementia is a full-time job. Thus, informants believed that caregivers' time and energy must be considered when deciding whether to implement a new program. As 1 HBPC geropsychologist noted, caregivers may be wary of taking on yet another task:

I know when I've done other caregiver interventions, there are times where caregivers simply feel too overwhelmed to try one more thing. So, I could see, depending on the caregiver, the caregiver's openness to a more structured intervention, something that could have definite positive outcomes for them, but up front will require some effort on their part, I could see them feeling this is one more thing that I just can't do right now. (HBPC Geropsychologist, VAMC-B)

#### Discussion

In this qualitative study, VA staff and leaders identified key determinants of the implementation of TAP – a multicomponent intervention for Veterans living with dementia and their caregivers – within the VA healthcare system. Factors to consider included TAP's alignment with organizational priorities, perceived value and fit with existing clinical workflows, competition with existing organizational and clinical priorities, and considerations about the effect of caregiver burden on participation. These findings provide guidance for clinical staff, leaders, and implementation scientists seeking to implement similar interventions.

These findings confirm prior studies examining factors that influence the uptake of geriatric interventions into routine clinical care.35 Even for interventions with fewer components (eg, implementation of preventative screenings in primary care), a lack of operational support and competing initiatives are common barriers, often due to a lack of dedicated time for new programs.<sup>36</sup> Geriatric interventions are often inherently more complex because they focus on the care of complex patients – those who need tailored, multicomponent interventions to address multifactorial conditions such as delirium and dementia.<sup>35</sup> Thus, barriers to implementation may be magnified because complex interventions require substantial staff training, changes to workflows including multiple follow-up sessions delivered by clinicians, and ongoing engagement from caregivers and patients. The findings of our and previous studies suggest that for more complex interventions, implementation efforts must account for the multi-level factors that influence EBP uptake, such as those outlined by the PRISM framework affecting program adoption, implementation, and maintenance, including organizational and patient perspectives.<sup>37</sup>

Consistent with PRISM, our study highlights the importance of aligning new programs with existing organizational priorities.<sup>38</sup> A systematic review of the implementation of comprehensive geriatric assessment found that lack of alignment with partners hinders implementation,<sup>39</sup> while a VA-based study of the implementation of the Geriatric Resources for Assessment and Care of Elders model (a primary care initiative for low-income older adults and their primary care physicians to improve quality of geriatricsfocused care), found that having engaged, enthusiastic leadership contributed to successful implementation.<sup>40</sup> Previous studies have similarly shown that interventions that resonate with organizational missions and strategic objectives are more likely to receive leadership support, resource allocation, and sustained commitment.<sup>38,41</sup> Taken together, these findings suggest that positioning TAP as an integral component of the VA's broader mission to enhance Age-Friendly care may promote its initial adoption, pave the way for its sustainability, and enhance long-term impact.

This study also underscores the significance of addressing the needs and perceptions of frontline clinical staff, as outlined in the recipient domain of PRISM. Informants expressed positive attitudes toward TAP, recognizing its fit with the intended population and the potential benefits for Veterans and caregivers, consistent with findings from previous studies where stakeholder engagement and perceived intervention fit were crucial for successful implementation. 42

Also consistent with PRISM, informants noted the importance of considering competing organizational and clinical priorities. In our study, alignment with organizational priorities and competing demands were often overlapping considerations, particularly for geriatrics programs that aligned closely with TAP. As noted above, geriatrics programs often require more resources and thus are more costly to implement, which can make them targets in efforts to

constrain costs. TAP's similarities to other, more established VA programs made it difficult for some informants to identify the value added by TAP and by extension the value of reallocating resources for its implementation. These findings underscore the importance of considering and managing competing priorities and limited resources. Informants identified several competing initiatives within the VA that could hinder TAP's implementation, such as falls prevention programs and caregiver support initiatives, consistent with prior research highlighting the challenge of resource allocation and prioritization in healthcare settings. 43 Informants also highlighted concerns about additional workload for staff, training requirements, and perceived burden for caregivers. To mitigate these concerns, it is vital to involve frontline staff and caregivers in adapting and tailoring TAP to fit their workflows and resources. Providing flexible training options and integrating TAP into existing routines may help address these barriers and enhance the program's acceptability and feasibility, as could maximizing the use of existing resources and infrastructure.44 As above, this includes identifying synergies with other programs and ensuring ongoing leadership support leadership.

Moreover, when implementing an EBP for PLWD and their caregivers in which caregivers actively participate in delivery, we must understand their competing priorities. Dementia-related neuropsychiatric symptoms are associated with caregiver depression, decreased quality of life, and increased caregiving time, <sup>45,46</sup> all of which increase caregiver burden. While TAP and other EBPs are effective in reducing caregiver burden, burden may simultaneously pose a barrier to implementation. Thus, implementers must recognize this tension and proactively take steps to address it. EBPs such as TAP, which are caregiver-centered, problem-focused, and can be tailored to the needs of each individual caregiver, are inherently more implementable. <sup>47</sup>

Taken together, these findings suggest that when implementing a multicomponent EBP in the VA, it is important to use a structured framework, such as PRISM, to systematically consider the factors that may influence implementation. Furthermore, it is important to proactively discuss operational alignment, perceived values and fit within workflows, competing priorities with implementing partners, and caregiver burden. Understanding informant perspectives on these factors before implementation may impact how a team approaches and talks to partners, the setting the team chooses to implement the EBP, and implementation strategies used. Systematically assessing the factors identified in this study may help increase the implementation, adoption, and sustainability of Age-Friendly EBPs in healthcare systems by allowing for a more targeted, personalized approach to addressing and operationalizing the 4Ms of Age-Friendly care. Future work could explore the extent to which these factors affect the reach, effectiveness, and sustainability of an EBP.

This study has several limitations. First, interviews did not include questions directly asking informants about

their personal or departmental experience with AFHS or about AFHS as a VAMC priority. Instead, informants were asked to identify priorities at their VAMC and to discuss their experiences with implementing new programs or quality improvement projects. However, although AFHS was not used as a systematic prompt, most informants discussed AFHS efforts at their VAMCs. Second, pre-implementation interviews were conducted at 6 VAMCs within a single VA regional network, which includes VAMCs in 2 states. Although these VAMCs span urban, suburban, and some rural areas, the results may not be generalizable to other regions or more rural locations. Finally, this quality improvement study was designed to focus on the VA context and was not designed to generalize to other healthcare systems.

### Conclusion

We found that VA clinical staff and leaders identified key factors to consider in implementing TAP, including 1) alignment with organizational priorities, notably AFHS; 2) informants' perceived value and fit with existing clinical workflows; 3) competition with existing organizational and clinical priorities; and 4) considerations about the effect of caregiver burden on participation. As a growing number of geriatrics-focused interventions are implemented within the VA, we must be thoughtful about how to handle competing priorities and work to not only expand resources, but also help VAMCs choose EBPs that address the 4Ms in their local context. These findings provide guidance to frontline clinical staff, leaders, and implementation scientists on key factors to consider before implementing complex interventions within the VA healthcare system.

### **Abbreviations**

AFHS Age-Friendly Health System

CAPABLE Community Aging in Place- Advancing Better

Living for Elders

CSP Caregiver Support Program EBP Evidence-based practice

EMPOWER Eliminating Medications through Patient

OWnership of End Results

GEC Geriatrics and Extended Care
HBPC Home-Based Primary Care
PLWD Person living with dementia

PRISM Practical, Robust Implementation and

Sustainability Model

REACH-VA Resources for Enhancing All Caregivers Health

VA Program

SAGE QUERI Safer Aging Through Geriatrics-Informed

Evidence-Based Practices

TAP Tailored Activity Program
VA Department of Veterans Affairs

VAMC VA Medical Center

VISN 4 Veterans Integrated Service Network 4

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### **Authors' Contributions**

CMW, LEA, AP, KMP, OG, and RTB conceived the study. CMW, LEA, AP, KMP, OG, and RTB analyzed the relevant data. CMW wrote the first draft of the manuscript. CMW, LEA, AP, KMP, OG, LNG, JAL, REB, RMW, and RTB contributed to the interpretation of the results and revised the manuscript. All the authors approved the final version.

REB is the corresponding principal investigator with RMW, JAL, DEH, and RTB as coprincipal investigator for the project. In addition, RTB leads the Tailored Activity Program (TAP) implementation activities and CMW serves as the project manager for TAP implementation. REB, LR, KMP, and SK were responsible for the study design and methodological and analytic strategy. Methodological rigor support was provided by KMP and LEA for implementation science frameworks and qualitative method and analysis support was provided by AP. REB was responsible for the initial implementation questions, securing and maintaining relationships with our operational partners, and providing input and materially edited this manuscript. CMW had the responsibility of writing and coordinating with the team for this manuscript. All study team provided expertise in the methodology, analysis, and materially edited this manuscript. All authors read and approved the final manuscript.

### **Data Availability Statement**

The underlying data for this study consists of in-depth, qualitative interviews with employees of the U.S. Department of Veterans Affairs. It is not possible to create a minimal data set as this study did not obtain ethical approval or informed consent from participants to publicly share underlying data sets. Relevant excerpts from transcripts of qualitative interviews are included within the paper. The datasets generated and/or analyzed during this study are not publicly available but may be available upon request at the Center for Health Equity Research and Promotion of the U.S. Department of Veterans Affairs administrative offices, at (215) 823-5817 (https://www.cherp.research.va.gov/).

### **Declaration of Conflicting Interests**

The author(s) declared the following potential conflicts of interest with respect to the research, authorship, and/or publication of this article: Dr. Gitlin is an inventor of an online training program for health professionals in the Tailored Activity Program (TAP), for which she and her previous (Thomas Jefferson, Johns Hopkins University) and current (Drexel University) institutions are entitled to fees. This arrangement has been reviewed and approved by all Universities and is in accordance with its conflict-of-interest policies.

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# **Ethical Approval and Informed Consent Statements**

In January 2019, all planned procedures were determined by the VISN 4 Chief Medical Officer to be operations activities not constituting research and proceeded as such under VISN authority and oversight without IRB review according to the provision of VHA Program Guide 1200.21.

### **Consent to Participate**

Not applicable.

### **Consent for Publication**

Not applicable.

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### **Supplemental Material**

Supplemental material for this article is available online.

### **Notes**

- Note that some informants in leadership/administrative positions were not actively practicing at the time of the interview.
- II. Whole Health: VA's approach to care that supports Veterans' health and well-being. Centers around what matters to the Veteran by developing a personalized health plan based on the Veteran's values, needs, and goals. See website for details: https://www.va.gov/wholehealth/.
- III. Geriatrics and Extended Care (GEC): VA health care for older Veterans with complex needs. Includes HBPC and extended care. Elderly Veterans can receive geriatric and long-term care programs at home, at VAMCs, or in the community. See website for details: https://www.patientcare.va.gov/geriatrics.asp.
- IV. Home-Based Primary Care (HBPC): VA program that provides health care services to Veterans requiring team-based, in-home support for ongoing diseases and illnesses that affect their health and daily activities. See website for details: https://www.va.gov/GERIATRICS/pages/Home\_Based\_Primary\_Care.asp.
- V. Caregiver Support Program (CSP): Offers clinical services to caregivers of Veterans enrolled in the VA. CSP promotes the health and well-being of caregivers, through education,

resources, support, and services. See website for details: VA Caregiver Support Program Home.

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