How VA Whole Health Coaching Can Impact Veterans' Health and Quality of Life: A Mixed-Methods Pilot Program Evaluation

Global Advances in Health and Medicine Volume 10: 1–13
© The Author(s) 2021
Article reuse guidelines:
sagepub.com/journals-permissions
DOI: 10.1177/2164956121998283
journals.sagepub.com/home/gam

(\$)SAGE

Natalie Purcell, PhD, MPA^{1,2}, Kara Zamora, MA^{1,2}, Daniel Bertenthal, MPH¹, Linda Abadjian, PhD¹, Jennifer Tighe, MSPH¹ and Karen H Seal, MD, MPH^{1,2}

Abstract

Purpose: To examine the impact of a pilot VA Whole Health Coaching program, including whether and how the program helps veterans improve their health and quality of life.

Intervention: Whole Health Coaching is a structured program to support veterans in making healthy behavior changes to promote holistic well-being.

Design: This mixed-methods quality-improvement evaluation combined surveys (pre- and post-coaching) with follow-up qualitative interviews.

Setting: The setting was a large VA healthcare system, encompassing a medical center and six community-based clinics in Northern California.

Participants: 65 veterans completed surveys at both time points; 42 completed qualitative interviews.

Method: Telephone surveys administered at baseline and 3 months assessed global health (PROMIS-10), perceived stress (PSS-4), and perceived health competency (PHCS-2). Pre- and post-scores were compared using t-tests. A subsample of participants completed a qualitative interview evaluating program experience, goal attainment, and the coaching relationship. **Results:** Surveys showed significant improvements over baseline in mental health (p = 0.006; d = 0.36), stress (p = 0.003; d = -0.38), and perceived health competence (p = 0.01; d = 0.35). Interviewees were highly satisfied with their coaching experience, describing both effective program components and improvement opportunities.

Conclusion: Whole Health Coaching can help participants make meaningful progress toward health goals, reduce stress, and improve quality of life. The Whole Health model's emphasis on holistic self-assessment; patient-driven goal-setting; supportive, non-judgmental inquiry; and mindful awareness contributed to program success and enhanced participants' experience.

Keywords

health coaching, behavior change, prevention, wellness, quality of life, veterans, mixed methods, qualitative research

Received December 7, 2020; Revised December 7, 2020. Accepted for publication February 5, 2021

Introduction, Background, and Significance

The Veterans Health Administration is the largest integrated healthcare system in the United States. VA cares for 9 million veterans annually across more than 1,200 health facilities and is thus well positioned to pilot new care models. To improve veteran population health, care quality, and patient satisfaction, VA is implementing a "Whole Health" care model centered on holistic,

¹San Francisco VA Health Care System, San Francisco, California ²University of California, San Francisco, San Francisco, California

Corresponding Author:

Natalie Purcell, San Francisco VA Health Care System, Integrative Health (T-31), 4150 Clement Street, San Francisco, CA 94121, USA. Email: Natalie.Purcell@va.gov

patient-driven, personalized care planning.^{3,4} Whole Health seeks to make healthcare more person-focused, relationship-based, and oriented toward promotion of health-sustaining behavior. To realize Whole Health transformation, VA engages veterans in health planning across multiple dimensions of wellbeing—physical, emotional, social, and spiritual. Veterans receive support in developing and reaching their own health goals, and can access a range of integrated clinical care, complementary and integrative health services, and wellness programs to support self-management and healthy behavior change.

A key component of VA's Whole Health transformation has been the national rollout of a Whole Health Coaching program.^{5,6} Whole Health Coaches help veterans explore their values, develop personal health plans, and make progress in achieving their health goals. Nationwide, VA has trained over 2,300 VA clinicians, staff, veteran peers, and others in its coaching model. The purpose of VA's coaching program is to "provide veterans personalized, proactive, patient-driven health care," "support them to successfully implement their personal health plans," and "incentivize measurable improvement in health outcomes."6(p3) To achieve these aims, VA's program draws on evidence-based practices known to support health behavior change, including motivational interviewing, ⁷ appreciative inquiry,8 and positive psychology.9 Research suggests that similar health coaching programs are effective in supporting behavior change, 10-12 but coaching models vary widely. 10,12–14 To date, there is little research examining the effectiveness of VA's Whole Health Coaching Program in supporting behavior change or improving veterans' health and wellbeing.15

At the San Francisco VA, we conducted a mixed-methods quality-improvement (QI) evaluation to examine the impact and effectiveness of a pilot coaching program grounded in VA's Whole Health model. Combining telephone surveys administered pre- and post-coaching with qualitative interviews, we examined whether Whole Health Coaching helps veterans achieve meaningful improvements in their physical health, mental health, and quality of life. We also examined which aspects of the program were more and less helpful to participants and solicited suggestions for improvement. In this manuscript, we describe the pilot program, report results of our mixed-methods evaluation, and consider their implications for VA and other health systems.

The Intervention

VA's Whole Health Coaching program provides a structured model (Table 1) to support veterans in making healthy behavior changes.⁶ Like many health coaching programs,¹⁴ VA's program is designed to empower

participants and support them in self-management. Coaches help participants find their own motivation for change, then facilitate that change through collaborative development of realizable, progressive goals. Regular coaching sessions allow participants to check in on their progress, promoting accountability and fostering a relationship between coach and participant. Within that relationship, the coach recognizes the participant as the expert on themselves and harnesses that expertise using open-ended questions, active listening, reflections, expressions of empathy, and affirmations. Discussions stay present- and future-oriented, emphasizing the participant's strengths and aspirations and providing support to mobilize these. Coaches adopt a guiding, rather than directing, style; they actively inquire and listen but share information and advice only when invited. Coaching facilitates behavior change by helping participants "try on" different perspectives, refine action plans, anticipate barriers and facilitators, reflect on lessons learned, and draw on strengths and supports within the context of an accountable relationship.^{6,14}

In addition to these evidence-informed coaching techniques, VA's Whole Health Coaching model adds several elements that are specific to integrative health and wellness coaching programs, 14,17-20 and some that are unique to VA's program. Detailed in Table 2, these elements include exploration of the participant's "mission, aspiration, and purpose" in life; holistic, multidimensional self-assessment (a "Personal Health Inventory" 16); and practice of "mindful awareness." 6 Whole Health Coaching is rooted in a fundamentally patient-driven agenda; the program does not focus on addressing any specific diagnosis or problem and instead supports veterans in making life or health changes based on their personal values and priorities. VA attempts to integrate Whole Health Coaches within the veteran's broader VA care team, encouraging communication through the electronic medical record and aligning the team in support of the veteran's personal health plan.

To facilitate this integration, VA's Whole Health Coaching model was designed to be flexible, and different VAs have adapted the program to fit local needs. At San Francisco VA, coaching is a one-on-one service offered to interested veterans referred by a provider. Coaching unfolds over 8-10 sessions that occur roughly once per week and last approximately 50 minutes. Most sessions are conducted by telephone, but coaches also offer in-person or video options upon request. San Francisco VA's coaches come from a variety of different backgrounds; all have other clinical and/or non-clinical roles at VA, coaching veterans only part-time. The pilot coaching team was recruited from a small team of clinicians interested in holistic care and involved in launching a new Integrative Health service line at San Francisco VA. The team included psychologists, social workers,

Table 1. Stages of Whole Health Coaching (Adapted From the VHA Whole Health Coaching Manual⁶).

Stage I	Explore mission, aspiration, and	- Coach uses open-ended, values-based inquiry to help veteran explore their "mission, aspiration, and purpose" in life.			
	purpose	 Through examination of personal values, veteran develops/begins to articulate a vision for their health and wellness. 			
		 Coach and veteran explore potential value conflicts, including behaviors, patterns, or circumstances that are not consistent with veteran's articulated values and vision. 			
Stage 2	Reflect, assess, and focus	 Coach guides veteran through a "Personal Health Inventory". a self-assessment of the veteran's experience across multiple dimensions of health and wellbeing. 			
		 Areas explored include activity/energy, rest, nutrition, relationships, surroundings, and spirituality. Veteran identifies the dimensions that are most important to them and where they are motivated/ready to make change. 			
		- The specific purpose of the coaching relationship comes into focus for veteran and coach.			
Stage 3	Plan for action	 Veteran and coach develop a plan for action that includes veteran-defined "SMART" goals—goals that are specific, measurable, action-oriented, realistic, and timebound. 			
		 Veteran and coach explore facilitators of and barriers to action, as well as available resources for education/support. 			
		- Veteran and coach co-create a plan for action and for maintaining accountability.			
Stage 4	Execute the action	- Coach supports veteran in executing the action plan.			
		 Coach engages veterans in active reflection, ongoing self-assessment of actions taken to date, and discussion of lessons learned. 			
		 Veteran's goals remain dynamic; action plan is iteratively refined with attention to evolving facilitators, barriers, and supports. 			

 Table 2. Unique Features of VA's Whole Health Coaching Program.

Feature	Category	Description
Manual-based	Program materials/structure	 Guided by an original manual⁶ that progresses through four unique stages of coaching (Table 1). Uses VA-developed program materials, including a Personal Health Inventory¹⁶ that assesses various dimensions of health
Veteran-focused	Target population	 and wellbeing across VA's "Circle of Health."³² Designed to serve veterans, reflecting military cultural awareness and sensitivity to traumatic conditions common among veterans.
Open	Target population	 Flexible program to serve a highly diverse veteran population. Intended to be a resource for any veteran.
Ореп	rai get population	 Not focused on any particular disease or condition.
Patient-driven	Program philosophy/approach	 Agenda and goals are fundamentally patient-driven. Starts with exploration of the veteran's mission, aspiration, and purpose in life ("What matters most to you?" and "What do you want your health for?")
Holistic	Program philosophy/approach	 Explicitly holistic. Attends to the biological, psychological, social, and spiritual dimensions of health and well-being.
Mindfulness-centered	Program philosophy / approach	Emphasizes mindful awareness
T III diameter contente	riogram principally / approach	 Supports veterans in learning and practicing breathing techniques/mindfulness. Mindfulness practices woven into coaching sessions (as the veteran is interested and open to them).
Integrated	Role within the healthcare system	 Coaches are integrated with the veteran's VA care team. Coaches communicate with care team members through the electronic medical record. Veteran's personal health plan is intended to be shared across coaching and clinical care.

nurses, veteran peers, and public health professionals (see acknowledgements). All completed VA's Whole Health Coaching Training, consisting of two separate three-day trainings in Whole Health Coaching, with required practice and feedback sessions between and after each training. The team maintains fidelity to the coaching model through weekly team meetings and case reviews facilitated by a coaching lead, participation in monthly national community-of-practice calls, and peer mentorship allowing individualized reflection and feedback for each coach.

Methods

We invited all participants in San Francisco VA's Whole Health Coaching pilot program to take part in an IRB-exempt program evaluation, funded through VA's Quality Improvement Research Initiative. The primary aim of the study was to evaluate the pilot program's impact on participating veterans' physical health, mental health, and quality of life. Secondary aims were to evaluate participants' satisfaction with the program, solicit suggestions for improvement, and obtain participant feedback on the quality and impact of the program, including its structure, design, and content.

To achieve these aims, we used a mixed-methods design. Upon enrollment in the coaching program, participants completed a baseline telephone survey administered by a program assistant who recorded their responses into a secure electronic database. Three months after baseline, participants who completed at least three health coaching sessions were invited to complete a follow-up telephone survey. Survey instruments included demographic questions and multiple validated scales drawn from the VA's Whole Health Evaluation Toolkit.²¹ These scales included the Patient-Reported Outcomes Measurement Information System 10-Question Short Form – Global Health (PROMIS-10)²² measuring overall mental and physical health, the Perceived Stress Scale – 4 Item (PSS-4)²³ measuring perceived stress, and the Perceived Health Competence Scale – 2 Item (PHCS-2)²⁴ measuring perceptions of competence to manage one's health. Survey data were exported to Stata 14.2 for analysis. Baseline and followup survey responses were compared using t-tests and Cohen's d.

Upon completion of the follow-up telephone survey, veterans were invited to participate in a semi-structured qualitative interview evaluating their coaching experience. Trained interviewers completed qualitative interviews within three months of follow-up survey administration. Interviews were guided by a set of original questions informed by qualitative interview instruments previously used to evaluate local clinical program implementation and effectiveness for quality

improvement.^{25,26} Topics covered included program experience, impact, and satisfaction, with probes to elicit feedback on health goals, goal attainment progress, the coaching relationship, and program improvement suggestions. Interviews lasted 30–60 minutes. All were administered by telephone and audio-recorded with participant permission.

Interview recordings were analyzed using a matrixbased analysis technique developed for health services research contexts.^{27,28} This technique was designed to be time- and resource-efficient, balancing rigor with pragmatism and yielding results that are comparable to traditional qualitative methods.^{29–31} Rather than producing and analyzing transcripts, our trained analysts listened to the audio-recording of each interview and prepared a written summary using a templated matrix organized by topical areas drawn from the interview guide.27 At least two trained analysts independently examined each audio file, summarizing participant responses for each domain and transcribing relevant quotations into the interview analysis matrix. The analysts then collaborated to review and compare all matrices, identify and discuss recurring themes, and refine a description of each theme. Identified themes were paired with direct veteran quotations to ensure alignment with veterans' language and broad representation of interviewed veterans' voices. Any discrepancies were resolved through discussion, with audio files consulted as needed to reach consensus in the identification and description of themes.

Results

Participants

Of the 88 veterans who enrolled in the pilot program during the study period and completed at least three coaching sessions, 79 volunteered to participate in the QI study. Of these, 65 (74% of the total eligible population) completed both baseline and follow-up surveys and were included in this analysis. Among those participants, 42 (65%) completed qualitative interviews. Participants included a diverse segment of the VA population across the spectrum of age, gender, and race/ethnicity. Eighty-eight percent (88%) of participants were referred from the urban medical center in San Francisco and 9% from community-based outpatient clinics, including 5% from rural areas in Northern California. Demographics are summarized in Table 3.

Survey Results

Survey results are summarized in Table 4. In follow-up surveys, participants showed statistically significant improvements over baseline in both mental health and

Table 3. Participant Demographics (N = 65).

Self-Report Variables	N	%
Gender		
Man	51	78.5%
Transgender man	0	0.0%
Woman	12	18.5%
Transgender woman	I	1.5%
Other	I	1.5%
Age		
18–29	1	1.5%
30–39	9	13.8%
40–49	9	13.8%
50–59	15	23.1%
60–64	9	13.8%
65 or older	22	33.8%
Race and ethnicity (multi-select option)		
American Indian or Alaskan Native	6	9.2%
Asian	4	6.2%
Black or African American	10	15.4%
Hawaiian or Pacific Islander	2	3.1%
White	44	67.7%
Hispanic or Latino	10	15.9%
Employment status		
Not working and not looking for work	3	4.6%
Unable to work due to disability	15	23.1%
Not working, but actively looking for work	5	7.7%
Retired	21	32.3%
Working as a volunteer (no pay)	2	3.1%
Working for pay full-time (30 hours or more per week	17	26.2%
Working for pay part-time (less than 30 hours per week)	5	7.7%
Education	-	,
2-Year degree or lower	39	60.0%
4-Year degree or higher	26	40.0%
Current housing (multi-select option)		
Own apartment or house	55	84.6%
Friend or relative's apartment or house	7	10.8%
Hospital, domiciliary, or drug treatment center	I	1.5%
Transitional housing	4	6.2%
Car or street	i	1.5%
Perceived ability to meet basic needs	1	1.370
I Not at all	0	0%
2	9	13.8%
3	10	15.4%
4	10	15.4%
5. Very well	36	55.4%
Administratively-sourced variables	30	33.476
Referring clinic location	40	92%
Primarily urban Primarily rural	60	5%
,	3 2	
Unspecified Professional background of assigned coach	2	3.10%
Professional background of assigned coach	24	40.00/
Psychologist (PhD)	26	40.0%
Registered nurse (RN)	21	32.3%
Public health background (MPH)	9	13.8%
Veteran peer	9	13.8%

Table 4. Survey Results.

Scale	Domain	Ν	Baseline	3 Months	Change	t	Р	Effect Size
PROMIS Physical Scale	Overall physical health	65	11.95	12.15	0.20	0.59	0.557	0.07
PROMIS Mental Scale	Overall mental health	65	11.74	12.58	0.85	2.84	0.006	0.36
Perceived Stress Scale - 4 item	Stress	65	6.54	5.34	-1.21	-3.03	0.003	-0.38
Perceived Health Competency Scale – 2 item	Perceived health competency	65	6.80	7.88	1.08	2.66	0.01	0.35

perceived stress scores. Participants improved an average of .85 points on the PROMIS-10 Mental Scale (p=0.006). Average PSS-4 scores decreased by 1.21 points (p=0.003), where lower scores indicate less stress. In both domains, effect sizes were moderate (0.36 and -0.38, respectively), suggesting reductions in stress and improvement in overall self-reported mental health with potential clinical significance. Perceived health competence (PCHS-2) scores also showed significant improvement over baseline (1.08 points on average; p=0.01) with a moderate effect size (0.35). No significant differences between baseline and follow-up scores were noted for the PROMIS-10 Physical Scale measuring overall physical health.

The small number of participants within demographic subgroups (see Table 3) limited our power to conduct comparisons based on age, race or ethnicity, and socioeconomic factors. However, we did note potentially meaningful differences between men and women. Women's baseline scores were somewhat poorer than men's on measures of mental health (mean PSS-4 of 6.3 for men versus 7.3 for women; mean PROMIS-10 Mental Scale of 12.0 for men versus 10.9 for women) and physical health (mean PROMIS-10 Physical of 12.2 for men versus 10.9 for women). At follow-up, women reported more improvement than men on the PROMIS-10 Mental Scale (women's mean score change was 0.8 greater; p = .25) and the PROMIS-10 Physical Scale (women's mean score change was 0.7 greater; p = .43). Men improved more on the PSS-4 (men's mean score change was 0.9 greater; p = .36). These differences were not statistically significant in our small sample.

Qualitative Interview Themes

All interviewed participants felt they benefited from coaching, were glad that they had participated, and would recommend the program to other veterans. Qualitative themes are reported here across four domains: (1) Coaching Impact, (2) Effective Program Components, (3) Coaching Relationship, and (4) Improvement Opportunities.

Coaching Impact

Theme: veterans reported meaningful progress across a wide variety of goal types. Interviewed veterans described a wide variety of personal coaching goals. Many set goals pertaining to their physical health—for example, sleeping better, eating healthier foods, increasing physical activity/exercise, losing weight, quitting smoking, reducing alcohol/drug use, or improving management of chronic conditions like diabetes. Other goals pertained to reducing stress and enhancing quality of life—for example, improving family relationships, engaging in meaningful activities, or improving management of home and financial matters.

Across goal areas, veterans reported high levels of satisfaction with their progress. Those with goals related to physical health described making meaningful changes, such as walking more, trying new exercises and activities, eating healthier foods, and transitioning to more consistent sleep schedules. A few reported achieving significant weight loss and feeling confident about their ability to sustain the loss: "I was going up and down before, but now I'm sticking to it." Three veterans reported reaching new insights about their drug and alcohol use and significantly reducing or stopping their use for the first time. Veterans tended to describe their progress on physical health goals as intertwined with mental health changes. For example: "[Coaching] definitely got me to change my diet," observed one veteran, "That's a big help to my health. She's got me doing yoga and tai chi and meditation...so that's helped me quite a bit as far as my stress levels, my body, pain."

Theme: coaching improved participants' mood and increased confidence in their ability to make ongoing positive life changes. Across many goal types, participants reported overall improvements in mood and reductions in stress. As one veteran put it, "[I] feel a little more confident and just generally feel a little better, particularly emotionally. When we started, I tended to feel a little bit down about things, and I think some of that has gone away and that's because of the program." In some cases, participants' improvements in mood were tied to greater confidence in their ability to make meaningful changes in their lives and health. "I know I can actually do it now," affirmed one veteran, "I can achieve those [goals]."

Participants emphasized that coaching is an active, rather than passive, modality—one that requires the veteran to "show up." For many, desire for change and willingness to work for it preceded coaching but was reinforced or enhanced through the coaching relationship.

Despite veterans' satisfaction with the progress they made in coaching, many acknowledged that there was significant work left to be done. They used a language of incremental progress and ongoing improvement, rather than achievement or completion. The sum of that progress, however, was often described as profound and lifechanging. Coaching "affected my diet, the way I approach my life, the way I respond to people, and the anxieties I had," shared one veteran. Coaching was "the spark I needed to reignite my life," observed another, "My life's opened up in really unimaginable ways."

Effective Program Components

Theme: a participant-defined agenda facilitates engagement/empowerment. When veterans described aspects of the program that worked well for them, a primary theme was the veteran-driven nature of coaching: veterans decided the overall purpose of the coaching relationship and set their own goals. They saw coaches as offering support and helping them learn new skills, but fundamentally following the veteran's lead. "I would set the goals, [the coach] would give suggestions, and I would ultimately be the one to decide," explained one veteran, "The whole goal was that I would get skills that I'd use for the rest of my life and, if he was driving it, I wouldn't get the skills." Another veteran, who felt that coaching provided crucial support as she transitioned off opioid pain medications, described her coach's approach:

"She wouldn't tell me you need to do this.... She'd give me ideas of what could be done, and how things could be done, and then we'd talk about which way, from the things that she mentioned, did I think would work for me, and how. It was like she had me figure it out. You know, we'd talk it out."

Participants emphasized coaches' efforts to tap into their own motivation and capabilities. "What I'm going to take away from all this is that my happiness is based on my own behavior," asserted one veteran.

Theme: SMART-goal setting keeps goals realistic and facilitates gradual progress. Participants praised coaches' approach to goal-setting, noting that coaches helped them to identify realistic goals and moderate their expectations. "I had a lot of stuff that needed attention, but it looked like an overwhelming amount," explained one veteran, "[I'd] look at it and just go 'I can't deal with that today.

[My coach] would make suggestions like 'how about trying 15–30 minutes of working at it, just chip at it a little each day?' and I'm like, 'yeah I'll give it a shot.' But it worked." Some noted that modest, incremental goal-setting was an adjustment in perspective for them and helped them stay on course rather than abandoning their efforts as they had in the past. "When I set an unreasonable goal for myself, I have a tendency to get stopped and then get depressed and not want to do anything," noted one veteran, "[My coach] was able to help me map out a lot of steps towards a goal I had more or less written off as impossible." Coaches encouraged veterans to celebrate small successes and gradual progress, which could help them to stay the course and make meaningful improvements over time:

"[My coach] was very good at making me feel at ease, making sure that I wasn't under any pressure... You don't have to make huge goals or make too many. She was able to construct it to where I was making big goals, but...I was able to see little tiny achievements...[It was] a lot less stressful than it would have been if I would have thought about what was going to happen in six months."

Theme: regular weekly meetings with progress check-in's create accountability. Participants felt that consistent, routine meetings were key to making progress. They were motivated to make changes because they knew they'd be asked about their progress during their next coaching session, and they did not want to let the coach—or themselves—down. One participant explained:

"My coach was somebody I could be accountable to...She gave me the support and held the space for me to actually do it. If I didn't have anybody to tell about my kitchen or my eating dark green leafy vegetables, you know, it's just not going to happen. As soon as you have someone to share it with who cares about you, it happens."

Routine, consistent "check in" opportunities helped stave off procrastination for many veterans. "I wanted to prove that I could do it—to myself *and* to someone else," shared one.

Theme: coaching techniques—including probing, challenging, and holding space—helped veterans gain new perspective. The opportunity to try on different perspectives was important to participants. Veterans explained that coaching helped them to gain perspective and focus, paying attention to feelings, thoughts, and other factors that they might otherwise fail to notice. "Every time we talk, something new opens up," affirmed one veteran.

Coaches would not only "hold space" for thoughtful reflection, but also gently ask probing questions, challenging assumptions and negative self-talk to facilitate new insights:

"Some things you already know about, some you don't; [they] are pretty much latent. [Coaching] helps bring them out and bring them to the forefront. It keeps you on point, it keeps you focused. That's always great. It's like a separate mind. Sometimes [my coach] acts as a sounding board, other time she acts as an incentive."

Some veterans noted the particular value of shifting from a "super soldier" mindset to one more attentive to their personal needs, feelings, and health: "You have to unlearn some things...You can't just push through everything."

Theme: the holistic Circle-of-Health approach engages veterans in new and welcome ways. Several veterans noted that VA's Whole Health program materials were helpful. For example, the "dimensions of wellness" in the VA Circle of Health³² (Table 2) functioned as "signposts along the way." Veterans appreciated the holistic approach that the Circle of Health offered, with attention to mind, body, spirit, and surroundings. A few noted how important it was that they could weave their spiritual and religious values into their coaching plan; they emphasized this was not something they experienced in the healthcare system before. Several felt that the mindful awareness focus and incorporation of mindfulness practices like breathing and meditation helped them get more out of coaching and, in some cases, gave them valuable tools that they continued to use between sessions and after coaching ended. For example, one veteran described how creative visualization exercises, such as prompts to imagine a different possible future, motivated him to stop drinking alcohol: "It was the first time I really thought...I don't want to be this, I'd rather be that."

Theme: flexible program elements allow adaptation to individual needs. Although participants appreciated the structure of the program, many also praised the flexibility built into that structure. They liked that they could have input into the focus of each coaching session, as well as the meeting schedule and frequency (for example, meeting every other week instead of weekly upon request). "Letting me make my own decisions rather than having to go strictly by the book or by the rules...helped me a lot," noted one veteran. Many appreciated having the option to connect with their coach by telephone or in-person, citing the convenience of connecting by phone but also, for some, the importance of making a face-to-face connection. Participants felt that,

overall, the program structure was flexible enough to allow tailoring to their individual needs.

Coaching Relationship

Theme: veterans value a coaching relationship that is collaborative and non-judgmental. Above all, veterans valued having a personal, collaborative, one-on-one relationship with their coach. The characteristics that Veterans praised most in their coaches included their ability to listen with attentiveness and care, their compassion and kindness, their lack of judgment, their supportive and encouraging style, their emphasis on the positive, their approachability, and their authenticity. Although veterans praised the knowledge and professionalism of the coaches, they also described a warmth to the coaching relationship. Most felt a "real and genuine" personal connection, often using familial analogies to describe how close they felt to their coach over time for example, comparing their coach to a brother, a grandma, or a "favorite auntie." "The Whole Health Coach is part of my family, my network, my essential support system," shared one veteran. For others, the coach became a *primary* support person in the absence of supportive personal or familial relationships.

Themes: coach and participant can meet as peers. Multiple veterans articulated a clear contrast between their relationship with their coach and their relationship with other healthcare providers. They described a patientprovider power dynamic present in many healthcare contexts that was not present in the coaching relationship. Coaches met them as an equal and peer, not as a superior or an authority; coaches were there to listen, not to tell. "To have a professional associated with the VA actually listen to me was mind-blowing," confided one veteran. The fact that there was no diagnosis or problem at the root of the coaching relationship also mattered to veterans; they were met as human beings with goals and capabilities to nurture rather than patients with problems and diagnoses to treat. Veterans contrasted their person-centered coaching experience with diagnosis-driven conventional healthcare:

"[Healthcare providers think] everyone has the same issues, the same stories. They want to give you a pill or put you in a program, and none of it is really about you. Like [if] you don't have a substance abuse issue, or you weren't in Vietnam, or you're not suffering with all these conditions that they're familiar with, you don't really have an issue, or you're just kind of pushed to the side."

Coaching, by contrast, "was about *me*. I felt like someone was paying attention to me for the first time in a really long time."

In particular, multiple veterans expressed appreciation for the opportunity to engage in therapeutic self-exploration outside the context of a mental health diagnosis or treatment:

"When you're going to a mental health counselor, you're going because there's something wrong with your mental health, and that's the stigma... A coach is standing there behind you, whispering in your ear, telling you to speed up when you get to the curve and slow down for the last ten yards, whatever it is that coaches throughout life do to help someone reach their potential—you know, teaching and suggesting. And I think, probably, interacting... on a coach basis would probably be in a lot of ways more effective....I can see that there would be real value in coaching taking away the stigma of the mental health professional."

Veterans described an authenticity and even reciprocity in their relationship with their coaches that some had not felt with mental health providers or other healthcare providers in the past.

Theme: participants attribute their positive coaching experience to their specific coach's approach, skill, and personality. Many participants felt that their particular coach was the reason they succeeded, attributing the success of the relationship to the specific skill and personality of their coach. "I think my coach was one of the best that you guys have; I can't imagine anyone being more empathetic and supportive," noted one representative veteran. However, this sentiment was shared among participants working with variety of coaches, suggesting that the desirable characteristics attributed to individual coaches—that they were non-judgmental, positive, encouraging, approachable, relatable, good listeners, and supportive—were at least in part a product of the Whole Health Coaching model and training. Notably, those who worked with veteran coaches felt that their shared military background was important to building camaraderie; however, those who did not work with veteran coaches described similar satisfaction and rapport with their coach and did not bring up lack of veteran status as a concern.

Improvement Opportunities

Theme: participants would prefer a longer or ongoing coaching program. When asked how the program could be improved, a majority of participants said that they felt that eight to ten coaching sessions was not a sufficient number. Many felt that coaching should be

ongoing: "You need that for a lifetime, you're always going to need somebody to talk to and someone to help you through, and be accountable, and pick you up a little bit." Some felt saddened and distressed at the idea of ending their relationship with their coach, comparing it to the withdrawal of a needed medication. "How am I going to fit something in that space so that I keep moving forward without her?," asked one veteran, "It's like taking pain medication [away]; it works, and then it stops, and you're like, 'what?" Some suggested a more gradual tapering of coaching sessions or the addition of other options to support ongoing healing and progress.

Theme: program materials could be confusing and overwhelming for some participants. Although many participants felt the program materials were helpful, a few found VA's Personal Health Inventory¹⁶ (see Tables 1 and 2) to be somewhat overwhelming and confusing, at least at first. Those who offered this critique shared that they could also see the value in proceeding through a structured, holistic self-assessment. For example, one veteran who initially found the Personal Health Inventory to be challenging reflected in retrospect, that "the questions are there for a reason. I think they're also a good gauge to see where I'm at in the whole decision-making process... for the practitioner to know what I need to work on."

Discussion

Our mixed methods evaluation of VA's Whole Health Coaching program provides preliminary evidence for its effectiveness in improving veterans' self-reported mental health, perceived stress, and perceived health competency. Through qualitative interviews, we found high levels of satisfaction with program structure and content, the coach-veteran relationship, and program outcomes. Although self-reported health goals varied widely, veterans were largely satisfied with their progress toward their goals, often describing that progress as incremental and ongoing after coaching.

Prior studies of health coaching interventions have shown coaching to be effective in promoting health behavior change and improving some health outcomes. 10-12,33 In particular, coaching toward a defined purpose to facilitate health behavior change—for example, tobacco cessation, 34,35 increasing physical activity, 12,36,37 or improving diet and weight management 11,12—often results in a significant, measurable impact. However, unlike many coaching programs (and other health behavior interventions), the broad aims of Whole Health Coaching are not defined in advance; they are instead defined by participants in the course of the coaching relationship. This complicates evaluation of Whole Health Coaching's impact: tracking specific chronic disease indicators and health outcome measures (e.g., Body Mass Index, blood pressure, lipid panels) across the participant population may miss the outcomes that are most relevant to participants.

Indeed, our qualitative interviews revealed that the goals of Whole Health Coaching participants were wide-ranging, covering a broad spectrum of topics related to health, quality of life, and well-being. Our survey identified statistically significant, moderate improvements in mental health, stress, and perceived health competency. However, given the diversity and specificity of reported goals, any composite survey is unlikely to have captured the full range of program impacts. The diversity in veterans' reported goals—and the fact that many goals were not directly related to physical health—may also account for the discrepancy between our quantitative and qualitative findings with regard to physical health outcomes. No statistically significant improvements were identified on the PROMIS physical health scale, but many interviewed participants reported meaningful, positive changes in their physical health, including major, life-altering changes. This suggests that qualitative inquiry can play an important role in illuminating hidden impacts in the evaluation of health interventions with participant-defined goals (especially goals developed as a part of the intervention).

To date, systematic and integrative reviews suggest that health coaching interventions vary widely in their techniques, theoretical underpinnings, intervention structure, and goals, and many studies do not explicitly describe or define what health coaching means. 10,12,13 It is thus not surprising that reviews show variability in program outcomes and find it challenging to identify what intervention characteristics are associated with greatest effectiveness. Our qualitative findings lend insight into the aspects of the Whole Health Coaching program that participants believe contribute to its effectiveness (see Table 5). These include empowering veterans to set the agenda for coaching; guiding veterans through a holistic self-assessment of their health and well-being; rooting coaching goals in each participants' mission, aspiration, and purpose; and skill-building with incorporation of mindfulness exercises.

The positive outcomes identified in our study suggest that Whole Health Coaches can fill an important role as integrated members of a patient's care team—a role that is consistent with VA's vision for the program.⁶ Coaches can provide patients with attention and support beyond the patient-provider dyad, helping patients work toward goals developed in collaboration with their providers and incentivizing healthy behavior change. Because of coaching's emphasis on goal-setting and its potential to enhance perceived health competency, coaching may also prime patients to meaningfully engage in shared decision making³⁸ with medical and/or mental health

providers, ideally leading to more realistic, meaningful, and patient-centered care plans.

It is notable that so many Whole Health Coaching participants thought of their coach as providing a therapeutic intervention that, in itself, improved their mental health. It is also notable that some participants—including more than one with longstanding substance abuse problems—reported that coaching helped them to address those problems where prior formal treatment interventions had failed. Interviewees suggested that, because Whole Health Coaching is not diagnosisdriven, it could be an option for veterans who are struggling with stress and mood concerns but are not willing or ready to engage in mental health care. Multiple participants explicitly suggested this, noting that coaching does not carry the potential stigma of mental health care and may thus have a lower barrier to entry for veterans who are reluctant to pursue mental health treatment. Health coaching and psychotherapy are distinct interventions with distinct aims,³⁹ and VA would not suggest that coaching is an appropriate substitute for mental health care. However, some veteran participants did suggest this, and several articulated reasons why they preferred coaching to mental health care. Those reasons included the absence of a clinician-patient power/status differential and a greater focus on strengths than problems.

Participants' primary critique of the Whole Health Coaching program was its short duration. Many felt that the program should be ongoing. Because VA resources are likely not adequate to sustain ongoing, one-on-one coaching, it will be important for VA to explore how coaches can help veterans foster other supportive community connections and transition into these support networks as the coaching relationship comes to an end. VA could also explore creative possibilities to foster longer-term peer support—for example, by connecting coaching graduates to one another in facilitated Whole Health groups. VA has already worked to develop peer-led Whole Health groups, but additional work is needed to explore the integration of such groups with coaching programs.

Strength and Limitations

Our study has several limitations. Our sample size was small and drawn from a single VA site, limiting generalizability. A larger sample would have allowed subgroup comparisons in analyzing survey and interview results. Future studies with larger samples could examine whether veterans with particular demographic or clinical profiles are more likely to report positive coaching outcomes, and whether veterans who set certain types of goals report greater progress. Unfortunately, these comparisons were not possible with our modest

Table 5. Contributors to Program Effectiveness: Qualitative Interview Themes.

Domain	Effective Program Element	Example
Relationship	Non-judgmental, collaborative relationship with coach	"There's no judgment; it never feels like I have to say the right thing, like I can just say whatever it is and work it out from there and maybe hear some feedback."
Collaboration	Patient-defined agenda; taps into motivation; fosters empowerment	"I'm feeling like, yeah, I want to move forward. I want to be empowered and not in despair, not in crisis, not not getting up. It's a positive thing, but it's hard work."
Communication	Absence of clinician/patient power dynamic – meeting as equals	"[I was] 100% in the driver's seat All she had was just suggestions, nothing pushy, not like you have to do it this way, all suggestions to help me hammer out what my own goals were."
Goal-setting	SMART-goal setting keeps goals realistic; facilitates gradual progress	"[My coach] made me realize I was capable of change." "She told me don't set your goals too high, don't set your goals too low, somewhere in between, and that's what I do."
Accountability	Regular weekly meetings with check-in's create accountability	"Having someone kind of check up on meknowing that somebody was kind of watching me, even though there's no judgment or anything on their part, it still kind of helped keep me motivated. I think that was the biggest thing."
Structure	VHA program materials (e.g., Personal Health Inventory) create helpful structure	"The topics were definitely major signposts along the wayI did really enjoy the fact that they ask you questions initially and wrap it up with responses."
Flexibility	Flexible program elements allow adaptation to individual needs (e.g., in-person & telephone options)	"You can tailor it to your needs."
Holism	Focus on mindfulness / mindful awareness and openness to spiritual domain allow authentic, holistic engagement	"Like the name of the program, Whole Health—instead of looking at the illness, it's looking at the person."

sample. Our study also did not include a control group, limiting our ability to attribute observed outcomes to the coaching program. Additionally, our three-month follow-up time point was not sufficient to examine long-term program impacts. Future research should incorporate longer-term follow-up assessments (e.g., six months, one year) to understand whether observed gains are sustained. Finally, the present study was limited to examining coaching impacts among veterans who engaged in the program and completed three or more sessions. To better understand contributors to successful engagement, future studies could assess veterans who enrolled in coaching but never started or dropped out.

Strengths of the present study include the relative diversity of our sample (including a large number of women) and the high participation rate among coaching program enrollees. Arguably, the study's primary strength is its mixed-methods design; qualitative interviews helped in the interpretation of quantitative survey results and shed light on elements of the coaching program that contributed to its effectiveness. We suggest using mixed methods to explore the impact of coaching programs at other sites and in other geographic areas.

Conclusion

Although further research is needed, VA's Whole Health Coaching program is a promising intervention with the potential to help participants improve their lives in the ways that matter most to them. Integrating coaches into healthcare teams may provide patients with needed support to develop personal care plans and make meaning progress toward identified health goals. Whole Health Coaching was designed to serve veterans, but may be considered for adaptation and implementation beyond VA. Practitioners from other clinical professions might also consider adopting aspects of the Whole Health Coaching approach that participants identified as particularly helpful. Motivational interviewing and valuesbased engagement, for example, are already widely used by mental health and primary care providers. 40 But Whole Health Coaching goes a step further in its commitment to a truly patient-driven agenda and its explicit rejection of a hierarchical provider-patient relationship. For the participants in our study, Whole Health Coaching worked in large part because of the warm, supportive relationship that developed between veteran and coach—a relationship that felt authentic and reciprocal to the veterans we interviewed. This may be an ideal to aspire to across healthcare encounters.

Acknowledgments

The authors would like to thank the pilot Whole Health Coaching team, including veteran peer support specialists Rodney Roberson and Carl Schuler; social worker and veteran peer Anna Marie Urbieta, LCSW; social work student and public health professional Ashley Feuchs, MPH; registered nurses Jerrol Kimmel, RN, Thomas Mahoney, RN, Andrea Lynn, RN, and Cynthia Sharp, RN; supervising psychologists Jennifer Manuel, PhD, Asale Hubbard, PhD, and John Sorrell, PhD; and program specialist Winnie DeGuzman. The coaching team is led by author Linda Abadjian, PhD (psychologist).

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: This research was funded by the Veterans Health Administration Health Services Research and Development Quality Improvement Enhancement Research Initiative (QUE15-283). The content is solely the responsibility of the authors and does not necessarily represent the Department of Veterans Affairs or any other institution.

ORCID iD

Natalie Purcell https://orcid.org/0000-0002-0582-9235

References

- United States Department of Veterans Affairs. Veterans Health Administration (Home Page). https://www.va. gov/health/. Published 2020. Accessed March 20, 2020.
- Veterans Affairs Office of Policy and Planning. National Center for Veterans Analysis and Statistics. https://www. va.gov/vetdata/. Published 2017. Accessed January 13, 2018
- Bokhour BG, Haun JN, Hyde J, Charns M, Kligler B. Transforming the veterans affairs to a whole health system of care: time for action and research [published online ahead of print]. *Med Care*. 2020. doi:10.1097/ MLR.00000000000001316
- Shulkin DJ. Beyond the VA crisis: becoming a highperformance network. N Engl J Med. 2016;374(11):1003–1005.
- Veterans Health Administration Office of Patient Centered Care and Cultural Transformation, Pacific Institute for Research and Evaluation. Whole Health Coaching. Whole Health Library. https://wholehealth.wisc.edu/ courses/whole-health-coaching/. Published 2019. Accessed March 20, 2020.
- 6. Veterans Health Administration Office of Patient Centered Care and Cultural Transformation, Pacific Institute for

- Research and Evaluation. Whole Health Coaching Participant Manual. Washington, DC: US Department of Veterans Affairs; 2016.
- 7. Miller WR, Rollnick S. *Motivational Interviewing: Helping People Change*. 3rd ed. New York, NY: Guilford Press; 2013.
- 8. Cooperrider DL, Whitney D, Stavros JM. *Appreciative Inquiry Handbook*. Toronto: Lakeshore Communications, Inc. 2003.
- 9. Snyder CR, Lopez SJ. *Handbook of Positive Psychology*. Oxford: Oxford University Press; 2005.
- 10. Hill B, Richardson B, Skouteris H. Do we know how to design effective health coaching interventions: A systematic review of the state of the literature. *Am J Health Promot AJHP*. 2015;29(5):e158–168.
- 11. Kivelä K, Elo S, Kyngäs H, Kääriäinen M. The effects of health coaching on adult patients with chronic diseases: a systematic review. *Patient Educ Couns*. 2014;97(2):147–157.
- 12. Olsen JM, Nesbitt BJ. Health coaching to improve healthy lifestyle behaviors: an integrative review. *Am J Health Promot AJHP*. 2010;25(1):e1–e12.
- 13. Dejonghe LAL, Becker J, Froboese I, Schaller A. Long-term effectiveness of health coaching in rehabilitation and prevention: a systematic review. *Patient Educ Couns*. 2017;100(9):1643–1653.
- 14. Wolever RQ, Simmons LA, Sforzo GA, et al. A systematic review of the literature on health and wellness coaching: defining a key behavioral intervention in healthcare. *Glob Adv Health Med.* 2013;2(4):38–57.
- 15. Bokhour BG, Haun J, Barker A, et al. Establishing Evidence for the Whole Health System of Care in VA: Directions for Future Research. Washington, DC: Center for Evaluating Patient Centered Care in VA, U.S. Department of Veterans Affairs; 2019.
- Veterans Health Administration Office of Patient Centered Care and Cultural Transformation. Making Your Plan – Whole Health. https://www.va.gov/WHOLEHEALTH/ph i.asp. Published February 5, 2020. Accessed April 3, 2020.
- 17. Smith LL, Lake NH, Simmons LA, Perlman A, Wroth S, Wolever RQ. Integrative health coach training: a model for shifting the paradigm toward patient-centricity and meeting new national prevention goals. *Glob Adv Health Med*. 2013;2(3):66–74.
- 18. Lawson K. The four pillars of health coaching: preserving the heart of a movement. *Glob Adv Health Med.* 2013;2(3):6–8.
- 19. Caldwell KL, Vicidomini D, Wells R, Wolever RQ. Engaging patients in their health care: lessons from a qualitative study on the processes health coaches use to support an active learning paradigm. *Glob Adv Health Med.* 2020;9:216495612090466.
- 20. Caldwell KL, Gray J, Wolever RQ. The process of patient empowerment in integrative health coaching: how does it happen? *Glob Adv Health Med.* 2013;2(3):48–57.
- Wehler C, Wu J, Gaj L, Barker A, Bokhour BG. Whole Health Evaluation Toolkit: A Guide for Assessing Patient Reported Outcomes of the Whole Health System of Care. Washington, DC: Veterans Health Administration; 2018.

22. Cella D, Riley W, Stone A, et al. Initial adult health item banks and first wave testing of the Patient-Reported Outcomes Measurement Information System (PROMISTM) Network: 2005–2008. *J Clin Epidemiol*. 2010;63(11):1179–1194.

- 23. Cohen S, Kamarck T, Mermelstein R. A global measure of perceived stress. *J Health Soc Behav*. 1983;24(4):385–396.
- Bachmann JM, Goggins KM, Nwosu SK, Schildcrout JS, Kripalani S, Wallston KA. Perceived health competence predicts health behavior and health-related quality of life in patients with cardiovascular disease. *Patient Educ Couns.* 2016;99(12):2071–2079.
- 25. Purcell N, Zamora K, Gibson C, et al. Patient experiences with integrated pain care: A qualitative evaluation of one VA's biopsychosocial approach to chronic pain treatment and opioid safety. *Glob Adv Health Med*. 2019;8:2164956119838845.
- 26. Purcell N, Zamora K, Tighe J, Li Y, Douraghi M, Seal K. The Integrated Pain Team: a mixed-methods evaluation of the impact of an embedded interdisciplinary pain care intervention on primary care team satisfaction, confidence, and perceptions of care effectiveness [published online ahead of print October 12, 2017]. *Pain Med.* doi:10.1093/pm/pnx254
- 27. Hamilton AB. Qualitative methods in rapid turn-around health services research. Presented at the: Health Services Research & Development Cyberseminar. http://www.hsrd.research.va.gov/for_researchers/cyber_seminars/archives/video_archive.cfm?SessionID = 780. Published December 11, 2013. Accessed June 3, 2016.
- 28. Hamilton AB. Rapid qualitative analysis: updates/developments. Presented at the: Health Services Research & Development Cyberseminar. https://www.hsrd.research.va.gov/for_researchers/cyber_seminars/archives/video_archive.cfm?SessionID = 3846. Published September 29, 2020. Accessed November 5, 2020.
- Palinkas LA, Mendon SJ, Hamilton AB. Innovations in mixed methods evaluations. *Annu Rev Public Health*. 2019;40:423–442.
- 30. Vindrola-Padros C, Johnson GA. Rapid techniques in qualitative research: a critical review of the literature

- [published online ahead of print July 15, 2020]. *Qual Health Res.* doi:10.1177/1049732320921835
- 31. Taylor B, Henshall C, Kenyon S, Litchfield I, Greenfield S. Can rapid approaches to qualitative analysis deliver timely, valid findings to clinical leaders? A mixed methods study comparing rapid and thematic analysis. *BMJ Open*. 2018;8(10):e019993.
- 32. Veterans Health Administration Office of Patient Centered Care and Cultural Transformation. Whole Health. https://www.va.gov/wholehealth/. Published 2019. Accessed March 20, 2020.
- Cornis-Pop M, Reddy KP. Integrative medicine and health coaching in polytrauma rehabilitation. *Phys Med Rehabil Clin N Am.* 2019;30(1):261–274.
- 34. Boccio M, Sanna RS, Adams SR, et al. Telephone-based coaching. *Am J Health Promot AJHP*. 2017;31(2):136–142.
- 35. Sforzo GA, Kaye M, Ayers GD, Talbert B, Hill M. Effective tobacco cessation via health coaching: an institutional case report. *Glob Adv Health Med.* 2014;3(5):37–44.
- 36. Oliveira JS, Sherrington C, Amorim AB, Dario AB, Tiedemann A. What is the effect of health coaching on physical activity participation in people aged 60 years and over? A systematic review of randomised controlled trials. *Br J Sports Med.* 2017;51(19):1425–1432.
- 37. Williams J, Stubbs B, Richardson S, et al. "Walk this way": results from a pilot randomised controlled trial of a health coaching intervention to reduce sedentary behaviour and increase physical activity in people with serious mental illness. *BMC Psychiatry*. 2019;19(1):287.
- 38. Elwyn G, Frosch D, Thomson R, et al. Shared decision making: a model for clinical practice. *J Gen Intern Med*. 2012;27(10):1361–1367.
- 39. Jordan M, Livingstone JB. Coaching vs psychotherapy in health and wellness: overlap, dissimilarities, and the potential for collaboration. *Glob Adv Health Med*. 2013;2(4):20–27.
- 40. Simmons LA, Wolever RQ. Integrative health coaching and motivational interviewing: synergistic approaches to behavior change in healthcare. *Glob Adv Health Med*. 2013;2(4):28–35.