Challenges and Strategies for Implementing Battlefield Acupuncture in the Veterans Administration: A Qualitative Study of Provider Perspectives

Stephanie L. Taylor, PhD,¹⁻³ Karleen Giannitrapani, PhD,⁴ Princess E. Ackland, PhD,^{5,6} Jesse Holliday, MSW,⁴ Kavitha P. Reddy, MD,⁷ David F. Drake, MD,⁸ Daniel G. Federman, MD,⁹ and Benjamin Kligler, MD¹⁰

ABSTRACT

Objective: Battlefield Acupuncture (BFA) is an auricular needling protocol for pain. More than 1300 Veterans Health Administration (VHA) clinicians have been trained in BFA delivery. However, little is known about how well BFA has been implemented at the VHA. The aim of this research was to identify the challenges providers experience in implementing BFA and to look for any successful strategies used to overcome these challenges.

Materials and Methods: Semistructured telephone interviews were conducted from June 2017 to January 2018, using an interview guide informed by the integrated Promoting Action on Research Implementation in Health Services framework to address several implementation domains: knowledge and attitudes about BFA; professional roles and training in BFA; organization of BFA delivery and resources to provide BFA; and implementation challenges and strategies to address challenges. The interviews were analyzed, using a grounded theory-informed approach. This research was conducted at 20 VHA facilities and involved 23 VHA BFA providers nationwide.

Results: Nine main implementation themes were identified: (1) providers organizing BFA delivery in various ways; (2) insufficient time to provide BFA to meet patient demand; (3) beliefs and knowledge about BFA; (4) lack of BFA indication guidelines or effectiveness data; (5) self-efficacy; (6) time delay between training and practice; (7) limited access to resources; (8) key role of leadership and administrative buy-in, and (9) written consent an unwarranted documentation burden. Providers offered some possible strategies to address these issues.

¹Center for the Study of Healthcare Innovation, Implementation and Policy, Greater Los Angeles Healthcare System, Los Angeles, CA.

²Veterans Administration Greater Los Angeles—Health Services Research & Development, Los Angeles, CA..

³Department of Health Policy and Management, University of California—Los Angeles School of Public Health, Los Angeles, CA.

⁴Center for Innovation to Implementation, Palo Alto Veterans Administration Healthcare System, Palo Alto, CA.

⁵Center for Chronic Disease and Outcomes Research, Minneapolis Veterans Administration Health Care System, Minneapolis, MN.

⁶Department of Medicine, University of Minnesota, Minneapolis, MN.

⁷Integrative Health Coordinating Center, Office of Patient-Centered Care and Cultural Transformation, Washington, DC.

⁸Interventional Pain Clinic, Hunter Holmes McGuire Veterans Administration Medical Center, Washington, DC.

⁹Veterans Administration Connecticut Healthcare System, New Haven, CT.

¹⁰Integrative Health Coordinating Center, Veterans Administration Office of Patient Centered Care and Cultural Transformation, Washington, DC.

The views expressed in this article are those of the authors and do not necessarily represent the position or policy of the Department of Veterans Affairs or the United States government.

An earlier version of this work was accepted for presentation as part of a panel and a poster at the 2018 International Congress on Integrative Medicine and Health in Baltimore, MD, on May 9, 2018.

CME available online at www.medicalacupuncture.org/cme Questions on page 260.

Conclusions: System- and provider-level challenges can impede BFA implementation. However, several providers discovered strategies to address some challenges that can be used within and outside the VHA, which, in turn, might improve access to this potentially promising pain-management intervention.

Keywords: pain, auricular acupuncture, Battlefield Acupuncture, complementary and alternative medicine

INTRODUCTION

BATTLEFIELD ACUPUNCTURE (BFA) is an auricular (ear) acupuncture procedure that has been used by the military in garrison, in active combat, and in the Veterans Health Administration (VHA) for pain. During BFA, patients undergo the sequential insertion of up to 10 auricular semi-permanent needles in each of 5 bilateral, acupuncture points. BFA has been shown in pilot and case studies to reduce pain intensity and potentially reduce pain medication use.¹⁻⁴ BFA has been used in the Department of Defense (DoD) for more than 15 years on active-duty service members, their family members, and retirees, although BFA was introduced into the VHA in the last few years.⁵⁻⁷ BFA can be learned easily by nonacupuncturist providers. In the VHA, clinicians of various disciplines (e.g., MDs, DOs, PAs, nurse-practitioners) can currently be privileged to provide it as long as it is in accordance with their state licensures and scopes of practice.

In a national effort to promote nonpharmacologic pain-management care, research clinicians at the DoD and the VHA received funding to train VHA and DOD non-acupuncture providers in BFA, with the goal of integrating BFA into existing pain-management care in VHA and DoD facilities.² In the VHA, that effort used a “train-the-trainer” model to first train 49 VHA providers as instructors, who then trained ~1300 additional VHA providers in BFA between 2015 and 2016.

However, the implementation and sustainment of BFA within VHA care has been highly variable, according to anecdotal reports. Given the potential of BFA to be a safe, nonpharmacologic pain-treatment option that can be delivered by many providers, a qualitative examination was conducted of challenges that providers have had in implementing BFA within the VHA and of any strategies these providers used to resolve these challenges. Gaining a better understanding of—and subsequently disseminating—this information could facilitate the integration of BFA within the VHA and elsewhere.

MATERIALS AND METHODS

Semistructured telephone interviews were conducted with VHA BFA providers between June 2017 and January 2018. All study procedures received a waiver from the institutional review boards at the Veterans Administration

(VA) Greater Los Angeles Healthcare, Los Angeles, CA, and VA Palo Alto Healthcare, Palo Alto, CA, systems with the understanding that interviews were conducted for VHA quality-improvement purposes.

Participant Recruitment

A targeted, criteria-based recruitment strategy was used, followed by snowball sampling to recruit and interview 23 BFA providers from 20 VHA medical centers and community-based outpatient clinics spread across the nation. These providers were VHA clinicians (e.g., primary care physicians, chiropractors, LAcS, and other providers with additional training in acupuncture) embedded in a variety of environments (e.g., pain clinics, integrative health clinics, primary care, acupuncture clinics), who were trained to deliver BFA and who then trained other VHA clinicians regionally.

To begin, a list of the original 49 BFA providers who were trained as BFA instructors was obtained from the VHA’s central office; these providers were sent a recruitment e-mail regarding the study. Of the 49 providers, the first 14 instructors who responded to the e-mail were given 30-minute, semistructured, individual telephone interviews. Theme saturation (when the same information was repeated several times) was reached by the time the tenth instructor was interviewed. Thus, interviewing was stopped after the fourteenth instructor, instead of pursuing recruitment of additional instructors via a second recruitment e-mail or telephone calls. At the end of these interviews, the names of providers whom these instructors had trained were asked for, so that the providers could be recruited for interviews. The goal was to broaden the sample beyond only instructors (early adopters) to also include providers to whom BFA had spread. Many provider trainee names were received, but interviewing was stopped after the ninth trainee, because, again, theme saturation was reached very early. snowball sampling recruitment was relied upon instead of randomly selecting a portion of the 1300 provider trainees, because a list of such trainees did not exist. The final sample size was 23 participants (17 physicians from multiple disciplines, 4 acupuncturists, and 2 nurses).

Data Collection

The seminal integrated Promoting Action on Research Implementation in Health Services (i-PARIHS) framework

was used to inform the development of the interview guide to help ensure that 3 key implementation domains were addressed. The i-PARIHS framework posits that the (1) *recipients* of an implementation effort (i.e., VHA providers); (2) system factors or *context*; and (3) the *innovation* itself (e.g., BFA) all can affect implementation success.⁸ The guide had queries in the following domains: knowledge and attitudes about BFA (*innovation*); professional roles and training in BFA (*recipients*); organization of delivery and resources to provide BFA (*context*); any additional implementation challenges (*innovation/recipients/context*), and implementation strategies to address challenges. Examples of interview questions included:

- “Why did you decide to get trained in BFA?”
- “Tell me about any challenges your facility encountered in the process of providing BFA.”
- “What, if anything, has been done to overcome these barriers?”
- “What has really helped with implementing BFA in your facility?”

Additional probing included if the following domains helped or hindered implementation: leadership support (i.e., attitudes, direct involvement, staff release time); resources (i.e., space, funds, administrative support); having staff or provider champions; provider attitudes; staff attitudes; veteran attitudes; marketing; and ability to capture workload credit for delivering BFA in administrative records. Interviews ranged from 20 to 65 minutes and verbal consent was obtained to record at the start of the interviews. All interviews were audio-recorded and transcribed verbatim, and any identifying information was removed.

Data Analysis

Atlas.ti, version 7, a qualitative analytical software, was used to analyze the transcripts.⁹ The approach involved a 2-step process. First, *a priori* codes¹⁰ that corresponded with the interview-guide domains (e.g., knowledge and attitudes about BFA) were applied to all 23 transcripts. Any coding discrepancies were discussed at weekly meetings until consensus was reached.¹¹ Next, 2 members of the research team (K.G. and J.H.) reviewed the output from the coded interview transcripts, using a grounded theory-informed approach.¹² For that, open coding was used to identify emergent codes and subcodes relating to BFA implementation themes. Open coding is the process of labeling text based on its content rather than the reader's preconceived categories. It allows investigators to identify additional data relevant to their specific aims from the perspective of the interview respondent. Specifically, 4 research team members (K.G., J.H., P.E.A., and S.L.T.) engaged in constant comparison of the open coded-outputs to identify broad implementation themes around challenges faced in attempting to deliver BFA and strategies used to address these challenges.

RESULTS

As shown below, 9 main BFA implementation themes emerged, with most providers expressing multiple issues. For example:

“Basically, you have to have people trained who like the technique [provider attitudes]. They have to try it, and they have to like it. Then, they have to have time [resources]. Then, they have to have space [resources]. And, it's better if it's embedded in some type of context [organization of BFA delivery].”

“Getting administration to understand the effect of [BFA], and room limits and time limits; those are the three big things [implementation issues].”

There were also individual subthemes and corresponding strategies to overcome implementation challenges under each theme. The majority of themes have implications for other healthcare systems, but some are more salient to the VHA.

Theme 1: Providers Are Organizing BFA Delivery in a Variety of Ways

Providers are struggling with how to organize BFA delivery best to meet the high levels of patient demand. For example:

“I'll tell you the challenge that we have is once they find out, word-of-mouth—and it's generally by word-of-mouth—about Battlefield Acupuncture, we have a lot of requests from either people walking in or other services co-sign us requesting that their patient is requesting acupuncture or BFA. The challenge is being able to get all of those patients in, in a timely manner. ... we're looking at all of those initiatives and how we can best address that in a workshop format, where we have a larger area, a larger crowd as far as veterans, able to attend.”

As shown below, there was variation in how providers believed the provision of BFA should be organized. For example, some felt that delivering BFA at several locations in a facility by providers from various disciplines facilitated implementation, while other providers thought it was important to provide BFA within one existing integrative health program or to have dedicated BFA personnel. Some institutions also provided BFA in group or walk-in clinics to address high levels of patient demand and utilized nurses to administer BFA or document its use to relieve MDs' time burden (as detailed in Theme 2).

Strategy 1a: Provide BFA as one part of the approach to treat pain. Most providers felt that BFA should be offered in conjunction with other pain-management treatment options, not as a stand-alone treatment, given the generally short-term effects of BFA. For example:

“It's not clear yet, in my opinion and from my review, if people have chronic pain and you can make them better for 3–7 days, is that meaningful and useful to them? Dr. XXX's

opinion, and I tend to agree with it, is that the Battlefield Acupuncture should be integrated into a kind-of more whole pain-treatment approach."

Some providers suggested that they should be transparent with patients about what they consider to be the goal of BFA, which is to ease pain temporarily while subsequent longer-term pain-management treatments are considered.

Strategy 1b: Incorporate BFA into the existing infrastructure. At some sites, providers advocated integrating BFA in one or more existing clinics, such as a pain- or mental health-clinic. One provider said: *"Critical for success, I think is having a program that's already set up, [to] work this [BFA] in. You have to have a previous existing structure [e.g., pain clinic, mental health clinics] where [BFA] kind-of fits the need. ... you have to be looking at integrative health totally and put [BFA] in there as part of it."*

Some providers suggested incorporating BFA specifically into a mind-body wellness program. Some responses were:

"It's an integrative clinic...without the other stuff going along with it [BFA]. ... you don't get really the full benefits you might as part of an integrative program."

"You just can't say 'oh, we're going to do BFA for whatever.' So, creating a structure where it fits in, which is kind-of what we're doing—integrative health with supplements and mindfulness and diet and self-management starting—and doing BFA as an add-on as opposed to saying, 'oh, you know, you want us to heal somebody and do a procedure.' I mean, because the problem is the primary-care folks [who] learn it just don't get it in terms of how it fits in with everything else. In terms of overall coordination, trying to create the model of integrative care and then put this as part of [it] as opposed to having [BFA] as a stand-alone [treatment] makes a lot more sense in terms of adopting [it]."

Other providers also emphasized that multiple services (e.g., mental health or nursing), not only primary care, should be involved in integrating BFA into the infrastructure and, to do so, one needs to have solid relationships with key influencers from those services. One provider recommended to *"incorporate [BFA] with somebody from mental health and nursing—at least those two—in order to get the most bang from your buck."* Another provider commented:

"I think, [in] a lot of places the integration of the different services isn't as robust as it is here. The [emergency room] doctors [are] doing this in the hospital. We're doing this at home-based healthcare. We're doing this in our nursing home. And I'm not sure what the answer is to get that kind of integration. I think you have to have the relationship with these other services for them to want to try to do this. I think that's maybe the hardest thing to get."

Strategy 1c. Establish a separate BFA clinic in addition to allowing individual providers to deliver BFA in their own clinics. Suggestions included:

"[H]ave a BFA clinic that is open for 2 hours per week for either walk-in or [to] schedule a certain number of veterans per half hour, and staff [the clinic] by the various providers in the facility who are trained in BFA. If you have 4 trained, they only have to devote 2 hours per month to BFA, [and] if 8 are trained, 2 hours every 2 months. This is a great way to increase capacity. Of course, this does not mean that a provider is not able to use the procedure in [his or her] own clinic, but [this] allows a space for everyone to get the treatment outside of an individual provider's regular clinic."

"I've heard of places that kind-of have drop-in/walk-in clinic once a week. ... with several providers who can do the protocol, and people can come in, and you could just serve a lot of people that way; I think that would be great."

Strategy 1d: Dedicate specific personnel to deliver BFA. Some facilities are dedicating a specific person for providing BFA, as opposed to having several people deliver BFA. One provider said that

"we have an established acupuncturist, and so, it's 1 person, full-time...that's [that person's] duty as opposed to somebody who maybe is doing it, you know, an hour on Monday and 2 hours on Thursday. It's just very clear that there is a person there who is doing this—you know what I mean? I think that's what makes it so sustainable is that it's just—you know—not a collateral duty, it's my duty."

Strategy 1e: Encourage nonphysician clinicians to provide BFA. If the state allows it, encourage nonphysician clinicians to practice BFA. As noted below and under Strategy 2c, nurses and other non-MDs can provide BFA to relieve the time burden for MDs. One provider asked: *"We train people in the DoD with no [prior] medical training; why can't we train...physical therapists, if they wanted to do it? And just regular nurses...this is less invasive than drawing blood; why limit it?"*

Theme 2: Providers Have Insufficient Time to Provide BFA to Meet Patient Demand

Many providers stated that time constraints prevented them from being able to deliver BFA. Some providers reported that their facilities had large patient demands for BFA.

Barrier 2a: Providers perceive that they are too busy to provide BFA. BFA takes only a few minutes to administer and can be performed while interviewing a patient. However, some primary-care physicians feel too overwhelmed to be able to provide regular BFA treatment. Some said:

"So, those are the hurdles. ... just getting over the mental barrier of using it and demonstrating to yourself it's not going to add that much time to your workday in order to do a treatment. ..."

"We probably have 100 people that we've trained now and I bet 25 or 30 are actually using it. You can train a primary-care doctor but, unless you give [these doctors] time to do this, it's probably not going to happen. You're just not going to throw something extra on their plate[s]. 'Here's some extra work. We're not going to do anything for you for it.'"

Strategies 2a. Some providers suggested that recent BFA trainees should participate in an existing BFA clinic to become more competent and, in turn, realize that BFA can actually be administered relatively quickly. Other providers suggested 2 additional strategies to address this barrier that were presented in Theme 1 (*organization of BFA delivery*): (1) dedicate specific personnel to deliver BFA, and (2) encourage RNs, where allowed by states' scopes of practice, to provide BFA or assist with documentation.

Barrier 2b: Excess patient demand can be daunting. Patient demand is related to the issue of provider supply. Many providers were concerned about publicizing BFA availability, because they would be "overwhelmed by patient demand." One provider said: *"I didn't open up a consult service because it was going to be too overwhelming if I did that. So, I think, for people to get started, they need some way to manage their schedules so they don't get inundated."*

Strategy 2b:. In addition to training many clinicians to provide BFA (as noted above in Theme 1), some providers reported addressing high patient demand by setting-up walk-in clinics (as noted above in Theme 1) or scheduling group visits delivered by MDs or non-MDs. One provider said that *"your primary-care providers don't have any time to do anything extra at all. So, we do most of our BFA, I'd say, pretty much exclusively now, as group visits and the group visits are facilitated by nurses."*

Theme 3: Provider Beliefs and Knowledge About BFA

Barrier 3a: Provider beliefs that BFA is not effective in the long term. Almost all providers indicated that, as an isolated therapy, BFA's window of effectiveness is immediate and might not persist over time: One provider reported that *"the treatment takes care of pain for about as long as the pins are in the ear, which is typically about a week. And after the week is out, it's our impression that the pain kind-of comes back to baseline."*

Nevertheless, many providers still deliver BFA because they felt that it was simple to deliver and had a meaningful immediate effect on pain relief. One said: *"It's just simple, and it doesn't take much time, and people get really great relief with it."*

Barrier 3b: Provider beliefs that BFA may not be not comfortable. Several providers reported that their patients felt that using Aiguille Semi-Permanente (ASP) needles ("gold studs") for BFA was uncomfortable: *"I have a lot of people say that [BFA needles] really hurt, and they don't want it again. The ASP needles are painful."*

One BFA-trained provider did not practice BFA because she felt uncomfortable receiving it herself and, thus, did not incorporate it in her own practice. One provider explained:

"One of them was my colleague, Dr. XX, who, as a physical medicine rehabilitation physician, treats people with pain...received training. When she was done with the training, she never applied it, and I asked her why and she said, 'Well, I didn't like it on me.' Because part of the training, of course, is that you put the needles in someone else's ears, and you get it in your own ear[s]. So, she didn't like the feeling in her own ear[s], so that was that."

However, providers generally thought that BFA benefit outweighed this discomfort.

Strategy 3b: Incorporate alternative, less-painful needling choices in BFA training. Strategies used to address the discomfort caused by ASP needles included delivering BFA with standard acupuncture needles, which are thinner than BFA needles but cannot be left in the ear, or using press tacks, ear seeds, or magnets. For example: *"I also teach how to use the small, little needles because it makes it much more flexible. When you just teach gold studs [ASP needles] some of the patients aren't going to like it, it hurts; they don't want to come back for it. If you teach using also with the small needles, then you have an option of saying: 'Hey, let me just try these needles. We can convert to the gold studs if you want.'"*

Theme 4: Lack of BFA Effectiveness Data

As BFA is a relatively new protocol, BFA-trained providers often cite the dearth of evidence supporting its use for particular types of pain: *"We don't really know what the patient response is, because we only know what patients tell us if they return to us. And, if you treat [patients], and they feel better, and then they don't feel better, and they decide not to come back, there's no information. So, ... what is this therapy and what does it actually do?"*

Theme 5: Provider Self-Efficacy in Being Able to Deliver BFA

Some providers struggled to overcome mental hurdles around the ability to practice BFA—a new skill—with confidence. This confidence to perform—or self-efficacy^{12,13}—was especially evident for providers who faced a lengthy time delay between training and getting privileged (see Theme 6 below).

Strategy 5. Promote self-efficacy through practice right after training. One provider said: “You have to not be shy about fitting it in when you’re treating a patient, and, once you get over the hurdle of doing your first 1 or 2, you’re as experienced as you need to be to make use of it.” Another provider reported: “There’s kind of a sweet spot after training where you want to jump in there and start using it right [away]. ... if you don’t use it, you’re going to be hesitant to use it.”

Theme 6: Time Delay Between Training and Practice

The issues regarding the often-lengthy licensing and credentialing processes within the VHA can lead to delays in practice and subsequent diminished self-efficacy in being able to deliver BFA.

Barrier 6a: Lack of awareness of state acupuncture licensing regulations. Acupuncture regulations are established at the state level, and there is variation in whether or not states allow nurses or other nonacupuncturist licensed clinicians to provide acupuncture as part of their licensed scopes. As a federal institution, the VHA allows most types of providers to hold their professional licenses in one state but to practice in another. This disparity between the state regulations and VHA federal policy means that clinicians who originally received their acupuncture privileges in one state—where scope of practice regulations allowed them to practice BFA under their professional licenses—and subsequently moved to a new state could encounter barriers.

First, for BFA providers whose original licensing states allowed them to practice BFA but whose new states *did not allow this*, several providers said that they were unaware of these state regulations, so they were trained but unable to practice BFA. Second, among providers who moved to states that *did* allow acupuncture in their scopes of practice, many providers were unaware that they would need to apply for licensure in their new states to actually practice BFA—they thought the old states’ licenses would suffice. As such, these providers received BFA training but had to wait months to get licensed in their new states, reducing their self-efficacy in being able to deliver BFA. One provider said:

“The challenge of training people right is that, first of all, you have to know that your providers can do acupuncture, and it’s a double-bind. Their state[s] of licensure [have] to allow [these providers] to do acupuncture and their state[s] of location [have] to allow them to do acupuncture. They have to figure out if the professions that they want to be trained [in] have the ability by their scopes [of practice] to do acupuncture. Otherwise, you train somebody, and then it takes 6–9 months ... to get that all in place, and then they have forgotten their training.”

Barrier 6b: Local VA credentialing processes can be lengthy. Almost all providers commented that the local credentialing process was so lengthy that it caused significant delays between training and practice. One provider commented: “Getting credentialing. ... I’m not here enough to push it the way I want to, but we’re at a dead...stop. Like we had it so that people were trained in like March and April [6 months ago], and not a single person has been able to use it. ...” Another provider said: “But the credentialing is like this major thing, and, unless you have somebody who is super motivated, it’s just going to stop. It’s going to stop the momentum completely, which is exactly what happened here.”

Strategy 6b: Sequence training after eligibility has been determined. Almost all providers emphasized the importance of getting trained only after first determining if one is able to be credentialed in his or her state, and speaking with the credentialing officers in advance to streamline the otherwise often-lengthy process. One provider advised: “One [strategy] is to get the people who do the credentialing on board beforehand. Because I was all excited when I got this BFA training, and then that was in June. ... And then I think it was October before I got credentialed to do it.”

Theme 7: Need for Sufficient Resources to Deliver BFA

Theme 7a. Some providers have difficulty purchasing needles. Although probably it is an issue specific to the VHA—and only at some locations—a few providers experienced challenges obtaining acupuncture needles to practice BFA. One provider reported that “getting the needles is another thing. ... [the hospital administration] ordered needles 2 months ago, and I still haven’t seen them. But that’s like an institutional thing, I’m sure.” Many times, the shortage of needles was due to the large uptake in demand that many providers experienced.

Theme 7b. Having sufficient space to deliver BFA is a current challenge. A few providers said that they had difficulties obtaining adequate space to meet patient demand. One said that “[b]ecause right now and in the space that we have, we’re only able—I think capacitywise—[to handle] about 25 [total veterans].” Another provider reported that “[g]etting administration to understand the effect of [BFA], and room limits, and time limits—those are the three big things [implementation issues].”

Theme 8: Leadership and Administration Buy-In is Key

Providers stressed the importance of obtaining buy-in from administrators and leadership, which is a strategy for addressing multiple challenges. For example, such a buy-in

can help address insufficient staffing, having protected time to deliver BFA, purchasing sufficient supplies, and shortening the often-lengthy credentialing process, as noted above. One provider said: *“The other [key to implementation] is just making sure that you have buy-in from your leadership that you’re good to go and to use it.”*

Theme 9: Written Consent for BFA Can Be an Unwarranted Documentation Burden

Until September 2017, the VHA required providers to obtain written consent from BFA recipients, as they do from all acupuncture recipients, using an electronic written-consent documentation process that took 5–10 minutes to complete. Some BFA providers expressed frustration with that process, with some feeling it was unwarranted for BFA.

DISCUSSION

The BFA-trained providers in this study encountered various challenges when attempting to implement BFA in their VHA facilities. Nine main implementation themes were identified:

- (1) Providers are organizing BFA delivery in a variety of ways.
- (2) Providers have insufficient time to provide BFA to meet patient demand.
- (3) Provider beliefs and knowledge about BFA include concerns about lack of long-term pain relief and patient discomfort with ASP needles.
- (4) Providers perceive a lack of BFA indication guidelines or effectiveness data.
- (5) Some providers experience poor self-efficacy in delivering this new skill.
- (6) Some providers experience a time delay between training and practice.
- (7) Some providers have limited access to resources.
- (8) Leadership and administrative buy-in is key.
- (9) Written consent can be an unwarranted documentation burden.

Given that BFA is a new skill to many providers and is being implemented in a wide variety of VHA settings across the nation, it is not surprising that providers face numerous issues when attempting to deliver it. Some providers offered possible strategies to address these issues.

One of the most salient issues was how to organize BFA delivery. Some institutions have created separate clinics to deliver BFA, while other institutions have integrated BFA into existing clinics or programs (e.g., a pain clinic is able to offer BFA as one of many pain-treatment options) or into mind–body programs specifically (to be able to offer a variety of complementary and integrative health approaches for pain). In addition, to address high patient demand, some

institutions offer walk-in clinics or group visits,³ as group visits have been shown to be effective and efficient for treating patients with chronic conditions.¹³ Other institutions emphasized the importance of protecting provider time by using blocked clinic time for BFA delivery, dedicated BFA providers, and/or credentialing nonphysician clinicians to handle the documentation required so that providers could focus on delivering BFA.

To address some of the issues presented here, the VHA and other healthcare systems wanting to offer BFA might consider modifying BFA delivery requirements or training for interested providers and their facility leadership and administrators. Some of these modifications have already been made subsequent to the interviews for the current study. For example, the VHA changed its patient-consent requirement from written to oral in September 2017, when the VHA determined that BFA was a low-risk stand-alone treatment. To address the discomfort some patients reported, the VHA is also beginning to incorporate other needle options into training.

In addition, to help reduce physician burden and increase the number of providers able to deliver BFA, the VHA could support additional training for both new providers wanting to deliver BFA, which could include a wide variety of clinicians, and refresher courses for previously trained providers, and the content of these courses could review the latest evidence. However, both facility administrators and clinicians should first be aware of their eligibility per their states’ licensure requirements. Also, the VHA now allows advanced-practice RNs to perform BFA under their scopes in any VHA in the nation as long as their facilities have passed full practice authority. Additionally, the VHA could suggest a more-standardized approach to BFA credentialing and privileging for dissemination across the individual VHA medical centers.

This study should be considered in light of the following limitations discussed below.

First, only the first 14 provider–instructors who replied to the study invitation were interviewed; this means that only the perspectives of those with strong beliefs (positive or negative) about the BFA implementation process or BFA itself might have been captured. Also, use of a convenience sample instead of a random sample of provider trainees means that the results might not reflect those of all BFA provider trainees. However, it was not possible to obtain a random sample, given that a list of all provider trainees was unavailable. Nevertheless, theme saturation was reached in both provider groups early, so interviewing additional providers would most likely not have netted new information. In addition, this study sample did represent providers from a variety of disciplines, practicing in either large medical centers or community based outpatient clinics, within a range of BFA delivery models.

Another limitation is that BFA is predominately available in only VHA and DoD settings and, as such some themes

may be VHA- or DoD-specific. Other themes might have more universal applicability that is not VHA healthcare system-specific.

CONCLUSIONS

In implementing BFA, VHA providers are finding benefit in delivering BFA, using a variety of models, some of which were considered specifically to address providers' perceived lack of time and high levels of patient demand. Thus, clearly, one BFA delivery model does not fit all needs. Providers also are experiencing a few challenges while implementing BFA in their facilities. However, these providers offered a few strategies to overcome those challenges. Given that many providers' beliefs about BFA offering immediate, short-term pain relief, it is important for providers to offer BFA as one tool in the toolkit to address patients' pain. Some patients might benefit from the immediate, short-term relief that BFA can provide while trying other, more long-acting approaches, depending on the causes of their pain.

This study examined the implementation of an innovative, potentially effective, short-term pain-management option. However, the important word/concept is *potentially*, as little research has yet been published on this intervention.¹⁻⁷ The VHA's National Pain Management Office initially implemented BFA, because the anecdotal evidence originating from the DoD's experiences in the military arena was very positive. Given the prevalence of pain among veterans, BFA has the potential to be helpful to them too, and perhaps to the larger population of persons in pain. As such, this study offers a glimpse into the issues that providers face in implementing an innovative practice. The results might offer insights that could be considered by other healthcare settings where there is interest in offering patients another pain-management option.

ACKNOWLEDGMENTS

The authors want to acknowledge and thank all providers who agreed to participate in the interviews and acknowledge the input from Juli Olson, DC, LAc, VA National Lead, in Acupuncture. This work was supported by the Department of Veterans Affairs Quality Enhancement Research Initiative program (PEC 16-354). All VHA authors of this article attest that the activities that resulted in producing it were not conducted as part of a "research project," but as part of the nonresearch evaluation conducted under the authority of name of the VA Office of Patient Centered Care and Cultural Transformation. The status of this work as quality improvement and not as "research" was also confirmed following review by the Research and Development Committee at the VA Greater Los Angeles Healthcare System.

AUTHOR DISCLOSURE STATEMENT

No financial conflicts of interest exist.

REFERENCES

1. Goertz CM, Niemtow R, Burns SM, Fritts MJ, Crawford CC, Jonas WB. Auricular acupuncture in the treatment of acute pain syndromes: A pilot study. *Mil Med.* 2006;171(10):1010-1014.
2. Niemtow R, Baxter J, Gallagher RM, et al. Building capacity for complementary and integrative medicine through a large, cross-agency, acupuncture training program: Lessons learned from a Military Health System and Veterans Health Administration joint initiative project. *Mil Med.* 2018 [Epub ahead of print]; DOI: 10.1093/milmed/usy028.
3. Federman DG, Poulin LM, Ruser CB, Kravetz JD. Implementation of shared medical appointments to offer Battlefield Acupuncture efficiently to veterans with pain. *Acupunct Med.* 2018;36(2):124-126.
4. Guthrie RM, Chorba R. Physical therapy treatment of chronic neck pain: A discussion and case study using dry needling and Battlefield Acupuncture. *J Spec Oper Med.* 2016;16(1):1-5.
5. Murakami M, Fox L, Dijkers MP. Ear acupuncture for immediate pain relief—a systematic review and meta-analysis of randomized controlled trials. *Pain Med.* 2017;18(3):551-564.
6. King HC, Hickey AH, Connelly C. Auricular acupuncture: A brief introduction for military providers. *Mil Med.* 2013; 178(8):867-874.
7. Pickett H. Battlefield Acupuncture. *J Chin Med.* 2011;96:12-17.
8. Harvey G, Kitson A. PARIHS re-visited: introducing the iPAR-IHS framework. In: Harvey G, Kitson A, eds. *Implementing Evidence-Based Practice in Healthcare: A facilitation guide.* Oxfordshire, England: Routledge; 2015:25-46.
9. ATLAS.ti. 7th ed. Berlin, Germany: Scientific Software Development; 2015.
10. MacQueen KM, McLellan E, Kay K, Milstein B. Codebook development for team-based qualitative analysis. *CAM J.* 1998;10(2):31-36.
11. Bernard HR, Wutich A, Ryan GW. *Analyzing Qualitative Data: Systematic Approaches.* Thousand Oaks, CA: Sage; 2016.
12. Glasser B, Strauss A. *The Discovery of Grounded Theory: Strategies for Qualitative Research.* New York: Adline De Gruyter; 1967.
13. Quiñones AR, Richardson J, Freeman M, Fu R, O'Neil ME, Motu'apuaka M, Kansagara D. Educational group visits for the management of chronic health conditions: a systematic review. *Patient Educ Couns.* 2014;95(1):3-29.

Address correspondence to:

Stephanie L. Taylor, PhD
Veterans Administration Greater Los Angeles
Health Services Research & Development
11301 Wilshire Building 206, 2nd Floor
Los Angeles, CA 90073

E-mail: stephanie.taylor8@va.gov

(CME follows →)

**To receive CME credit, you must complete the quiz
online at: www.medicalacupuncture.org/cme**

CME Quiz Questions

Article learning objectives:

After studying this article, participants should be able to appraise the effort to implement a standardized acupuncture protocol into a large government administered health care system; assess the reported experience of healthcare givers in the effort to implement a standardized acupuncture protocol into a large government administered healthcare system; and examine proposed strategies for meeting challenges identified in the effort to implement a standardized acupuncture protocol into a federally administered healthcare system.

Publication date: October 4, 2018

Expiration date: October 31, 2019

Disclosure Information:

Authors have nothing to disclose.

Richard C. Niemtzow, MD, PhD, MPH, Editor-in-Chief, has nothing to disclose.

Questions:

1. Identify the *incorrect* statement:
 - a. Battlefield acupuncture (BFA) is an auricular acupuncture procedure that has been used by the military.
 - b. BFA involves the sequential insertion of ten semi-permanent needles into bilateral auricular points.
 - c. BFA has been used for fifteen years in the Department of Defense (DoD) on active duty members, family members, and veterans.
 - d. BFA was recently officially introduced to the Veterans Administration system.
 - e. BFA is a procedure that requires extensive training in acupuncture in order to administer properly.
2. Identify the *incorrect* statement:
 - a. Introduction of BFA into the VA system is part of a national effort to promote non-pharmacological pain management.
 - b. Training in BFA was initiated by research clinicians at the VA and DoD.
 - c. The project trained non-acupuncture providers at DoD and the VA in BFA.
 - d. The program training model used licensed acupuncturists to train all providers.
 - e. The goal was to integrate BFA into existing pain management care at existing DoD and VA facilities.
3. Identify the *incorrect* statement:
 - a. The authors conducted a qualitative examination of challenges that providers have had in implementing BFA within the VA and any strategies they used to resolve these challenges.
 - b. BFA providers were VA clinicians including primary care physicians, chiropractors, licensed acupuncturists, and others with additional training in acupuncture.
 - c. The primary data collection tool utilized in this study was a written survey with multiple choice answer options.
 - d. Interviewed healthcare providers were working in a variety of environments in the VA including pain clinics, integrative health clinics, primary care, acupuncture clinics.
 - e. The program used a 'train the trainer model' to train VA clinicians.
4. Identify the *incorrect* statement:
 - a. Nine BFA implementation themes were identified.
 - b. BFA was identified as best being offered through a stand-alone treatment facility dedicated to this treatment approach.
 - c. Providers were struggling with how best to organize BFA delivery to meet the high levels of patient demand.
 - d. An important strategy identified was the inclusion of BFA in conjunction with other pain management options.
 - e. Because of generally short-term effects of BFA, strategically BFA has a role as part of a comprehensive pain treatment approach, rather than as a stand-alone treatment.
5. Identify the *incorrect* statement:
 - a. Written consent documentation was identified as a helpful step in patient utilization of BFA.

- b. An important implementation theme identified by providers was the lack of BFA effectiveness data.
- c. Lengthy credentialing processes were perceived as contributing to a time delay between BFA training and practice.
- d. Time delay between BFA training and practice was related to differences in state acupuncture regulations.
- e. Many providers believe that BFA is primarily helpful as short-term pain relief.

Continuing Medical Education – Journal Based CME Objectives:

Articles in *Medical Acupuncture* will focus on acupuncture research through controlled studies (comparative effectiveness or randomized trials); provide systematic reviews and meta-analysis of existing systematic reviews of acupuncture research and provide basic education on how to perform various types and styles of acupuncture. Participants in this journal-based CME activity should be able to demonstrate increased understanding of the material specific to the article featured and be able to apply relevant information to clinical practice.

CME Credit

You may earn CME credit by reading the CME-designated article in this issue of *Medical Acupuncture* and taking the quiz online. A score of 75% is required to receive CME credit. To complete the CME quiz online, go to <http://www.medicalacupuncture.org/cme> – AAMA members will need to login to their member account. Non-members have the opportunity to participate for a small fee.

Accreditation: The American Academy of Medical Acupuncture is accredited by the Accreditation Council for Continuing Medical Education (ACCME).

Designation: The AAMA designates this journal-based CME activity for a maximum of 1 *AMA PRA Category 1 Credit*TM. Physicians should claim only the credit commensurate with the extent of their participation in the activity.