8-2017

Supported Employment for Veterans with Traumatic Brain Injury: Provider Perspectives

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Citation Details

Pogoda TK, Carlson KF, Gormley KE, Resnick SG, Supported Employment for Veterans with Traumatic Brain Injury: Provider Perspectives, ARCHIVES OF PHYSICAL MEDICINE AND REHABILITATION (2017), doi: 10.1016/j.apmr.2017.06.029.

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PII: S0003-9993(17)30525-7

DOI: 10.1016/j.apmr.2017.06.029

Reference: YAPMR 56972

To appear in: *ARCHIVES OF PHYSICAL MEDICINE AND REHABILITATION*

Received Date: 11 January 2017

Revised Date: 22 May 2017

Accepted Date: 29 June 2017

Please cite this article as: Pogoda TK, Carlson KF, Gormley KE, Resnick SG, Supported Employment for Veterans with Traumatic Brain Injury: Provider Perspectives, *ARCHIVES OF PHYSICAL MEDICINE AND REHABILITATION* (2017), doi: 10.1016/j.apmr.2017.06.029.

Running Head: Providing Supported Employment to Veterans with TBI

Supported Employment for Veterans with Traumatic Brain Injury: Provider Perspectives

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Acknowledgements. The views expressed in this article are the authors' and do not necessarily represent the views of the Department of Veterans Affairs or the United States Government. This work was supported by the VA Health Services Research & Development Center for Healthcare Organization and Implementation Research, which provided financial support only. The authors wish to thank Shana Bakken, PhD and Joseph Carlomagno, MEd for their contributions to and support of this research.

Disclosures: None.

Parts of this research were presented at the 2015 Annual Research Meeting of AcademyHealth, Minneapolis, MN (June 15, 2015); National Meeting of VA Health Services Research and Development Service, Philadelphia, PA (July 9, 2015); 2015 VA Office of Research & Development TBI State-of-the-Art Conference, Washington, DC (August 24, 2015); and the 2016 Defense Centers of Excellence for Psychological Health and Traumatic Brain Injury Summit, Falls Church, VA (September 13, 2016).

Supported Employment for Veterans with Traumatic Brain Injury: Provider Perspectives

Abstract

Objective: In 2006, 13 sites were provided with one-time pilot funding to provide supported employment (SE) to Veterans with traumatic brain injury (TBI) history. In 2014, we surveyed SE providers at pilot and non-pilot sites that did not receive this funding. Our objectives were to identify any pilot and non-pilot site differences regarding current: (1) provision of SE to Veterans with TBI; (2) staffing and communication between the SE and polytrauma/TBI teams; and (3) provider perceptions on facilitators and barriers to providing, and suggestions for improving, SE.

Setting: Veterans Health Administration (VHA) SE programs.

Design: Mixed methods cross-sectional survey study.

Participants: Providers included a total of 54 SE supervisors and 90 vocational rehabilitation specialists (VRSs).

Interventions: Not applicable.

Main Outcome Measures: Web-based surveys of forced-choice and open-ended items included questions on SE team characteristics, communication with polytrauma/TBI teams, and experiences with providing SE to Veterans with TBI history.

Results: SE was provided to Veterans with TBI at 100% of pilot and 59.2% of non-pilot sites ($p = .09$). However, VRSs at pilot sites reported that communication with the polytrauma/TBI team about SE referrals was more frequent than at non-pilot sites ($p = .003$). In open-ended items, suggestions for improving SE were similar across pilot and non-pilot sites, and included

increasing staffing for VRSs and case management, enhancing communication and education between SE and polytrauma/TBI teams, and expanding the scope of the SE program so that eligibility is based on employment support need, rather than diagnosis.

Conclusions: These findings may contribute to an evidence base that informs SE research and clinical directions on service provision, resource allocation, team integration efforts, and outreach to Veterans with TBI who have employment support needs.

Keywords: Supported Employment, Traumatic Brain Injury; Veterans; Interdisciplinary Health Team; Community Integration

41 Abbreviations

42

43 Compensated Work Therapy (CWT)

44 Full-time employee equivalent (FTEE)

45 Individual Placement and Support (IPS) model of Supported Employment (SE)

46 Institutional Review Board (IRB)

47 Polytrauma Network Site (PNS)

48 Polytrauma Support Clinic Team (PSCT)

49 Polytrauma Point of Contact (PPOC)

50 Polytrauma/TBI System of Care (PSC)

51 Posttraumatic stress disorder (PTSD)

52 Severe mental illness (SMI)

53 Therapeutic and Supported Employment Services (TSES)

54 Traumatic brain injury (TBI)

55 Department of Veterans Affairs (VA)

56 Veterans Health Administration (VHA)

57 Vocational rehabilitation specialist (VRS)

More than 2.7 million U.S. service members have been deployed in support of the Iraq and Afghanistan wars.[1] As many Veterans return to civilian life with service-related physical and psychological injuries, including traumatic brain injury (TBI), it is critical that healthcare systems are adequately resourced to address their health and psychosocial needs.[2] Frontline clinicians and healthcare managers can provide essential macro-level perspectives on patient health service needs.[3-7] This key stakeholder input allows for successes to be documented and shared, but is also important for identifying gaps in care. A methodology that identifies facilitators and barriers to service provision is important for informing recommendations on future implementation efforts that address healthcare concerns.[3,8] Here, we report the results of a survey of Veterans Health Administration (VHA) Compensated Work Therapy (CWT) program supervisors and frontline vocational rehabilitation specialists (VRSs) about their experiences with and perceptions of providing the evidence-based Individual Placement and Support (IPS) model of Supported Employment[9] (hereafter referred to as SE) to Veterans with TBI.

VHA provides a range of vocational rehabilitation services through its Therapeutic and Supported Employment Services (TSES) CWT program. In fiscal year 2005, SE for individuals with severe mental illness (SMI) was implemented VHA-wide.[10] Policy allowed up to 25% of an SE caseload to include Veterans without SMI but who had intense employment support needs. SE is designed for individuals unable to work independently without intense intervention. Various models of supported employment, including the IPS model of SE, have been evaluated in civilian populations and shown to be effective for those with intellectual/developmental disabilities, physical disabilities, and moderate/severe TBI history.[11,12] SE's core principles include no pre-requisite vocational training, rapid job searches for competitive work that matches the individual's interests, long-term workplace support as needed, and integration between the

SE and clinical treatment teams so that health and employment-related issues can be addressed in tandem.[9,13] A significant minority of Iraq and Afghanistan war Veterans using VHA services have TBI history and are unemployed.[14] However, among those with a history of TBI, a substantial proportion may have intense employment support needs. In a national survey of Veterans with TBI, 45% reported unemployment. In this same survey, 42% reported at least moderate interest in SE.[15] Providing SE to these Veterans, many of whom are in their prime working years,[14] could positively impact their long-term employment success.

In the U.S. civilian population, approximately 2.5 million individuals sustain a TBI annually,[16] and since 2000, more than 360,000 TBIs have been reported in U.S. military service members.[17] In an analysis of more than 600,000 Iraq and Afghanistan war Veterans accessing VHA services between 2009 and 2011, 9.6% had a TBI diagnosis.[18] For both civilians[19] and recent U.S. service members,[20] at least 75% of diagnosed cases are classified as mild TBI.

Workforce participation is considered a significant indicator of recovery and has been closely studied in those who sustained TBI.[21-28] The return to work rate following TBI varies widely[29,30] and is associated with various demographic, injury-related, and post-injury rehabilitation factors, including use of vocational rehabilitation services.[31-35] For many civilians, return to pre-injury levels of functioning following mild TBI usually occurs within 3 to 12[36] months or sooner,[37,38] although up to 20%[39] continue to experience a range of cognitive, emotional, and physical symptoms[40] years after the injury that impact function. For those who served in the Iraq and Afghanistan wars, recovery from mild TBI is difficult to measure and is confounded by such factors as reporting delays[41] and comorbid conditions like posttraumatic stress disorder (PTSD),[18,42,43] depression, and substance use,[44] which may complicate evaluation and rehabilitation.[45]

VHA's Polytrauma/TBI System of Care (PSC) was developed to address the multiple healthcare needs of Iraq and Afghanistan war Veterans with TBI and comorbid conditions. Its outpatient services include 23 regional Polytrauma Network Sites (PNS), 87 Polytrauma Support Clinic Teams (PSCT) that are more geographically dispersed, and 39 Polytrauma Points of Contact (PPOC) that do not have polytrauma/TBI rehabilitation teams but can make referrals for appropriate care.[46,47] Interdisciplinary polytrauma/TBI rehabilitation teams include physiatrists, psychologists, and case managers.[48] Vocational rehabilitation specialists (VRSs) are not typically core team members, but may be co-located in the same medical center or available for referral.

In 2006, VHA TSES provided 13 CWT programs with one-time funding for that fiscal year for a dedicated VRS to provide SE to Veterans with TBI history. At most pilot sites there was also funding for a psychologist to facilitate integration between vocational rehabilitation and clinical providers. Due to limited resources, there was no contemporaneous evaluation of this implementation. In 2014, we followed up with SE supervisors and VRSs from the 13 pilot sites and their counterparts at other (non-pilot) sites that did not receive this specialized funding. This study's objectives were to identify any differences between pilot and non-pilot sites with regard to providing SE to Veterans with TBI; staffing and communication between the SE and polytrauma/TBI teams; and provider perceptions on facilitators and barriers to, and suggestions for, improving SE for this Veteran population. We hypothesized that compared to non-pilot sites, pilot sites would: (1) have a higher rate of providing SE to Veterans with TBI history, (2) report better interactions between the SE and polytrauma/TBI teams, and (3) experience fewer challenges with providing SE to Veterans with TBI history.

Methods

Design. This was a mixed methods cross-sectional survey study with forced choice and open-ended questions.

Participants. Target participants were identified through VHA administrative records, and included SE program supervisors (pilot sites: n = 13; non-pilot sites: n = 133) and VRSs (pilot sites: n = 90; non-pilot sites: n = 159). SE providers could not be identified at 2 of the 152 Department of Veterans Affairs (VA) medical centers, and therefore these 2 sites were excluded from participating.

Procedure. The Research and Development Committees and/or human subjects Institutional Review Boards (IRBs) of the research team investigators approved all procedures. Prior to recruitment, we notified 150 VA medical center directors about the study. Of these, four prohibited the survey from proceeding locally because of privacy concerns or lack of local IRB guidance, and were subsequently excluded. Using a modified Dillman method for mailing timelines,[49] in August 2014 we emailed invitations to participate in a web-based survey to SE providers at the remaining 146 sites. The survey was programmed in and administered using Verint Enterprise Feedback Management software version 6.5 (Melville, NY), which securely captured responses within the VA firewall.

Survey questions differed by participant type. For forced-choice items, supervisors were asked to provide information on broader program-level issues, such as which clinical populations their SE program served, and current and ideal full-time employee equivalent (FTEE) hours dedicated to providing SE to Veterans with TBI history. Questions for SE VRSs focused on field-level experiences, such as working with the site's polytrauma/TBI clinic team (yes/no), communication frequency with the polytrauma/TBI clinic team about SE referrals on a 1 (never)

to 9 (daily or almost daily) Likert-type scale, and perceived helpfulness in working with the polytrauma/TBI clinic team on a 1 (not at all) to 5 (extremely) Likert-type scale. The software had automated skip patterns so that participants did not respond to questions that previous responses indicated were not applicable. For example, participants at sites without a polytrauma/TBI team (PPOC) were not presented with questions about their interactions with them.

Open-ended questions asked respondents to: list their ideal SE team composition (supervisors only), describe their experiences working with Veterans and the local polytrauma/TBI clinic team (VRSs only), identify training they have received (VRSs only), and suggest program improvements (supervisors and VRSs).

Statistical Analysis

Means, standard deviations, percentages, and proportions were used to describe the quantitative outcome variables. Continuous outcomes were compared using independent and pairwise t-tests. For categorical data, we used chi-square test for independence, and Fisher's Exact Test (one-sided) when the statistical assumptions for chi-square were not met. We also tested VA medical center characteristics, including pilot site status, region of country (West, Midwest, South, Northeast), and outpatient PSC level (PNS, PSCT, PPOC) to identify any differences between responders and non-responders. Analyses were performed with IBM SPSS Statistics v20.[50]

Qualitative Analysis

Open-ended responses were coded with NVivo v10.[51] A priori constructs focused on general experiences providing SE to Veterans with TBI history; working with polytrauma/TBI clinic providers; and facilitators, challenges, and suggested improvements for providing SE to

these Veterans. Any new themes that emerged were coded. Inter-rater reliability between two team members (TKP, KEG) was established using a "check-coding" process.[52] Open-ended responses were coded independently for 10 respondents, and initial reliability estimates (agreements as a proportion of agreements plus disagreements) were at least 85%. Consensus was reached after discussing areas of initial disagreement. Additional open-ended responses from 5 different participants were then independently coded by both team members, maintaining a stable level of percent agreement of $\geq$.90. Finally, the remaining open-ended responses were coded independently.

Results

Quantitative.

Response rate. Response rate for SE supervisors was similar across pilot (5/13; 38.5%) and non-pilot (49/133; 36.8%) sites (p = .51), and was not independently associated with country region (p = .81), or PSC level (p = .87). For VRSs, the response rate between the pilot (14/40; 35.0%) and non-pilot (76/209; 36.4%) sites was also comparable (p = .87), and did not vary by country region (p = .70) or PSC level (p = .97).

SE Supervisors. Length of time supervising the SE program was comparable across pilot and non-pilot sites (Table 1). The percentage of sites providing SE to Veterans with TBI history was higher among pilot (100%) than non-pilot (59%) sites, although this result did not reach statistical significance (p = .09). Across sites, supervisors reported comparable VRS FTEE hours dedicated to serving Veterans with TBI history. Notably, there was more than a twofold gap in the current versus perceived ideal FTEE hours for providing SE to Veterans with TBI history at

both pilot (M = .70, SD = .45 vs. M = 1.80, SD = .45, $p < .02$) and non-pilot (M = .76, SD = .87 vs. M = 1.67, SD = .93, $p < .0001$) sites.

SE VRSs. Length of time working in the SE program was comparable across pilot and non-pilot sites. Respondents across sites were similarly divided in their perceptions on how providing SE to Veterans with TBI history compared to Veterans with other conditions, with approximately half endorsing that it was about the same to easier, and half stating that it was more difficult.

After excluding participants from PPOCs, there was no statistically significant difference in percentages of pilot and non-pilot sites that worked with the polytrauma/TBI teams. Among sites that reported working with the polytrauma/TBI team, communication between the SE and polytrauma/TBI clinic teams about SE referrals was reported to be more frequent among pilot site VRSs compared to what was reported from non-pilot site VRSs. Despite communication frequency differences, across sites the VRSs perceived the polytrauma/TBI teams to be moderately to very helpful when they worked together.

Qualitative

Supervisors. SE program supervisors were asked to list which disciplines they would add to their SE teams to further support the needs of Veterans with TBI history. Because of similarities, responses are collapsed across pilot and non-pilot sites (Table 2). The three most frequently identified disciplines were: peer support specialists, case managers/social workers, and job developers that were separate from VRSs. Others included mental/behavioral health professionals, medical providers, and other rehabilitation providers.

SE supervisor perspectives on how to improve SE services for Veterans with TBI history may be seen in Table 3. The most frequent suggestion for program improvement was to increase VRS FTEE dedicated to serving Veterans with TBI history. Some supervisors were concerned

that employment was not prioritized during the recovery process and recommended that vocational rehabilitation be discussed as part of rehabilitation treatment planning. They also suggested that SE eligibility be based on level of employment support need, rather than diagnosis. Finally, although employment is an obvious goal of vocational rehabilitation, some supervisors were concerned that the CWT program was too focused on jobs, rather than careers, and suggested that continuing education be considered an important gateway to future employment.

SE VRSs. Table 4 illustrates content domains and exemplar quotes by VRSs regarding their experiences with providing SE to Veterans with TBI history. The most noted challenge in working with these clients was their co-occurring cognitive and behavioral conditions, especially problems with memory and anger, which require more intense workplace support. At the facility level, perceived facilitators of SE success were leadership providing administrative resources; clinicians taking a team-based approach to care, which was further supported by VRSs attending weekly meetings and having ongoing communication with the team; supportive community employers; and family and peer support involvement. Reported barriers to providing SE included leadership not wanting to expand it to other clinical populations, like those with TBI; clinicians not valuing employment or understanding the SE model, and the case management needs of Veterans not being met.

Discussion

There was strong support by SE supervisors and VRSs that SE would be a positive and integral support for readjustment to civilian life for Veterans with TBI who have intense employment support needs. Across pilot and non-pilot sites, SE supervisors advocated for an

expansion of services for Veterans with TBI history on multiple levels: increased staffing for VRSs and other Veteran supports (e.g., peer support specialists, case managers); emphasizing the importance of employment during rehabilitation treatment planning; extending SE eligibility to those with functional limitations, irrespective of diagnosis; and broadening SE services to include support for continuing education. We note that SE focuses on competitive employment, rather than education. It de-emphasizes pre-vocational training, and promotes working with Veterans to find jobs that match their current skill level and interests. However, our findings are consistent with the growing literature on supported education,[53,54] which can assist returning Veterans with TBI with educational pursuits.

A recent survey of Veterans with TBI who use VHA, conducted in parallel to the current one, demonstrated a high rate of unemployment and an interest in receiving SE.[15] Together, these studies suggest that offering SE to Veterans with TBI would be well-received by both patients and SE providers. These findings are also consistent with earlier studies of provider perspectives. In interviews about the rehabilitation needs of Veterans with polytrauma/TBI, VHA providers reported that those with jobs worry about maintaining them as they cope with memory loss,[4] and a "need for more and tailored vocational services" (p. 708)[7] for these Veterans. Difficulty with vocational and clinical team integration, the need for provider education, and lack of resources have also been described in smaller, time-limited studies that implemented SE for Veterans with spinal cord injury[3] and SMI.[5] Addressing Veteran vocational rehabilitation needs and implementing SE remain ongoing challenges.

SE supervisors at nearly 60% and 100% of responding non-pilot and pilot sites, respectively, reported that their SE programs currently served Veterans with TBI. This was more prevalent than we had anticipated, since Veterans with SMI are the intended recipients of most

SE services. Our hypothesis that a higher rate of pilot sites would provide SE to Veterans with TBI history was not supported by statistical significance testing; however, the difference in percentages suggests a trend that pilot sites are more likely to provide SE to Veterans with TBI history.

Among sites that had polytrauma/TBI teams, a similar percentage of VRSs from pilot and non-pilot sites indicated that they worked with these clinicians. This may reflect greater VHA-wide awareness of vocational rehabilitation needs for Veterans with TBI or a growing trend of interdisciplinary collaboration for this clinical population. Nonetheless, VRSs at pilot sites reported more frequent communication about SE referrals than VRSs at non-pilot sites. Thus, the pilot funding may have been a facilitating mechanism to develop and sustain communications between the SE and polytrauma/TBI teams that continued after the funding ended. However, it is not possible to parse out cause and effect in this cross-sectional study; it is also possible that sites that received pilot funding were already coordinating care between their polytrauma/TBI and SE teams or were better positioned to integrate care than sites that did not receive pilot funding. Despite this, these findings are consistent with our hypothesis that better interactions between the SE and clinical teams would be associated with previous funding support.[13] Our third hypothesis that pilot sites would have fewer current SE challenges was not supported. Open-ended responses revealed concerns that there was not a shared knowledge-base about SE program principles and education on TBI, perceptions that case management needs were not being met (e.g., by the polytrauma/TBI team), and perceived weak management support to expand SE to Veterans with TBI history.

The majority of Iraq and Afghanistan war Veterans with TBI have co-occurring psychiatric diagnoses, pain, and other symptoms,[14,18,55] which underscores the importance of

interdisciplinary treatment. Unlike other federal, state, or local agencies in which supported employment is compromised by a fragmented system wherein employment and clinical providers may work in different healthcare settings,[9,56] the VHA provides a national infrastructure for SE and polytrauma/TBI programs to co-exist within many VA medical centers or regional VA healthcare systems. The extent to which employment and clinical providers integrate, rather than work in parallel, is modifiable,[56] but may be constrained by local resources. Without adequate supports, local implementation practices can drift from the SE model.[5,57]

Historically, VHA SE implementation efforts have included technical assistance and on-site monitoring by SE experts who conduct thorough reviews (e.g., SE providers, client, and employer interviews), evaluate each site's SE model adherence, and report results to local leadership to facilitate engagement.[10,58,59] Any future implementation efforts to provide SE to Veterans with TBI will benefit from a small-scale demonstration study that incorporates these elements, in addition to systematic and contemporaneous documentation and assessment of facilitators and barriers. Lessons learned from that effort can be used to tailor strategies to maximize successful implementation in any larger-scale rollout.[8]

In 2016, the VHA TSES program announced a Transformation Plan that includes a focus on competitive employment services, including SE, and a new program called Community Based Employment Services, an evidence-informed practice that follows SE principles but is intended for those not requiring the employment support intensity that is offered through SE. These program shifts may provide additional opportunities for Veterans with TBI history to reach their vocational potential.

Study Limitations

The study is limited by several factors, including its cross-sectional design which precludes interpretations about cause and effect. Survey data were captured eight years after the pilot funding. Without a detailed accounting of each site's SE implementation efforts, we cannot determine whether the snapshot represents an iteration, new development, sustainment, or devolvement in process. We also assumed that sites that reported providing SE were providing the IPS model of SE, but we could not verify the extent of SE implementation fidelity.[57]

Approximately one-third of VA employees from pilot and non-pilot sites responded; their experiences may not be representative of the VHA SE community. This concern is tempered by the range of positive and negative responses across sites, and geographic and PSC-level similarities between responders and non-responders.

Finally, administratively obtained site-level data on the number of Veterans with TBI history utilizing SE, their TBI history severity, comorbidities, and employment outcomes, in addition to Veteran-reported experiences,[15] would have provided broader and richer dimension to provider responses, but was outside the scope of this study. Future research into the implementation of SE for Veterans with TBI history would be enhanced by ascertaining these patient characteristics.

Conclusions

SE supervisor and VRS experiences on providing SE to Veterans with TBI discussed here complement the vocational rehabilitation needs, interests, and service use described by Veterans with TBI history in a parallel survey effort.[15] Together, these findings can contribute to an evidence base that informs VHA research and clinical considerations of service provision, resource allocation, team integration efforts, and outreach to Veterans with intense employment support needs.

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Table 1. Supervisor and vocational rehabilitation specialist experiences with providing SE to Veterans with TBI history, by site type.

	Site Type		
	Pilot	**Non-pilot**	**p-value or Fisher's Exact Test**
SE Supervisors	**N = 5**	**N = 49**	
SE provided to Veterans with TBI history	100% (n = 5)	59.2% (n = 29)	.09
Time working with SE program			.39
< 5 years	40.0% (n = 2)	57.1% (n = 28)	
> 5 years	60.0% (n = 3)	42.9% (n = 21)	
SE vocational rehabilitation specialist FTEE dedicated to Veterans with TBI history			
Current	.70 ± .45 (0-1) (n = 5)	.76 ± .87 (0-4) (n = 46)	.89
Ideal	1.80 ± .45 (1-2) (n = 5)	1.67 ± .93 (.25-5) (n = 46)	.77
SE Vocational Rehabilitation Specialists	**N = 9**	**N = 56**	
Time working with SE program			.25
< 5 years	33.3% (n = 3)	51.8% (n = 29)	
> 5 years	66.7% (n = 6)	48.2% (n = 27)	
Providing SE to Veterans with TBI history compared to other conditions			.40
About the same to much easier	55.6% (n = 5)	44.6% (n = 25)	
Somewhat to much more difficult	44.4% (n = 4)	55.4% (n = 31)	
Worked with polytrauma/TBI clinic	77.8%	53.8%	.18

team	(n = 7)	(n = 21/39)*	
Communication frequency with polytrauma/TBI clinic team about SE referrals[†]	3.86 ± 1.35 (2-6) (n = 7)	1.86 ± 1.46 (0-6) (n = 22/39)	0.003
Perceived helpfulness in working with polytrauma/TBI clinic team[‡]	4.29 ± 1.11 (2-5) (n = 7)	3.27 ± 1.45 (0-5) (n = 22/39)	.10

Note. Values are mean ± SD (range) or as otherwise indicated.

*Denominator is reduced after Polytrauma Point of Contact sites indicate they have no polytrauma/TBI clinic team. One Polytrauma Point of Contact site did not respond. All pilot sites had a polytrauma/TBI clinic team.

[†]0 (Never) to 7 (Daily or almost daily)

[‡]1 (Not at all) to 5 (Extremely)

Table 2. SE supervisor responses to which disciplines would be helpful to better support the vocational rehabilitation needs of Veterans with TBI history.

Ideal Team (ranked by frequency of response)
1. Peer support specialists
2. Case managers/social workers
3. Job developers (separate from vocational rehabilitation specialists)
4. Mental/behavioral health professionals (e.g., psychologist, neuropsychologist, psychiatrist, substance abuse counselor)
5. Medical providers (e.g., physician, physician assistant, nurse)
6. Other rehabilitation staff (e.g., occupational therapists, recreational therapists, and speech-language pathologists)

Table 3. SE supervisor suggestions for program improvement

Suggestion	Exemplar Quotes
1. Increase SE Staffing	• "To have a VRS/VRC staff dedicated to, or embedded in supporting the Polytrauma/TBI program providing SE services. Currently only providing CWT/SE to Veterans with SMI." (Non-pilot)
2. Add vocational rehabilitation as part of rehabilitation treatment plan	• "Most often active Polytrauma cases are staffed and discussed in a very 'medical/acute rehab' manner. Vocational rehabilitation is seen as a tertiary referral that often comes just prior to discharge from other Polytrauma services. This delay in referral and focus on vocational rehabilitation also results in veterans feeling that vocational options are not part of their future planning, and also allows complacency and/or a focus/mindset on 'obtaining/ maintaining disability benefits' to set in." (Non-pilot) • "To be effective, the SE program has to be an active participant in the Psychosocial Rehab Treatment Team. This provides the best wrap around services possible." (Non-pilot)
3. Base SE eligibility on employment	• "SE needs to be expanded to vets with TBI and PTSD, beyond the 25% rule. This would be invaluable to our program. We often refer [veterans with] PTSD & TBI for voc[ational] assistance and they

	support needs, not diagnosis	receive less intensive services than is needed because we can't fit them in the 25% SE. Flexibility to assess Veteran service needs based on functional capacity and support needs, rather than diagnosis, is better service for veterans. (Pilot)
4.	Continuing education considered as part of the vocational rehabilitation process	• "Integration of VBA [Veterans Business Administration] Chapter 31 Voc[ational] Rehab Counselors to the VHA TBI Team. We have a lot of veterans with TBI who are younger compared to our other SE (SMI) population and a significant number of them have SC [service-connected] disability. As such, they are interested in obtaining the necessary education to develop a career." (Non-pilot) • Please avoid 'just get then a job syndrome'; focus on careers, education, and training. DO NOT let these veterans squander their GI bill benefits or Chapter 31 when they have the ability to go to school. TSES needs to know that education and training are of equal value to employment and result in better jobs and life quality. Let TSES/CWT programs support education as well as employment. (Pilot)

Table 4. SE vocational rehabilitation specialist experiences with, and suggestions for, providing SE to Veterans with TBI history**.**

Experience	Exemplar Quotes
1. Challenging health and functional characteristics of Veterans with TBI	
Cognition and Behavior	• "Often those with TBI have more complex underlying issues that can pose barriers to employment, such as memory, anger management or organic personality syndromes. These can make it more difficult for the person as an employee in an often complex work environment to navigate all the accompanying stressors when compared to those with less complex issues…." (Non-pilot)
	• "Job supports require more assistance at work site, coaching, developing tools for assistance with cognitive issues." (Pilot)
2. Stakeholder support	
A. Facilitators	• "Support by VA administration regarding schedule and resources to provide services to [the TBI] population, weekly [staff meetings] and on-site trainings also assist with providing services to [the TBI] population." (Pilot)
	• "Clinicians who have recognized and diagnosed TBI in Veterans,

	access to on-line training and information, team approach to service provision, quality case management, good family and peer support, motivation on the Veterans' part, understanding employers." (Non-pilot)
	• "Great relationships with some employers that are willing to employ and monitor this population of Veterans." (Non-pilot)
B. Barriers	• More restrictions from management and other clinics that are clueless in the realities of job placement of this population diminish the SE VRS from being more effective (Non-pilot)
	• There is a great potential to provide a breadth of SE Services to Veterans [with TBI] at this VA [medical center]. The CWT management are not interested in the CWT/SE program growing beyond what it already is. (Pilot)
3. Integration of the SE and TBI clinical teams	
A. Facilitators	• "Our polytrauma team is very engaged in seeking positive outcomes for each of the Veterans they serve - this shows in my interactions with them. We have one of our SE specialists assigned to the polytrauma weekly meetings…. I can send messages or speak directly when needed and am confident in getting a great response

	(Non-pilot)
	• "The communication and integration that the SE services have with treatment team which consist of case managers and a combination of psychiatrist, psychologist and or physician has really made the outcome successful." (Non-pilot)
B. Barriers	• "They [TBI clinic providers] did not understand the SE model and the send inappropriate referrals. (Non-pilot)
	• "Many of the polytrauma staff hold the belief that competitive employment is not a realistic goal for patients with TBI. Furthermore, they are not quick to follow evidence-based practice and refer for employment services when a patient expresses an interest; they wait for the patient 'to be ready.'" (Pilot)
4. Education and training on SE and post-TBI symptoms	
A. Facilitators	• "SE staff at this VA has been provided direct SE training from our mentor training VA site; we have been provided books, access to websites, therapeutic email workgroup, professional publications, etc.; and professional training seminars." (Non-pilot)|
	• "Several trainings yearly, to include national level training for SE

	staff, local SE trainings, webinars, and continued monthly staffings and in-services to emphasize EBSE [evidence-based SE] practices." (Pilot)
B. Barriers	• "I believe the Polytrauma/TBI program could benefit from further education on EBSE [evidence-based supported employment] practices and success stories to further encourage involvement and integration with SE." (Pilot)
	• "I would like more training and education regarding TBI so that I am more prepared when employers talk with me about the TBI as well as the potential benefits/concerns." (Non-Pilot)
5. Suggestions for SE program improvement for Veterans with TBI	
Case management and Resources	• "SE staff can't provide 'case management' however that's exactly what many of our Vets need to gain/retain employment." (Non-pilot)