



Peer-Reviewed Original Research

What is a VAD Social Worker? A National Perspective

Pamela Combs,¹ Will Cohen,¹ Umar Siddiqi,¹ and Valluvan Jeevanandam¹

¹Section of Cardiac Surgery, Department of Surgery, University of Chicago Medicine, Chicago, IL

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*Corresponding author: pcombs@surgery.bsd.uchicago.edu

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Abstract

Ventricular Assist Device Social Workers (VAD SWs) are mandated members of VAD care teams and contribute to the psychosocial aspect of patient care within the United States. However, the contributions and methods of the VAD SW are relatively undefined. This article reports the results of two national surveys regarding VAD SWs. One survey ascertains the VAD SW's views of their work and their role in the VAD care team. The other survey assesses the VAD SWs involvement with care, through the perspective of the VAD team. Our results indicate that SWs are not only routinely involved in VAD patient selection but during the whole health care continuum. VAD SWs are well integrated within the VAD care team, and they are influential in the evaluation process. Agreement exists between VAD care teams and the national guidelines regarding the importance of psychosocial care provided by a VAD SW; however, no standardized protocol exists for pre-implant evaluations, screening for substance abuse, or assessing caregiver support.



Introduction

The role of social workers (SWs), in general, is expansive in both depth and breadth. According to the National Association of Social Workers, the mission of social work is to “enhance human well-being and help meet the basic needs of all people, with particular attention to persons who are ill or are experiencing mental, physical, or intellectual challenges”.¹ In consonance with this definition, patients with a durable ventricular assist device (VAD), including those who receive a left ventricular assist device (LVAD), which is the most common durable VAD, are particularly suited to receive psychosocial support from VAD social workers (VAD SWs).

An LVAD is a mechanical pump, implanted internally, that is connected via a driveline tunneled under the skin to an external power source and control device. By collecting blood directly from the left ventricle and propelling it into the aorta, an LVAD can significantly improve circulation in patients with heart failure.² These patients are typically discharged home and may live with this device for years; thus, the psychosocial aspect is a key component of successful outcomes. However, to achieve the benefits of VAD implantation, patients must have caregiver support and be able to personally manage complicated medical requirements to prevent an array of potential complications.³

Assessment of a patient’s psychosocial status before device implant is recommended by mechanical circulatory support (MCS) guidelines.⁴⁻⁶ This evaluation identifies gaps and assures optimization of post-operative care, thereby increasing the patient’s likelihood of success after device implant.⁷ Factors such as housing, financial status, and the presence of a support system are important to consider when deciding on implant eligibility.⁸ Additionally, relevant medical history such as smoking, substance use, and psychiatric conditions can indicate potential challenges in a patient’s care post-implantation.⁶ Along with the evaluation, the VAD SW lends support to the patient/family who encounters psychosocial issues after device implant, such as living situations, transportation obstacles, financial struggles, and end-of-life decision making. Thus, it is the role of the VAD SW to support the patient/caregiver to ensure a positive quality of life following device implantation.

Little discussion of VAD SWs’ role perception exists within published literature. Furthermore, there is a lack of information regarding the extent of VAD SWs’ involvement in care, as well as the perspectives of other team members regarding the VAD SW’s value. It is important to understand the contribution of the VAD SW and what they provide to the VAD field. To address the current paucity of research, we report the results of two national surveys of VAD SWs within the United States. The first arm explores the VAD SW’s views of their own work, as well as their perception of the role the position fills on the VAD care team. The second arm explores the VAD team member’s perspective regarding the VAD SW’s role for patient selection and care.



Methods

Data Collection Structure

Two surveys, one solely for VAD SWs and one for VAD care team members apart from the VAD SW, were created using online software (SurveyMonkey, Inc., San Mateo, CA). This online resource offered an efficient approach to send the survey/s and receive responses over vast geographic areas. The survey of VAD SWs asked 20 questions that addressed topics concerning care management, SW involvement, and perspectives regarding how the SW respondent believed their role fits with the VAD care team. It included 1 free response and 19 multiple choice questions; one multiple choice question included an explain option. The survey of VAD team members included 23 questions, of which 2 were free response; of the 21 multiple choice questions, 9 had an explain option. The questions addressed topics regarding VAD team utilization of the SW, perspectives regarding the SW's contributions to VAD patient care, and overall understanding of the VAD SW role.

Distribution

Both surveys were assessed via a web link. The survey of VAD SWs was sent via mass email to the International Consortium of Circulatory Assist Clinicians (ICCAC) Social Worker Workforce, a professional network, as well as to VAD programs nationwide. The survey of VAD team members was distributed via the MCS collaboration forum, a professional network. SWs and team members responding to the survey were encouraged to promote survey completion to their colleagues and associates.

Analysis

The results were downloaded and reviewed. Questions with "yes," "no," and "sometimes" answer choices were assigned values of 1 (yes), 0 (no), and 0.5 (sometimes). Answers from programs with multiple respondents were consolidated to a single response. Questions of fact were assigned the majority response, while questions of perspective were averaged based on the assigned value of each answer. Average answers of >0.5 were considered "yes," and average answers of <0.5 were considered "no" for questions without a sometimes option. Questions involving ranking were consolidated by averaging the rank of each response and re-ordering based on the averages. If the average answer for a question was indeterminate, the program was excluded for the question.

Results

Patient, VAD Team Member, and Program Demographics

Responses were received from VAD SWs and VAD team members ($n=32$, 29) for one month and two weeks, respectively. Our research team closed the surveys



when responses ceased over five days. Each VAD SW represented a different VAD program. However, two programs were represented multiple times in the VAD team member survey and therefore treated as consolidated answers. In total, 22 VAD programs responded to our team member survey. Eleven (50%) of the respondents were VAD Coordinators. Clinical Nurse Specialists, VAD Cardiologists, Directors, and VAD Program Managers were each represented by 2 (9%) respondents. A psychologist, heart transplant coordinator, and physician assistant were also present in our sample (5% each). VAD team members described themselves as having more experience with durable devices as compared to the SW respondents, with 20 (63%) VAD SWs having between 1-5 years of experience in the field and 15 (68%) team members having more than 10 years of experience in the field, even after excluding the two consolidated answers. Regarding VAD patient volume, 25 (78%) programs in the SW survey implant fewer than 50 VADs per year, while 13 (59%) programs in the team member survey implant fewer than 50, and eight (36%) programs implant 51-100 VADs per year.

The VAD SW role was most commonly assigned to the VAD/Transplant team, with 15 (47%) SWs reporting this departmental assignment while seven (22%) reported assignment to Case Management, four (13%) to Advanced Heart Failure, and six (19%) to a combination of these departments or specialties within the departments. Of the team member programs that responded, 19 (86%) indicated that they employed a dedicated VAD SW who is assigned to all durable VAD patients at the program.

Patient Care

SWs uniformly reported (31/32, 97%) that they were expected to be involved in the pre-implantation evaluation process for every inpatient, and every team member program (100%) reported that SWs present a written or verbal assessment of patients at every selection meeting. Of the team member programs, 16 (73%) indicated that SWs present both a written and verbal assessment.

In the case of urgent implants, 10 (45%) programs responded that the SW is called to address the case as soon as possible, five (23%) programs indicated that the VAD coordinator and SW collaborate to create an assessment, three (14%) have an urgent meeting where those in attendance discuss the case, and four (13%) said that they do their best to ensure SW involvement however it is not always possible before implantation. In situations where the SW is absent, 20 (91%) programs have formal coverage for the SW's responsibilities.

Respondents were asked whether the SW is a deciding factor in patient selection. Of the SWs who responded, 22 (69%) responded that their assessment is "sometimes" a deciding factor and six (19%) answered that it is a deciding factor, whereas 18 (82%) VAD programs indicated that a SW's assessment is a deciding factor, with one mixed consolidated response. However, no "sometimes" option was available for VAD team members. When team members were asked whether,



“realistically,” an informal decision is made prior to a SW’s assessment, 10 (45%) programs responded “yes.”

Regarding methodology, 11 (34%) SWs responded that they utilize the Stanford Integrated Psychosocial Assessment for Transplant (SIPAT) tool for evaluation. This test is not required but offers objectivity in assessment.⁹ In separate questions, eight (25%) SWs indicated the use of the Montreal Cognitive Assessment (MoCA) to evaluate VAD patients, and only 11 (34%) SWs have a formal assessment tool to screen for alcohol and/or substance abuse. Additionally, two (6.7%) VAD SWs use a formal tool to evaluate caregivers.

After a patient is discharged from the implantation admission, SWs at 19 (86%) programs still have care responsibilities. Every VAD SW (100%) answered that they continue to care for MCS patients during each hospital readmission. Twenty-five SWs (78%) indicated that they provide care both inpatient and outpatient, five (16%) responded only inpatient, and two (6.3%) only outpatient.

Perspectives on the Social Worker Role

VAD team members were asked to rank the areas in which SWs are most helpful (Table 1). One composite program was excluded due to a lack of a definitive ranking from the program’s respondents. More than half (11/32, 52%) of programs ranked caregiver presence and involvement as the most helpful contribution of VAD SWs. Nearly half (10/32, 48%) ranked living situations as the second most important contribution, followed by 10 (48%) ranking compliance/adherence as the third most important. Financial status, long-term success, and education status were then indicated in the order listed.

Table 1. Contributions of the VAD SW. VAD team members were asked to rank the aspects of patient care and selection where VAD SWs are most helpful.

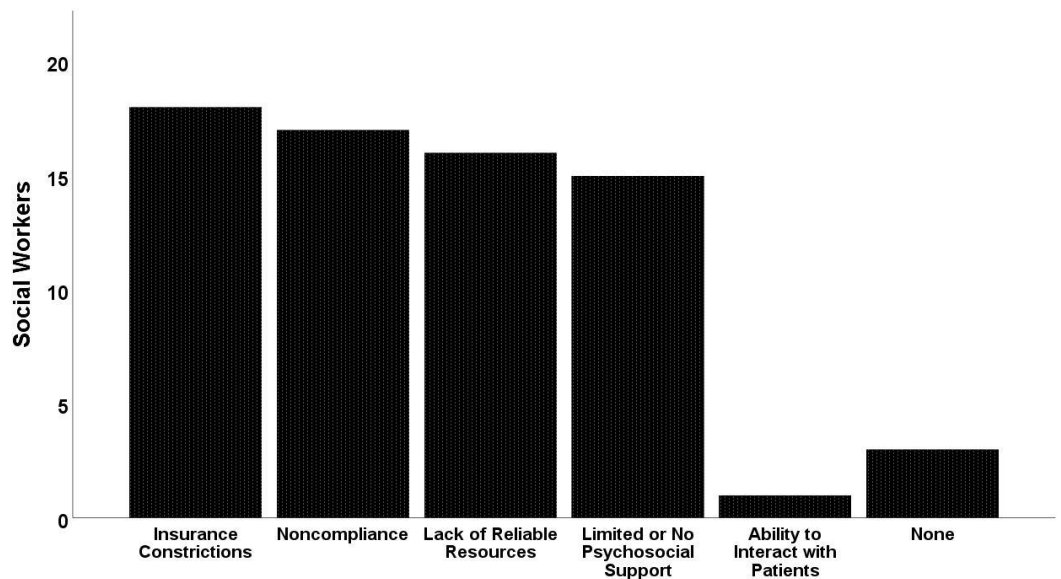
Role	1	2	3	4	5	6	Total
Caregiver Presence and Involvement	11	5	3	2	0	0	21
Living Situations	4	9	4	3	1	0	21
Long-term Success with the Device	2	4	0	3	3	8	20
Compliance/Adherence	3	2	10	4	2	0	21
Financial Status	0	1	3	6	8	2	20
Education Status	1	0	1	2	6	10	20



When asked whether VAD SWs were underutilized, only five (23%) programs answered “yes.” All but one program (21/32, 95%) felt that the SW had a good understanding of the psychosocial care contributions that the VAD team required. Similarly, every program answered that the SW adds value to the VAD care team. Regarding the level of trust the respondent has in the VAD SW, the average score was 0.92 (SD= 0.17), demonstrating that most programs trust their VAD SW.

Of the SWs who responded to the survey, 30 (94%) believe that that the MCS team utilizes them as a resource, and 26 (81%) stated that they feel valued by their department. However, there were several factors that SWs indicated limited their ability to perform their job (Figure 1). Insurance constrictions were cited by 18 (58%) SWs (one skipped answering), patient noncompliance by 17 (55%), a lack of reliable resources by 16 (52%), and the implantation of patients with limited or no psychosocial support by 15 (48%). Only one (3.2%) selected the ability to interact with patients, and three (9.7%) selected that there were no barriers limiting their job performance.

Figure 1. Obstacles to the VAD SW. SWs were asked to select the barriers that they feel limit their ability to effectively perform their job.





Discussion

Scope of practice

This article demonstrates that the VAD SW's scope of practice goes beyond the evaluation and selection of VAD patients and continues into long-term psychosocial care in the post-operative period. This follow-up is present, not only to ensure a patient adheres to the strict medical regiment needed for VAD care but to help preserve the mental and emotional welfare of the patient. This is important because complications and hospital readmissions in VAD patients are common and can negatively affect patient morale.

The survey of VAD SWs indicated that no standardized method has been widely adopted by VAD programs to evaluate patients and assess the level of caregiver support. While SIPAT and MoCA are used at some programs, they are only present at a minority. Perhaps more surprising is the absence of standardized evaluation for alcohol and substance abuse in a patient population that has a wide range of comorbidities and presentations and will almost uniformly have stressful situations emerge after implantation. Additionally, the absence of standardized screening of caregivers is surprising, given the important role that the patient and caregiver have in managing care after discharge.¹⁰

Social workers have demonstrated utility in working with non-VAD patients who require strict medical adherence and could suffer from frequent complications, including transplant patients.¹¹ Social support is a significant factor for transplant patients, as one survey found that up to 20% of transplant candidates are excluded due to inadequate social support.¹² Furthermore, 71.4% of surveyed providers stated that social support was important to avoid wasting organs. Patient support groups are a common feature at transplant programs nationwide; they are designed to improve psychosocial support in this stressful lifestyle. Many VAD SWs represented in our surveys described their effort to institute similar patient support groups for VAD patients, both in-person and online.

Humanizing medical care is another area in which transplant SWs have improved patient care. For example, they play an important nonsurgical role in organ donation by communicating and connecting with donor families.¹³ Their efforts are integral to preserving organ donation as a humane gesture. We found that the innovations of VAD SWs in integrating palliative care throughout a patient's clinical course can similarly elevate the level of comfort and nurturing involved in patient care (Figure 2). Similarly, some VAD SWs have created educational guides based on the experiences of prior patients to make information more accessible to new VAD recipients. Furthermore, the implementation of the SIPAT by many social workers has resulted in better-selected patients, at least from a psychosocial standpoint. Given the high burden of care present in the VAD population, this is key to optimizing the likelihood of a successful outcome.¹⁴



Figure 2. *Ventricular Assist Device Social Worker Innovation. VAD SWs have introduced novel patient care ideas into their programs.*

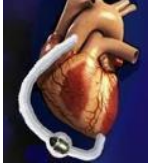
Ventricular Assist Device Social Worker Innovation

- *Introduction of SIPAT (The Stanford Integrated Psychosocial Assessment for Transplantation)*
- *Initiation of Patient Support Groups*
 - *In Person and Online*
- *Establishing Protocols for Patient Networking*
- *Suggesting Device Applications for Meditation*
- *Involving Palliative Care in Patient Evaluation and throughout the Patient's Course*
- *Creating a VAD Candidacy Agreement*
- *Creating a Book of Patient Stories for VAD Patient Education*

Perspectives on the SW Role

SWs reported widespread acceptance by VAD care teams, which corresponded to the perspectives reported by VAD team members. VAD programs not only described confidence in the SWs ability to understand the psychosocial care required for a VAD patient but had overall trust in their SW. An overwhelming majority of SWs responded that they were not only utilized as a resource by the team but were a valued member of it—a finding in total concordance with the perspective of the VAD team members. This demonstrates an agreement between active programs that are directly treating patients and the national guidelines regarding the importance of psychosocial care in this patient population. As Dew and colleagues published, psychosocial evaluation assists in determining candidacy for implantation, facilitates care planning and beneficial interventions, encourages referrals for those that are ineligible for implantation, and enables the provision of post-implantation care to optimize psychosocial and medical outcomes.⁴

Despite the widespread involvement of SWs in VAD patient care, SWs encounter several barriers to most effectively fulfilling their role (Figure 1). Insurance constrictions, patient noncompliance, lack of reliable resources, and implantation of patients with little psychosocial support constitute the largest impediments to VAD SWs. While some of these obstacles are outside the realm of institutional control, actions can be taken to help alleviate others. Relationships between VAD SWs and hospital billing and insurance departments could be helpful in streamlining assistance for patients with financial issues relating to health care cost. Additionally, we found that no standardized assessment or protocol exists for evaluating and/or finding effective psychosocial support for patients. Since a lack of psychosocial support is a common barrier in patients following implantation, it is important that the field investigate this topic further to develop a method that better predicts issues with support before they arise.



Limitations

Surveys of this nature have several limitations that impact the ability to include a totality of responses. Selection bias was likely present as known SWs were contacted to complete the survey, in addition to posting on the sites described above. Additionally, our limited sample size may or may not accurately reflect the larger consensus of the field. With respect to the team member survey, it must be considered that respondents may not have a full understanding of the role that the VAD SW fills at their program. As a result, answers may not encompass the entire scope of the SWs activity in some cases. In addition, physicians were underrepresented among VAD team member respondents. As the leaders of the VAD care team, it is perhaps most important to understand the physician perspectives of the VAD SW.

Conclusion

The results from this study offer confirmation that the VAD SW has gained widespread acceptance, acknowledgement, and support from VAD teams nationwide. Along with this, the VAD SWs in this study appear to be satisfied with their overall role. Furthermore, the VAD SWs report that they are appropriately utilized by the VAD care team—a key component of job satisfaction. Additionally, the structure and responsibilities of the VAD SW role are relatively consistent. However, there is little standardization in the methods used by SWs between programs. For example, variation exists with the use of SIPAT. Future research regarding these aspects of the role, along with associated patient satisfaction should be explored. These findings provide strong evidence to support the continued presence of the VAD SW whose practice is valued by their teams.

Acknowledgements

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References:

1. National Association of Social Workers. Overview of the social work profession [Internet]. 2015 Apr [cited 2020 June 8]. Available from https://www.socialworkers.org/LinkClick.aspx?fileticket=zQs_aCfcRrc%3d&portalid=0.
2. Imamura T, Chung B, Nguyen A, Sayer G, Uriel N. Clinical implications of hemodynamic assessment during left ventricular assist device therapy. *J Cardiol*. 2018;71(4):352–358.
3. Kormos RL, Cowger J, Pagani FD, Teuteberg JJ, Goldstein DJ, Jacobs JP, et al. The Society of Thoracic Surgeons Intermacs Database Annual Report:



Evolving Indications, Outcomes, and Scientific Partnerships. *Ann Thorac Surg.* 2019;107(2):341-353.

4. Dew MA., DiMartini AF, Dobbels F, Grady KL, Jowsey-Gregoire SG, Kaan A, et al. The 2018 ISHLT/APM/AST/ICCAC/STSW recommendations for the psychosocial evaluation of adult cardiothoracic transplant candidates and candidates for long-term mechanical circulatory support. *J Heart Lung Transplant.* 2018;37(7):803-823.
5. Feldman D, Pamboukian SV, Teuteberg JJ, Birks E, Lietz K, Moore SA, et al. The 2013 International Society for Heart and Lung Transplantation Guidelines for Mechanical Circulatory Support: Executive Summary. *J Heart Lung Transplant.* 2013;32(2):157-187.
6. Slaughter MS, Pagani FD, Rogers JG, Miller LW, Sun B, Russell SD, et al. Clinical management of continuous-flow left ventricular assist devices in advanced heart failure. *J Heart Lung Transplant.* 2010;29:S1-S39.
7. Petty M, Bauman L. Psychosocial issues in ventricular assist device implantation and management. *J Thorac Dis.* 2015;7(12): 2181–2187.
8. Khazanie P, Rogers JG. Patient selection for left ventricular assist devices. *Congest Heart Fail.* 2011;17(5):227-234.
9. Maldonado JR, Dubois HC, David EE, Sher Y, Lolak S, Dyal J, Witten D. The Stanford Integrated Psychosocial Assessment for Transplantation (SIPAT): a new tool for the psychosocial evaluation of pre-transplant candidates. *Psychosomatics.* 2012;53(2):123-132.
10. Casida JM, Combs P, Pavol M, Hickey KT. Ready, Set, Go: How Patients and Caregivers Are Prepared for Self-Management of an Implantable Ventricular Assist Device. *ASAIO J.* 2018;64(6):e151-e155.
11. Ladin K, Emerson J, Butt Z, Gordon EJ, Hanto D, Perloff J, et al. How important is social support in determining patients' suitability for transplantation? Results from a National Survey of Transplant Clinicians. *J Med Ethics.* 2018;44(10):666-674.
12. Ladin K, Emerson J, Berry K, Butt, X, Gordon EJ, Daniels N, et al. Excluding patients from transplant due to social support: Results from a national survey of transplant providers. *Am J Transplant.* 2019;19(1):193-203.
13. Dhooper SS, Wilson CP. Social Work and Organ Transplantation. *Health & Social Work.* 1989;14(2):115–121.



14. Sperry BW, Ikram A, Alvarez PA, Perez AI, Kendall K, Gorodeski RC, et al. Standardized Psychosocial Assessment Before Left Ventricular Assist Device Implantation. *Circ Heart Fail.* 2019;12(1):e005377.