

Destination Therapy–Left Ventricular Assist Devices: Recommendations for the Way Forward

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INTRODUCTION

Left ventricular assist device as destination therapy (DT–LVAD) is associated with survival and quality–of–life benefits in patients with end–stage heart failure who are ineligible for cardiac transplantation. Clinicians are challenged to engage patients and their caregivers in the decision to accept or decline DT–LVAD, and communicate the degree to which their lives will change with a DT–LVAD.

PURPOSE

To identify key areas for development, adaptation and implementation of resources and tools to support the DT–LVAD decision–making process and to support living in the community with a DT–VAD.

METHODS

Design: A descriptive qualitative quality improvement project

Theoretical Framework: Ottawa Decision Support Framework¹

Setting: Three DT–LVAD implanting centers in Ontario, Canada

Participants: Healthcare providers, patients with DT–LVAD who received their device from 1 of 3 implanting sites, and caregivers

Patient Decision Aid: Developed by researchers at the University of Colorado’s Colorado Program for Patient Centered Decisions “A patient decision aid (PDA) for Left Ventricular Assist Device (LVAD) A device for patients with advanced heart failure” was freely available as a booklet and a video

(<https://patientdecisionaid.org/lvad/>).

Data Collection: Semi–structured interviews with patient decision aid acceptability questionnaire²

Data Analysis: Thematic analysis

FINDINGS

Between October – December 2018, 16 interviews were conducted with 3 patients with DT–LVAD, 2 caregivers, and 13 interprofessional healthcare team members.

Main findings were:

- DT–LVAD is a complex decision–making process best supported by a variety of balanced sources, including the PDA. Adaptations were suggested to fit the Ontario and site/community context.
- Limited LVAD knowledge in smaller communities leads to patients being admitted to the inpatient ward of LVAD centers for reasons unrelated to the LVAD (e.g. broken bones, colonoscopy), which increases patient expense, travel and time.
- Patients, and particularly caregivers, require additional support and services due to progressive comorbidities which may, with time, limit their ability to live independently.

Table 1. Patient Decision Aid Acceptability

Items	PDF Booklet (n = 4)	PDF Booklet & Video (n = 10)
Preferred format^a		
PDF – in print/electronically	3	3
Video	0	2
Both	1	4
Amount of information		
Too much information	0	0
Just right	3	8
Not enough information	1	2
Enough information to help a person decide		
Yes	3	6
No	1	4
Balanced presentation of options		
Slanted to accepting a DT-LVAD	1	2
Slanted to declining a DT-LVAD	1	5
Balanced	2	3
Understandable^a		
Yes	4	9
No	0	0
Useful for patients to make a decision		
Yes	4	10
No	0	0
Useful for caregivers involved in the decision		
Yes	4	10
No	0	0

SELECT KEY RECOMMENDATIONS

- Enhance existing pre–operative information to ensure realistic expectations of post–op recovery and life with a DT–LVAD;
- Transition healthcare to home communities;
- Anticipate future patient and caregiver needs;
- Strike a Caregiver Engagement group to identify and prioritize best ways to support LVAD caregivers; and
- Build and sustain networks to raise awareness, share expertise, and standardize clinical and patient–reported outcomes.

IMPLICATIONS FOR PRACTICE

The care trajectory of the DT–LVAD patient and caregiver requires a comprehensive approach inclusive of: 1) informed and shared decision–making, 2) ongoing assessments and evaluations, 3) support in home communities for both patients and caregivers, and 4) a systems–level approach to assure the delivery of quality care and outcomes.

VAD programs may consider implementing the PDA adapted for Ontario into routine practice for all patients considering a VAD, regardless of indication. The PDA content should be individualized to the patient’s situation, and used with other sources of information, including discussions with healthcare providers, educational materials, and the opportunity to meet others who have faced the same decision.

REFERENCES

¹ O’Connor, A. M., Tugwell, P., Wells, G. A., Elmslie, T., Jolly, E., Hollingworth, G.,...Drake, E. (1998). A decision aid for women considering hormone therapy after menopause: Decision support framework and evaluation. *Patient Education and Counseling*, 33(3), 267–279.

² O’Connor AM and A C. User Manual – Acceptability. 2002.



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