



45 (U.S.)



1 (Canada)



3 (Germany)



1 (Israel)



3 (U.K.)



1 (Saudi Arabia)



2 (Italy)



1 (Australia)



2 (Spain)



1 (Denmark)



1 (Finland)

Supplementary Figure 1. Distributions of countries represented in survey. We asked clinicians to identify their U.S. state or country of work. One clinician indicated Europe rather than a country.

Supplementary Table 1. Clinician & Facility Characteristics

	mean \pm SD
	or n (%)
Clinicians (N=60)	
Sex (female)	33 (55)
Race (Caucasian/White)	52 (86.7)
Ethnicity (Hispanic)*	3 (5)
Role	
Cardiologist	22 (36.7)
LVAD Coordinator	16 (26.7)
Advanced Practice Provider	7 (11.7)
Cardio-thoracic Surgeon	7 (11.7)
Other†	8 (13.3)
Years working with patients with HF	16.4 \pm 8.9
Years working with patients with	11.7 \pm 6.8
LVAD	
Center	
Type (Academic Medical Center)	48 (80)
Number of LVAD implantations/year	31.5 \pm 20.1
Mean percentage of BTT implants	47.4 (27.6)

* 1 clinician did not answer

† clinicians did not provide description of “other” role

BTT = bridge to transplant

Supplementary Table 2. Responses to Open Ended Questions

Clinician Response	Frequency	Exemplar
Patient barriers to initiating post-LVAD PA:		
Physical limitations	14/55 (25.5%)	<i>Chronic illness prior to implant, conditioned behaviour to avoid exercise.</i>
Fear	12/55 (21.9%)	<i>Fear of increased activity. Memory of pre-implant HF symptoms.</i>
Motivation	10/55 (18.2%)	<i>No initiative to work on their own.</i>
Lack of guidelines	8/55 (14.5%)	<i>Vague instructions, 'exercise as tolerated'</i>
Patient barriers to sustaining post-LVAD PA:		
Motivation	21/54 (35%)	<i>Once they have completed 12 week of cardiac rehab- they don't have the motivation to continue</i>
Complications	7/54 (13%)	<i>Infections and (completely relevant) fear of pulling the driveline</i>
Cost	6/54 (11.1%)	<i>[Patients] don't attend due to inability to afford co-pay</i>
Access	5/54 (9.3%)	<i>LVAD patients need more access to wellness services and supervised exercise programs outside of the hospital</i>
Institutional barriers to initiating post-LVAD PA:		
Cost	9/51 (17.6%)	<i>Insurance reimbursement</i>
Staff Training	8/51 (15.7%)	<i>We need more outpatient therapists who are educated in LVAD parameters and cardiac rehab</i>

Lack of guidelines	6/51 (12%)	<i>Lack of guided individualized exercise training offers</i>
Access	5/51 (9.8%)	<i>We want to get patients exercising closer to their home, but often [local cardiac rehab] won't accept them</i>
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Institutional barriers to sustaining post-LVAD PA:		
Cost	21/48 (43.8%)	<i>Lack of finances after insurance rehab days are gone</i>
Staff Training	7/48 (14.6%)	<i>Lack of staff training in LVAD rehab</i>
Transportation	5/48 (10.4%)	<i>Patients who live in rural areas often have few local resources and limited transportation</i>
Access	6/48 (12.5%)	<i>Few options past phase II cardiac rehab. Patients don't feel comfortable working out in their own gyms, but can't afford gym memberships or home exercise equipment</i>
Lack of guidelines	3/48 (6.25%)	<i>Lack of effective dissemination of best practice evidence surrounding exercise tolerance in the VAD population</i>
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Supplementary Table 3. Post-LVAD Implantation Physical Activity Recommendations

Inpatient Setting	Outpatient Setting
<p>1. Supervised, early mobilization once hemodynamically stable</p>	<p>1. Initiate PA or cardiac rehabilitation within 2-4 weeks post-implantation with input from an LVAD clinician</p> <p>2. Begin with low intensity activity (e.g. walking, stationary bike) and add lower and upper body resistance training</p> <p>3. PA sessions a minimum of 3 days per week for a minimum of 20 minutes per session</p> <p>4. Encourage PA self-management using the Borg rating of perceived exertion (RPE) scale (RPE 11-13)</p>