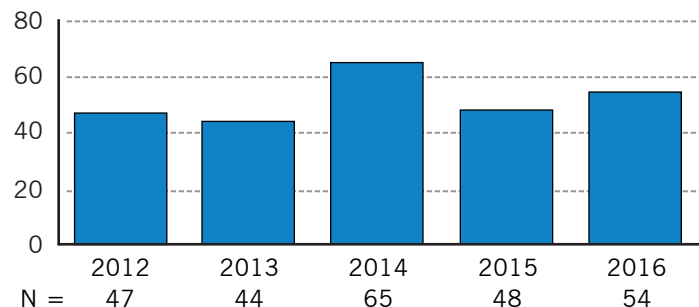


# Heart Failure and Transplant

## Heart Transplant Volume

### Volume

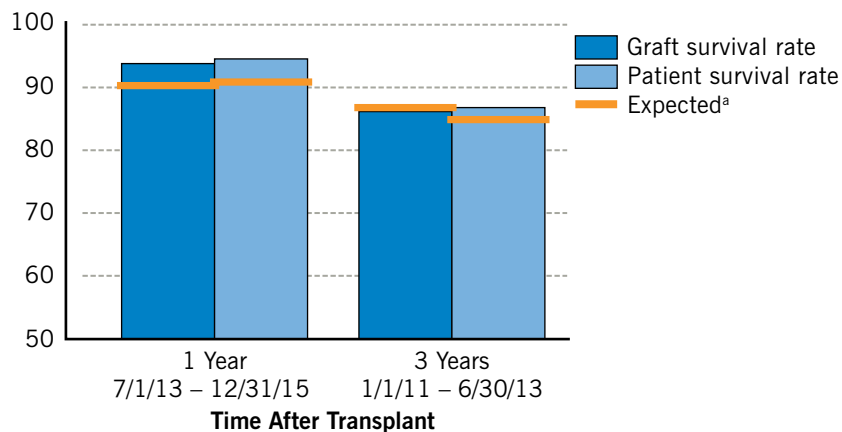


Cleveland Clinic's cardiac transplant program is one of the largest in the US and is the leading center in Ohio. Cleveland Clinic surgeons performed 54 heart transplant procedures in 2016.

## Heart Transplant 1-Year and 3-Year Survival Rates

Cleveland Clinic is committed to achieving the best possible outcomes for patients. Our surgeons have more than 20 years of experience with heart transplantation. This level of expertise resulted in survival rates that were equal to or better than expected.

### Survival (%)



Source: Scientific Registry of Transplant Recipients, January 2017. [srt.org](http://srt.org)

<sup>a</sup>Expected rate based on risk adjustment

1828

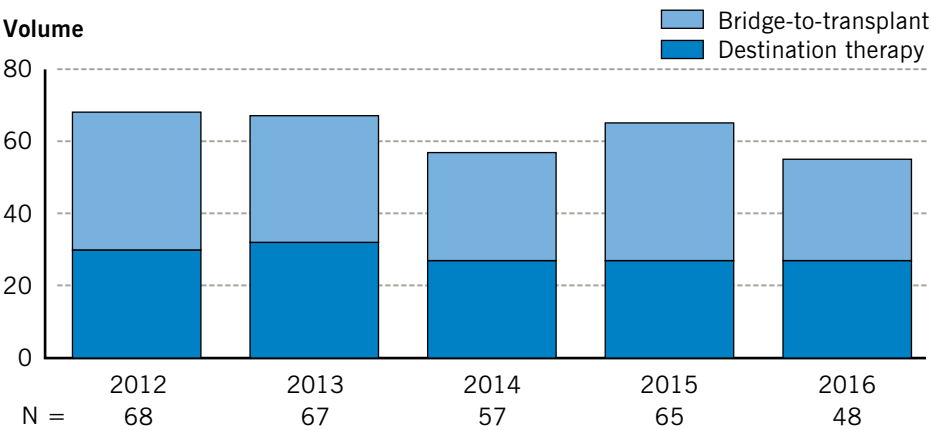
heart transplants have been performed at Cleveland Clinic since the cardiac transplant program began in 1984.

# Heart Failure and Transplant

## Ventricular Assist Device Implantation Volume<sup>a</sup>

2012 – 2016 (N = 305)

Cleveland Clinic is a pioneer in the use of ventricular assist devices (VADs), having more than 25 years of experience. They can be used to help preserve heart function in patients who are awaiting transplant (bridge-to-transplant) or as a final treatment option (destination therapy). In 2016, VADs were used as bridge-to-transplant in 27 patients, and 21 patients received VADs as destination therapy.



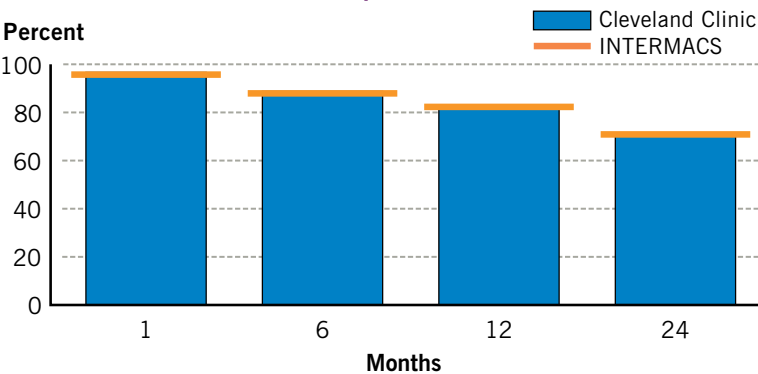
<sup>a</sup>2012-2015 LVAD volumes revised to include pediatric devices, including Berlin Heart.

## Ventricular Assist Device Implantation

2006 – March 2017

The Interagency Registry for Mechanically Assisted Circulatory Support (INTERMACS) is a registry for patients with mechanical circulatory support devices. Compared with INTERMACS data, the survival rates for Cleveland Clinic patients with continuous flow LVADs were as expected or better. The incidence of post-implant adverse events was not statistically different for malfunction/thrombosis, infection, neurological dysfunction, and rehospitalization.

### Continuous Flow LVAD Post-Implant Survival



INTERMACS = Interagency Registry for Mechanically Assisted Circulatory Support

### Post-Implant Adverse Events

	Cleveland Clinic	INTERMACS
Bleeding	10.6%	13.2%
Device Malfunction and/or Pump Thrombosis	4.9% <sup>a</sup>	5.2%
Infection	14.3% <sup>a</sup>	13.8%
Neurological Dysfunction	4.9% <sup>a</sup>	4%
Rehospitalization	39.0% <sup>a</sup>	39.3%

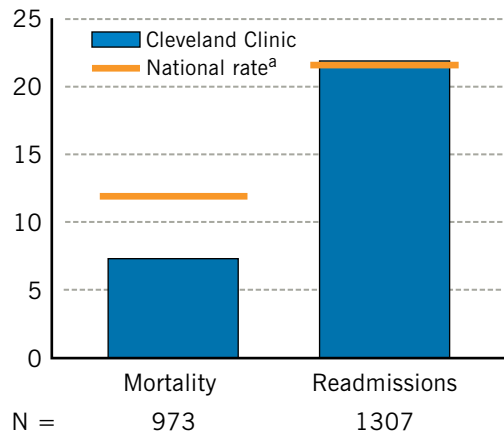
<sup>a</sup>No statistical difference

## Heart Failure

### Heart Failure All-Cause 30-Day Mortality and All-Cause 30-Day Readmissions

July 2013 – June 2016

Percent



CMS calculates 2 heart failure outcomes measures based on Medicare claims and enrollment information. The most recent risk-adjusted data available from CMS are shown. Cleveland Clinic's heart failure patient mortality rate is lower than the US national rate. CMS ranks Cleveland Clinic's performance as "better than" the US national rate. Although Cleveland Clinic's heart failure readmissions rate is slightly higher than the US national rate, CMS ranks Cleveland Clinic's performance as "no different than" the US national rate. To further reduce avoidable readmissions, Cleveland Clinic is focused on optimizing transitions from hospital to home or postacute facility. Specific initiatives have been implemented to ensure effective communication, education, and follow-up.

<sup>a</sup>Source: [medicare.gov/hospitalcompare](https://www.medicare.gov/hospitalcompare)

