

# Transmedics Organ Care System Heart

This technology was funded through the New Technology Funding and Evaluation Program (NTFEP). The NTFEP funds the introduction and evaluation of new technologies that:

- ✓ Are safe and effective
- ✓ Provide better health outcomes
- ✓ Provide value for money
- ✓ Provide greater access to care.

The evaluation findings will inform recommendations regarding the future use and/or investment of the technology within Queensland.



## What is the technology?

Chronic heart failure (HF) is a progressive, debilitating chronic disease associated with significant risks of death. Heart transplantation remains the gold standard treatment for selected patients with end-stage HF failing modern day therapies. TransMedics Organ Care System (OCS) Heart (aka “beating heart in a box”) is a portable perfusion system that allows the heart to be kept in a warm and functioning state (i.e. beating) outside of the body. Previously, all donor hearts were transported using cold storage preservation method (i.e. ice). TPCH is one of only three hospitals in Australia using this technology in specific circumstances.

## What are the expected benefits?



OCS Heart allows clinicians to monitor, assess and re-condition the donor heart during transport.



The window of time to perform transplants is expanded from 4 hours using cold storage up to 10 hours using OCS Heart, before the heart starts to deteriorate.



Maintaining the donor heart in a normal or close to normal physiological state provides better preservation of the organ during transport.



Using OCS Heart may expand the potential heart donor pool and reduce the average heart transplant recipient waitlist time by as much as 20-30%.



OCS Heart minimises the risk of adverse post-transplant outcomes and improves post-transplant outcomes.



OCS Heart will allow the viability of donor organs to increase and for the hospital to perform additional transplants each year.

## Where is the evaluation occurring?

Advanced Heart Failure and Cardiac Transplantation Unit, The Prince Charles Hospital (2016)

## Funding provided

\$ 443,605

## Want more information?

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