Transmedics OCS Heart

Initiative Type

Technology

Status

Deliver

Added

31 January 2018

Last updated

20 September 2021

URL

https://clinicalexcellence.qld.gov.au/improvement-exchange/transmedics-ocs-heart

Summary

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.

Key dates

Sep 2016

Sep 2018

Implementation sites

The Prince Charles Hospital

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Aim

Provides an opportunity to pilot and evaluate new technologies within 'real world' clinical settings in the Queensland context.

Benefits

The potential benefits of this technology include:

- OCS Heart allows clinicians to monitor, assess and re-condition the donor heart during transport.
- Maintaining the donor heart in a normal or close to normal physiological state provides better preservation of the organ during transport.
- OCS Heart minimises the risk of adverse post-transplant outcomes and improves post-transplant outcomes.
- The window of time to perform transplants is expanded from 4 hours using cold storage up to 8 hours using OCS Heart, before the heart starts to deteriorate.
- Using OCS Heart may expand the potential heart donor pool and reduce the average heart transplant recipient wait list time by as much as 20-30%.
- OCS Heart will allow the viability of donor organs to increase and for the hospital to perform additional transplants each year.

Background

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.

Evaluation and Results

Key findings will be published at the end of the evaluation period.

Resources

Technology Evaluation Summary

PDF saved 23/12/2024