

CardioMEMS HF System

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?

Heart failure (HF) is a complex chronic condition where the heart is not able to pump sufficient blood. HF is a serious disease; 50% of patients are dead within 3 years of diagnosis. Heart failure hospitalizations cost around \$1 billion per year in Australia, they also increase the risk of death and impair the quality of life. Once symptoms develop it is usually too late to avoid hospitalization. Early detection can be achieved by measuring the pulmonary artery (blood) pressure (PAP) using CardioMEMS HF System; a small sensor implanted into the pulmonary artery. Patients are able to transmit sensor readings remotely to the Heart Failure Service for monitoring and therapy adjustments by staff as required.

What were the evaluation findings?



Patients were hospitalised 5 times less during the 6 months after the CardioMEMS implant, compared to the 6 months before, saving approximately \$192,000.



Patients with CardioMEMS attend an outpatient clinic every 6 months compared to every 1 to 2 months without CardioMEMS.



More targeted and optimised use of medications.



Restricting implantation to a single cardiologist who was not a heart failure specialist increased clinic requirements.



Patient selection is complex and crucial to maximise outcomes
No patients with CardioMEMS died during the evaluation period due to their heart failure.



CardioMEMS would be suitable for other heart failure services in Queensland with at least two experienced heart failure cardiologists and specialised heart failure nurses.

Where was it evaluated?

Advanced Heart Failure and Cardiac Transplant Unit, The Prince Charles Hospital (2017)

Want more information?

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