# MiraQ Cardiac

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.



#### Clinical **Excellence** Division Creating solutions for better healthcare



### What is the technology?

The MiraQ Cardiac combines ultrasound imaging and transit time flow measurement (TTFM) in a single system that is specifically designed for cardiac surgery. There is growing support that checking grafts and anastomoses during cardiac surgery should be standard of care. Epicardial ultrasound gives a simple, fast and safe imaging of the coronary stenoses and graft anastomoses, providing immediate feedback on the quality of the CABG surgery. Performing flow measurements is the quickest and most accurate way to verify graft patency while patient is still in the operating room.

#### What are the expected benefits?



**Improved outcome** – assessment with ultrasound imaging and TTFM during cardiac surgery protects the patients from serious adverse events and death.



**Instant response** – the MiraQ Cardiac provides instant feedback on the performance of the graft eliminating guesswork and failure.



Reduce RE-DO cases – any occluded or underperforming grafts can be revised on the spot and take any measure to avoid recalls. Reduce re admissions and length of stay in ICU.

## Where is the evaluation occurring?

Cardiothoracic Surgery Service, Gold Coast University Hospital (2017)

### Want more information?

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**Guided workflow** – minimize user interaction and increase work efficiency due to measurement definitions and system configurations.



**Reduced MACCE** – epiaortic imaging provides a sensitive and direct diagnosis of aortic disease that can lead to changed surgical strategy and reduced rates of major adverse cardiac and cerebrovascular events.



**Operating room integration** – export and import data – the system is equipped with an isolated network connection allowing for safe and secure access to the hospital network.

