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Liverpool Hospital is celebrating its 200 year anniversary by reflecting on powerful moments throughout its history.

How Liverpool Hospital transformed patient care worldwide

In 1990, Liverpool Hospital implemented a Medical Emergency Team (MET) system which aimed to reduce the number of patients experiencing cardiac arrest while in the Hospital. Today, the system has been recognised as one of the best in the world, assisting over 200 patients every month in Liverpool Hospital alone.

Prior to its development, Liverpool Hospital and the Simpson Centre for Health Services Research (SCHSR) collected data about patients who experienced a cardiac arrest in hospital. What they observed in almost every case is that the patient did not suddenly have a cardiac arrest – there were noticeable changes in vital signs such as pulse, breathing and blood pressure up to eight hours beforehand.

Margaret Nicholson, a Nurse Practitioner candidate at Liverpool Hospital's Intensive Care Unit, said the data was instrumental in changing the way emergency response teams operated.

“At the time, it was typical for in-hospital emergency response teams to only attend a patient once they had suffered a cardiac arrest,” Ms Nicholson said.

“However, it was clear that patients were deteriorating slowly and that early intervention was the key to possibly preventing the cardiac arrest,” she said.

Liverpool Hospital developed a clear set of criteria around changes in vital signs which identified ‘at risk’ patients, so a specialised MET could intervene at the earliest indication of deterioration, rather than at the point of crisis.

Liverpool Hospital General Manager, Anthony Schembri, said it was a major turning point for the care of critically ill patients.

“The MET system, although simplistic in its design, was a revolutionary step forward in patient care,” Mr Schembri said.

“It has consistently reduced cardiac arrests by 30 per cent, which no other intervention has been able to achieve.

I’m proud to say that the MET system Liverpool Hospital created and implemented is now standard practice in many hospitals within Australia and around the world,” he said.

The MET usually consists of an Intensive Care doctor, a senior Intensive Care nurse and a Medical Registrar who have the advanced resuscitation skills necessary to respond to a medical emergency. The team is available 24-hours, seven days a week.

The system is continuously monitored and improved, with a recent initiative by NSW Health called ‘Between the Flags’ which builds on the MET system concept in an attempt to identify deteriorating patients before they reach MET calling criteria.