

## *Howick and Pakuranga Times*

LIVES are being transformed and possibly saved following the roll-out of an award-winning health initiative at a Manukau public hospital.

Over the past 12 months, a research team at Middlemore Hospital has looked at ways to cut the time it took heart attack patients requiring a specialised treatment to be transferred by ambulance to Auckland City Hospital.

People who suffer a heart attack known as ST elevation myocardial infarction (STEMI) after hours at Middlemore are taken to Auckland City Hospital's 24-hour cardiac catheterisation laboratory.

An emergency care audit of time-critical treatments showed only 17 per cent of STEMI patients reached the cardiac catheterisation lab within 90 minutes.

A pilot study was launched in July last year, with the goal of increasing the number of patients reaching the lab in the allotted time, from 17 to 95 per cent.

Dr Vanessa Thornton, the clinical head of emergency care at Counties Manukau District Health Board (CMDHB), was part of a team that took up the challenge to improve the transfer procedures.

"This treatment is time-critical," Dr Thornton told the *Times*.

"You have better heart muscle afterwards. You have better improvement and there's less chance of some of the things like heart failure happening if you can get the angioplasty done quickly.

"That's why people used to say 'time is muscle'. The longer it takes, the less [heart] muscle you'll have at the end of it."

During the study, steps were taken to streamline the transfer process and as a result 70 per cent of patients requiring after-hours lab treatment are reaching their destination within 90 minutes.

"There were two main issues with the time turnaround," says Dr Thornton.

"One was the time to get a transferring doctor or nurse with them, and then the time waiting for an ambulance to come.



**DELIGHTED:** Dr Vanessa Thornton, clinical head of emergency care at Counties Manukau District Health Board, is proud of a team award for efficiency. Photo supplied.

“Transferring patients is a complex process. We have to call an ambulance, get them in the ambulance, load them up, unload them at the other end... it all takes time.

“It was taking about 45 minutes just that part, just loading and transferring on a non-busy day.”

An outcome of the study is that heart attack patients now remain on an ambulance trolley, while having a five to 10 minute consultation with a coronary care nurse.

“It stopped us having to call and wait, and also the loading of the patient and transferring between beds. They [St John] have been very helpful with that.”

The CMDHB project recently won the improvement project of the year award at the annual CIForum, which is focused on quality improvement.

“We’re feeling pretty pleased,” says Dr Thornton. “We researched it, but now we’ve implemented it and it’s what people do.”

She says the “ultimate goal” will be that after-hours STEMI patients go directly to the lab at Auckland City Hospital.

“The ambulance will email us their on-board ECG [patient heart record] and then they will bypass Middlemore.”