



PROJECT BRIEF

Loddon Mallee Region Virtual Trauma & Critical Care (ViTCCU) Project

Loddon Mallee Health Alliance

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LMHA Virtual Trauma & Critical Care Unit (ViTCCU) project

The projects aim is to deliver specialist trauma and critical care support from major Melbourne hospitals and Bendigo Health to regional hospitals in Echuca, Swan Hill and Mildura, in the Loddon Mallee region of Victoria.

The Virtual Trauma and Critical Care Unit project will provide support for local regional doctors, in smaller towns, dealing with trauma or specialist cases, by linking them via video conferencing and super fast broadband equipment, with trauma and critical care specialists at Melbourne's Alfred, Austin, St Vincent's and Royal Children's hospitals.

The project is an expansion off an existing telephone service already provided to regional doctors by metropolitan specialists.

The video conferencing equipment incorporating broadband technology is set up by the bed of a critically ill patient in a regional hospital. It is able to immediately send the patient's vital signs, clinical test results and x-rays direct to waiting trauma specialists in Melbourne. The specialist can see the patient's condition live via a video session and review the patient's vital signs. They are then able to offer expert treatment advice on the care of that patient.

This will allow quicker decisions on the right treatment for the patient and also determine if they can stay in their local hospital or need to be sent on to a larger hospital in Melbourne or Bendigo.

Bendigo Health will be the primary referral site in the region for smaller hospitals, however all hospitals, including Bendigo will also be able to receive advice from those participating metropolitan hospitals.

Loddon Mallee Health Alliance chairman of the board, Alan Taylor, said that there were many benefits to regional patients and their families.

"In the majority of cases, critically ill patients are stabilised so they can be transported to Melbourne. With this project, more patients will be able to be treated in their local hospital, by their local doctor and remain close to their home, family and friends, reducing the stress and trauma of being transported to a metropolitan hospital," he said.

"This will also increase the knowledge of regional medical staff which will further improve patient care in regional and remote areas." he added.

Austin Hospital Director of Emergency, Dr Fergus Kerr said that the project would benefit both metropolitan and regional hospitals.

"The Virtual Trauma and Critical Care Unit project will encourage metropolitan hospitals to show clinical leadership and support for their regional colleagues by 'virtually' working beside them, offering specialist advice and assisting them to identify the best treatment options for their emergency patients," he said.



Adult Retrieval Victoria will be the initial contact point for all regional hospitals. They will assess and determine the best metropolitan hospital for the patient's care. This will also result in a reduction of the time taken to organise the retrieval service.

The ViTCCU

The system consists of a video conferencing cart at the foot of the patient's bed in the emergency or high dependency ward at for example Swan Hill hospital. Using Cerner clinical applications and a Polycom video conferencing system derived from cameras on the cart, vital signs telemetry, images of patient records, x-rays etc are provided over a dedicated 100Mbps connection to a specialist at for example St Vincent's hospital in Melbourne.



At the St Vincent's end the specialist uses the system to supervise and advice care of the patient. The remote specialist is seen and heard in Swan Hill.



In the majority of cases, the current practice is to stabilise patients to a level that enables their transportation directly to the metropolitan hospital. With the implementation of this project it is hoped that more patients will be stabilised and stay at their local hospital.



The installation of ViTCCU units will augment specialist clinical support for healthcare workers in the regional hospitals by;

- providing improved support for local doctors dealing with acute trauma cases,
- providing better patient information for the supervising trauma specialist,
- Allow quicker decisions on the right treatment,
- Produce better decisions on the need for patient transportation,

This will aid the diagnosis and stabilisation process and enable local ongoing treatment of some patients.

The installation of the units in metropolitan hospitals and the establishment of the new facilities have the potential to provide a foundation to expand the service to other regional hospitals, once the initial installation has been evaluated.

The project is being funded in part by the Clever Networks Initiative of the Commonwealth Department of Broadband, Communications and the Digital Economy, a consortium of suppliers (including Telstra, Cerner Corporation and KPMG), each participating hospital, the Telstra Foundation and Multimedia Victoria.

The project will be launched in Melbourne on 19th June and in Bendigo on 26th June, 2008.

The Loddon Mallee Health Alliance plans to have the first two sites, Bendigo Health and the Alfred Hospital online in September 2008. All other sites will be online by the end of November, 2008.

If you have any questions about this initiative, please direct your enquiries to the Project Director, Tania Carra on 03 54341007 or tania.carra@lmha.com.au.

