NOTES FROM THE FIELD

Helen Anderson case studies how collaborative training and education has prepared an Indigenous community in Goondiwindi for medical emergency

A miracle four years in the making

Imagine a five-year-old boy is playing in a river; he falls off a log and goes under in one-and-a-half metre deep water. A frantic three to five minute search begins — is he caught under the log? Will he be found in time? What will be done if he is found? A bystander runs to find someone who knows first aid and another bystander notices the bright coloured board shorts the boy was wearing. He is found!

Now imagine that you are located in a remote Aboriginal community of about 200 people more than 30 kms from the closest rural township and hospital. That rural township, Goondiwindi has a population of around 5,000 and is located on the border of Queensland and New South Wales (NSW). It is over 368 km from the nearest capital city of Brisbane in Queensland and a major hospital.

The first aider orders the boy onto a sandbank in the middle of the river — eight metres from the riverbank and orders another bystander to call triple-zero (000). The five-year-old is unconscious and not breathing — his pulse cannot be found. The first aider clears his airways — administers CPR and gets him breathing. He takes turn with other first aid trained members of the community in performing CPR. Another triple-zero (000) call is made to inform the fast-approaching ambulance unit that Daniel (the five-year-old boy) is found and CPR is being administered. The two ambulance units make it more than 30kms from Goondiwindi to the Aboriginal community of Toomelah in just 13 minutes. Daniel is saved — but the story doesn't end there.

Only four years ago this scenario would have been very different. If someone were sick or injured from the Toomelah community they would be thrown in the back seat of the nearest car and sped frantically, more than 30km, to the Goondiwindi hospital.

In the past, a lot of lives were lost and injuries were more complicated because of lack of education. Education however was not the only issue, funding of an ambulance ride was also contentious as Toomelah in NSW hosted the closest ambulance station but the hospital is located in Goondiwindi, Queensland.

Any triple-zero (000) call taken at this time would go to the NSW Ambulance Communications Centre in Dubbo then be systematically relayed to the Communications Centre in Toowoomba then onto the Queensland Ambulance Service (QAS) in Goondiwindi—giving rise to costly delays.

How did we get from that scenario to the above's fantastic 'Chain of Survival' example?

The scene of the emergency – McIntyre River, near Toomelah, Goondawindi, Queensland. Note the sandbank eight metres from the riverbank.

Matt Steer, Officer in Charge (OIC) of Goondiwindi Ambulance Station explains.

"About four years ago, a number of catastrophic medical events at Toomelah and the Aboriginal community made us realise that we needed to talk to the community and find out how to change their way of thinking. We recognised that there was a need to equip the community to manage emergencies in their own right and to trust that calling triple-zero (000) would bring them assistance and would not burden them with excessive costs. The triple-zero (000) action plan was born out of these discussions.

"We worked with NSW Health and NSW Ambulance Service; Queensland Indigenous Health and NSW Indigenous Health; and community workers in Toomelah and Boggabilla to get this plan up and running.

"Queensland Indigenous Health lead the charge, working with the QAS to provide first aid training and NSW Indigenous Health, in partnership with Mission Australia, facilitated meeting groups with the community and elders to talk about the importance of triple-zero (000) and build the triple-zero (000) action plan in association with the 'Border Rivers Parenting Project'— an informal training program with no written paper work.

"Meeting groups were held under trees around fires while participants cooked their tucker and we discussed their needs. A major finding was that the community didn't understand the communications centre system and how it worked. When the community called triple-zero (000) they were unsure of who was taking the call and from what region.

"Another concern of the community was that it was embarrassing when an ambulance turned up with lights and sirens—they created a big spectacle and created unnecessary attention. The program instructors explained that in an emergency our emergency devices need to be used. The Elders and the ambulance station representatives mutually agreed that the lights and sirens would be turned off when driving across the bridge into the community.

"Constantly liaising with the NSW Ambulance Service, Queensland Indigenous Health received grant funding for Goondiwindi ambulance staff to cross the border to conduct first aid training in the community.

"It was also handy that I play rugby league, and had contacts with the local rugby league football club (a lot of the Toomelah community play football with ex-football heroes in their ranks). I found this helped build the community's trust in me.

"We initially found people within the community who were willing to undertake first aid training — about 10 or 15 people. The QAS OIC in Inglewood, Mike Price, who is a qualified first aid and community education instructor, did a lot of work with us in adapting the program for Indigenous people. Because the community preferred to be outdoors, training was conducted anywhere – from under a gum tree to whatever environment they were comfortable – in partnership with their community programs in Brisbane and our region.

"So the improvement has very much been a collaborative effort between Goondawindi, QAS – in partnership with NSW Ambulance – and Queensland Indigenous Health. The results of this four-year program are that we now have up to 30 people out of a community of about 200

Daniel Connors, happy, healthy and alive today thanks to his community's collaborative emergency management approach.

Rodney Bourke, Extended Care Paramedic, Daniel & Angus McIntosh & Matt Steer, OIC, Gundy

who are trained in first aid and are now coming back and doing their certification. So the interest is there to see the dramatic benefits, and the community has responded to many emergencies–obviously the most dramatic and wonderful outcome has been little Daniel, that's a tremendous achievement.

"The other achievement on which we've been working with the community is negotiating with the elders and the people in the community about using triple-zero (000). We started by convincing a few people to do it which has had a ripple effect in the community. People started thinking this wasn't a bad idea. We also negotiated with NSW Ambulance and the NSW government so when a triple-zero (000) call was made from Toomelah and other NSW communities that are closer to us – it came directly to our Communications Centre in Toowoomba and then to us. There was also the question of payment, for which the NSW government has now taken responsibility."

On Saturday 29 October the four years of training and education all fell into place when little Daniel Connors fell off a log into the McIntyre River and was submerged for three to four minutes.

Angus McIntosh a Toomelah resident, was woken up to rush to Daniel's aid. He says, "I was actually home in bed and a little girl came and told me that Daniel had fallen in the river and they couldn't find him. He was still under water and they were still looking for him as I arrived. Then they found him and lifted him out and they didn't know what to do with him, so I told them to put him on the sandbank and that's when I jumped on him and remembered all my first aid training. He wasn't breathing, he was unconscious – I only learnt CPR at the start of this year. I cleared the airways, did the compressions on his chest, water came out of mouth and nose – a few of us took turns doing mouth-to-mouth and the compressions. I told a bystander to ring triple-zero (000), his parents were in Gundy and all that was on my mind was to go and tell them. I thought he was in trouble – I didn't think he'd make it."

Matt Steer recounts the ambulance perspective of the story, "At 13.51pm Toowoomba Communications Centre received a triple-zero (000) call providing information that a young boy was walking on a log in the river and slipped and was in about one-and-a-half metres worth of water. We were dispatched at 13.52pm and on-route received more information from the Communications Centre that Daniel had been found and they were doing CPR on him – that was a fairly ominous sign.

"We then notified Gundy Hospital and provided a situation report to the Queensland Emergency Management System (QEMS) (see diagram). When we arrived at Toomelah there was a line-up of people showing us exactly where to go. We were confronted with about 10 metres worth of water about waist deep that we had to get across. Daniel was on his left-lateral position on the sandbank in the middle of the river – he was still unconscious – he certainly had a pulse and diminished respiratory function, he wasn't breathing very well at all.

"We got him on the stretcher and made our way back across the river – he was quite cyanosed. We intubated, ventilated and sedated him on the riverbank and left the scene 28 minutes after arriving.

"Daniel was doing very well on the way to Gundy Hospital, his vital signs were improving, we had a team waiting to meet us at the hospital to continue ventilation and

resuscitation and the Retrieval Team arrived via the Royal Flying Doctor Service (RFDS) within three hours of the incident.

"In the case of Daniel the incident happened about 10 to 2pm and I think it was by 5.30pm that evening he was in the Brisbane-based Mater Children's hospital. He has no neurological damage and all the way along, from the very beginning he was rescued in care and the carers were responding. It was continuous and compounding – the patient care continued all the way through.

"This is an on-going process of meeting with groups every two-three months with now 20% of the community trained in first aid and doing courses two-three times a year. We are now getting returns – people coming back. Qld Indigenous Health continues to fund the training through grants.

"One of the courses per year is for High school kids at year 10 at Goondiwindi and Boggabilla High Schools.

"Indigenous kids come to Goondiwindi Ambulance Station and train for two days and get their first aid certificate. Our program targets the elders, adults and the young ones – we are focused on the young people as they are the people of the future."

Once other communities saw the positive outcomes in the Goondawindi community they also have adopted similar processes. There has been a significant decrease in people using their own vehicles to transport patients to hospital. The community now know who is trained in first aid and who to contact in an emergency. There is now pre-hospital support and QAS are arriving and continuing with care and utilising QEMS if needed and a full continuum-of-care from notification, to getting these people into tertiary care hospitals.

Perhaps the last word should go to Aboriginal elder, Aunty Ada, who was instrumental in changing attitudes to dialling triple-zero (000) and trusting QAS, "I am full of praise for the ambulance officers, hospital workers and my community for working together to save Daniel's life. We live 30km out here and it's a long way to town when something goes wrong. Our prayers were answered and I am very proud of the young people, though I think the kids have had a bit of a scare — they haven't been back down to the river yet."

The chain of survival

AN EXPLANATION OF THE QUEENSLAND EMERGENCY MEDICAL SYSTEM (QEMS)

The Queensland Emergency Medical System (QEMS) ensures an integrated and co-ordinated system to care for the acutely ill and injured. QEMS provides high quality primary health care, pre-hospital patient care and definitive medical care in Queensland through a continuum of care process using all emergency health care services. It focuses on a system, rather than organisational approaches to the delivery of patient care services.

This approach is necessary as emergency health care services are achieved through a series of focused sub-systems including private and public health care providers and emergency services agencies. These sub-systems, as summarised below, operate within a complex and extensive network of arrangements that together form QEMS.

High quality primary health care, pre-hospital patient care and definitive medical care is provided in Queensland through a continuum of care process, which reflects the QEMS concept. The basic elements of this continuum of care:

- Health Promotion and Injury Prevention;
- First-aid;
- A '000' Access system;
- Response Coordination;
- First Responders; (community members in rural or remote areas trained by QAS to respond until ambulances can arrive)
- Pre-hospital Response, Care and Transport; (provided by QAS)
- Retrieval and Inter-hospital Transfers (IHT);
- Medical care; and
- Rehabilitation.