

# Outback adventures

When the Royal Flying Doctor Service finally found a solution to the oral health crisis in some remote rural communities, the funding came from an unexpected source. **By Kerry Ramsey**

**W**hen Dr Hendrik Lai talks about a recent case study, he reveals how shocked he was when he treated a patient—a two-year-old boy—who had 16 cavities. “This child was probably drinking a couple of litres of soft drink a day and had a

diet high in processed sugar,” he explains.

Dr Lai recently returned from a decade working in villages in East Timor and the Solomon Islands—treating and educating patients in oral health—but this appalling situation was not in a developing country; it was in our own backyard.

“What I found, and it was a real eye-opener and quite heart-breaking, is that the state of dental health in remote and rural NSW is worse than what I saw in the developing countries,” explains the dentist.

As he points out, these outback communities—with around 7000 residents—are suffering from a severe lack of access to dental care, as well as minimal oral health education. To address this problem, Dr Lai has taken on the position as dental officer for The Outback Oral Treatment and Health (TOOTH) program. Run by the Royal Flying Doctor Service (RFDS) South East Section, in partnership with the Investec Foundation and the Gonski Foundation, it aims to deliver oral health services to north-west NSW.

After plenty of research and planning, TOOTH was initiated by RFDS senior dentist Dr Lyn Mayne. She established clinics at Bourke, Lightning Ridge, Collarenebri and Goodooga last February. Soon after, Dr Lai took over as dental officer and began fly-in fly-out clinics for these vulnerable communities. Based in Dubbo, he also supplies dental services and clinics

there, and works side by side with dental therapist Rebecca Hovington. Launched in May, TOOTH program will offer 128 dental clinics and 128 dental therapy clinics. “Initially, we are providing access to dental health care. Our long-term ambition is to see a stabilisation of the DMFT [decayed, missing and filled teeth] scores in these particular communities,” says Dr Lai. There had never been any epidemiological studies or statistical surveys of the DMFTs in these communities so there is no baseline against which to measure. At present, Dr Lai is gathering a benchmark of the current level of DMFT.

As the program progresses, the population DMFT will stabilise in the short run. The D (decay) component will drop while the M (missing) and F (filled) components will rise as treatment is provided.

In the medium and longer run, with an education system in place, the overall DMFT of the community should begin to decrease as parents, children and the community at large become educated as to the causes of oral disease. The overarching goal is for there to be a decrease in the exposure of decay in these communities.

“There’s never really been anybody there to provide the education to the members of these vulnerable communities,” says Dr Lai. And that includes the likes of the two-year-old boy with 16 cavities. As the dentist points out, “Clearly the two-year-old is not the one going out and buying two-litre bottles of soft drink. Mum and Dad were sticking that stuff in his mouth. It’s definitely an education-related issue.”

According to the RFDS South East Section statistics, 1000 school-age children in north-west NSW have dental caries, and there are also high rates of edentulism and missing teeth.

“Any dentist is surprised when they come out to these locations in Broken Hill or Dubbo,” says Dr Lyn Mayne. “They don’t expect to see the level of destruction in children’s teeth, as well as adults.”



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Dr Hendrik Lai, Royal Flying Doctor Service, Dubbo





She says the oral health of many Australian children in the outback is often on par with kids in orphanages in developing countries. “I’ve talked to people who have returned from voluntary work in orphanages with pictures of teeth in terrible condition. I can show them similar examples from locations out here. It’s surprising.”

This low level of dental health is directly related to insufficient numbers of healthcare professionals employed in these regions. “At best, it has been sporadic access to care—when it’s available—with very stop-and-start treatment,” says Dr Lai. “Without any professionals to provide education to the members of these communities, a vicious cycle is created.”

He explains that in the regions, it’s common for families to have virtually no dietary and oral hygiene habits. “The grandparents have had all their teeth taken out because of decay, and they’re okay about that. Mum and Dad are also getting all their teeth taken out because of decay, and they haven’t taught their kids that drinking three litres of soft drink a day and eating five Mars bars is not the best thing in the world for them.”

Also on the agenda, TOOTH program is addressing work-

**Above and left: Dr Lai is seeing children whose oral health is directly related to their parents’ poor understanding of oral health. Above, right: David Clarke of Investec says Government should be stepping in soon.**

force issues by providing clinical education for senior dental students from universities. At present, senior dental students from Charles Sturt University, The University of Sydney and Griffith University are being provided with unique clinical training experience in remote and rural dentistry.

Research shows a major determinate in where students choose to practise after they have graduated is where they have trained. If some senior dental students are trained in remote and rural dentistry, then they may make the decision to practise in these remote areas. This would lead to a direct increase in the access to care available in these vulnerable communities.

TOOTH program will cost \$2.5 million in the first three years. Funding is supplied by a three-party partnership—the philanthropic Gonski Foundation, Investec bank, and the not-for-profit Royal Flying Doctor Service.

David Gonski, as well as running his own foundation, is the chair of Investec bank. It was his idea to bring the two foundations together with the RFDS to get TOOTH program underway. Both Investec and the Gonski Foundation have committed to funding for the first three years. “The only thing missing is the government,” points out Dr Lai.

For Investec, this issue has been well addressed. According to the CEO of Investec, David Clarke, he intends to “impress upon both the state and federal governments the importance of this program and to push hard for them to fill our shoes at the end of the three years”.

As Investec has been an industry leader in providing dental finance for the past seven years, a dental health program with the RFDS was a perfect match. “We felt it was a nice fit and we have been approached by a number of dentists who would like to volunteer their help,” says David Clarke.

While it’s not always easy to take volunteers so they have a meaningful experience, the logistics of integrating them into the program are being discussed now. “The short-term nature of volunteers means they don’t see the results of their work in the long term,” says Clarke. One idea is that the volunteers

## Quote

David Clarke, CEO, Investec

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could help with diagnosis and the screening process.

At present, TOOTH program is only a NSW initiative but the set-up of the RFDS means that it could be easily exported to other states and territories. The RFDS carves up Australia into ‘sections’ and each of these sections operate effectively as a strategic business unit. They are free to decide upon their own programs and make-up.

For the RFDS, the dental component of TOOTH program represents the pointy end of the spear for primary health programs in the Dubbo area. The intention would be that as the program matures, they will be able to offer other primary health services and allied health services out of the Dubbo base using the same model. This could then be expanded to incorporate the other states and territories.

One area where the program has been a great success has been the welcome received from the local healthcare community, the local hospitals and health services, and the general population. “The level of support we’ve had in these communities has been absolutely overwhelming,” says Dr Lai.

Still in its infancy, TOOTH program is already producing very positive outcomes in these outback communities. A significant waiting list has already begun to develop as people hear about the program. In some of the areas, the waiting list is three months long. “I think the program represents a very robust and sustainable model,” says Dr Lai. □