


# SHAPING THE FUTURE

*Indigenous communities  
strengthen their voice in  
health programs*



From the city to the Kimberley to the Goldfields, we have identified doctors, both Indigenous and non-Indigenous, engaged in various ways to improve the health of Indigenous communities: saving their eyesight; protecting them from unsafe drinking water; and looking after their sexual health.

Aboriginal people are being involved in the process, and their knowledge, perspectives and lived experience are helping to shape how health programs are designed and delivered.

# Aboriginal voices helping shape rural health programs

*A newly established Aboriginal Advisory Group provides cultural expertise and strategic advice to Rural Health West*

**R**ural Health West has set up a special advisory committee to ensure Aboriginal voices help to shape the organisation's efforts to improve Indigenous health outcomes across the State.

The newly established Aboriginal Advisory Committee will provide cultural expertise and strategic advice to the Rural Health West Board and staff to ensure ongoing programs and future initiatives are informed by Aboriginal knowledge, perspectives, and lived experience.

The seven-member committee, which will meet four times a year, held its first meeting in Perth on 13 March. The inaugural chair of the committee is Dr Stephanie Trust – a Gidja and Walmajarri woman – who is clinical director of the Wunan Health and Well-Being Centre in Kununurra. The other members, who come from all over WA, are Dr Christine Clinch, Ashley Councillor, Jessica Curnuck, Adjunct Professor Tuguy Esgin, Stephen Morrison and Mitchell Walley.

Dr Trust says the advisory group provides an opportunity for Aboriginal perspectives to shape how Rural Health West's programs and services are designed and delivered.

"Aboriginal people understand the realities our communities face and the importance of care that respects culture, connection and community," she says.

"We need Aboriginal voices influencing every part of the health system – from the way services are delivered to how programs are designed and decisions are made.

"This committee creates a space for that influence. It allows Aboriginal leaders to share their knowledge and lived experience, so that Rural Health West can work in ways that genuinely support our communities."

Dr Trust, a former member of the Rural Health West Board, says strengthening Aboriginal leadership in health is critical to creating sustainable change in rural and remote Australia.

**“Closing the gap in health cannot be achieved without genuine partnership with Aboriginal peoples. For Rural Health West, this means ensuring Aboriginal voices help guide our priorities, our programs, and the way we work with communities.”**



**Committee members: Stephen Morrison, Dr Christine Clinch, Dr Stephanie Trust, Jessica Curnuck and Mitchell Walley.**

"Our communities have the knowledge and the capability to shape solutions," she says. "When Aboriginal people are part of the leadership and decision-making, it strengthens the whole system and helps ensure the services being delivered truly meet community needs."

Improving health outcomes for Aboriginal peoples is a key part of Rural Health West's mission.

The organisation delivers a range of programs that prioritise Aboriginal communities, including outreach services delivered specifically for Indigenous patients, recruitment and locum support for Aboriginal Community-Controlled Health Organisations, and the annual Aboriginal Health Conference.

Rural Health West CEO Professor Catherine Elliott said the establishment of the committee represents an important step in informing the organisation's work at every level to support culturally appropriate services and improve health outcomes.

"Closing the gap in health between Aboriginal and non-Aboriginal people cannot be achieved without genuine partnership with Aboriginal peoples," Professor Elliott says.

"For Rural Health West, this means more than consultation. It means ensuring Aboriginal voices help guide our priorities, our programs, and the way we work with communities.

"Aboriginal self-determination and leadership are a critical step in reconciliation, and partnering with Aboriginal peoples and organisations is a priority for Rural Health West.

"The Aboriginal Advisory Committee will play an important role in establishing and strengthening those partnerships and ensuring our work is informed by cultural knowledge, lived experience, and community leadership." ■

# An advocate for change

*Award-winning doctor Daniel Hunt is proud of his role in improving the delivery of safe and culturally appropriate healthcare to Aboriginal and homeless patients*

**A** MA (WA) Advocate of the Year Daniel Hunt says things have come a long way in First Nations healthcare since the Australian Indigenous Doctors Association was established nearly 30 years ago, when the number of Aboriginal doctors was low.

"If you look at the trajectory of numbers, it's amazing," Dr Hunt says. "In 2026, we're probably looking at sending out 1,000 Aboriginal doctor graduates from medical school. It's quite a significant feat; and while we have a long way to go with Closing the Gap, we've also come quite far.

"When the association was established, the life expectancy for Aboriginal persons was late forties, early 50s, and now it's in their late 70s. So, while it's not on par with non-Aboriginal people, we have to be very proud of how far we've come."

Dr Hunt, a Jaru and Indjibarndi man, was named Advocate of the Year in 2025 for his work in improving access to culturally safe healthcare, influencing health policy at state and national levels, and mentoring the next generation of clinicians.

He began his medical career as a dentist.

"I finished medical school," he explains, "and I started my internship at Royal Perth Hospital (RPH) where I developed an interest in oral maxillofacial surgery. I thought I could pursue that as a career, and basically got into dentistry at UWA, completed that degree, and worked for a few years as a dentist. Then COVID-19 hit and shut down dental practice."

So, Dr Hunt got a job at Derbarl Yerrigan Health Service, WA's largest and oldest Aboriginal Community-Controlled Health Service, as a non-vocationally registered general practitioner.

"I started enjoying it a lot, and that's how I sort of found myself in general practice," he says.

The pandemic was a testing time for patients and staff at Derbarl Yerrigan.

"We partnered with the Department of Health, Street Doctor, and other healthcare providers to ensure vulnerable patients such as homeless and Aboriginal and Torres Strait Islander patients got access to the COVID vaccines," Dr Hunt recalls.

"So that was one of the things we really started to push, and through the success of our staff we managed to vaccinate quite a number of patients.

"When COVID finally hit WA, I worked with Richelle Douglas, the medical director at the time, to set up our own COVID hotline. It was something more culturally safe and appropriate for our patients than having to rely on the state-based COVID hotline. In the first five months, I think we saw three times the number of patients than the state COVID hotline did.

"It was staffed by Aboriginal health practitioners, and so all patients were screened by an Aboriginal health practitioner or nurse and then passed on to the doctor for further assessment. And we created a community of practice with infectious disease consultants to streamline access to the

various antiviral infusions and medications.

"We ensured those medications and our own COVID care boxes – which included cleaning agents, wipes, paracetamol, ibuprofen and general medications – could be delivered to individuals' houses, as this was when we had to isolate for about two weeks. We also made sure food boxes with staples like baked beans,

corned beef and rice were delivered to them at the same time.

"It was difficult for our patients to get access to COVID swabs initially, because they were all done through the hospitals. And, again, not the most culturally appropriate service at the time. So Derbarl Yerrigan set up two COVID swabbing sites at Maddington and Mirrabooka clinics to ensure patients had ready access to testing services."

What lessons did Dr Hunt and his colleagues take away from that COVID experience?

"Well, I think the lessons are always the same," he says, "because despite the sort of stereotypes that people have of Aboriginal patients, nobody wants to be alone; and everyone wants their friends and family to be healthy.

"I work in government now; but from my perspective in a not-for-profit, I think our colleagues in government need to spend a little bit more time listening to those people who are

**“ Having that level of influence, being able to provide that kind of expert advice on what we say are our healthcare needs; those are the things I'm quite proud of – being able to be a bit of a voice for Aboriginal patients, for our vulnerable patients, and for general practice.**



Dr Daniel Hunt at the AMA (WA) Awards, with Health & Mental Health Minister Meredith Hammat and AMA (WA) President Dr Kyle Hoath.

Dr Hunt says he is proud to play a role in influencing health policy.

"You're being asked to provide advice on syphilis and genital syphilis, and being invited to point-of-care workshops and roundtables," he says.

"Last year syphilis was recognised as a communicable disease of special interest by the federal government, so that really highlights the importance of working with the BVSTIA Committee, and sitting down with the Chief Health Officer to provide our advice on what we see as the needs for the State in improving

how we look after, for example, a hepatitis C patient or HIV patients.

"In 2024, I was invited to a Senate inquiry on the state of dental health in Australia.

"So, having that level of influence, being able to provide that kind of expert advice on what we say are our healthcare needs; those are the things I'm quite proud of – being able to be a bit of a voice for Aboriginal patients, for our vulnerable patients, and for general practice."

Despite being a trailblazer himself, Dr Hunt credits those who have gone before, especially his mother, Kerry, whenever he wins an award.

"Mum grew up in a time when there were still Aboriginal wings in hospitals," he says. "A couple of years before I was born she was admitted to hospital and placed in the Aboriginal wing. That stuff is not that long ago when a sort of segregation was still apparent.

"She became an Aboriginal health practitioner when those roles first started rolling out. She worked at Perth Aboriginal Medical Service, which is now Derbarl Yerrigan, so she always had that interest in healthcare.

"Being a kind of old-fashioned parent, anything that was to do with education was always actively encouraged, but I was never pushed into medicine. It was just something that sort of happened along the way because she had that interest in it. And I just rolled with that interest, to be honest. Now I can't conceptualise having any other job." ■

the subject matter experts, such as the Aboriginal medical services."

While working at Derbarl Yerrigan, Dr Hunt became interested in sexual health, and he is now the chair of the WA Blood-borne Virus and Sexually Transmissible Infections Advisory (BVSTIA) Committee.

"When I was at Derbarl, the syphilis epidemic, which had not been declared, was starting to kick off. We recognised the need to start looking after those patients," he recalls.

"Derbarl had experienced at least one congenital syphilis death of a patient's baby. So, we partnered with the WA Department of Health to put together a syphilis point-of-care testing program, for which I was the lead in Derbarl.

"It was very successful. We were the largest testing site in Australia, and we tested more patients than any other site. We were able to treat about 20 infectious patients and ensure all patients, with either infectious or non-infectious syphilis, were treated. In that four-year period, there were no congenital syphilis cases, so I'm very proud of that."

Dr Hunt spent his last six months at Derbarl Yerrigan as the acting Chief Executive Officer. He left the organisation last May and began working at RPH as the homeless medicine consultant in November.

"I'm the clinical lead for our homelessness program," he says.

"I basically work with in-reach teams. RPH has partnered with Ruah and Homeless Healthcare to provide an in-reach service, seven day a week, to help homeless patients navigate the healthcare system and improve their medical care."

# Drawing another line in the sand on contaminated drinking water

*Researchers are testing for heavy metal contaminants in “baby” teeth that might explain the higher incidence of disease in remote WA communities*

**A**n Australian-first study is aiming to identify childhood exposure to environmental contaminants in regional and remote Indigenous WA communities by testing “baby” teeth.

The Heavy Metal Tooth Fairy project will collect 125 deciduous teeth from Aboriginal communities and compare them with 125 teeth from Perth children using geochemical analysis.

The project team, led by Kalgoorlie-based paediatrician Christine Jeffries-Stokes AM, is working on the hypothesis that the teeth of children in regional and remote communities will have higher levels of heavy metals than their metropolitan counterparts because they use groundwater for drinking.

The new research builds on the results of the Western Desert Kidney Health Project led by Dr Jeffries-Stokes and her sister-in-law, senior Wongutha, Mulba-Ngadu and Anagu woman Dr Annette Stokes AM, from 2007 to 2014. This groundbreaking study found that nitrate-contaminated drinking water was a contributing factor to higher-than-expected rates of kidney disease and type 2 diabetes in the Goldfields.

“That raised the possibility of other contaminants in the drinking water as well, and we’ve not been very successful in getting information about that,” Dr Jeffries-Stokes explains.

“But we formed a collaboration with the UWA Hydrogeology team, particularly Sarah Bourke, and the School of Human Sciences, with Caitlin Wyrwoll. And we’ve been working together for a few years now on how we might progress all this.

**“ We know that children in all these remote areas from Kalgoorlie and across to the border have higher rates of some diseases. So the next step would be to look at whether there’s any correlation between these toxic metal exposures or heavy metal exposures and the patterns of disease we see.**



“We came up with the idea of looking at teeth to see if there’s any evidence of exposure to heavy metals. People have looked at teeth before, like after Chernobyl, but not in this way. Primary school kids across the desert and everywhere else are losing lots of teeth, and we thought this might be a neat way to use them and get information if we can. We’ve done a pilot with 10 teeth, and it looks like it’s going to work.”

The research effort, a sub-project of The Kids Institute ORIGINS program, is supported by the Stan Perron Charitable Foundation, Glencore’s Minara Community Foundation, the WA Health Department, and the University of WA’s Rural Clinical School.

The project has received various ethics approvals, including from the West Australian Aboriginal Health Ethics Committee, with one final approval pending; and the researchers have enlisted the support of about 27 schools and communities that are keen to take part.

The school children and community members will be involved in a citizen science project, in which they will be shown how to test drinking water for contamination.

“They’ll be testing the water and sending us samples,” says Dr Jeffries-Stokes, “and we’ll also be doing an education project where we teach the kids in schools about where their drinking water comes from, how to make a model of the water cycle, and simple methods of purifying the water. We will also develop their knowledge and an interest in science.”

As a school project, the children will also be tasked with tracing their family history.



"They'll make a poster and interview their family members to find out where they've lived," Dr Jeffries-Stoke explains, "because if we do find things in the teeth, we need to then work out where those exposures might have occurred."

As the team did with the Western Desert Kidney Health Project, they organised for a group of Goldfields school children to create a "sand animation" promotional video that will be launched shortly on Facebook and YouTube.

"It uses the ancient method of teaching, which is called *milbindi*. It's the way Aboriginal people have taught for millennia, by drawing in the sand, the dirt, *parna*. So, we're using that to tell the story about the project, what we're doing, and why we're doing it," she says.

The comparison teeth from Perth school children will be provided by the ORIGINS program.

"They already have those teeth," Dr Jeffries-Stokes explains. "They have a cohort of 10,000 children, and we will match the teeth by comparable age and sex."

The project team's hypothesis is that there will be differences in heavy metal contamination between the two sets of teeth.

"We hopefully will see differences," Dr Jeffries-Stokes says, "but if we don't, it's also useful information – that children are not getting significantly different exposures from the environments out here, which would be great and reassuring."

"But if we show they are, that becomes very important; because we then need to protect them. We know that children in all these remote areas from Kalgoorlie and across to the border have higher rates of some diseases, and so the next step would be to look at whether there's any correlation between these toxic metal exposures or heavy metal exposures and the patterns of disease we see."

"We don't know whether environmental exposures are a factor or not, but it would be nice to be able to say yes, they seem

to be; or no, they don't, and we can focus our efforts on other areas of research.

"If we do find evidence, it can be used to advocate for better filtration or better quality drinking water, and it will also help

us understand the patterns of disease we're seeing, particularly things like autism spectrum disorder, which we're encountering massive increases in diagnosis for – but also for lifelong risk, like for the risk of diabetes, kidney disease, and needing amputations, which we have found may be related to arsenic exposures. This could happen from the water or from the dust, particularly in areas where there are gold deposits.

"It's fairly well established that chronic arsenic exposure can cause what we call peripheral neuropathy. So, the nerves, particularly in your feet and legs, start to die off; you lose the feeling in your feet and legs, and get reduced blood flow to those areas. That can result in the need for amputations which, in fact, is a major problem in remote areas and was always thought to be due to type 2 diabetes."

"That's probably a factor, but usually with type 2 diabetes you shouldn't need an amputation until very late in the disease; whereas we've seen quite young people needing amputation. The rate of amputation for people from remote areas is very much higher than for those in urban areas." ■

**“ We’ll be doing an education project where we teach the kids in schools about where their drinking water comes from, how to make a model of the water cycle, and simple methods of purifying the water. We will also develop their knowledge and an interest in science. ”**

**The Heavy Metal Tooth Fairy project is seeking more funding for their research, particularly to support a parallel study of dust contamination.**

For further information, send an email to [christine.jeffries-stokes@rcswa.edu.au](mailto:christine.jeffries-stokes@rcswa.edu.au).

# They have their eye on an even bigger prize

*After winning the \$5 million Pilbara Challenge, Lions Outback Vision is scaling up its mobile retinal scan technology into clinics across the State in a spinout called Ninox Vision*

Lions Outback Vision won the \$5 million prize in the State Government's global Pilbara Challenge competition, by developing an AI-powered mobile retinal scanner that was better at picking up eye disease than a doctor. The prize money was supposed to enable the winner to continue to develop their solution and help revolutionise healthcare service delivery, especially to Indigenous communities, in the remote north of the State.

But Lions Outback Vision has gone one step further, starting to roll out the technology to clinics in the North-West and other parts of the State, involving GPs in the process.

"The Pilbara Challenge tested the AI technology prospectively in a mobile visiting van, but now it's ready to base in any GP's own clinic harnessing the opportunistic screening, since the camera's always there and the business model stacks up," Lions Outback Vision Founder and Director Professor Angus Turner explains.

"All diabetic patients have access in WA to at least a nursing post where their diabetes is being checked once a year or more. And in those contexts, the camera technology is suitable. So, we are not losing our mission in Lions Outback Vision, which is for remote settings wherever we go, where it makes the most sense because there are no other opportunities. There's not even an optometrist resident in those places.

"The real impact of this technology is for all regional towns, and even the cities, because nationally only half the people with diabetes are getting their eyes screened."

Broome Regional Aboriginal Medical Service and Ord Valley Aboriginal Health Service already have access to the technology, but Prof Turner has also negotiated the supply of the hi-tech cameras to GP clinics in Perth and Albany.

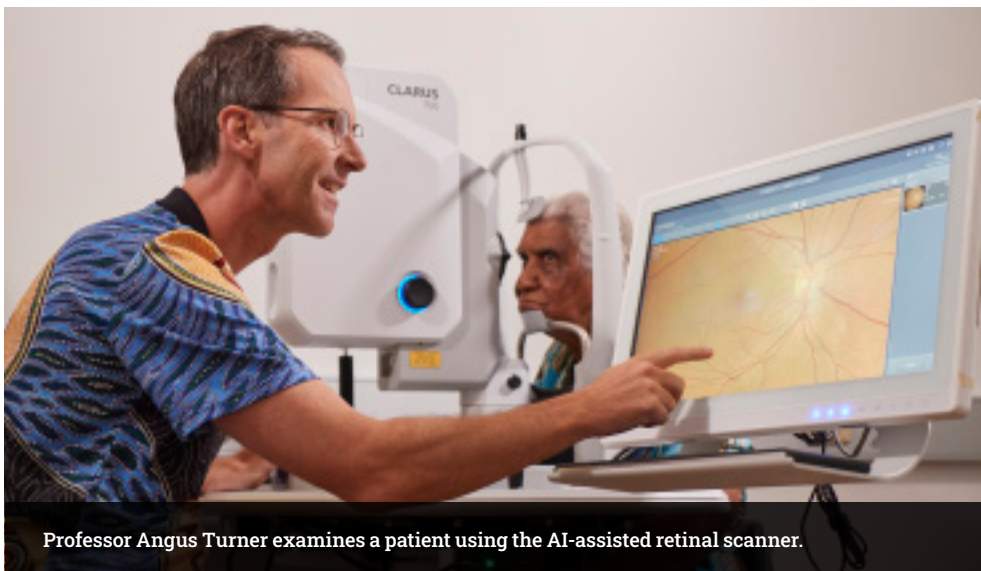
"I'm hoping to have 25 signed up by June," he says. "It's hard to speculate; but if it's working well, I hope to have another 100 over the course of the following year. The practices will have a one-year free trial. And if it works for their practice, we'll be offering a lease of the camera over a four-year timeframe so they can make sure it's sustainable for their business.

"It's because we have the prize funding that we're able to do this. It's created a huge opportunity to provide WA with world-class screening infrastructure."

The State Government issued the Pilbara Challenge in 2023 for a world-leading medical research and innovation solution to resolve the problem of health service delivery in the region.

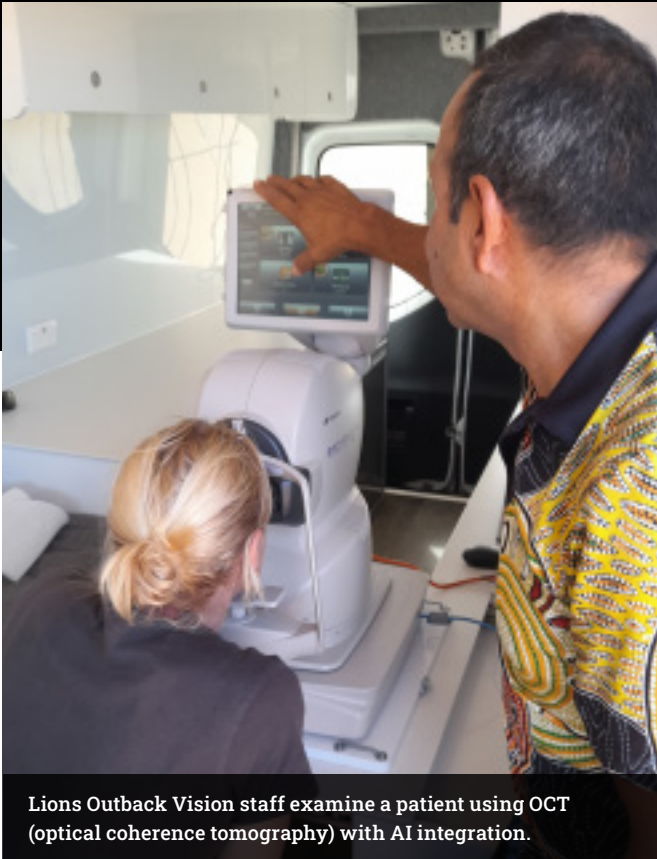
From almost 100 entries, 10 shortlisted finalists received a grant of \$200,000 to commence work on the ground. They were required to submit a final report at the end of the 12-month "proof of concept" period. Lions Outback Vision was able to show that the use of its mobile technology had produced a 17-fold increase in screening uptake in the Pilbara.

"We've been working for a long time in Lions Outback Vision to provide ways of screening for certain conditions, especially for remote settings," Prof Turner recalls.



Professor Angus Turner examines a patient using the AI-assisted retinal scanner.

**“The real impact of this technology is for all regional towns, and even the cities, because nationally only half the people with diabetes are getting their eyes screened.”**



Lions Outback Vision staff examine a patient using OCT (optical coherence tomography) with AI integration.

"One aspect has been working with optometrists to do telehealth, and that's been very successful. But in working with the GPs in primary care, we haven't had much success with screening for diabetes – even though it's a well-known mode of photographing a diabetic patient's eye and trying to detect disease, so we can prevent blindness. That has not really worked. So this challenge was to try to dive in and tackle it with some new approaches in a digital health space and see if it made any difference."

At the outset, Lions Outback Vision identified some barriers to testing using the existing technology: the cameras were clunky and taking the photo required some skill; the operator had to send the photo elsewhere to get it diagnosed, causing delays; and the patient was left out of the loop.

The challengers decided they needed a new type of camera which essentially drives itself, and road-tested three AI models to find the one best suited to the diagnostic task.

"Now we're just testing it in the real world," says Prof Turner. "Here's a patient in front of us, here are three different AIs to road-test. How does it go, practically speaking, with this new camera, the new on-the-spot diagnosis, and what difference does it make for that patient on the day?"

"It was a research trial. The patient signed a consent form to say they were happy with all this fancy AI stuff. And then we asked them: Do you like this on-the-spot facility? Does it help you? And they said they absolutely loved it. So, the patients were happy with the experience, and the AI was extremely accurate, as good as or better than the doctors."

In the end, Google Health's advanced diagnostic tool called ARDA (Automated Retinal Disease Assessment) was the clear

## KEY FACTS

- The retinal camera takes a photo to diagnose diabetic retinopathy, with the digital image immediately transferred to the cloud, where it's analysed by AI software and integrates seamlessly with the GP's electronic medical records.
- Google Health's advanced diagnostic tool called ARDA (Automated Retinal Disease Assessment) was the clear winner of the three AI models tested.
- Broome Regional Aboriginal Medical Service and Ord Valley Aboriginal Health Service already have access to the technology.

winner of the three AI models. This technology has now been handed over to Ninnox Vision to provide the service in Australia, so it has no further connection to Google.

The camera takes a photo of the patient's retina to diagnose diabetic retinopathy at the back of the eye, and then the digital image is immediately transferred to the cloud – where it's analysed by the fully integrated AI software that provides an instant diagnosis, rather than the patient having to wait perhaps weeks for the results.

"AI is the only reason we can now do that on-the-spot diagnosis," Prof Turner explains. "The machine securely transfers the photo to the cloud, where AI does its magic to work out whether diabetes is affecting the eye or not. And that's been validated as being very accurate for Aboriginal people."

The technology is also easy to master after just a 10-minute training session.

"So, my goal," Prof Turner says, "is to say to GP practices: if you have a health assistant or a receptionist, they might be able to take the photo on the way in before the patient has even seen anyone because they don't need any eye drops. And by the time the patient is seeing the doctor, the report is already in the medical record." ■