Training Indigenous doctors for Australia: shooting for goal

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Advocates, mentors and leaders in Indigenous health are emerging from our medical schools

According to the Australian Indigenous Doctors' Association (AIDA), there are currently about 90 Indigenous doctors in Australia.[1] This amounts to 0.18% of the medical profession, despite 2.4% of the Australian population being Indigenous. Many organisations have called for an increase in the numbers of Indigenous doctors and other health care workers as part of a strategy to improve the health and wellbeing of Indigenous Australians and to reduce the terrible disparities between their health and that of the general Australian population. These increasingly urgent calls have come from the Australian Health Ministers' Advisory Council,[2] the Australian Medical Association (AMA),[3] AIDA,[4] and many other leading Australian health, human rights, aid and development organisations.[5]

To increase the proportion of Indigenous doctors to the non-Indigenous level, the AMA estimated in 2004 that 928 more doctors need to be trained.[3] As a start, AIDA has identified a goal of 350 extra Indigenous students enrolled in medicine by 2010.[4] Although many medical schools have strategies to recruit and retain Indigenous students (Box), the goal set by AIDA may not be easy to achieve. Three of the schools are recognised as "leaders" in Indigenous medical education — the University of Newcastle, the University of Western Australia and James Cook University. We interviewed key representatives from each of these schools to discover what they have achieved, their strategies, and their plans for the future.

Indigenous medical graduates and students in Australian medical schools, 2007*

University	Previous graduates	Current students	Indigenous entry scheme (quota or target)
Adelaide	4	7	Yes (6)
ANU	0†	0	Yes (2)
Bond	0†	0	No (possibility if funded)
Deakin	0†	0‡	In development
Flinders	4	2	Yes (5)
Griffith	0†	1	No formal quota
James Cook	6	19	Yes (5)
Melbourne	3§	5	Yes (3)
Monash	1	3	Yes (5)
Newcastle	51	25	Yes (8)
New South Wales	12§	15	Yes (no quota)
Notre Dame	0†	0	In development
Queensland	~ 8	8	Under review
Sydney	7§	4	Yes (no quota)
Tasmania	4§	6	Yes (1–2)
Western Australia	13	23	Yes (10)
Western Sydney	0†	5	Yes (5%–10%)
Wollongong	0†	1	Yes (3)

* Information obtained from an email poll of Deans of the medical schools.
† School has not yet had a graduating year.
‡ Deakin medical school has not yet enrolled students.
§ Information available for recent periods only: Melbourne, since 1989; New South Wales, since 1980; Sydney, since 1997 (graduate program); Tasmania, since 1996.
ANU = Australian National University. na = not available. ◆

Newcastle: the trailblazer

While not the first medical school to graduate an Indigenous doctor, the school at the University of Newcastle was the first to make a concerted effort to train Indigenous doctors, and has produced the most — 51, or around 60% of doctors in Australia who identify as Indigenous. The school's first two Indigenous graduates, Sandra Eades and Louis Peachey, and many who followed, have become leaders both in medicine and in their communities. The Indigenous entry program was a "natural fit" for Newcastle, explained Michael Hensley, Head of the School of Medicine and Public Health. It was made possible by the combination of the receptive environment created by Foundation Dean, David Maddison — with its strong focus on community, equity and engagement by the medical profession — and an individual with a passion in Robert Sanson-Fisher, Professor of Behavioural Science, who came with extensive experience in Indigenous health from Western Australia. In the early 1980s, with the support of the then Dean, John Hamilton, the school explored the barriers to Indigenous entry, as well as experiences of similar programs in Canada and New Zealand. The program had its first intake in 1985 and currently has 25 Indigenous students enrolled.

However, the program "was not without its objections, that we would be creating a special stream with lower academic standards", said Hensley. "I think it was important to have those comments up front and to work through them. We said we would have evaluation beforehand, and a strong mentoring and academic support system. Once the students were in the course, there would be no difference in assessment procedures. And we had support from the University to have these as additional places, not replacing Commonwealth-funded ones."

Western Australia: a model of Indigenous leadership

Initially, Newcastle medical school drew Indigenous students from around Australia, but in 1996 it acquired a competitor with the founding of the Centre for Aboriginal Medical and Dental Health at the University of Western Australia (UWA). The Centre's goal was both to improve the recruitment and retention of Indigenous medical students and to assist departments in Medicine and Dentistry with teaching about Aboriginal health and with improving links with Aboriginal organisations. It grew, explained Helen Milroy (Director of the Centre and a child and adolescent psychiatrist from the Palyku people), out of the success of the pre-existing Centre for Aboriginal Programmes (now the School of Indigenous Studies), which provided alternative entry and support schemes

for Indigenous students in other disciplines. In fact, she attributes her Centre's success partly to its collocation with the School of Indigenous Studies and access to its staff. In 1996, there were two or three Indigenous students in the medical course; since then, another 11 Indigenous doctors have graduated, while 23 Indigenous students are currently enrolled.

James Cook: a strategic initiative for the north

The medical school at James Cook University (JCU) in northern Queensland was the first new medical school for 25 years, and producing Indigenous doctors was integral to its rationale and accreditation in 1999, explained Jacinta Elston (Assistant Dean [Indigenous Health], from the Kalkadoon people). The school was planned with a focus on rural and remote health, Indigenous health, and tropical medicine, as well as on training a medical workforce for northern Australia. In 2003, the Indigenous Health Unit was created under her leadership to improve Indigenous recruitment and retention across the Faculty of Medicine, Health and Molecular Sciences, as well as to support development of an appropriate Indigenous health curriculum and Indigenous health research, and to engage with the community. The medical school has produced six Indigenous doctors in its first two graduating years, including its first Torres Strait Islander doctor, and has another 19 Indigenous students currently enrolled.

How do the programs work?

The programs at these three schools are all based around alternative entry schemes that assess a student's ability using a wider range of criteria than an academic score. But the programs are much more than this, comprising various combinations of recruitment strategies, premedical preparation, academic, social and personal support during the course, and flexible pathways. All have a school-determined quota of places available for Indigenous students (ranging from five places at JCU to 10 at UWA), although if more applicants are deemed suitable this may be flexible. As Milroy explained, it is important to have a quota, rather than having to argue case by case.

The interviewees dismissed the suggestion that their programs are in themselves discriminatory and might create envy among other students. "This is a strategy to improve the health of a very disadvantaged group in Australia. I think it is a legitimate measure to have a special entry and support program", said Hensley. Indeed, the programs are analogous to the widespread alternative entry schemes for rural students that aim to reduce the health care inequities in rural areas.

All interviewees emphasised that the programs do not create a subclass of doctors with lower academic standards. As Elston warns her students, "There is only an alternative entry process, there is no alternative exit process. All our students graduate the same way, by meeting the same standards".

Selection — picking stayers

All three medical schools have a rigorous selection process that aims to select students who will successfully complete the course. At JCU, appropriate selection is the main emphasis. For Elston, this means first assessing an applicant's motivation to undertake medicine. "Most Aboriginal or Torres Strait Islander people want to do something for their community. This is important, but whether it is enough to get you through a 6-year program is a different issue. If an applicant said, 'I'm just sick of being broke. I want to be a heart surgeon and drive a red Lamborghini, because my family have been broke all our lives, and I don't want to be, I don't want my kids to be', then we would see that as probably just as motivating." Secondly, Elston assesses the applicant's support structures and ability to balance study with family and community commitments, and only after that whether they are at the right stage of their lives academically. If applicants are not considered ready, then Elston may suggest enrolling in another degree such as biomedical science; if they achieve a certain academic level in the first year, they will be considered again. Elston attributes the JCU retention rate — 25 out of the 29 students enrolled so far — to this policy, but admits her school might be seen as too rigid at times.

In fact, Hensley pointed out that "it is difficult at times to decide on a background that guarantees completion, and we have had remarkable success stories from a range of academic backgrounds". However, Newcastle is grappling with a 25% non-completion rate over the first 15 years of its program, which Hensley attributes to a combination of the major family and community responsibilities borne by many students and less-than-ideal school preparation. He feels that, in the balance between giving "higher-risk" students a chance and achieving a high completion rate, the pendulum at Newcastle perhaps swung too far, and it would be fairer to individuals and the school to be tougher in screening.

Preparation — many pathways to medicine

UWA medical school is also very careful with student selection, explained Milroy. "We look at their educational background, whether they finished high school, and other education, and put them through a series of interviews and tests." However, UWA also offers an extensive program of preparation for potential students. "We offer many pathways into medicine. If they require a lot of academic top-up, we suggest they take an orientation course for a year focusing on sciences, such as physics, chemistry and human biology. If they do well in that, we offer a 5-week intensive pre-med course, and if they are successful in that, they gain entry into medicine. If they don't do so well, we might suggest they start a health science degree, which is slightly less intense, and they can either do that for a year and then come into medicine, or complete that degree and be considered for postgraduate entry a couple of years later."

Academic and social support — a home away from home

From the beginning, Newcastle had an Aboriginal liaison officer who set up academic tutoring and mentoring to supplement the standard teaching program, and a physical unit, where students could meet and access textbooks and computers. The program also provided social and financial support, and scholarship and travel information (as many students came from interstate). This was initially within the medical school, but later through the university's general Indigenous support unit, Wollotuka. Although Hensley thinks the ideal is to provide both academic and other support in a "seamless process" within the medical school, "the reality is that universities, especially small ones, cannot afford to have multiple individual support units", he said.

UWA places particular emphasis on student support and alternative pathways when they are not doing well, and Milroy is proud of having "lost" only two students overall, and even they may return. "However, our students do sometimes take a year off if they have just too many life stressors, or do a year of health science if

they are not doing well. Because of being part of the larger School [of Indigenous Studies], we have people dedicated to looking at scholarships, accommodation and financial support, and others who look after emotional and social wellbeing, and a large student body which offers support and camaraderie." The Centre also provides academic and personal support. We talked with Paula Edgill, a graduate of UWA medical school from the Noongar people, who is a lecturer at the Centre: she has an open-door policy for students and gives them her mobile telephone number for after-hours contact about academic or even personal issues.

Milroy also emphasised cultural safety. "I think a reason we have been so successful is that we're Indigenous-led and have a very holistic approach, with a generational view — we've had a mother and son graduate. We really get to know our families and communities well, it is a culturally affirming place, the students feel safe here and feel their identity is supported and respected. It's a home away from home." The Centre also addresses any issues of discrimination at a personal or faculty level, so that the students do not have to be apologists or experts in Indigenous health.

Recruitment — revealing the possibilities

Recruitment is an issue for all the medical schools, as they often have difficulty filling their quotas. "You can't rest on your laurels, every cohort is a new group you have to enthuse and support", said Hensley. All have recruitment programs in high schools, not only to encourage school leavers to apply for medicine, but also to motivate younger students to aspire to university and medical school. "I think the decision is made in the early years of high school, or even in primary school, whether someone will commit themselves to the work required to be ready for medicine", Hensley explained.

At JCU, Elston sends a team of Indigenous students to every high school in northern Queensland with the Indigenous health careers "road show" to talk to Years 10–12. At UWA, the medical school participates in the extensive recruitment programs run by the School of Indigenous Studies, including careers expos in high schools around WA, a Year 8 "discovery day" at the university and a Year 12 seminar. Milroy's Centre also runs a health careers camp for Years 10–12, where 25–30 Aboriginal students from around WA stay at the university for a week to learn about different health careers. She finds that students may have come in contact with the Centre and the University for a number of years before enrolling. And the success of their program is an inspiration in itself. "If a Year 8 kid comes to the uni and sees a medical student from their community, then they think that is fantastic."

Milroy also believes that it is important to gain the trust of Indigenous communities, and that the medical school has been helped by the long-term success of the School of Indigenous Studies. "It is very hard to bring in something new and be successful straight away. You have to build up a lot of trust with the community in terms of saying, 'If you send your students to us, we will look after them'. I think they actually believe that now."

What are the benefits?

All interviewees saw multiple benefits from their programs and the creation of Indigenous doctors. "It is a comprehensive strategy with a number of aims, one being to have Indigenous doctors who want to work in areas of Indigenous health, either rural or urban", said Hensley. It can thus provide workforce where it is needed. However, the effect on access of Indigenous people to health care may be even greater than just having a doctor available. Milroy cited research by Noel Hayman, an Indigenous academic and general practitioner, showing a rapid rise in Indigenous patients attending a general practice because of the presence of Indigenous staff.[6] "When you've had such discriminatory experiences, fear of going into health care is always going to be an issue. That sense of relief in having someone you think will not only understand you, but also look out for you, is really important. We need culturally secure non-Indigenous doctors, but also doctors from within culture, if we are going to change things."

Yet the benefits are even wider — the programs contribute to equity, giving the Indigenous community the educational opportunities to be doctors, wherever they wish to work. And Indigenous doctors also bring non-medical benefits to their communities — increasing "the economic base" through their incomes, said Milroy, and inspiring young Indigenous people to achieve. Hensley cited the comment of Kelvin Kong, the first Australian Indigenous surgeon, that his desire to study medicine arose when graduates of Newcastle's Indigenous program told his high school group, "Look, you can do it". "Indigenous doctors can provide very strong role models for young Indigenous people, whether their ambitions are in medicine or any other field", Hensley said.

Indigenous doctors are also becoming advocates for Indigenous health. "I think the primary thing I've observed since AIDA has been around is the increased advocacy and political leverage we get from having Indigenous doctors, and I think it is the same for Indigenous doctors in a health service, they are going to advocate for Indigenous patients", said Elston. "They're influencing the mainstream in a way that the mainstream probably wasn't aware."

These advocacy and leadership roles have also now extended into medical education, as exemplified by Elston, Milroy and Edgill themselves. Edgill explained that "during my training, we only had three lectures in 6 years on Aboriginal health. Now that it is being added to all the years, I thought it would be fantastic to come back to the University and help with the change and produce doctors with better knowledge in this area". Further, one reason that Milroy employed Edgill was that she wanted "a whole cohort of students, whether Indigenous or not, to actually be taught medicine by an Indigenous doctor".

Indeed, the increasing presence of Indigenous students and staff in medical schools is enriching and influencing their curricula and engagement with Indigenous issues. Hensley confirmed that Newcastle's Indigenous entry program was "an important contributor to having Indigenous health discussed in a number of parts of the medical program. It has made us a stronger medical school in Indigenous health".

Hensley also described how Indigenous health is assuming a higher profile in the core medical curriculum, with the adoption of revised Australian Medical Council (AMC) accreditation standards from the beginning of 2007.[7] He chaired the AMC working group on the Indigenous health curriculum: "We worked closely with the Committee of Deans of Australian Medical Schools [now Medical Deans Australia and New Zealand], AIDA and other groups to put within the standards for accreditation a number of points that emphasised the need for Indigenous health to be embedded within the medical school structure. As of this year, medical schools have to report what they are doing for Indigenous health within the curriculum. Every year, colleges and societies submit new requirements, such as a comprehensive curriculum in oncology, for the

standards. They are all worthy, but the medical course would end up about 20 years. The Indigenous health curriculum framework was the only one that the AMC agreed fully was an appropriate part of every medical school."

Challenges to the programs

There was general optimism about the future of the programs, even in the face of reduced funding and other pressures on universities, such as privatisation. At JCU, the Indigenous program is part of the rationale for the medical school, and, at UWA, Milroy hopes that the success of the program will speak for itself. At Newcastle, Indigenous collaboration is one of five priority areas in the University's current strategic plan. Furthermore, the medical school is planning a partnership with the University of New England that will double its size and tap into the New England population, which has the highest proportion of Indigenous people in New South Wales. The immediate challenge is to replace the former head of the Indigenous program, Gail Garvey. "At this stage we wish to build up the discipline of Indigenous health and are looking for a senior academic and Indigenous medical graduate", said Hensley.

In fact, the real challenges to the programs lie with recruiting enough Indigenous students to fill their places and developing Indigenous academics to fill the developing roles in the discipline of Indigenous health.

The way forward

We asked the interviewees for their wish list if they had $5 million to spend on their programs. A high priority was scholarships to make the medical course a more practical option for Indigenous students — maybe similar to the rural-bonded scholarships (about $22 000 annually), but also grants to cover tertiary fees, textbooks and equipment. Milroy would also like to expand the scope for recruitment by taking recruitment programs into primary schools, and delivering pre-med programs in rural settings, such as Broome. However, increasing the scope for recruitment may ultimately require early educational intervention, said Elston, linked to the Years 3, 5 and 7 literacy and numeracy tests. "For Indigenous kids, the educational outcomes are so poor that that is where intervention should start — with a network of school-based programs that takes them out of the system into a more nurturing environment to help them get back up to scratch."

To help support Indigenous students at JCU, Elston also wanted more space for tutorials and study groups — she has one large room available for 50 students — as well as more staff "on the ground". Staff were also a priority for Hensley, who explained that, because the support of Indigenous students requires personal interaction, the efficiencies obtained in other areas of the medical school with information technology are not possible.

In addition, they all wanted higher-level positions for Indigenous health academics to strengthen the position of the discipline in the medical school and university. While all thought that Chairs of Indigenous Health would be a step forward, they identified a need first to develop the academics to fill them. Milroy suggested that fast-tracking Indigenous academics would be possible. "There are a lot of Indigenous people with reasonable skills, who just need some additional support and training. It would not take 10 years", she said. And an Indigenous-led research centre is an ultimate goal.

Hensley also pointed out the need to implement the new AMC curriculum standards and the role the Medical Deans are taking in advancing Indigenous health: "Indigenous health is a high agenda item with the Medical Deans and has unanimous support. We have produced the [Indigenous] curriculum,[8] we have worked closely with AIDA on the *Healthy futures* document,[4] and we are hoping to promote specific spending from the Commonwealth on Indigenous education. We want to make sure that the Indigenous health curriculum is much more than just a document. I am confident it will get there."

An initiative driven by the Medical Deans and AIDA to help medical schools implement the new standards is the LIME Network (Leaders in Indigenous Medical Education). This brings together Indigenous and non-Indigenous medical educators and Indigenous health and community professionals from across Australia, to share information and resources and develop tools for implementing the Indigenous curriculum, and recruitment and retention strategies for Indigenous students.

Although there are increasing numbers of Indigenous students in Australian medical schools, further growth will be needed to meet AIDA's goal of an extra 350 students by 2010. Australian medical schools have come late to these initiatives, yet we are already beginning to reap the benefits. Just as the growing numbers of Indigenous doctors may improve the health of Indigenous people, so may the growing numbers of Indigenous medical educators enrich the training of doctors, both Indigenous and non-Indigenous.

Competing interests

None identified.

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